DIGITAL YOUTH IN DIGITAL SCHOOLS:

LITERACY, LEARNING AND ALL THAT NOISE

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NOISE

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Mary Frances Buckley

This dissertation is dedicated to

My grandmothers, Ruth Buckley and Dorothy Mulligan

My husband, Peter

And last, to Mr. Beck and the students at Big Dipper Academy, Without you this dissertation would not exist

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ABSTRACT

DIGITAL YOUTH IN DIGITAL SCHOOLS: LITERACY, LEARNING AND ALL THAT NOISE

Mary Frances Buckley

Susan L. Lytle

Educational researchers, practitioners, and policymakers face increasing pressure to determine the role of new media in America's schools. Despite widespread agreement that digital media are transforming how young people learn and communicate, little evidence exists that digital media have markedly changed how we "do school." In the last decade, extensive research focused on increasing access to and integrating technology in schools, suggesting that digital media support new contexts for knowledge development. Yet little empirical research examined how adolescents actually engage digital media in their everyday lives in schools.

In a two-year study in a Philadelphia public high school, I researched what it means for literacy learning when youth attend a digitally comprehensive school, and what happens when we shift our focus away from new media as discrete tools, and instead

consider them as part of the social and cultural fabric of "doing school." I followed and learned from tenth-graders in English and History classes taught by the same teacher.

Through the theoretical frames of socio-cultural constructions of literacy, youth culture, and media ecologies, I examine three interrelated dimensions significant to adolescents' experiences as students in what I call a new culture of literacy learning: (1) Noise, (2) Navigation, and (3) Negotiation. Noise refers to the intense, multilayered, and highly saturated nature of this context. Navigation represents the range of moves, tools, and roles that adolescents engaged to accomplish their intellectual work in these classrooms. Negotiation illustrates how adolescents leveraged digital media to participate with others.

The findings can support the work of teachers to redesign classrooms that harness digital media to cultivate adolescents' literacies and foster meaningful participation. This study raises questions for educators, researchers, and policymakers about how to assess literacies that are multimodal, fluid, and collaborative. My results also can contribute to conversations about designing new ways to study adolescents' literacies within and across the dynamic contexts associated with digital media. Finally, this study suggests that we will need new theoretical frameworks to understand adolescents' literacy work in schools.

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Chapter 1:

Digital Youth in Digital Schools: What Do You Mean?

Story of the Question: Growing Up Digital in Graduate School

In fall 2006, I turned 29 years old and began graduate school at the University of Pennsylvania. For the first time in my educational history, I was invited to write, every week, to a public audience of my peers and professor over a digitally mediated discussion forum on BlackboardTM. The forum was a critical component of Dr. Susan Lytle's doctoral course Theories of Reading and was designed as a space for the class, a group of first- and second-year doctoral students in Reading/Writing/Literacy to read and respond to the various and varied texts of this course. One month into the course each of us wrote and published a Reading Autobiography. The next week, I shared my responses to the autobiographies and then began to read my peers' responses. I clicked from post to post, until I encountered the following: "I respectfully decline to respond to the group this week, but I did have a question for Molly. What do you mean you understood White in a new way?" I stopped in my tracks and stared at this new post—directed to me, yet published to the whole class over this digital forum—from behind a laptop screen in my apartment. My peer, a Black woman, was responding to a line in my Reading Autobiography linked to a discussion of how my experiences as White teacher in a

¹ BlackboardTM is a course management software program that was developed to support

and enable institutions and instructors to use technology in a range of ways in and beyond the traditional walls of school contexts.

predominantly Black middle school challenged some of my prior conceptions of race, including an understanding of "Whiteness."

I contemplated this question, re-read the selected section of my autobiography, went on a long run during which I thought about what I "meant," responded to an email and a text from classmates who wanted to make sure I had "seen Blackboard," and composed and posted a response to my peer. Most importantly, in and through all of my actions and interactions, I engaged my peer's question about my understanding of race and my racial development. I thought about writing back to my peer; a one-to-one exchange was more appealing, but only because it felt "safer" or more "comfortable." Meanwhile, this public exchange was part of the class text now.

This Blackboard encounter surfaced as a critical incident in my educational story because it prompted me to recognize that digital media may offer unique ways to engage with others around race and countless other significant concepts. More importantly, I recognized how digital media may leverage our individual social locations to clarify what we "mean"—individually and collectively—when we bring our ideas and experiences to bear in classrooms. This interaction triggered uncertainty, new thinking, and further talk, but it also raised significant questions for me about how we construct responsibility, risk, and cross-talk in classrooms. I wondered what new literacies were embedded in and/or required to navigate a classroom that used digital media to read and write together. Furthermore, I wondered what new literacies might emerge when classrooms harness digital media for literacy learning in schools.

After several years as a teacher and student who was deeply skeptical about new media's role in schools, this critical incident led me to believe that digital media might create and facilitate new kinds of learning in schools. At the same time, just blocks east of Penn's Graduate School of Education, a Philadelphia public high school that would become the site of this research project opened its doors and began to cultivate a digital school. At 29 years old, I began to grow up digital; I also began a long inquiry into the possibilities of digital media for students' current and future lives that led me to the questions, concerns, and hopes that are at the heart of this study.

Introduction

Digital media are changing the landscape of adolescents' daily lives, shaping how young people learn, communicate, and interact with their peers and the world at large (Collins & Halverson, 2009; Ito et al., 2009, Ito et al., 2010; Watkins, 2009). From social networking sites to virtual worlds, mobile phones to iPods and e-readers to tablets, new media are a routine part of most adolescents' everyday lives. Currently, over two billion individuals use the Internet (Internet World Stats, 2011). At the current rate of growth, more than half the world's population will be online in five to seven years, with young people leading this trend (Leu et al., 2011). Adolescents—the oft-named "digital youth"—currently outpace all other age groups in media usage and are the most digitally connected generation (Nielsen Company, 2009, 2011). Young people are online daily at a greater rate than any other segment of the world's population (Lenhart, Madden, & Hitlin, 2005). The Kaiser Family Foundation (2005, 2010) reported that youth aged eight

to eighteen spend a third of every day interacting with various technologies, up from a quarter of every day just five years ago, when the study was last conducted.

Although race, class, gender, and economic factors contribute to both the rate and nature of adoption of networked digital media, adolescents today are growing up at a time when new media are playing an increasingly central role in their everyday lives. We have witnessed the rapid increase in youth participation in sites for social exchange, usergenerated content creation, and play. From the launch of MySpace (www.myspace.com), in 2003, to Facebook (www.facebook.com), in 2004, YouTube (www.youtube.com), in 2005, Twitter (www.twitter.com), in 2006, Tumblr (www.tumblr.com), in 2007, and most recently, in 2011, Google+ (www.plus.google.com), new media have quickly permeated the social and cultural fabric of young people's lives. Online youth are not limiting themselves to social networking sites. The majority use online time to manage blogs, Web pages, and Wikis or to share their artwork, photos, stories, or videos (Lenhart, Madden, & Hitlin, 2005).

The proliferation of new media extends into formal educational contexts as well.

Many middle and secondary schools have adopted Web-based course management software programs such as Blackboard (www.moodle.com) or Moodle (www.moodle.com), invested extensively in hardware including Smartboards and one-to-one laptop programs, and worked feverishly to design and implement curricula, protocols, and policies related to the use and assessment of new media in schools.

While there is little debate that the various new media forms are altering how youth socialize and learn (Ito et al., 2010; Pew Research Center, 2010), there is much

debate about what those changes mean for literacy learning in classrooms and what responsibilities educators have to employ or not employ new media in schools. Consider a series of headlines from a recent spate of articles on technology and learning in the *New York Times:* "Technology in Schools Faces Questions on Value" (Richtel, 2011), "Classroom Software Boom, but Mixed Results Despite the Hype" (Gabriel & Richtel, 2011), and "Out With Textbooks, in With Laptops for Indiana School District" (Schwartz, 2011). The swirl of often competing discourses reflected in these articles heightens existing concerns within the education field about the role and value of new media in the formal educational context of school and what constitutes "success" (or lack thereof) in relation to the use of new media for learning.

Concurrently, adolescents are increasingly turning to a broad range of media-based learning sites *outside* the classroom where they can pursue their unique interests and goals—at their own initiation and direction (Collins & Halverson, 2009; Ito et. al, 2009; Jenkins, 2006). That development, some scholars argue, represents not just an expansion of learning but a "knowledge revolution" (Collins & Halverson, 2009). Its implications are profound: Students do not need to come to school to "get" information or to generate knowledge. Importantly, the kinds of learning that tend to be fostered and supported by new media challenge not only conventional classroom learning but the very tradition of education as we typically know it in America's public schools (Brown, 2002).

Given the stakes, it is critical that we reevaluate what it means to teach and learn in these contexts and address a central issue: How to leverage digital media to invigorate innovative and dynamic literacy learning *within* formal educational spaces. Educational

researchers, practitioners, and policymakers face a number of pressing questions: What is the role and significance of digital media for adolescents' literacies in schools? How do we take advantage of its unique nature/characteristics? What does school-based learning and curriculum look like in this digital era? What "counts" as literacy and what "counts" as knowledge in these digital times? How should schools be designed, or redesigned? If we are serious about creating dynamic learning environments for adolescents within our nation's schools, of making digital media more than a buzzword, it is critical to illuminate and understand the current range of literacy practices, habits, and mindsets of those youths who have "grown up digital" (Tapscott, 2009) within formal educational spaces.

To address these issues, this study investigates and analyzes the everyday practices of students living and learning in four tenth-grade English and four tenth-grade History classes in a school that explicitly embraces digital media and digital mindsets. The study intends to speak critically both to the questions of how adolescents engage these new media-rich learning spaces and what role adolescents' engagement plays in literacy and learning. A nuanced understanding of how adolescents navigate school-based spaces in this digital media era has important implications for how we as educators work with young people to design environments that are in tune with fundamental realities of their lives while creating effective contexts for literacy learning and enhancing the possibilities for their current and future lives. The results of this study reveal what I call a new culture of literacy learning that will support researchers, practitioners, policymakers,

and students as we continue to imagine and design new learning environments for the twenty-first century.

Statement of the Problem

Despite the centrality of digital media in adolescents' everyday lives, these new technologies have remained largely on the periphery of schools and classrooms. A major hindrance is that few American public high schools embody a holistic media-rich learning environment. Although there are an increasing number of cases wherein one teacher, one department, or one classroom weaves new media into everyday learning, there are few media-rich environments school-wide. Although many schools are ostensibly committed to such an effort and have attempted to design such spaces, very few public schools have substantively and consistently integrated new media into the daily life of school.

New media are predominantly used for learning outside the edges of formal schooling or for purposes that do not harness their full *learning* potential (Alvermann, 2010. To define the role of new media within the educational experience, American schools, teachers, and classrooms face at least three significant and interrelated challenges:

- 1. The pressure and mindset to treat new media as a discrete subject;
- 2. The need to understand the role and implications of new media outside the classroom;
 - 3. The task of viewing new media from the perspectives of adolescents.

Below I expand on each of these challenges.

First, a significant number of our nation's schools face pressure to adopt new media as a novel content area to teach and assess in schools. Whether this is called a technological competency, a twenty-first-century skill, or a digital literacy, policymakers and several professional organizations suggest that there is a discrete set of skills or literacies related to new media that we can not only name but also identify as something specific that we must teach. As a result, we are likely overlooking the opportunity to benefit from the power of new media for radically enriched intellectual learning in classrooms. Currently, school and classroom talk about technology centers around how to implement podcasts and other media in the classroom or how to test the digital competencies that students will purportedly need in the workplace, and less attention is paid to how classroom teachers can understand and build on adolescents' digital literacies and mindsets. Although new media pervade the ways that digital youth read, write, and think, there is considerable evidence that they have not penetrated to the core of schools (Collins & Halverson, 2009). The pressure to address new media as a discrete skill set presents a conundrum; most current research on new media argues that they offer the potential to expand and deepen students' existing literacies, not just create a new autonomous literacy (Alexander, 2006, 2008; Alvermann, 2009). Current research posits that adolescents work with multiple kinds of texts (e.g., print, visual, audio) in a range of sophisticated ways, that they constantly reshape and combine these in their composition processes, and access a wider range of audiences than ever before. The creation and institution of frameworks, standards, and tests of the so-called twenty-first-century skills

perversely appear to constrain what counts as literacy and simultaneously fail to optimize the affordances of new media for learning and literacy (Alvermann & Hinchman, 2011; Kist, 2010).

This challenge is best addressed in imagining how schools can embed new media in the very fabric of the classroom and the wider school environment. Instead of thinking about how to use these new media to teach conventional literacies, we need to envision, design, and foster classrooms and schools where technologies either are a legitimate site of inquiry or offer integral support for other sites of inquiry. This is no small task; in fact, it requires a significant break from the well-established "grammar of schooling" (Tyack & Cuban, 1995) that has undergirded the organization of classrooms and schools for the last 150 years. In effect, new media, if used to their full potential, could change the education paradigm; they can shift the emphasis from teaching to learning, and from instruction to productive inquiry (Brown, 2009). Such a shift could foster peer-based, self-directed, and social learning that enhances the school-based possibilities for students' new literacies and learning.

The second challenge is understanding the role that new media play in expanding the broader educational opportunities of all young people. When schools fail to integrate new media within and across the school context, they are segregating the school experience from adolescents' experiences of everyday living and learning in a world dominated by digital media; this segregation can have a far-reaching and detrimental impact on their futures, especially for students in the poorest schools. Ironically, while new media are regarded highly for increasing the opportunities for equity in learning and

possibilities for flattening hierarchies because of their low barriers to participation (Jenkins, 2006), their absence can have the opposite effect. Evidence indicates that children in the poorest school districts have the least amount of Internet access in their homes (Cooper, 2004). Youth who attend schools that lack digital media, and who do not have the means or resources in their home environments to experience them, are left at a sharp disadvantage compared with their peers. More often than not, schools that are denoted as "struggling" or failing to meet adequate yearly progress (AYP) according to accountability measures associated with No Child Left Behind (NCLB) are also least likely to have the new media technologies and resources on the school grounds since they are under the greatest pressure to raise standardized test scores, which do not test online reading comprehension or other digital literacies (Collins & Halverson, 2009; Leu et al., 2011).

Of greater concern, perhaps, are the premises underlying such uneven investment in new media, more specifically the assumptions that new media and digital technologies are privileges or resources that are "nice to have" but not essential to all young people's learning and, furthermore, that new media are reserved for students and/or schools that are deemed "successful." When we position digital media as a luxury or prerequisite available once standard academic goals are met, we are delimiting new media's distinctive learning potential and further marginalizing large groups of youth, especially poor youth. In adopting this premise, we also perpetuate the idea that new media literacies can be isolated and taught as discrete acts or skills apart from other academic learning activities.

Finally, most of what we know from current research and literature comes primarily from the perspectives of teachers, school leaders, and policymakers. Although existing research is helpful in thinking about new media in schools, it does not offer us specific insight into what *youth* are doing every day in new-media-rich environments. In other words, few studies intentionally and explicitly focus on how adolescents participate with digital media in school. We have little understanding of how adolescents—from their perspectives—engage new media in classrooms and schools. Consequently, we are in danger of making significant policy and curricular decisions that rely too heavily on information gathered from the perspectives of teachers, few, if any, of whom have grown up digital. To better understand and design meaningful spaces of literacy learning in these digital times, it is critical that we add more youth voices to the conversation. We must take seriously what it means to a "digital youth" to navigate a digital classroom that is embedded in a digital school.

Therefore, in this study I observe, follow, and listen closely to over one hundred adolescents in school-based contexts to uncover the nature of their literacy learning practices in school. I attempt to understand how they engage this space for literacy learning when new media are ubiquitous in their immediate classroom context and wider school community, yet so seamlessly integrated to be nearly invisible. The site of this study, Big Dipper Academy, is a Philadelphia public high school that was designed as a pioneer in "21st Century Learning." Big Dipper is deeply committed to both integrating digital media and honoring the digital mindsets of students, teachers, and administrators.

² Pseudonym.

It is a one-to-one laptop school, and digital media are recognized as a given, everyday reality of life in this brick-and-mortar building.

Rationale

We are at a critical moment in thinking about the role of new media in American schools. In the last several decades there have been two overarching trends in the educational research and national discourses surrounding the role of technology in American schools. The first was characterized largely by a focus on issues of access to technology, while the second was characterized by a focus on issues related to the integration of technology in schools. The most recent educational research and national conversation suggest that we are in the midst of another transition, thus marking a third trend. This trend is characterized by issues and questions related to technology in routine, everyday use in schools. This study moves us beyond the questions and issues of access and integration that dominated the first two trends and looks closely at adolescents' everyday literacy learning in schools and classrooms that are intentionally designed as media-rich learning contexts.

The prevalence of new media in most adolescents' everyday lives has created new contexts for learning, suggesting new ways for thinking about teaching, learning, and the role of education in the United States. Although adolescents' increasing participation with new media and this networked society raises serious issues and questions for educational research, practice, and policy in the twenty-first century, this study speaks to the significant implications for teaching and learning when classrooms and schools avail

themselves of the everyday habits, mindsets, and practices of the digital youth in schools. What happens when youth who have 'grown up digital' attend schools that have 'grown up digital'? This study investigates how adolescents' participation in and with digital media can deepen our understandings of how knowledge is constructed by, for, and with students. It also deepens our understandings of the role of digital literacy practices in twenty-first-century teaching and learning. I address these questions through a two-year qualitative study of the literacy learning practices of 122 tenth-graders in their English and History classes in a media-rich Philadelphia public high school.

The study has two central objectives. First, the study describes and analyzes the ways adolescents use new media in school from a youth-focused perspective. I draw specifically on a youth perspective not only because I view youth as active participants and knowledge generators in relation to what they are doing in their English and History classes with new media, but also because I believe it is critically important to add youths' knowledge and perspectives to the current debate about the role and significance of new media in school-based learning. Given the amount of time youth spend in school, it seems impossible, or at least a grave oversight, to think about literacy learning if we overlook how adolescents use new media in their everyday lives. Second, the study addresses the implications for new learning environments and adolescent literacy education for the future of schooling. The primary goal here is not to argue for or against new media in schools, or to demonstrate the relationship between the use of new media and "traditional" academic performance; rather the goal is to better understand how the everyday habits, mindsets, and literacy practices of students who have grown up digital

shape their everyday life in classrooms and schools. Ultimately, I uncover new ways for educational practitioners, researchers, and policymakers to imagine and design spaces in school that support students' rich literacy practices and create meaningful and productive learning environments *with* new media.

It is important to emphasize that this study does not focus on the actual technologies of this space; instead, I focus on the adolescents and the ways in which they take up the new media in pursuit of rich and meaningful literacy learning spaces. As used in this study, a rich literacy learning space is defined as one in which teachers and students use digital media regularly to engage significant intellectual concepts and support challenging academic projects.

Research Questions

This study focuses on adolescents in an urban, public, technologically rich high school in the United States. A primary goal is to add adolescents' perspectives and voices to the national conversation and debate about the role and meaning of adolescents' everyday digital media practices in classrooms and schools. Therefore, the following research question and sub-questions will be supported by research methods that document and collect adolescents' points of view.

I focused on one central research question and several sub-questions. I raise this central question with the belief that the perspectives, practices, and participation of digital youth who are situated in a technologically rich school environment can enhance educational practitioners', researchers', and policymakers' understanding of teaching and

learning in the twenty-first century. Given the nature and design of this study, particularly my commitment to an ethnographic perspective, these questions evolved as data emerged (Creswell, 2007; LeCompte & Schensul, 1999).

The central research question is: How are new media used by adolescents for literacy learning in digitally rich school-based contexts?

Within this one research question, I consider the following sub-questions, which I have organized around three central themes: Media-in-Use, Collaboration and Participation, and Knowledge Generation.

(1) Media-in-Use:

- a. What are adolescents doing with new media in these school-based contexts?
- b. How do adolescents describe their use of, engagement with, and experiences of new media spaces?

(2) Collaboration and Participation

- a. How do adolescents participate with others in digitally rich school-based contexts?
- b. How are these new relationships shaping or being shaped by relationships with peers, teachers, school, families, and communities?
- c. What are the possibilities and limitations of participation and collaboration in this learning context?

(3) Knowledge Generation

a. How is knowledge constructed by, for, and with students in these spaces?

b. What kinds of identities/perspectives/ideas are adolescents developing and enacting in these spaces?

Conceptual Framework

Underlying this study and the aforementioned research questions are several assumptions about literacy, youth culture, and technology that are grounded in literatures across several domains of scholarship. These were used to develop a conceptual framework around three interrelated strands of work to support the close investigation and analysis of the meaning, role, and significance of new media for literacy and learning. The three strands of interrelated work are: (1) Socio-cultural constructions of literacy; (2) Youth culture; and, (3) Media ecologies. In this section, I will elaborate on these three strands.

Socio-Cultural Constructions of Literacy

Throughout history, literacy has been a hotly contested term and the subject of much debate in education. At the root of this debate are the range of beliefs about and contrasting conceptualizations of the purposes of literacy. Several scholars have argued that within the United States there is no singular history or definition of literacy. Instead, there are multiple histories of literacy and multiple paths to literacy (Graff, 1979; Willis, 1997). Willis (1997), in her historical account of literacy research in the nineteenth and twentieth centuries, posited that literacy has been conceptualized in three broad ways: as a skill, as school-knowledge, and as a social and cultural construct. In this study, I adopt a

socio-cultural construction of literacy (Scribner & Cole, 1981), drawing specifically on the frameworks offered by the New Literacy Studies (NLS; Gee, 1996; New London Group, 1996; Street, 1984, 1995) and the new literacies theory (Coiro, Knobel, Lankshear, & Leu, 2008; Leu, O'Byrne, Zawilinski, McVerry, & Everett-Cacopardo, 2009; Leu, Kinzer, Coiro, & Cammack, 2004).

Within the NLS framework, literacy is conceptualized not as a set of neutral, discrete, or autonomous skills but rather as a socially and culturally situated practice that is continuously formed and reformed in and through social interactions and institutions (Gee, 1996; Street, 1984, 1995). Based on ethnographic research of literacy practices in Iran, Street (1984) contested the idea of literacy as an autonomous ability to read and write, and instead proposed a conceptualization of literacy as inherently ideological. Whereas the autonomous model suggests an objective, decontextualized vision of literacy, the ideological model of literacy posits that all of the practices and interactions that take place around texts are grounded within specific local contexts and influenced by broader power relations and institutional structures.

In keeping with the NLS framework, I see literacy as sets of socially, culturally, and politically situated practices that are actively negotiated by individuals in context.

Given the emphasis in this proposed project on how adolescents engage digital media in a multitude of school-based contexts (i.e., the school, the classroom, networked spaces) as well as the individuals' identities within and across these varied contexts, this construction of literacy is appropriate because its definition encompasses both how individuals make sense of local literacy events and the ways that the contexts in which

individuals access and engage texts may be mediated or prescribed by broader ideologies (Barton & Hamilton, 1998). Furthermore, I adopt the notion of "multiple literacies" that are fluid and will vary according to specific contexts and spaces (Barton & Hamilton, 1998, 2000; Scribner & Cole, 1981; Street, 1984, 1995). The concepts embedded in NLS offer a compelling frame for this study because I situate the literacy practices that surround adolescents' use of and response to new media, digital technologies, and networked spaces as distinct, nuanced social practices that are tied to and informed by the broader social, linguistic, and cultural contexts of the youths' everyday lives.

Given the focus of this study, however, on the literacy learning contexts that are facilitated by digital media, including the Internet and Internet-associated technologies, I also draw on an understanding of literacy that falls within the broader framework of NLS, yet refers specifically to literacies in relation to new media and digital technologies. This framework that grew out of and is supported by NLS has been defined as a new literacies (lowercase) perspective (Coiro, 2011; Lankshear & Knobel, 2007; Leu et al., 2004). This specific perspective is useful to this study because it situates the technologically dense contexts at the center of many adolescents' everyday lives as contexts that are rich with literacy practices that can advance our collective understanding of adolescents' use of the Internet and related media in schools. The new literacies (Coiro, 2011; Leu et. al., 2009) perspective rests foremost on the belief that the Internet should be viewed as a literacy issue and not a technological issue. Scholars in this tradition argue that researchers must commit to looking beyond the technological aspects of the Internet and instead focus on the underlying social practices. By this they mean that the research community should not

view the Internet, or even components of it, as a singular, specific, and fixed technology that can be researched and understood, but rather as a context in which individuals, groups, and communities read, write, and communicate (Leu et al., 2009). The new literacies perspective is informed by work that has grown out of the NLS tradition, and socio-cultural definitions of literacy broadly, in its commitment to analyzing the underlying social practices of the Internet as literacy practices, as well as the belief that these social practices are socially situated, context specific, and continuously developed and negotiated through social activity. In addition to acknowledging the cultural, linguistic, economic, political, and social forces at play in any individual or group's literacy practices in an Internet-based context, the new literacies perspective acknowledges that these literacies are tied to specific media moments and mindsets that include the skills and dispositions required by new technologies and are often, although not necessarily, tied to specific generational identities.

Knobel and Lankshear (2007) and Lankshear and Knobel (2006) delineated their own working framework for new literacies by articulating specifically what constitutes "new" within their particular perspective. They argued that cases of new literacies must consist of what they refer to as new "technical stuff" as well as what they refer to as new "ethos stuff." Their understanding of new "technical stuff" revolves around the presence of new technologies: new digital tools or electronic technologies that enable people to participate in new kinds of literacy practices and involve new kinds of sensibilities and norms. By new "ethos stuff" Knobel and Lankshear (2007) suggested that the literacies that are enacted or invoked are often more participatory, collaborative, and distributed

than they tend to be in "conventional literacies." Alternatively, then, new literacies are often described as less "polished" and less "author-centric" than more conventional literacies (Knobel & Lankshear, 2007). Their notion of new ethos stuff is inextricably tied to what they refer to as an emergent mindset that "differs profoundly from the mindset that dominated the modern period" (Lankshear & Knobel, 2006, p. 1). They have outlined some of the key differences between Web 1.0 and Web 2.0 (see Appendix 1.A) as well as what they call Mindset 1 and Mindset 2 (see Appendix 1.B) that I find to be helpful in understanding the notion of how they are theorizing "new ethos stuff" and, in turn, new literacies. It is important to note that Lankshear and Knobel offered this table as a useful heuristic and did not intend to suggest that these are the only two mindsets. The idea of an 'emergent mindset,' or what I often refer to as a 'digital disposition,' is central to my study in the sense that I assume, given the explicit and intentional design around technology at the site of my research study, that most of the adolescents as well as the teachers and administrators are largely operating from the second mindset.

Youth Culture

This youth-centered study uncovers adolescents' own experiences and perspectives on how they take up, interact with, and make sense of the everyday digital media and networked spaces that are embedded in their school lives. Given the youth-centered focus of this project, all the research questions are grounded in a concern with youth culture, specifically school-aged youth in middle and secondary schools.

Therefore, the second strand of work that helps to frame this study is youth cultural

studies. The youth cultures framework supports my effort to position the adolescents in this proposed study as active, purposeful, and thoughtful agents in their own lives and learning as well as in their relationships with others and their surrounding communities. In contrast to how adolescents are generally positioned in society, including the "not-yet adult" (Alvermann, 2006) construction of young people, I operate with the belief that they are always navigating complex and complicated social worlds.

Scholars from disciplines including psychology and biology as well as sociology and anthropology have worked extensively and carefully to characterize the ways in which young people think and behave. Much of the work on youth posits that adolescence, drawing on biological and psychological maturation processes, can be conceived of as a universal phenomenon or a biologically determined stage of development aligned with certain kinds of behaviors (Hall, 1908), In contrast, this study adopts the premise that youth is a socially constructed category (Buckingham, 2003, 2007; Kett, 1977; Levi & Schmitt, 1997). Instead of seeing adolescence/youth as a fixed, clear developmental stage before adulthood, or adolescents as "incomplete" cultural actors on their way to adulthood (Kett, 1977), this study accepts the following two beliefs: (1) adolescence/youth is a social category (Hall & Jefferson, 1976) that is always under construction and constantly subject to being (re)made and (re)invented based on the various forces (e.g., political, economic, cultural) and social actors (e.g., peers, adults, schools) that are operating within a given social context; and, (2) adolescents are purposeful social actors who are actively and continuously negotiating and navigating their worlds as conscious, deliberate young people.

I situate the youth who are the participants in this study as individuals who are always navigating complex social worlds and involved in sophisticated decision making and problem solving. Nakkula (2008) and Nakkula and Toshalis (2006) asserted that adolescent development is an ongoing process of creation, negotiation, and interpretation. This stance on youth stands in contrast to the commonly accepted model of youth as "not-yet-adult" (Alvermann, 2006). To understand the perspectives of youth in terms of the choices they make and how they live their lives, this study aims to meet youth "where they are" and in terms of what they are "becoming." I assume that youth, as they experience and construct their lives, are always, actively co-authoring their lives in tandem with other individuals (e.g., adults, teachers, peers) and in response to how they are positioned by institutional structures and systems (Nakkula & Toshalis, 2006).

This study is intended to demonstrate how adolescents, who are embedded in a technology-rich environment, draw on and engage surrounding texts and contexts in the process of constructing and enacting certain identities. The specific social hierarchies, and power relations as well as the economic, political, historical, and cultural realities that are operating within adolescents' particular social world inform how they make meaning, how they position themselves, and how they construct their identities (Appadurai, 1996; Bettie, 2003; Cole & Durham, 2004; Frank; 1997; Gorsuch, 2000; Hebdige, 1979). Youth may, for example, take on the role of "social shifter" or agent of change whereby, in the process of being "made" or defined by specific social structures, they resist, appropriate, and/or transform those structures (Cole & Durham, 2004; Mahiri, 2004).

Media Ecologies

Finally, this study is grounded in a media ecologies framework (Barron, 2004, 2006; Benkler, 2006; Brown, Collins, & Duguid, 1989; Ito et al., 2009; Shirky, 2008) in order to consider the role of the digital media and networked spaces that adolescents engage every day in school-based contexts. This scholarship provides a useful lens to view the patterns of participation and multiple modes and forms of communication between and among the adolescents and the wider school community. I also draw on a media ecologies lens because it provides a way for me to observe, follow, and learn from the possible literacy learning opportunities that may emerge across adolescents' engagement with different participatory cultures (Jenkins, 2006). This has the potential to support my belief that the participation efforts and communicative practices that are facilitated by or take place within and across new media and networked environments do not exist in a vacuum; instead, they are linked directly to the identities, relationships, and interactions that are performed by students in the classroom, hallways, and a range of online spaces. These frameworks are grounded in an "ecological perspective" that posits that individuals are actively and continuously creating and navigating learning contexts within and across new media contexts. They also rest on the premise that new media practices are embedded in a broader social and cultural ecology. As such, the media ecologies framework offers this study a rich approach for researching and studying participation patterns within and across such a diverse and complex set of spaces.

A media ecologies framework is also useful for grounding my specific approach to the role of technologies in this study. Although technology plays a central role in this study, my emphasis is not on technology itself, but rather on the social and cultural spaces that are created or mediated by different technologies. I acknowledge that there are complex and situated histories, cultures, politics, and social relations embedded within the ever-changing space that is the medium for student communication and interaction in this study. I also recognize that the virtual space—a "technosocial space" (Okabe & Ito, 2003)—is itself constructed from a combination of situated social, cultural, and technological developments. In keeping with several theories of contemporary technology studies (Bijker, Hughes, & Pinch, 1987; Edwards, 1996; Hine, 2000), I recognize that technology is not an external force that influences society and culture. Rather, technologies are *embodiments* of social and cultural structures that in turn get taken up in new ways by existing social groups (Okabe & Ito, 2003). The media ecologies framework, in conjunction with NLS and new literacies, enables me to locate the contemporary technologies in this study within broader historical contexts and trajectories.

I draw on this framework because it conceptualizes the interactions between participants as intricately intertwined with the different spaces they occupy (virtually and otherwise). This frame is a particularly useful lens for this study because it broadens the notion of context. As I mentioned earlier, much of the literature to date in this terrain is limited in that it is restricted by a bounded practice (e.g., blogging, wikibuilding) or a bounded context (e.g., a classroom, a virtual discussion forum). Instead, the media ecologies framework affords this study a perspective that these contexts are not only inextricably tied to one another but also embedded in a broader social and cultural

context. A media ecology explicitly demands that I think about the relationships among the multiple media, technologies, and spaces at play in this study not just as they are presented within the school and classroom, but also *in and through* the practices and mindsets that enter the school vis-à-vis the adolescents. This frame supports this study's central research questions and addresses some of the constraints of NLS and new literacies, specifically the limitations of the notion of context and spaces.

The Organization of This Dissertation

This dissertation is organized in seven chapters. Chapter Two offers a review of relevant literature and the accompanying ideas, practices, and arguments across the literature that inform what we currently know and need to know about this problem in the literacy field. Chapter Three describes the context for this research, my role as a researcher within this context, and the methodologies and methods used to collect and analyze data. Chapters Four, Five, and Six introduce and analyze three central dimensions of literacy learning—Noise, Navigation, and Negotiation—that emerged from the data. Each dimension is distinguished by a set of endlessly varying and rich language and literacy practices that constitute a collection of new literacies that are radically altering the learning potential of the classroom environment. Together, the three dimensions compose what I refer to as a *new culture of literacy learning*. Chapter Four focuses on the nature of this context for literacy learning in these classrooms. The chapter introduces the ways in which students engage the collection of texts, resources, people, and ideas linked to this learning environment and the multiple literacies that students use

and initiate to participate with this diverse collection of texts. Chapter Five centers on students' lived experiences as participants in this class and how they find ways to maneuver in this learning environment. This chapter focuses on students' moves and tools as well as the range of roles and responsibilities that were required to navigate these multilayered classes. Chapter Six also centers on students' lived experiences within this space, but with specific attention to their multiple literacies. Drawing on student work and students' perspectives, as observed and reported, I examine how adolescents participated with others in this space. I present an analysis of how adolescents' participation with digital media informed the construction of ideas and knowledge and how students' use of various digital media supported a sophisticated repertoire of multiple literacies. Finally, Chapter Seven summarizes and discusses the findings and their implications for educational researchers, practitioners, and policymakers and the opportunities and questions for future research.

Chapter 2:

New Media Literature and Research: What "Works"?

Introduction

This study is situated within a substantial corpus of research that explores teaching, learning, and literacy for adolescents in these digital times. There is a growing body of research on young people's new media practices in and out of schools in relation to literacy. We are just beginning, however, to understand the role and significance of new media for literacy in adolescents' everyday lives in the formal context of school and from adolescents' own perspectives. Given the challenge of learning *how* to follow and learn from adolescents' participation in new media contexts, the research community is in the early stages of developing sophisticated approaches for looking at these sites of adolescents' literacies. Researchers are also constrained by the number of school contexts where there is relatively unbridled use of digital media. This chapter begins with a review of relevant literature in order to explain what we already know from research in these fields and what this study will contribute to current scholarship. I will close this section with a brief discussion of the various perspectives and terms used in the literature and my decision to use certain terms in this study.

A Review of the Literature

In the last decade, there has been a surge in quantitative and qualitative research studies on new media in middle and secondary schools. As new media permeate schools

and the lives of adolescents in school and out of school, scholars from several disciplines have tracked, analyzed, and worked to understand how new media is and/or could be used in schools. Most researchers are explicitly focused on new media's potential for teaching and learning, although what constitutes teaching and learning varies across the research. Research and scholarship on the issue of school-based literacy learning and digital media has focused heavily on questions of how to integrate and use digital media to support or extend existing teacher-driven learning agendas and institutions. This body of literature has largely dichotomized the role or potential role of digital media for learning in schools into what I refer to as "constructive" and "disruptive" (Cochran-Smith & Lytle, 2009). Constructive roles include the use of specific technologies that aid, improve, and/or enhance literacy learning as we typically conceptualize it and test it in schools, the use of digital media to bridge students' out-of-school and in-school lives, and the use of digital media in electives or as an "add-on" in classrooms to teach technological competencies and skills needed to be competitive in the workplace. Much of the research aims to understand the extent of digital media's "success" in schools in relationship to increased academic achievement, as defined by federal, state, and district standards, and efficiency of our nation's educational institutions which are not designed to measure digital literacies.

There is an underlying concern in much of the research with determining how digital media can enable more classrooms to cover more material with as little time and money as possible. Digital media that are reported as constructive for literacy learning are media for which empirical research has shown, primarily according to existing

standardized assessments, that digital media constructively facilitate and bolster school-based literacy learning. Disruptive roles include uses of digital media that interfere with traditional literacy learning objectives of schools or that distract us from the priorities of formal educational institutions. This dichotomization of the role of digital media for literacy learning is consistent with much of the current educational research and discourse that relies on top-down frameworks and "adult" or "institution-centered" perspectives to determine what "works" for learning. For digital literacy learning, this focus on isolating the value of digital media with regard to specific, predetermined outcomes has contributed to continued focus on questions that ask how we monitor, control, or limit media use in schools.

Although the notion of constructive and disruptive roles of digital media still dominates much of the literature surrounding digital media and literacy learning in schools, several scholars have criticized this literature (Alvermann, 2010; Alvermann & Hinchman, 2011) and problematized the focus on research that examines digital literacies in ways that reinforce outdated conceptualizations of classrooms and schools (Kist, 2005, 2010). Likewise, scholars have argued that the efforts to deem digital media and technology either effective or ineffective have overlooked that a more nuanced understanding of new uses of digital media may exist for school-based literacy learning (Ito, 2009; Ito et al., 2010; Lankshear & Knobel, 2003, 2006; Moje, 2002). Recent qualitative studies have illustrated a more complex understanding of digital media's role in classrooms and schools and the possibilities to use digital media for *new* kinds of learning as well as in support of traditional kinds of learning in new ways (Alvermann,

2010; Ito, 2008b; Kist, 2005, 2010; Parker, 2010). Parker's (2010) research suggested that shifting our focus toward what youth are doing in digital spaces could reframe the debate about technology in schools.

Literature on literacy practices of adolescents with new media includes research that focuses on their use of new media in school-based contexts and research on their use of new media in out-of-school or after-school contexts. I will focus primarily on the range of research perspectives within and across the research that takes place in school-based contexts because of its relevance to the context and goals of this study. Given the lack of research in school settings similar to the setting in this study, however, I will pay attention to aspects of the out-of-school research that are relevant to this study. In my review of the vast body of research, four subsets emerged as helpful for framing this study. I have grouped these as follows: (1) broad trends in access and integration in schools, (2) in-school use, (3) regulation and control, and (4) out-of-school use.

Broad Trends in Access and Integration

The bulk of the growing body of research on new media in middle and secondary schools tends to focus on new media as tools that need to be accessed and integrated into classrooms and schools. "Tools," however, are variously used and widely defined across this literature. Consistent with the ongoing debate in the field that this study aims to address around *how, for what purposes,* and *to what extent* new media could/should be used in schools, there is much debate in the current literature around the role and perceived "successes" or "failures" of new media tools in school.

Beginning in the mid-1990s, a number of survey-based studies began to document several of the patterns of technology integration and use in U.S. public schools. Taken together, this survey research provides this study an important reference point for thinking about broad trends of youth media engagement. In survey research conducted for the oft-cited Pew Internet & American Life Project, the researchers documented trends in the frequency of adolescents' new media engagement. Two recent studies reported that 90 percent of school-aged youth use the Internet regularly, with adolescents between 12 and 17 composing the largest group of users (Lenhart et al., 2008; Lenhart, Madden, & Hitlin, 2005). Furthermore, 55 percent of online teenagers are using Web 2.0 technologies several times a day, on average dedicating at least 9 hours per week on networked spaces (Lenhart & Madden, 2007). The National School Boards Association (2007) reported even higher frequency; they documented that youth, whom they refer to as "digital natives" (Prensky, 2001), spend 4.5 hours a day interacting with or viewing "screen media" (Internet, Internet video, mobile phones, TV, but not games). This study attempted to look beyond frequency of media use to understand the kinds of behaviors or activities that compose students' time on networked spaces. They reported that 60 percent of the students surveyed use social networks to talk about education or school-related topics, and that 50 percent talk specifically about their schoolwork. Even more, they reported that 82 percent of middle and high school students media-multitask when they are doing their homework. By this, they mean that school-aged adolescents may be, among other things, using instant messaging, Web surfing, or texting. Lenhart and Madden (2007) also outlined the following as the predominant ways youth spend time

with new media: sharing media, exchanging messages, requesting or searching for information, developing personal connections, posting digital content, remixing digital content, creating or commenting on blogs, and forming/bolstering social groups.

With regard to the integration of new media in schools, Wells and Lewis (2006), drawing on data from the National Center for Educational Statistics, reported that in the last 10 years Internet access has increased from 35 percent to 100 percent in public schools and from 14 percent to 94 percent in individual public school classrooms. Given the trends in wireless connectivity and evidence of technological hardware in schools, they posited that new media are available in schools, yet underused.

This survey research on trends in media availability in schools and adolescents' increasing use of media sheds light on a trend toward youth's increased sociability, changing spaces of sociality, and a significant turn to what many scholars have called either a "networked society" (Castells, 1996; Ito et al., 2010) or "networked publics" (boyd, 2008; Ito et al., 2010; Varnelis, 2008). Although this research is limited in terms of what it can tell us substantively about the lived experiences of adolescents' time and experiences with new media *in schools*, specifically the meanings adolescents themselves make of these experiences, the findings are important for documenting the prevalence of new media in young people's lives and the disconnect between adolescents' media engagement in school and out of school.

In-School Use

The second strand of research in this body of work aims to address some of the actual ways, in practice, that new media are being used in classrooms and schools and the ways that educators, and the nation at large, can assess learning that is contingent upon and takes place with(in) new media. This research is concerned with the evaluation and assessment of new media in "traditional" classrooms. Undergirding most of the research in this strand is a core belief that technology has changed teaching and learning as well as the workplace in some substantive ways and that schools, teachers, and classrooms should "adapt" by changing and adopting some new approaches to classroom teaching. Thus, this strand focuses specifically on *how* educators are teaching differently and/or how educators *could* teach differently with new media.

New Media "Fits In"

In this literature, there is an increasing number of qualitative-based studies, primarily ethnographic-focused case studies and practitioner research studies, working to deepen our understandings of how new media are being engaged in U.S. schools.

Although we do not yet have any large-scale studies that consider the school-based experiences of a large, diverse sample of youth populations across a range of schools and districts, current case-study research offers important perspectives on how specific cases or populations of youth, teachers, classrooms, or schools engage new media.

Vasudevan, DeJaynes, and Schmier (2010) examined the significance of multimodal play with new media for the purposes of composing in three urban

educational settings. Chandler-Olcott and Lewis (2010) investigated secondary school teachers' constructions of adolescents and their online literacies to capture various perspectives on integrating new media in classrooms. Allison's (2009) study, "Be a Blogger: Social Networking in the Classroom," presented a rich case of a blogging curriculum he integrated into his New Journalism/Technology classes in a New York City high school. Students regularly author their own blogs and respond to peers' blogs via Youth Voices (http://youthvoices.net).

Allison documented the ways blogging requires students to engage and navigate new media, but the project is an isolated activity that is positioned as a way to use or "fit" technology within a pre-established curriculum. In other words, he posited that blogging is a way to use new media to support a generally rich classroom writing culture and traditional writing goals in high schools. As Allison wrote, "Students become passionate self-guided learners who seek to improve their skills to keep up with and to impress their peers" (p. 75).

Similarly, Crandall (2009) studied how technology was adopted to support twelfth-grade students in their efforts to fulfill Kentucky's senior project requirement. Technology was integrated to help schools "keep up" with local and state regulations and to meet concerns about students' digital preparedness. In Crandall's study, students were given permission to use digital skills and include some multimedia components in their senior project. In this case, technology was a tool that enhanced the curriculum and extended the literacies students drew upon, but in an explicit effort to support the existing framework and goals.

Studies such as those by Allison (2009) and Crandall (2009) inform this study in that they support a common trend in this literature of documenting one individual teacher who is charting new media integration largely out of their own initiative and professional motivation. Across the research on new media in English, Social Studies, or Humanities classrooms, it is not unusual to see isolated teachers or small groups of teachers taking it upon themselves to learn the technology and new media, access the necessary hardware, and create one space or one of few spaces in a given school to honor technology as part of the learning environment. Studies such as these illustrate how new media works in support of preexisting English classroom goals and less on the ways in which this new media is extending what we might mean by writing in the classroom. Leander (2008) referred to this as "new literacies in old literacy skins," and Lankshear and Knobel (2009) called this "old wine in new bottles."

New Media That "Delivers"

This strand of research also opens up new understandings of how certain out-of-school new media practices are being drawn from to deliver content that schools deem important. Greenhow (2009) designed a social media experiment, "Hot Dish." Based on the engagement of three hundred 16- to 25-year-olds with a news competition via Facebook, Greenhow studied how new media, specifically social networks like Facebook, were appropriated or manipulated to "deliver" news to youth. What I gather from this work is the impetus of educators to try, sincerely, to understand and maximize youth's communication channels and ways of living and learning, yet at the same time to

use them to address perceived challenges or shortcomings in current schooling. In this study the researchers were concerned with students' 'willingness' to access and engage with current events. They documented that adolescent response was fairly strong, which supported the finding that adolescents are invested in online spaces and that the virtual platform may be a compelling site for youth organizing and civic-minded engagement.

Building on earlier work, Greenhow's (2009) study contributes to the idea that social networks can connect individuals to information in new ways and that youth are actively reading, collecting, and distributing information. This study documented interesting possibilities for youth participation patterns, but given the experimental nature of this project with incentives and prizes for participation, it is difficult to extrapolate a clear picture of the *adolescents*' motivations, practices, and habits. This research approach highlights the need for a youth-focused lens to gain insight on the role of current news in adolescents' lives.

Operating below the surface of much of the research on new media and digital literacies is the idea that these are skills that must be taught and measured. This idea dominates much of the research that focuses on new media as twenty-first century skills or the seemingly broader construct of twenty-first century literacies. A review of the literature in the last 10 years documents how an increasing number of professional organizations such as National Council of Teachers of English (NCTE), International Reading Association, Alliance for Adolescent Education, and others at the local, state, and federal levels have written and released a variety of standards, curricula, and assessments related to new media and digital technologies that researchers are now

tracking and evaluating. This has led to the creation and addition of "21st Century Skills" (see Partnership for 21st Century Skills, 2008) as a core requirement under No Child Left Behind, the NCTE putting forth a "21st Century Literacies" framework (see NCTE, 2008), and the Educational Testing Service designing the ICT Literacy Assessment, now iSkills (see www.ets.org/iskills/about). There is much research underway to evaluate how we can teach these skills effectively and efficiently, remaining inside a framework of top-down accountability. This research suggests the emergence of a new "schooled literacy" to be integrated, taught, and tested. Although this research offers insights on some of the skills, competencies, and literacies that are involved in the use of new media in schools and the professional workplace, because it is tied to a predetermined set of ideas about what counts as a skill or literacy it limits our ability to understand novel ways of using new media.

Although we are gaining valuable insight on how students respond to and engage certain technologies in the classroom, we lack a clear picture of how adolescents' literacy and learning practices are informed when they are at work within classroom and school-based contexts that are rich with new media. Around the country we are witnessing a concentrated and costly effort to both integrate and test digital media in secondary schools. This includes the effort to determine the impact of digital media on student achievement, as determined by students' results on standardized tests, as well as efforts to gauge students' proficiencies with specific digital skills. However, given our limited understanding of digital media's unique contributions to school-based learning, there is a disconnect between digital media and standardized tests. This lack of clarity about the

purpose of new media in schools leads to increasing concerns in popular news media about the effectiveness and value of new media in school. For example, Richtel's (2011) recent *New York Times* article "In School of the Future, Stagnant Scores," which reported on a school in Arizona said to have all the affordances of technology but where students are not meeting expectations on standardized test scores. We need additional research to determine the extent to which current tests can accurately measure, if at all, the success of new technologies.

New Media for New Literacies

A growing number of researchers argue that these frameworks (e.g., 21st century skills) and the instinct to link them to achievement on existing standardized tests are part of a wider trend of narrowing what counts as literacy (Eidman-Aadahl, 2010; Herrington, Hodgson & Moran, 2009; Hillocks, 2005; National Commission on Writing, 2010). This research stands in opposition to the increasing body of research that suggests how students' literacies are evolving and expanding with the use of digital media. Many scholars argued that adolescents combine a range of print, spoken, visual, and digital texts in their composing processes and use a variety of forums to publish and disseminate the content they generate, exposing them to multiple audiences with the click of a mouse (Kress, 2003; Kress & Van Leeuwen, 1996; Lankshear & Knobel, 2006; Yancey, 2009).

There are extensive studies on a variety of critical media literacy initiatives. This body of work argues that schools must not ignore, dismiss, or prohibit new media in schools, and, in fact, have a responsibility to help students navigate new media spaces

(Gurak, 2001; Hobbs, 2011; Morrell, 2007). Schools should work with students to be critical of the kinds and sources of information that is distributed via the Internet. Some scholars suggested that new literacy assignments could be implemented to uncover and examine racism, sexism, and heterosexism in much of today's media (Bean & Moni, 2001; Wallowitz, 2004). This work is often the main focus of fields such as "information literacy," "media literacy," or "critical media literacy" (Gurak, 2001; Hobbs, 2011; Jenkins, 2006; Morrell, 2007, 2009). This research suggests that we must work with students and new media to examine how they navigate, trust, and critically interrogate the multiple types and sources of data distributed via new media.

At the core of this literature remains a deep tension between the materiality of technology and the ways in which it is understood by and used with youth. This tension is documented by the Pew Internet and American Life Project's survey (Levin, Arafeh, Lenhart, & Rainie, 2002) that reported that despite evidence of schools' access to and integration of new technologies, there remains a "digital disconnect" between students and schools. Using survey data collected from 3,000 public school students, Levin et al. reported that students overwhelmingly claim that their teachers have not shifted their teaching practices to incorporate the new technology in media in the classroom context. It is important to note that this "digital disconnect" is distinct from what is often called the "digital divide," which refers to the ways in which digital media and technologies are increasing the division and inequities along social class lines.

Cuban (2001, 2006), among others, complicated this body of work on integrating digital media in schools. Building on his long history of researching teachers'

instructional practices and the resistance of the American educational system to reform, Cuban's research documents teachers' and schools' resistance to new media. Based on a 7-month study in two comprehensive high schools, he reported that most teachers and students are either occasional to rare (once a month) users or they are non-users of these machines in instruction (2006). Cuban (1984, 2001, 2006) cited the increases in technology integration in terms of access to computers and wireless connectivity, but did not find any substantive changes in the classroom environment as a result of those technologies. Cuban (2001) reported that the technological innovations maintained existing classroom practices. As one of the teachers, a leader in computer integration in the school, claimed, "It's how you use the tool. If we are only using it to word process than we may as well have typewriters" (p. 814).

Drawing on earlier historical work, Cuban (1984, 2001) was not optimistic about meaningful and substantive integration of technology. Cuban emphasized the importance of understanding the social and cultural context of any school and the ways that resistance, often from the teachers, comes into play. He suggested that there are several reasons why teachers choose not to use the technology: uncertainty about how best to use it, confidence that it's superfluous, and a belief that they can teach just as well in the "old ways."

New Media to Extend

Many of the earlier studies reported either a "one-time" integration or an isolated practice in an individual classroom. We are beginning to see, however, research that

attempts to gain a deeper understanding of new media as something embedded in the daily practices and habits of students.

Schwartz's (2009) study, a case study of how media (video, verbal, and audio) fuse in the teaching of poetry with ninth-grade students, demonstrated the possibilities for integrating a wide variety of new media in school-based contexts. Schwartz relied on technology for certain kinds of participation and content generation that are unique to new media. The poetry fusion project did not simply replace other writing work in the classroom or use new media to teach poetry the way he had previously taught poetry. Instead, the new media has expanded the class's notion of text because students read, analyze, and compose print-based poetry, but also non-linear, multimodal, digitally mediated poetry.

Studies of new media practices and new literacies in classrooms typically adopt a different conceptual framework for thinking about how and why teachers make room for new media literacy and learning in the classroom. Some recommended that we think of the new literacies in intellectual or academic spaces as "interdisciplinary" (Eisner, 1994; Moje, Young, Readence, & Moore, 2000), and others suggested that we see them as inquiry-based (Bruce, 2002; Bruce & Bishop, 2002). Lankshear and Knobel (2006) considered the use of blogging and media casting, among other literacy practices, for extending the contexts in which students write and the range of audiences for whom they write. Leander (2007) examined the challenges and possibilities of adopting wireless classrooms. He documented that often the youth, his so-called wired bodies, were sitting in a wireless classroom, yet computers tended to be closed and the Internet was largely

prohibited for most of the school day (Leander, 2007). Alexander-Smith's (2004) and Morrell's (2002) research showed how new media related to hip-hop and rap can be used to extend traditional conceptions of literacies in the academic classroom. Black's (2009) research on fan fiction and Knobel and Lankshear's (2008) investigation of "digital remix" showed the unique capabilities of fan fiction for participation with others and coauthorship.

Several relatively recent studies (Coiro, 2011; Leu et al., 2005; Leu et al., 2007) drew on a new literacies framework to analyze the nature of online reading, online reading in relationship to writing, and online reading comprehension in classrooms. The findings of one such study (Coiro, 2011) suggested that prior knowledge may contribute less to online reading comprehension because readers often gather required prior knowledge online as part of the reading paths they follow. Castek, Bevans-Mangleson, and Goldstone (2006) concluded that students appear to learn online reading-comprehension skills best within the contexts of challenging activities designed by the teacher. Both of these studies documented that new kinds of learning spaces are borne out of new media.

Fishman, Lunsford, McGreggor, and Otuteye (2005) conducted a longitudinal study to investigate the writing practices of almost 200 college-age youth in these digital times. This study documented that young people today are writing extensively in school and out of school, and are aware of audience and how to adjust writing styles for a range of audiences, committed to writing that "made something happen in the world," and increasingly aware of writing as collaborative and social rather than solitary.

Kist (2005) aimed to examine the characteristics, possibilities, and challenges of everyday teaching and learning in what I would call technologically rich classrooms and documented the kinds of knowledge generation and collaboration that are possible in new media rich contexts. Kist (2005) sought out and studied teachers who were attempting to bring new literacies into the everyday life and practices in their classrooms. One of the hardest elements of the project, he argued, was determining what counted as a "new literacies classroom" and then finding them.

In order to conduct this empirical research, a 7-year project, Kist (2005) used five defining characteristics of a new literacies classroom as a starting point. He gathered sixty possible sites over 2 years, with the help of his New Literacies Classroom survey (see Kist, 2005), but after follow-up visits and interviews, ultimately selected six cases that met his vision of a classroom that adopted new literacies every day. Across the six cases of middle and secondary school classrooms, which included rural, urban, and suburban private and public schools in the United States and Canada, he examined how teachers "taught" in the new literacies classrooms, including an analysis of teacher's assignments and assessments as well as teachers' and students' perceptions of their experiences in these classrooms.

Kist (2005) reported three major findings: multiple text forms, collaboration and motivation, and new spaces for teaching and learning. Although Kist (2005) showed that multiple texts were drawn upon in the new literacies classrooms he studied, print was still the privileged medium. His second key finding in these "new literacies" classrooms was the emphasis on collaboration, although it was variously interpreted across classrooms.

At the completion of the study, Kist (2005) remained uncertain, however, of the rationale and purpose of this collaboration. Although it was frequently observed, he nevertheless raised the question: "Were these collaborative projects designed to get the students ready for the 'world of work,' or were there other reasons for their collaborative nature, such as a social view of literacy?" (Kist, 2005, p. 130).

Kist's (2005) third key finding, which draws specifically on the first two, suggests how collaboration, motivation, and the use of multiple texts create new spaces for teaching and learning. Kist (2005) reported that teachers and students seemed to have conflicting goals for their uses of new literacies in these classrooms. Based on his observations and interviews, he completed the study wondering what the *goals* were for the use of new literacies in the classroom because it remained unclear whether the purpose was to give students new ways of expressing themselves or to learn forms like Power Point and Flash to be employable in the future. Kist (2005) raised concern that if the primary purpose was to learn new forms it would lead to the creation of a new autonomous literacy (Street, 1995) as opposed to a new literacy.

Kist (2005) offered a systematic and extensive attempt to understand the teaching and learning potential of new media and to draw on new media as meaningful and substantive tools for teaching and learning every day. Instead of positioning technology as "tools" that can enhance learning, Kist (2005) focused on trying to understand what happens for teaching and learning when new media are embedded in the operations of the classroom every day. He showed portraits of teachers who are pioneering these efforts in their classrooms. Kist (2005) found that all of the teachers he studied were acting out of

their own professional interest and developed classroom pedagogies that were largely isolated from the dominant pedagogies of their schools, which meant that although new media literacies were integrated into the teacher's classroom, new media were not part of the fabric of the students' complete school experience. Although Kist (2005) brought both teachers' and students' perspectives to the conversation, his primary focus was to understand how *teachers* took pioneering steps to integrate and use new media. When he interviewed students, he aimed to understand how their experience in the new literacy class was similar to or different from other classes in school. Additional student perspectives about how students engage these kinds of contexts that are not necessarily "different" from other classes but part of their everyday, ordinary reality of school would extend our understanding of how new literacies are supporting novel contexts for learning.

One-to-One Laptops

What I refer to in this dissertation as digitally rich schools are relatively new arrivals in secondary school education, specifically public education. In the digital school as I've defined it, all students are issued an individual laptop. In the early 2000s the nation started to see several private schools and a few public schools invest in more systematic and persistent integration and use of digital media. In the mid-2000s, a growing number of states increased their investment in digital technologies and committed to what is commonly referred to as ubiquitous computing in schools. Most of the time ubiquitous computing refers to schools and districts with one-to-one laptop

programs. Maine first provided laptop computers and wireless access to students in middle and secondary grades in 2004. Indiana, Michigan, New Hampshire, New Mexico, Texas, and Vermont and several individual school districts and schools began experimenting with state-supported laptop initiatives shortly after Maine (Zucker, 2005). In 2004, the Denver School of Science and Technology, a public charter high school, became Colorado's first one-to-one laptop school (Zucker & Hug, 2007).

Despite the growing number of state-wide and district-wide efforts to increase the presence and use of digital technologies in our nation's high schools, ubiquitous computing and digitally rich high schools are still relatively rare in the American public school system. Several one-to-one laptop initiatives distribute laptops for students, but not necessarily for teachers or administrators, compromising the extent of pedagogical changes. Furthermore, under the surface of what appears to be ubiquitous computing in many schools is an increased use of technology and the integration of various digital tools, but not necessarily the embrace of a digital mindset.

New Media: Regulation and Control

Much of the literature on digital media in school-based contexts is concerned with how to regulate, censor, and/or control how and when new media are used in schools. The establishment and maintenance of control has been a central issue throughout the history of public schooling in the United States. In a recent interview that is part of PBS's recent documentary "Digital Nation" (Dretzin, 2010), scholar James Gee commented about his work with games in schools, "There is a mania for control in schools."

Certainly, control has surfaced as a key concern with regard to digital media and social networks in school. Recent survey research documented the real fear that surrounds social media generally and in schools, specifically (Jenkins, 2006; Leander 2007).

Currently, many middle and secondary schools either block or ignore the digital media and networked spaces within school-sanctioned contexts. The National School Boards Association (2007) reported the following statistics: 92 percent of school districts require parents and/or students to sign an Internet use policy; 98 percent of districts use software to block access to inappropriate sites; 84 percent of districts have rules against online chatting, and 81 percent against instant messaging in school; 62 percent of districts have rules against participating in bulletin boards or blogs; 60 percent prohibit sending and receiving e-mail in school; and 52 percent of all schools specifically prohibit any use of social networking sites in school.

Looking at the literature through the lens of regulation and control also includes research that focuses on technology as a tool to teach content more efficiently. Some schools and school districts have replaced face-to-face courses with online courses built entirely on a model of mastery and students are said to be directing their learning, but within a highly structured program in which students progress through the program as they demonstrate evidence of mastery of a level. This technology has been implemented heavily in language, math, and science courses. Instead of challenging the assumption of learning as a predetermined body of knowledge, this use of technology perpetuates the transmission model of teaching.

Out-of-School Use

A central idea that cuts across the research in this territory is that in addition to playing an increasingly significant role in adolescents' day-to-day lives, adolescents' experiences with and engagement of digital media and networked spaces are constantly and continuously informing and expanding their literacy practices (Alvermann, 2008; Ito, 2008b; Jenkins, 2006). Alvermann (2008) urged educators and researchers alike that theorizing the role of the now everyday, online literacies that young people rely on in school and out of school is required in order to think about the implications these literacies may have for classrooms, teachers, teacher educators, and researchers. In many ways, out-of-school contexts have provided rich areas for research in this field because many of the constraints associated with the school context are alleviated and researchers can try to get a little 'closer' to young people's voluntary engagement with new media. Buckingham (2007) called the gap between youth's out-of-school and in-school lives the "digital divide."

Within this body of research on new media in out-of-school contexts are three particular ideas that surface as relevant to this study. First, although not a parallel environment, much of the research on adolescents' new media practices outside of schools can help us imagine the range of possibilities of students' new media practices in school. Second, out-of-school new media practices may offer ways to make school more immediately relevant in and to students' lives. In other words, if students enjoy working with this media and their attention spans are better suited to this kind of digital media, there is some logic to integrating it in schools. The shortcoming in some of this line of

research, however, is that digital media and networked spaces are too often used only to continue to teach what would have been taught without the media. In other words, the new media should offer something or some way of learning that students are not able to access in another way. Embedded across all of these reasons for looking at the new media practice, however, is the finding that youth are regularly and actively using a range of new media outside of schools, and educators are able to think about how these youth practices may be leveraged for literacy learning.

The most substantial study of out-of-school digital media use is the study conducted by Ito and a large team of researchers (Ito et al., 2010) from the University of Southern California and the University of California–Berkeley and sponsored by the MacArthur Foundation's Digital Media and Learning Initiative. Based on a 3-year ethnography that included over 800 youth interviews and over 5,000 hours of online observations, they conducted the most extensive study to date on youth media use in the United States. Their research focused on youth aged 12 to 18 in out-of-school contexts and looked at young people's participation in and with new media. Similar to my intent in this study, Ito et al. (2010) aimed to understand this participation from a youth-focused perspective in order to gather the role and logic of new media in kids' lives, from their unique perspectives.

This extensive study (Ito et al., 2010) yielded two major findings: first, youth use online media to extend friendships and interests. The authors suggested that youth are using online media to connect with peers in new ways, often to extend the friendships that they navigate in their other day- to-day contexts such as school, sports, or other local

activities. As they say, youth use this new media to "hang out" and extend friendships. The authors also discovered, however, a small group of youth who use this new media to explore interests or find information that goes beyond what they are able to find in other day-to-day, local contexts. The new media offer youth the opportunity to connect with others who may share a specialized or niche interest and to access spaces in which they can explore that interest. Ito et al. (2010) referred to this kind of engagement as "interest-driven" networks and cited examples such as gaming, creative writing, video editing, and other artistic endeavors. What the interest-driven networks afford youth are access to peers outside their local community and the opportunity to distribute their work more broadly to gain visibility and support.

The second major finding of this research (Ito et al., 2010) is that youth engage in peer-based, self-directed learning online. In both the friendship-driven and interest-driven networks, youth are creating, navigating, and adapting new forms and processes for social behavior, interaction, and participation. The research cited two specific findings within this larger trend. The first was "messing around"; the second, "geeking out." By messing around with new forms of media, youth acquire technical and media literacy and discover ways to share and receive feedback on their work and creations. The authors argued that the immediacy and breadth of information of the digital world lowers the barriers to self-directed learning (Ito et al., 2010). Youth also "geek out." In other words, they use digital media to delve deeply into some topic or talent of interest to them. The authors suggested that this form of self-directed learning is highly social and engaged, although it is not driven primarily by youth's local contexts or friendships. In this

learning space, youth are finding and turning to specialized knowledge groups in an effort to improve or enhance their particular interest or craft. In this finding, categories such as age, geographical location, social position, profession, and other common markers of social status and/or authority are elided in many ways. In this work, then, adults are not positioned as experts or authority figures, even though they are participants.

Ultimately, the authors found that the kinds of spaces facilitated by new media offer a "degree of freedom and autonomy for youth that is less apparent in a classroom setting" (Ito et al., 2008, p. 2). They argued that this is the case because there is a greater sense of respect for one another's authority online, youth are more motivated to learn from peers than adults, learning efforts are largely self-directed, and outcomes emerge through exploration rather than a predefined set of goals. Given the kinds of evidence Ito et al. (2010) found about how new media forms have altered how youth socialize and learn, their study suggested several implications for thinking about new media engagement in schools. Specifically, they suggested that adults should facilitate, not shut down or dismiss, young people's engagement with digital media and that adults have an important role to play in facilitating and encouraging young people's interest-driven participation. Finally, Ito et al. (2008) suggested that to "stay relevant in the 21st century, educational institutions need to keep pace with the rapid changes introduced by digital media" (p. 2). This study offered a generative way to approach and attempt to understand youth's everyday new media practices from a youth-focused lens. It also offered specific constructions and notions of learning and participation in the new media contexts that, the authors argued, are deeply embedded in most of adolescents' everyday living and learning.

Complementing this research, Hull (2003) and Hull and Nelson (2005) documented how young people's digital stories engaged and enriched participants' literacy practices. These authors showed youth's capacity for integrating multiple modes and multiple forms of communication to construct meaningful and sophisticated texts. Their work in cross-cultural contexts showed how people's participation in global networks specifically enhances intercultural knowledge, communicative competencies, and literacy development of a given network's members, and they posited that new media have created new contexts for and kinds of cross-cultural learning.

Conclusion

Across the literature I notice two overarching trends. One trend reflects how new media should be integrated into classrooms and schools in support of the current approach to schooling in America. This research is not explicitly focused on how to change classrooms and schools' conventional assumptions about formal literacy learning environments. As Greenhow (2009) posited in her review of the trends in new media research, "Still dominant is a view and use of the Web as augmenting information retrieval rather than supplanting traditional resources and activities, despite the evolution in Web 2.0 technologies, students' out-of-school habits and learning preferences, and new desired competencies" (p. 248). The second trend, the "new learning" trend, purports

that something substantive is happening with new media and young people that is in a position to not only support "traditional" school goals, but also extend them.

In the last decade we have seen an increase in empirical studies on individual classrooms that weave new media into their classrooms day-to-day. Although the new media have been integrated into the daily environment in a range of ways and for different purposes, the research on these classrooms offers a rich foundation for this study because it begins to articulate the new sites of possibilities for literacy learning in formal school contexts. Although this research offers many promising directions for thinking about the role and significance of new media in adolescents' literate lives in school, there is virtually no research that takes a similar kind of close look at literacy, teaching, and learning in a classroom that is situated within a digitally ubiquitous context where students and teachers have unbridled access to new media. Vasudevan et al. (2010) posited that although there are many calls for rethinking new literacies pedagogies in schools, there are few examples of this call to action coming to fruition in schools. Given the newness of digital media in public high schools, researchers are constrained by the limited number of settings available to systematically observe and document what it is like for adolescent students to learn in a digitally rich learning environment.

This study, then, offers an important lens for beginning to look at the possibilities for literacy and learning in specific new-media-rich classrooms that are situated within a new-media-rich school environment. The classroom life at BDA afforded me the opportunity to observe and analyze what it is like for adolescents who are learning day-to-day in digitally rich environments. While scholars, educators, and policymakers

generally agree there is a need to expand and improve the use and role of digital media in our public schools, until educational researchers and practitioners develop a more nuanced understanding of the possibilities of this space as a formal learning context, there is a danger that we will continue to focus on and evaluate media according to how it contributes to or disrupts existing agendas in school. Given the importance of designing and sustaining classrooms and schools that embrace digital media in meaningful and purposeful ways, the literacy learning contexts and practices I observed in the English and History classes at Big Dipper have the potential to make a significant difference in the learning trajectories of its students.

Perspectives on "School-Based Contexts" and "New Media"

I want to offer the rationale behind the decision to use two central terms of this study: "school-based contexts" and "new media." In much of the current literature, "inschool," "school," "classroom," or "school context" are used to describe a given school-related space that is under study. For this study I have chosen to use the term "school-based context" to refer to the research site. I use this term in an effort to emphasize that many of the contexts that were observed, followed, and captured in this study are external to the physical brick-and-mortar classroom or school, yet directly linked to the classroom context, for example, students who watched a YouTube video for school from their homes while they talked with several classmates via iChat. In this construction of "school-based contexts" I will include all new media that (1) are physically situated within the school spaces (e.g., Smartboard, wireless Internet connectivity, video

cameras), (2) travel in and out of the school *with* the adolescents (e.g., iPod, mobile phone, laptops), and, (3) exist as part of a virtual space associated with school (e.g., discussions on the course management software program, SMS messaging, blogs). I also include the following new media "mindsets" as part of this space: (1) instinctive knowledge seeking processes (e.g., an adolescent's instinct to "Google it," to text a friend for feedback, and (2) integration of information from other sources that are not sanctioned by the school but are actively feeding information into school (e.g., in-class reference to a discussion about an article posted on Facebook).

I rely heavily on the term "new media" yet also draw extensively on "digital media." I use both of these terms to suggest that, more than just a set of specific digital technologies or one set concept of a digital literacy, this study aims to understand literacy and learning within a complex ecology where multiple media converge. I draw on Jenkins's (2006) idea of "convergence culture" in my understanding of new media. According to Jenkins (2006), media convergent spaces are places where multiple media and multiple texts come together. As Jenkins and others argued, the "convergence culture" that shapes so much of our lives today is not simply about the constant merging, intersection, and integration of digital media and technological developments, but is also about the cultural and social phenomenon of new media (Jenkins, 2006; McKee, 2008). "New media" and "digital media" will function as umbrella terms in this study to capture the intersection of old media such as print books and television, new media that are digital and interactive, and the mindsets that are part of the social and cultural fabric of new media. In this dissertation I use these two terms to encompass the ideas embedded in

commonly used terms such as digital technologies, networked spaces, convergent texts, and virtual worlds. By definition, the term "new media" embodies the idea that what is "new" is actually always changing and historically situated and comes with some relationship to some other media that is now "old." An affordance, then, of the term "new media" is that it can be understood both as an object like a mobile phone or iPod and as a networked space like a wiki or a video sharing site.

Chapter 3:

"Technology Doesn't Matter, Well, But It Does"

Introduction

In this chapter I discuss the methodologies and methods of this study. I begin with a description of the context, including an introduction to the school, the teacher, the classroom, and the students, with special attention to my role and positioning within this context. In the second half of the chapter, I describe the methods of data collection and analysis.

Context for the Study

Big Dipper Academy is an exceptional story. Located in the School District of Philadelphia (SDP), it is a public urban high school that shares many of the demographics and characteristics common to big city high schools in the United States. What is different is that BDA is a school where digital media are part of the air students and teachers breathe, surrounding everything but never themselves the focus. That made BDA an appropriate site for this study, which aimed to observe, document, and analyze adolescents' experiences in such a digitally rich public urban school, how digital media shaped those experiences and are in turned shaped by adolescents. Specifically, I

followed and learned from students engaging new media in four English and four History classes at BDA that were taught by the same teacher, Mr. Beck.³

But before proceeding, it was crucial both to the setting of this study and the educational and literacy learning issues that this study addresses to understand the relationship of these eight classrooms to the school and district context in which they were nested.

The District Context

The SDP is the eighth-largest district in the nation, serving close to 185,000 public school students and 26,000 charter school students. Approximately 48,000 of those students are enrolled in the city's public high schools. Like other large urban districts across the country, the SDP has weathered a succession of reform efforts over the past several decades: Reforms have reflected the different visions of the various policymakers, superintendents, and school boards and have been intricately intertwined with Philadelphia's changing political landscape. Each wave of reform has been marked by different approaches to structuring the district, determining curriculum, and prioritizing school resources. Consistent across the reforms was an effort to address the persistent racial segregation and economic disparities that have troubled the district. Although several elements of the political and educational climate of the SDP are distinct to Philadelphia, including a state takeover in 2001, many of the reform efforts and surrounding dialogue strongly resemble national reform efforts, including the advent of

³ All names are pseudonyms.

No Child Left Behind in 2002, the adoption of what is known as the "diverse provider" model (Gill, Zimmer, Christman, & Blanc, 2007), and the increasing turn to scripted curricula and rigid tracking and accountability systems.

At the time of this study, the SDP included 45 public high schools. There also were 16 charter high schools that operated outside SDP jurisdiction but remained important to the high school environment across the city. The city's public high schools were divided into three distinct categories: neighborhood schools (21), special admission schools (15), and city-wide admission schools (9). Big Dipper Academy (BDA) opened in September 2006 and was, and remains, delineated as a special admission high school. BDA was born out of one of the many school reform efforts of the early 2000s. The specific reform, the Secondary Education Movement, was initiated under former Philadelphia superintendent Paul Vallas. This reform was committed to the idea of "public partnership high schools" wherein a city high school was partnered with a local or national museum, organization, and/or business. BDA, which was designed in partnership with a prominent science museum in the city and with a focus on "21st century learning," was one of four public partnership schools subsequently launched.

I bound this study within the geographical boundaries of Philadelphia and a school classification of secondary and public because of my commitment to issues particular to urban secondary schools. This commitment was rooted in my belief that teaching is always about social justice and my experience as an urban middle school teacher in Washington, DC. After I decided to bind this case within the city of Philadelphia, I used a combination of criterion-based and purposeful maximal sampling

(Creswell, 2007; Patton, 2002) to select a public school that met my criteria for a digitally rich school-wide context. These criteria were the following: (1) digital media are an inextricable and valued part of the school environment; (2) a range of digital media are readily available; (3) digital media are easily accessed and regularly used (multiple times a day) by teachers, students, and administrators in all aspects of teaching and learning and the school's daily operation; and (4) the school recognizes that students, teachers, parents, and administrators enter the school with a range of digital histories and mindsets.

Given the above criteria, it was essential that the classrooms I observed be located in a school-wide context that supported and facilitated the digital life and learning in the classrooms. One of the first reasons BDA stood out among other public high schools as a compelling site for this study was the school, according to its website and SDP literature, was designed to pioneer the notion the "21st Century School." I conducted a pilot study in Mr. Beck's classroom at BDA in Spring 2009 that confirmed that the school met the study's selection criteria. Distinct from other public high schools that I had encountered, BDA was committed to creating and sustaining pedagogical spaces that were always, and inevitably, situated within a digital media context. In recent years, I have heard several news media sources document the unique nature of the school context and described BDA described as a leading example of School 2.0. BDA surfaced as a "telling case" (Mitchell, 1984) of teaching and learning in the digital era *in schools.* When I began this study, BDA was beginning its fourth year in operation and first year as a complete 4-year high school. Currently in its sixth year, BDA continues to operate with a clear

commitment to both integrating digital media in school-based contexts and honoring the digital mindsets of students, teachers, and administrators.

This telling case has significant implications for educational research and policy because the school is a site of possibility that was—in the moment—trying on and trying out different ways of teaching and learning in a space where digital media were ubiquitous. As a pioneering school in the field, BDA and its classrooms have much to teach us about the affordances and the constraints of a digitally rich school context; an understanding of BDA's efforts to use digital media in everyday ways can help the United States develop schools and pedagogical approaches with respect to technology in smart, responsible, sophisticated ways. In her recent research on technology and the self, Sherry Turkle (2011) reminded us not to fall prey to thinking that just because so many people have grown up with the Internet that the Internet is "all grown up." This study takes seriously Turkle's charge to honor the current period as a time to develop and nurture our ability to use digital media for communication and learning. In a recent interview on American Public Media, she argued that we are in a period of maturation in which we must learn how to "get good at it [using all kinds of backchannels and side channels]" (Tippett, 2011). I call upon Turkle because her work offers the enterprise of education, and this study in particular, a useful frame for thinking about how to approach this time when the role of technology in schools is uncertain and unclear. Our job right now as educational researchers is to learn how to become sophisticated and responsible users of various digital media and to learn how adolescents use and position these technologies.

My goal in selecting this setting was a direct effort to penetrate a context that was already embracing the digital terrain in a brick-and-mortar building. Through a close study of this context, I was able to uncover what happens for teaching and learning when individual classrooms and groups of students are nested in a school that accepts new media as a given reality (positive or negative).

The School Context

Given the focus of understanding the "everyday practices with new media in schools," the context—a place in which new media were positioned not as something unique but rather (as they are for many adolescents out of school) as part of the everyday environment—was undeniably critical to identifying and analyzing the everyday learning and literacy practices of digital youth in digital schools. BDA is such a place. BDA is located in Philadelphia's center city business district and close to several museums, colleges, and universities. In Fall 2006, BDA admitted 110 students to its inaugural ninthgrade class. Today the school serves approximately 500 students across Grades 9 through 12. The student population at BDA is 45.8% African American, 32.7% White, 9.7% Latino, 9.5% Asian/Pacific Islander, and 2.3% Other; 47.7% of the student population qualifies for free/reduced lunch. In accordance with the school district's policies for admission to open admission schools, BDA has designed its own selection process, which includes a combination of interviews, review of student work in middle school, grades, recommendations, attendance records, and results on the Pennsylvania State Standardized Assessment (PSSA). More than 80 middle and junior high schools are represented across

the BDA population, and over 60 different feeder schools in any one grade, reflecting the diversity of schools and neighborhoods included at BDA.

According to the school's website, Big Dipper is built on the premise that inquiry is the very first step in the process of learning. Developed in partnership with a museum of science and with a commitment to inquiry-based education, BDA aims to provide a rigorous, college-preparatory curriculum. Students at BDA learn in a project-based environment where the school's core values of inquiry, research, collaboration, presentation, and reflection are emphasized in all classes and in the flexible student schedules. Each successive grade has one overarching theme for the year: *Identity* for Grade 9, *Systems* for Grade 10, *Change* for Grade 11, and *Creation* for Grade 12. In addition to BDA's core values, three essential questions serve to undergird and drive all instruction and curriculum: (1) How do we learn? (2) What can we create? and (3) What does it mean to lead?

From the street view, Big Dipper does not look like a typical comprehensive high school, nor does it look particularly modern or high-tech. With the exception of arrival and dismissal times, when young people hover near the school's single, west-facing entrance, BDA easily blends in with neighboring office buildings. In fact, just a few years ago, BDA's physical plant was home to several administrative offices for the SDP. At street level, a double glass doorway immediately leads to the "café," which is BDA's name for the cafeteria. To the left sits a small corner desk where a security officer typically greets visitors and requests them to sign the visitor logbook. More notable is a wall-sized painting of a periodic table with the phrase "Learn, Create, Lead" above it.

This phrase—shorthand for BDA's three "essential questions"—serves as a kind of school motto, emblazoned on the school website, hallways, and classroom walls and reflected in teachers' unit plans and assignments as well as student work.

Immediately to the right is a door to a stairwell that leads to the second and third floors. In warmer weather, the corner of the dark red stairwell is jammed with students' bicycles and helmets. Although most Big Dipper students rely on public transportation city bus, trolley, or subway—a significant number of students ride bikes or walk. The main office, which included the office of the school's founding principal, Mr. Jordan, is on the second floor. During the two years I spent at BDA, I typically continued up the stairs, bypassing the second floor altogether, to the third floor, where Room 307, Mr. Beck's classroom and the primary site of my study, was located. On my way from the stairwell to Room 307, I passed the school's Literacy Lab (opened in the second year of my study in a former lounge space), a digital video (DigVid) lab, the studio arts room, and four classrooms. Similar to most high schools, the hallways I walked along were lined with floor-to-ceiling lockers, occasional bathrooms, water fountains, and wall hangings of student work. I almost always passed small clusters of students in the hallways; I would smile and wave hello. These small groups would typically be working on school-assigned projects, at times gathered around their MacBook laptops or behind a school video camera, and at times simply talking about, outlining, or rehearsing a school project.

On my walk to Room 307, I might catch a glimpse of Mr. Jordan, iPhone in hand, as he popped in or out of a classroom or gave a tour to the ever more frequent visitors to

BDA. Entrenched in a rich digital life of his own, Mr. Jordan blogs, tweets, and manages a website. On Jordan's school leadership-focused blog, he explains his understanding of BDA's underlying philosophy. Jordan characterizes BDA as a kind of School 2.0 that emerged from the belief that inquiry-based learning will lead to engaged students and citizens. My observations and fieldnotes support the idea that digital dispositions, habits, and mindsets of BDA's adolescents, as well as the school's faculty and staff, were seen as a vital and natural part of their lives in school. At BDA, technology was not something that happened in one special room or lab, nor was it something specific to be studied. Rather, technology was infused as part of English, Social Studies, Physics, Math, and all other content areas. Although there were technology electives available, students were constantly engaged with all available technologies and critically thinking about and drawing on the possibilities and challenges of technologies across all of their studies. According to Mr. Jordan and echoed by Mr. Beck, Big Dipper aimed to design a learning environment where technology was like oxygen, surrounding everyone and essentially invisible. Jordan, as well as BDA's other administrators and teachers, believed that almost all content creation in today's schools was, in some way, digitally created or supported and new media should be infused into learning in all disciplines.

BDA also was one step ahead of current talk about the role or fate of traditional print textbooks and the possibilities of e-textbooks in schools. From its inception, BDA envisioned a school environment in which students did not carry textbooks between home and school, but rather an individual, school-distributed Apple MacBook laptop. There were plenty of print-text books around BDA, including class sets of many typical high

school titles, including William Golding's *Lord of The Flies*, Elie Wiesel's *Night*, William Shakespeare's *Othello*, and Zora Neale Hurston's *Their Eyes Were Watching God;* less common titles such as Art Spiegelman's *Maus* and Marjane Satrapi's *Persepolis;* and in Mr. Beck's room a constant rotation of books that teachers and students checked out from the Free Library of Philadelphia.

Big Dipper's website served as a dynamic hub for all members of the school community. On the public home page, school announcements were posted regularly. The left sidebar typically displayed two distinct menus. The first menu included tabs with links to specific tools for "Students," "Parents," and "Staff." The second menu included 15 hyperlinked tabs including, but not limited to, Mission and Vision, Admissions, Curriculum, All Blog Posts, Class Directory, Student Handbook. The primary focus of BDA's home page, centered in the middle of the screen, featured a fixed paragraph about BDA with a slideshow of pictures running beneath. Below the pictures was a constantly changing string of blog posts authored by any member of the school community. Users could expect to find postings about current events, reminders about yearbook dues, links to student projects, and accolades for recent student accomplishments. For example, on a recent visit to BDA's home page, I noticed the following: one student posted a photo along with a written report on her fellow students' participation at the city-wide monologue tournament, another student authored a post that praised the success of the softball team, and a teacher posted a Google map, schedule, and link to a website that provided context for his class's upcoming site-specific dance performances. Scrolling down, I could click on a student-authored post to be directed to a page that housed a

collection of two tenth-grade cohorts' final portfolios or on a hyperlink to an individual student's paper on his/her personal blog or a cohort's science class wiki. BDA students' names and their writings were tag-able, searchable, and shareable with the click of a mouse. The school website offered clear, important guidelines for students' use of and care for their school-assigned laptops. In Appendix 2.A, I include a web page that documents the "Dos and Don'ts of Laptops" for students enrolled at BDA. Although this collection represented formal policies and procedures of use, my data analysis will address some of the unwritten policies and procedures that I observed during my observations in classrooms during the school day.

I would characterize this fluid collection of blog posts as a collaboratively authored live-stream that changed minute-to-minute. Three recent blogs I read include "Short Promo Video" (this post included a link to a student-conceived and student-produced video about the school), "Playwrights Shine" (this was a teacher's post indicating his students' recent winning of an annual playwriting contest; his post includes a list of upcoming performances and a link to a website to purchase tickets), and "F.L.A.S.H. Mob Event" (a student-authored post about BDA and other SDP students' efforts to counter current negative press about Philadelphia youth and flash mobs).

The right sidebar on BDA's website typically had the least amount of text and could be described as primarily administrative. The sidebar included the calendar date and a link to three school-related calendars: General, Athletic, College Visits. The calendars could by synchronized with anyone's digital device. During the course of my study, BDA's website and platforms used for school-based social networking and

management of course material were revised and, ultimately, rebuilt by BDA's in-house technology coordinator. I was consistently impressed with the maintenance and constant improvement of the website. For example, between the first and second year of the study, BDA moved from the use of Drupal, an open-source system designed to host school-sponsored, student blog pages and interactive networks, to the use of a new student blogging system designed by the technology coordinator. The year after my study ended, I noticed that an entirely new portal was added to enhance communication with parents and families.

Daily, students and teachers at BDA connected to Moodle (moodle.com), an online course management program, from behind the screens of their individual MacBooks. Sites accessed on Moodle were password-protected, but accessible from the BDA's homepage. A wide range of activities and information related to teaching and learning was located on Moodle, including online discussion forums, assignment rubrics, links to resources or websites for projects, and reminders about deadlines. There was also a school directory with hyperlinks to individual's e-mail addresses, class rosters, grade books, and more. Moodle was a critical component of and platform for the range of literacy learning opportunities I observed and will feature in forthcoming chapters. Figure 3.1, a still shot from a tenth-grade English Moodle page, is a sample of what BDA students would see when they logged into Moodle to access a class resource, post a project, or communicate on a class discussion forum. This particular image is from the "Gold" stream. Each grade at BDA was divided into four cohorts of students, referred to

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⁴ All stream names have been changed

as "Streams." I will explain this in greater detail in this chapter, but in brief, I followed 2 Gold Streams and 2 Silver Streams.

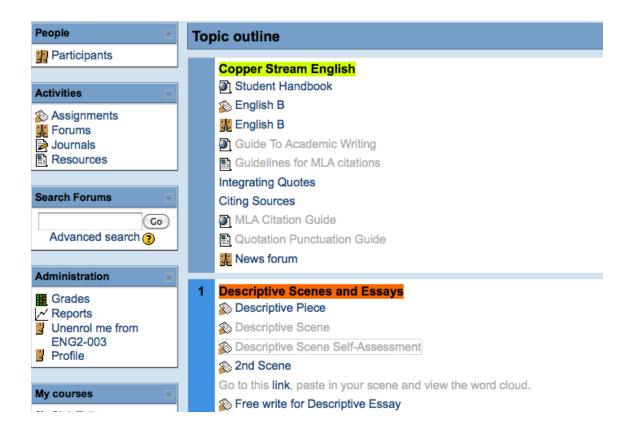


Figure 3.1. Sample image of English Moodle home page.

In the midst of what I observed as a clear, consistent presence of digital media and technology in this school, I consistently heard members of the school community remark, "It's not really about the technology" (interview, Mr. Beck, September 20, 2011) or comments to suggest that the technology itself did not "really matter"; technology was understood as a means, not an end. Relatedly, the school conceived of and hosted an annual conference. Although several presentations at the conference referenced, invoked, or analyzed digitally supported projects and platforms, the moderators of the conference

explicitly noted that the conference is an education conference and not a "technology conference." There is a constant tension in the literature and research between focusing directly on technology and focusing elsewhere. However, my two years at BDA proved that technology, of course, does matter in this context.

BDA participants themselves recognized the paradox inherent in their downplaying of technology. After participants said technology doesn't matter, they often added, in the next breath, "well, but it does" (interview, Mr. Beck, September 20, 2011). Big Dipper's stance was captured well in Mr. Jordan's blog. He explained that what was happening in the school was never *just* about the technology or *just* about using the so-called 21st Century literacies.

The Teacher and the Classrooms

Mr. Beck began teaching Humanities at BDA in 2007. Prior to BDA, he had taught in other Philadelphia public schools and New York City. Mr. Beck is a graduate of the Secondary Teacher Education Program at the University of Pennsylvania and took several courses within the Reading/Writing/Literacies department of which I am currently a student, although we did not overlap as students at Penn.

The classes Mr. Beck taught at BDA were an appropriate place to study students' engagement with new media in school-based contexts for several reasons. First, Mr. Beck was not under specific, school-mandated pressure to simply "use" technologies. In my observations, Mr. Beck did not design or teach isolated "technology units," and at no point did I observe him grasping to find ways to "bring technology in" or "to fit"

technology into his lessons. Instead, the technology in Mr. Beck's classroom was a constant and seamless part of his classroom and his pedagogical design. Within Mr. Beck's classrooms, new media were adopted and thought of as a natural part of the teaching and learning environment. Mr. Beck recognized that adolescent students in his classroom were growing up digital and thus brought with them distinctive ways of knowing and certain habits of mind. Mr. Beck's own evolution with new media was part of the site of my study. I noticed that Mr. Beck used Delicious to tag articles and exchange ideas with fellow teachers and friends. He created a Facebook profile primarily as a way to connect to his BDA context, periodically used his cell phone to text and talk, and, during the course of my study, chose to take a digital storytelling class to support his own digital growth and development.

Mr. Beck did not consider himself exceptionally savvy with regard to new technologies and did not instantly adopt new media. Beck did not use a smart phone or maintain a personal blog; he did not tweet or actively engage in Facebook. According to Mr. Beck, when he went home for the evening, he was largely offline, spending time with his partner and two young children. Although Mr. Beck may not identify as someone on the cutting edge of new technologies, he was incredibly well versed in a wide variety of digital media and actively connected with other colleagues and professional development opportunities to expand his familiarity with a range of new media.

In addition to being described as a digitally rich classroom environment, Mr.

Beck's classrooms could also be described as critical literacy classrooms. By this, I mean that his classroom created spaces where, based on my observations and fieldnotes,

reading, writing, and literacy were ultimately political acts that offered students opportunities to understand, analyze, and change their individual and collective realities as well as their action in understandings of the world. Underlying Beck's pedagogical design and stance in his classes was a commitment to teaching for social justice. In his classrooms, literacy—conceptualized as a socio-cultural practice—was positioned as a practice through which students interrogate themselves, their peers, and society. In and through the multiple texts of the classroom, students were using literacy not simply to express their beliefs or to examine different perspectives, but rather to examine society and to try to challenge or change it. Mr. Beck described himself as a Humanities teacher, and his profile on the school's website identified him as such. He is the only Humanities teacher in the building. As a former English and Social Studies teacher, I found the opportunity to study a high school context that intentionally integrated English and History an appealing aspect of selecting Mr. Beck's classrooms as the focal site for my research.

I came to find that the Humanities distinction was not always straightforward. Mr. Beck's classes were explicitly grounded in the Humanities with regard to how he approached and designed specific learning units and his goals for student learning and educational outcomes. Students' schedules and report cards, however, did not list "Humanities" but rather "English" and "World History." For Mr. Beck's students, English and History courses were often scheduled for back-to-back class periods to facilitate the overlap between the two classes. Mr. Beck wrote specific "English" and "World History" unit plans, kept separate files for student work in the two subjects, and

assigned distinct grades for the two courses. For longer narrative reports on students, however, Mr. Beck would write one report. He also played with what commonly might be deemed an "English" or "History" unit. For example, a playwriting unit in the spring was part of his History curriculum.

I followed four different cohorts of tenth graders in their respective English and World History courses taught by Mr. Beck. Cohorts ranged from 25 to 32 students. All cohorts at BDA were referred to as "Streams," each with a unique name. The streams I followed for this study were Silver Stream 2009-2010, Silver Stream 2010-2011, Gold Stream 2009-2010, and Gold Stream 2010-2011. Mr. Beck's curriculum for the year included seven units in World History and eight units in English. Individual units in English included a unit on Crossing Boundaries, Language & Identity, and Exploration of Freedom. A few History units included Age of Exploration, French & Haitian Revolutions, and Industrialization and Globalization. In keeping with the school culture, it is worth noting that all of Mr. Beck's unit designs were written and stored as Google Documents. Every time I accessed the unit designs for reference or analysis, I was able to observe if the unit had been viewed and by whom. For example, I recently noticed that one of Mr. Beck's unit plans had been viewed and annotated by Mr. Jordan and another teacher. This was striking in that it offered additional insight into how BDA's teachers and administrators were actively using digital media for their own learning and development and, at times, tapping into new media to facilitate the co-authoring of lessons and units. In fact, an essential part of the BDA context was that adults in the school used a range of digital platforms to communicate and collaborate. The adults, like

students, were writing for public, semi-public, and private audiences and, like students, made themselves and their intellectual work visible (to known and unknown audiences), searchable and replicable (boyd, 2007).

Throughout the remainder of this dissertation, most directly Chapters 4 through 6, I take up a range of the literacy practices at play for adolescent students in Mr. Beck's classes and analyze them in greater detail. In Table 3.1, however, I provide a list of literacy practices as a brief overview of the range I observed in these classrooms. I also offer a list of the range of literacy spaces in Table 3.2 to depict some of the kinds of learning spaces at play in these classrooms *and* to be clear that, in this research site, it was never the case that just *one* literacy practice or one learning space was happening in a given class period or unit. Instead, several practices and spaces were invoked or used, most often simultaneously.

Important to the observations I conducted in these classrooms was the range of spaces for literacy work at BDA. Table 3.2 offers a brief overview. In addition to the range of spaces for reading/writing/literacy, students engaged with and produced texts that drew on a number of different new media elements (e.g., images, audio files, and video files) and published their texts for a range of audiences (e.g., peers, teachers, school community).

Table 3.1: A Range of Literacy Practices in Mr. Beck's Classroom

Practice	Practice
Paper writing (e.g., Research, Analytic, Reflective)	Essays (e.g., Descriptive, Persuasive, Opinion)
Journaling (online and pen-to-paper)	Reading logs (online and pen-to-paper)
Playwriting	Letter writing
Brochure writing	Group oral discussions
Poetry reading and writing	Group, online written discussions
Note-taking (online, pen-to-paper handout)	Online instant messages or "chats"
Blog writing	Web page writing, Tumblr writing
Google documents individual and collaborative writing and editing	Wiki writing and editing
Reading of bound print texts	Online reading (e.g., essays, websites, e-journals, PDFs)
Online viewing, searching, reading (e.g., You Tube, PBS, New York Times)	Podcasting

Table 3.2: Literacy Spaces at BDA

Literacy space	Literacy space
Microsoft Office (e.g., Word, Powerpoint,	Wikis
Excel)	Drupal
Pages	Cell phones, Smart Phones
Google Docs	iTunes
YouTube, SchoolTube	Paper journal
Facebook	E-mail client
gChat, iChat, Moodle Message	iMovie
Garage Band	Digital cameras
Audacity	Moodle forums
Dropbox	Search engines

The Students

The central focus of this study was on the adolescents in Mr. Beck's English and History courses during the 2009-2010 and 2010-2011 academic years. Nearly all students started at BDA in ninth grade, but a few students had transferred to BDA in their sophomore year. Although this study looked at two distinct cohorts, or streams, each academic year, there were four total streams in any one grade. The students were grouped into new streams every new academic year, a practice that served to shake up/realign the patterns of participation and peer negotiation within the classroom, particularly at the beginning of the year. Although most students had some familiarity with the whole class, students used the first few weeks to feel out some of the dynamics and personalities across their new stream. The classes were representative of BDA's diversity with regard to race, country of origin, religion, social class, sexuality, and gender. In the tenth-grade cohorts I studied, students came to BDA from over 60 different middle and junior high schools, including a mix of public, private, charter, and parochial schools. Prior to starting at Big Dipper, students attended schools with varying degrees of digital media integrated into the school context, but I did not interview any who came from schools that matched the level of digital media saturation at Big Dipper. Each cohort of students saw Mr. Beck for eight classes each week; four were designated as English and four as World History. Two times a week each stream met for English and History for a back-to-back block period.

Students engaged with texts and with each other both online and offline, and their reading and writing practices took place in multiple contexts: the computer (in both

networked and non-networked spaces), paper handouts, paper journals, print books, and online documents, in school and in students' respective homes. The wide embrace of digital media and the anytime, anywhere contact associated with digital media allowed for a remarkable permeability between participants' in-school and out-of-school lives. As I share in Chapter Five, typical in-school practices, habits, and expectations for high school students carried on, without interruption, outside of school. Similarly, many of the practices, habits, and expectations typically associated with adolescents' out-of-school lives were highly normalized practices in school.

One of the most explicit and visible ways I observed boundaries between participants' in-school and out-of-school lives as permeable was via the school-distributed laptop. As effortlessly and seamlessly as students carried their laptops from class to class and around the school, they also carried them out of BDA every afternoon. MacBooks went with students to the debate club and soccer practice, the local park, and coffee shop, and most importantly, they went to students' homes. Wherever the laptops traveled, so too did the potential to access assignments, articles, grades, peers, teachers, and current school work. The MacBook left students directly tethered to school when they left the building. This became important because all of the ideas, people, and projects tied to the MacBook were potentially available and accessible to students, at any time, regardless of their physical, geographical location.

During class, students' MacBooks typically rested on the tables in front of them or their laps, and students carried them from class to class in their arms or a backpack.

When I walked through the hallways and the café, going to and from Mr. Beck's

classroom, I saw students' MacBooks open and active as students sat eating lunch, socializing, and completing school work with their peers. Similar to the ways high school students typically decorate lockers, backpacks, and reusable water bottles, students at BDA decorated their laptops. At BDA, laptops were a common place for the kind of identity work typical in high school. I noticed a wide variety of bumper stickers adhered to laptops: "I ♥ Cycling," "Marathon," "Hollister," and "Recycle." I observed one student who always wore pink and black headphones and another who almost always had black and white polka-dotted earbuds draped around her neck. Another student displayed at least four different sets of earbuds during the year. I observed a diversity of background screens, wallpaper, and screensavers across Macbooks, with pictures of family and friends one of the most popular choices for a background. Figure 3.2 shows a typical student workspace.

In addition to the MacBooks, iPods, headphones, and smart phones were common. In the second year of the study, I saw one student bring in an iPad to stand in for his MacBook, which was under repair. The classroom SmartBoard was used at the drop of a hat, links for lessons were posted on the Moodle platform, essays were uploaded to the public blog, class wikis were created, published, and edited, and students regularly relied on instant message, Facebook, and e-mail to communicate with one another. As students worked, most had at least three screens open and several applications running. Students' assignments, papers, and essays were written and saved on the laptops. As a result, when students shared an excerpt from an essay or any other work with the class orally, they would stand up, holding the MacBook in front of them,

reading from the screen as naturally as I would read from a notebook or piece of paper. The students' interactions, writings, and other communications as they related to their engagement of new media will be analyzed both within and across the four tenth-grade streams that I observed.

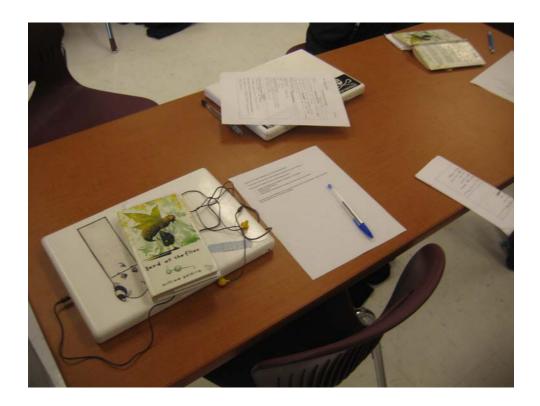


Figure 3.2. Image of a student's classroom workspace.

In addition to analyzing the social practices of the cohorts as a collective, I also selected a small group of students (15) for closer analysis. In my effort to look at the classes as collectives, I used purposeful maximal sampling (Patton, 2002) to select "telling" (Mitchell, 1984) information-rich cases that enabled me to explore, in-depth, students' literacy practices, the construction and negotiation of knowledge, and the nature

of teaching and learning in this context. Although my selection of focal participants limited the breadth of information I could collect across the population, informal conversations with smaller groups of participants allowed me to speak, to some degree, with almost all the course participants.

Methodology

To examine the interplay between the adolescents and this digitally rich school environment, I conducted a qualitative 2-year study of students' participation in eight tenth-grade English and History classrooms. I systematically observed, recorded, and analyzed adolescents' behaviors and interactions to understand the literacy practices and patterns of participation that shape, support, and sustain the culture of these classrooms. I moved between offline and online environments, observing, following, speaking with students across the eight classes, and interviewing the 15 focal participants in an effort to understand how adolescents used various digital media in-school, how they engaged with the spaces and opportunities made available to them, and how their literacy practices and learning lives were shaped by participation in and interactions with these spaces. I approached the observations and interviews with a belief that, to the extent possible, the literacy practices and experiences of adolescents in schools need to be understood from adolescents' unique perspectives and in their own terms. In keeping with my adoption of a Youth Culture framework, I ground this study in the belief that adolescents' patterns of participation are representative of rational and sophisticated activities that exist in direct relation to the social and cultural environments in which they live and learn.

During the time I spent in this unique learning environment as well as the cyclical, ongoing phases of data analysis of offline and online environments tied to adolescents' school lives, I found a range of spaces, times, and dynamics available for literacy and learning. These spaces, times, and dynamics served to shape and reshape the school-based environments that adolescents inhabited as high school students.

Ultimately, my analysis of data illustrated the emergence of a distinctively new context for literacy learning. I will argue that this new context was composed of a collection of new literacy practices that radically alter learning environment, constituting what I refer to as a new culture of literacy learning. The core of this dissertation will be focused on describing and analyzing the specific dimensions of this new culture and the ways in which the central dimensions of this culture function as sites of and for adolescents' literacy learning.

Methodological Frame

I used qualitative research methods to look closely at adolescents' everyday new media practices in a digitally rich school. Specifically, the study was designed as a critical case study (Yin, 2003) with an ethnographic perspective (Heath & Street, 2008). According to Yin (2003), a rationale for a single case is when the case represents a *unique* case as well as a representative or a typical case. This specific research design was chosen because it enabled me to look closely at that which is representative or typical (i.e., the everyday digital media practices of adolescents) within a unique context (i.e., a digitally rich urban public school). Although the central focus was on *adolescents*'

everyday digital media practices in school-based contexts, the design of these classrooms and the specific school in which these adolescents operated were essential to my investigation of this case. To address these nested contexts, I designed an embedded, single case study (Yin, 2003). The larger case is the everyday digital media practices of the collective of adolescents in eight tenth-grade English and History classrooms in this school. The units of analysis were the classrooms, the curriculum, and the individual participants (students and teacher) in those classrooms. A range of data collection techniques were used for each unit of analysis. Yin explained that the lessons learned from the embedded single case can provide important insights about the experiences and practices of individuals in everyday institutions and contexts.

Supporting this case study methodology (Creswell, 2007; Yin, 2003) was my commitment to an ethnographic perspective (Heath & Street, 2008) with a critical orientation. By this I mean that I aimed to understand how digital media were meaningful to the *adolescents* in their everyday lives. An ethnographic perspective supported the process of constructing a theory of the inner workings of the classroom culture through direct personal observation of adolescents' everyday social behaviors and interactions in Mr. Beck's classes (Bauman, 1972; Heath & Street, 2008). I did not enter the study believing that new media would have a unidirectional "impact" on adolescents and the ways in which they negotiated their daily lives, or that adolescents existed as individuals who operated apart from digital media, but rather that they existed in relationship to the new media. This also meant that I did not study the specific digital media as the driving foci of this study, but instead studied *how* adolescents' engagements with digital media

were related to the literacy learning that was part of the adolescents' everyday schoollives in Mr. Beck's classes. Drawing on Erickson (1979 1992), my methodology aimed to
provide and interpret a view of the everyday aspects of students' "working in and through
the particular social ecology of the moment—in a given classroom, within a given school
and community, within a given society" (1979 p. 185). A strength of this perspective was
the potential to illuminate the meanings that adolescents found important in relation to
their engagement of digital media in the daily contexts in which I observed. A critical
examination of those meanings and daily practices could lead to new images of digital
media use in schools that could assist educational practitioners, researchers, and
policymakers in understanding the purpose and value of digital media in classrooms.

As a researcher with a critical orientation, I recognize that all language, thought, and meaning-making activities are mediated by underlying ideologies and power relations. Similarly, just as texts reflect a unique, situated set of values, so do readers and their "readings" or interpretations. Aligned with critical theorists Kincheloe and McLaren (1994) and others, I entered this study with the belief that certain groups in any society are privileged over others. Given this orientation, I was attentive to issues of power, authority, and the important role of ideology in the ways that participants engaged with others, school-based texts, and their educational experience. I also saw the participants in this study as "moving subjects" (Ellsworth, 1997 and, as such, students and a teacher who were always, inevitably, in process.

Given my intent to understand this space from adolescents' emic perspectives and let meanings emerge from participants, namely the adolescents, I also approached this

inquiry with a social constructivist stance. As a social constructivist researcher, with a critical orientation, I recognized reality as "socially constructed, complex, ever changing" (Glesne, 1999, p. 5) and meaning as socially situated and always "located in or affected by the local, political, cultural, economic, ethnic, age, gender, and other contextual characteristics of those who espouse them" (LeCompte & Schensul, 1999, p. 49). As such, I acknowledged that my research site, including the students, teachers, and administrators within it, were located within specific socio-cultural contexts that would inform how they were positioned in the school and how I perceived and interpreted them.

The adolescents at the focus of this study and the ways they engaged digital media in their school-based contexts are nested not only in their specific classroom contexts and relationships with other students and teachers in the class, but also in the practices, beliefs, and values of the tenth grade, the BDA, and the SDP. For example, although I did not focus on specific learning outcomes or the effectiveness of a specific pedagogy, technological tool, or digital space within these tenth-grade Humanities courses, I recognize that my project was situated within a context in which attention to learning outcomes and pedagogical effectiveness was actively at play within the research site.

The social constructivist epistemology also maintains that knowledge is negotiated socially and historically through interactions with others and through the social, cultural, and historical norms that operate in individuals' lives (Creswell, 2007; Crotty, 1998; Lincoln & Guba, 2003). Therefore, I recognized that all of the participants in this study, including me, brought particularized histories, identities, values, and beliefs, specifically as they related to assumptions and beliefs about the role of school and

education. I assumed that the meanings and values individuals ascribed to everyday digital media practices would be varied and multiple and sought to gather and make sense of the multiple meanings, while acknowledging that interpretations were shaped by my experiences and background. I looked closely at the range of meanings that students and the teacher made of the practices, interactions, negotiations, knowledge generation, and participation structures that existed in their daily school-based contexts, as well as the meanings that I, as a participant-observer, made regarding the nature of knowledge construction, authorship, and collaboration in this environment.

Given this perspective and my ethnographic stance, researcher reflexivity played an important ongoing role throughout this study (Hammersely & Atkinson, 1995). The study demanded that I reflect on my position of privilege as a White, middle-class graduate student. Although I had spent considerable time in schools and classrooms prior to the study, and had taught in urban public schools, I entered the study as an outsider to the BDA context. Moreover, at 32 years old when the study began, I was an outsider to this kind of digital educational context. I wrote my first email as a first-year college student and did not have Internet access in my own living space until my first year as a professional in 1999. Although I like to say that I have grown up digital in graduate school, I was an outsider to the daily digital lives of the adolescents I met at BDA. This study demanded that I be reflexive about the assumptions about adolescents, literacy, digital media, and what constituted a so-called productive teaching and learning space as they informed my understanding of how adolescents took up or used new media. I

My Role as the Researcher

Given the newness and uniqueness of BDA, visitors, including pre-service teachers, school leaders, and local media outlets, were not uncommon in the school. BDA became a fieldwork site for several students in the master's-level graduate course I taught at the University of Pennsylvania, and I first came to understand the kinds of teaching and learning practices there from reading one of my graduate students' fieldnotes from her observations in Mr. Beck's classrooms. I vividly remember one of my students' fieldnotes that documented the ways Mr. Beck's tenth graders were engaged in both online and offline discussions about How to Date a Brown Girl (or Black Girl, White Girl or Halfie), by Junot Diaz. With my attention piqued, I read all of her fieldnotes from Mr. Beck's classroom, and BDA emerged as an increasingly compelling site for my dissertation research. During the spring semester of 2009, as I worked on my dissertation proposal, I contacted Mr. Beck about the nature of my research and my interest in visiting his classroom as a potential site. During our initial meeting in April 2009, Mr. Beck expressed his interest in my work and his willingness to have me observe his classroom. With the permission of Mr. Beck and the principal, I began pilot observations in May and June 2009. It was agreed that I could follow either or both of the cohorts and attend the Social Studies or English classrooms as often as I deemed appropriate or necessary. In order to achieve a breadth of perspectives and practices, I elected to follow both Silver and Gold in their English and History classes. I decided that I would observe the students on the day when English and History were scheduled as a double-block period. I began data collection at the start of the academic year in September 2009.

Although this study is not explicitly a practitioner inquiry study, I did see myself as a teacher in another teacher's classroom. As a former English and History teacher and a teacher of a masters'-level course on adolescents' literacy/literacies, I was cognizant that my identity as a teacher and teacher educator was an active part of how I moved in and made sense of this context (Cochran-Smith & Lytle, 1990, 1999; Zeichner & Noffke, 2002). In her ethnographic study of high school girls, Julie Bettie (2003) wrote about her "awkward status as someone without any clear institutionalized role at the school" (p. 18). In the early stages of my research, I was conscious of my relationships, and my perceived relationships, with the students, teachers, and staff within the school building. I wanted to earn the trust of students as well as the staff. Equally as strong as my desire to earn the trust of students was my desire to earn the trust of Mr. Beck. Given my work as a former middle school teacher as well as my position as an educator of current and aspiring secondary school teachers, I was naturally inclined to develop a meaningful relationship with Mr. Beck. Although I was very much an observer, more so than a participant, I participated periodically, for example, in a small group table conversation, asking students questions about a project they were working on, or acting as a peer editor of students' papers or essays. It was clear that there was much I could learn from and with Mr. Beck, and that in turn I would observe things that would be of interest and use to Mr. Beck's practice.

Fundamental to my work and research in Mr. Beck's class was the idea that inquiry as a stance and approach to teaching and learning affords teachers and researchers the opportunity to re-imagine their practice across their professional life span (Cochran-

Smith & Lytle, 1993, 1999, 2009). As a teacher of graduate students in Reading/Writing/Literacy and a researcher of adolescents' literacies, this stance informed my work. My positionality as a practitioner—researcher was most apparent on Friday afternoons, when Mr. Beck and I participated in oral inquiries (Cochran-Smith & Lytle, 1990) around the events of the week and looked at student work.

As the study progressed, the evolution of my relationship with Mr. Beck offered me unique access to his perspectives on course design, pedagogical moves, and nuanced details about notable events and incidents across the school community. Whereas my visits to BDA on Monday and Tuesday were scheduled during classroom instruction time and focused on observations of the students' engagement within the classroom, my visits on Friday afternoons were intentionally scheduled during Mr. Beck's preparation period. During this time, I would read students' recent work with Mr. Beck and share (in talk and writing) my comments. During this time, Mr. Beck and I would engage in a variety of informal conversations that ranged from reflecting on the past week, thinking ahead to future units, or talking about a current issue or idea in the field or the world. In this time, we intermittently shared stories about our partners and families. When the school day ended on Friday, we would typically leave the building together and walk to the neighboring Trader Joe's grocery store as we carried on a conversation about a recent TEDx talk, a provocative post from Deborah Meier and Diane Ravitch's blog Bridging Differences, or social plans for the upcoming weekend.

Although my relationship with Mr. Beck was a complex dimension of my approach to the design of this study, it enriched the study in that it offered unique access

to him and, in turn, important insights on his teaching, his students, and the school context. Given my role as an outsider to the school context and the course curriculum, our relationship increased the number of available avenues to the data. The formal and informal conversations and interviews with Mr. Beck generated data that were incredibly valuable sources for addressing this study's research questions. In addition to the ways that Mr. Beck's perspectives were a critical data source for this study, Mr. Beck and I also began to co-research together. Recognizing the power of bringing together the ideas and perspectives of our different locations and roles in the classroom, Mr. Beck and I, along with several students, presented work at three conferences between January of 2010 and February 2012.

Methods of Data Collection and Analysis

Study Participation

The primary participants in this study were the adolescent students enrolled in Mr. Beck's English and History classrooms during the 2009-2010 and 2010-2011 academic years. The students in Mr. Beck's classes reflected the gender, racial, ethnic, and socioeconomic diversity of the school. For the two academic years during which this study was conducted, I used a combination of four data collection methods: online observation, offline observation, semi-structured interviews and focus groups, and document and artifact collection.

Observations

In-person, *face-to-face observations*. I conducted observations of the students in the in-person context of their English and History classrooms. I observed the Silver Stream every Monday morning, for the two consecutive years, from 9:20 am until 11:40 am, and Gold Stream every Tuesday afternoon from 12:40 pm to 3:00 pm. On Mondays, Silver had History class followed by English; on Tuesdays, Gold's block started with English and then moved to History. I refer to these observations as in-person or face-toface, but that should not be construed as meaning "offline" since significant in-person time was simultaneously spent in online, networked spaces. All of my observations were recorded in a fieldnote journal (Merriam, 1998) on my laptop. In an early conversation with Mr. Beck, it was agreed that recording fieldnotes on a laptop would not be intrusive, most obviously since it was in keeping with the ethos of the school and my MacBook did not stand out. With the exception of a 5-minute silent mediation on Tuesday mornings during History, my laptop was open. I organized fieldnotes by Date, Stream, and Class Period. Each class period generated roughly 25 to 30 pages of fieldnotes. On average, one month of in-person observations generated close to 100 typed pages of fieldnotes. I recorded students' verbal and non-verbal behaviors, trying to capture direct quotes as much as possible. I also paid careful attention to how students interacted with the range of new media in the classroom as well as their peers and teacher, taking note of where students sat and with whom, as well as the materials (e.g., bags, books, digital devices) they chose to include in their learning space. I focused heavily on patterns of participation and interaction as well as the kinds of knowledge and questions that

students brought to or sought out in this classroom space. I often drew diagrams of the table groups and combinations of students at any given table and noted the physical and spatial arrangements of various learning opportunities. Like students, I found myself tending to sit in the same place each visit, and intentionally tried to change my seat to sit with different groups of students and see the classroom from different physical angles, but almost always along the perimeter of the room so that my back was never to any group of students or to Mr. Beck.

Online, out-of-school observations. In addition to the face-to-face and in-person observations, I also observed the students in the virtual, online spaces that were tied to their classroom and school context. Twice a week and often more, I would log into BDA's Moodle platform and watch the online activity. This both offered me unique access to the events and learning opportunities that transpired when I was not physically in the school building, and enabled me to see how the students were engaging this new media space after the school day was technically finished. I paid attention to time stamps in terms of when students were posting various documents. Similar to the face-to-face observations, I noted patterns of participation in terms of who connected with whom and who wrote to whom (explicitly or implicitly). Given the nature of the space, I also noticed how students chose to describe themselves on their Moodle profile page and what images they used next to their name. Over time, some students reached out to friend me on Facebook or took the initiative to email me a project they were working on or photographs they had taken. One student assumed a role as unofficial class photographer and shared all of her digital photo albums. These documents offered me additional insight into students' online lives yet did not serve as an official data source for this study. The online observations added a complexity to the research design. Although they offered me the ability to carefully and methodically track many of the lines of connection, participation, and evolving networks, the immediacy and fluidity of the online space meant certain images, postings, or ideas could be posted and later changed or deleted between my observations. I relied on a constant comparative approach and perspective (Heath & Street, 2008) to study the patterns of interaction and participation that happened in the online and offline contexts and to make sense of the ways that the online practices overlapped with and/or intersected with face-to-face practices and vice versa. The recursive processes characteristic of ethnographic research supported the inherent fluidity between adolescents' online and face-to-face interactions associated with life in Mr. Beck's classes.

Documents and Artifacts

Over the course of the two years at BDA, I collected a variety of documents from a number of sources. I collected documents produced and published by BDA to deepen my understanding of the school context, and how it positioned and promoted itself as well as how the school positioned and represented its students, teachers, and administrators. Almost all of these documents were gathered off of the BDA's website, including the Mission Statement, Teacher Profiles, Student Handbooks, and more. I also collected teacher-generated documents such as unit plans, rubrics, assignment descriptions, and course handouts, which provided the context on the content of the

course and how students were being positioned in relation to the course material.

However, the bulk of the documents that I collected were the texts that students generated for the classes that I observed. These included a wide range, from analytic essays to reflective journals and research papers to digital stories. These documents gave me important windows into thinking about the nature of students' literacy practices in this digitally rich school.

Interviews

Throughout data collection, I engaged, ongoing, in informal and formal interviews and conversations with participants. Every semester of the study I conducted at least one formal interview with Mr. Beck. Interviews with Mr. Beck ranged from 20 to 30 minutes long, and all of them were audio-recorded and transcribed. During the interviews with Mr. Beck I focused on understanding his perspective on the dynamics between his pedagogical design and the ways in which students used and interacted with various digital media in the pursuit of academic work. I also used the interviews with Mr. Beck to clarify and deepen my understanding of certain aspects of his curriculum, and to gain additional insight on his goals for various learning activities. On a few occasions, I shared a specific artifact or a sequence of students' online, written exchanges and asked Mr. Beck what stood out to him about the students' intellectual work as well as what counted, to him, as literacy learning in that particular sequence. The information I gleaned from interviews with Mr. Beck increased my understanding of the broader

classroom context and, in turn, deepened my analysis of students' literacy practices and events.

During the final semester of the study, after a year and a half of observations, informal conversations, and document collection and analysis, I conducted a series of semi-structured interviews with 15 focal students. The interviews took place during the lunch period on the third floor in a small office within the college counseling suite.

Interviews ranged from 20 to 45 minutes long, depending on the students' schedules and availability during the lunch period. I used a semi-structured interview format in order to build on students' ideas and perspectives. During the interviews, I focused on understanding students' perspectives on their lived experiences in these classrooms and this school. I aimed to gather new information about how they made sense of the learning environment and how they navigated their own learning space within the classroom. For those interested in the starting protocol for these interviews, see Appendix 2.B. Every interview was recorded with a digital recorder and then transcribed.

Data Analysis

Data analysis was ongoing and recursive. I catalogued the data sources and read the available data sources multiple times. A first round of analysis included a focused reading of the fieldnotes, student and teacher interviews, and student's online texts. I paid attention to the ways in which students' uses of digital media were described by students and the teacher and the ways in which students and the teacher used digital media as part of the work of the classroom. I noted patterns within and across the data sources, and

identified ways to organize and code the data. Codes were inductively generated (Strauss & Corbin, 1998) from my multiple readings of the data, but were informed by my research questions and theoretical frameworks. In this first round of analysis, I generated two sets of broad codes. One set of codes pertained to the kinds of responsibilities and learning activities adolescents had in these classes. Table 3.3 lists a few examples from this collection of codes.

Table 3.3: Round One Codes: Students' Responsibilities and Activities

Code	Code
Responsibility (to self, to peer, to teacher)	Multiple texts
Tuning in	Overlapping texts
Tuning out	Multiple modes
Visibility of the learner	Co-authorship
Co-teaching	Learning along the way
Tech tips along the way	Real time feedback

The second set of inductive codes paid careful attention to the participation patterns and classroom dynamics/structures that supported the various and varied learning activities.

Table 3.4 shows a few examples from this set of codes.

As part of the analysis, I decided not to follow specific individual students, but rather to follow the collective of students. Instead of looking at how each individual student or one specific class engaged this space or at the similarities and differences across the spaces, I worked to understand the themes that emerged across all of the

classes. This led to a more robust understanding of how adolescents engaged and made sense of their experiences with digital media in class. Adapting the analytic framework of "telling cases" (Mitchell, 1984) and "threaded case studies" (Nakkula & Toshalis, 2006), I used what I describe as a threaded activity technique to deepen my understanding of students' individual and collective experiences in these classes. I carefully analyzed students' interactions, moves, and patterns of engagement within specific learning activities or units.

Table 3.4: Round One Codes: Participation Patterns and Class Organization

Code	Code
Small table group talk	Online writing: student to teacher
Whole class, online conversations	Online writing: student to "world"
Whole class, oral conversations	Pen-to-paper journal writing
Online writing: peer-to-peer	Whole class: presentations/performance

This threaded activity technique enabled me to look carefully at how a group of students and not just individual students used digital media in the context of class. I conducted a particularly close analysis of three threaded activities, with each activity representing a unit in Mr. Beck's curriculum. The three units I analyzed were *The Age of Exploration, Passing/Crossing Boundaries*, and *Language and Identity*. Although I could have selected any unit across Mr. Beck's English and History curriculum, I decided to ground each dimension in one specific curricular unit for the purposes of depth, clarity, and coherence. I also believe the selection and close analysis of three different threaded

activities illustrates the breadth of learning opportunities and learning spaces for students in Mr. Beck's classes.

After multiple readings of my data and early rounds of analysis, I found several important themes and three overarching dimensions salient to literacy learning in these classes. With each threaded activity, I foregrounded a specific unit of analysis. Across the three threaded activities, I shifted my focus from the class as a primary unit of analysis to subsets of students and individual students and, finally, the class's lived experiences of the curriculum.

Data were triangulated using multiple data sources, including interviews, fieldnotes, documents, and artifacts (Hammersely & Atkinson, 1995; Patton, 2002). Creswell (2007) suggested that data verification comes from extensive time in the field, thick descriptions, and close working relationships with the participants. I drew on the knowledge and insight from Mr. Block. I found that our weekly Friday meeting was an opportunity to share observations from the week or emergent codes during data analysis. I was able to use part of that time to gain his unique perspectives as the teacher working in the classroom with these students every day and to clarify ambiguity when necessary and appropriate.

The decision to spend two years in four English and four History classes taught by one teacher supported my intent to gain extensive insight on the most habitual, taken-forgranted and routine aspects of students' everyday uses of new media in school. My primary focus across the many students and the wide range of learning opportunities and experiences I observed during the two-year period was how the adolescents, as members

of a larger class collective, engaged and participated with new media in pursuit of the academic and intellectual work in Mr. Beck's classes. I drew on the extensive data across the two years to analyze, understand, and identify the primary patterns of engagement. After identifying these overarching patterns, which I refer to as dimensions of the new culture of literacy learning, I selected three different learning units in order to illustrate a rich and nuanced portrait of each of the three dimensions and offer a vivid image of the wide range of literacy learning opportunities that were part of Mr. Beck's English and History classes.

Chapter 4:

Noise: The Big Picture

Introduction

Research and scholarship on the issue of school-based literacy learning and digital media have focused heavily on questions of how to integrate and use digital media to support existing teacher-driven learning agendas and institutions, often with the intention of contributing to increased academic achievement, as defined by federal, state, and district standards. Scholars have also argued that the efforts to deem digital media and technology as either effective or ineffective (Cuban, 2001) have overlooked the possibility that digital media may be used for qualitatively new kinds of school-based literacy learning (Alvermann & Hinchman, 2011; Kist, 2005, 2010). Recent qualitative studies have reported a more complex understanding of digital media's role in classrooms and schools, and the potential to use digital media to both support traditional kinds of learning in new ways as well as *new* kinds of learning (Alvermann, 2010; Ito et al., 2010; Parker, 2010).

Ito (2008b) argued that we need to take seriously the kind of learning that young people are doing online and specifically the kind of learning they do when they have the freedom to use various technologies how, when, and in the way they want to use them.

Ito et al. (2010) and others (Horst, Herr-Stephenson, & Robinson, 2009; Parker, 2010) suggested that our project should not be to understand how digital media can simply support or fit into our current educational agenda and goals but rather how it could

support or open up new educational objectives. Shifting our focus toward paying attention to what youth are doing in digital spaces could reframe the debate about technology in schools (Parker, 2010). Trying to understand more specifically what actually happens when teachers embrace digital media for students' learning *in schools* is central to realizing the full potential of learning in the digital age. Despite the fairly extensive criticism of scholarship on digital media as just improving or interfering with literacy learning as we know it, we know very little about literacy learning in classrooms where digital media is becoming ubiquitous. Researchers are actually constrained by the limited number of digitally rich whole-school contexts.

Mr. Beck's classrooms at BDA afforded me the opportunity to observe and analyze what it is like for adolescents who are learning day-to-day in extremely rich digital environments. While scholars, educators, and policymakers generally agree there is a need to expand and improve the use and role of digital media in our public schools, until we have a more nuanced understanding of the possibilities of this space as a formal learning context we will likely continue to focus on and evaluate media according to how it contributes to or disrupts existing agendas in school.

This chapter analyzes the lived experiences of youth in the ubiquitous digital media contexts in Mr. Beck's classes, with special attention to the literacy learning opportunities associated with digital media in these classroom contexts and the roles created for or initiated by students via these learning opportunities. It is organized into two sections. The first section will introduce my analysis of the concept of Noise, what I

am calling the first dimension of a new culture of literacy learning. In the second section,

I argue that Noise is a functional space for literacy learning.

Unfortunately for those in search of easy solutions to determining the role of digital media in schools or an easy way to determine the extent to which digital media should be used to achieve a predetermined benchmark for success, the answer to the question of what role and purpose digital media should/could have is complex and context-dependent. Together, however, the collection of literacy practices I observed offered considerable insight on how adolescents engaged in various literacy learning opportunities in these classes. My findings challenged the idea that digital media are either constructive or disruptive (see Chapter 2), and put forth the idea of Noise, a metaphor for the learning environment in these classes, as a kind of "constructive disruption" (Cochran-Smith & Lytle, 2009) of what it means to learn in these high school classes.

Bring in the 'Noise'

Students' study of *the Age of Exploration* was tied to a larger World History unit titled *the Age of Exploration, Scientific Revolution and The Renaissance*. According to Mr. Beck's unit plan (Appendix 3.A), the three central goals of this unit were to understand that (1) this historical time period expanded people's understanding of the world, (2) people changed the way they viewed themselves and society, and (3) historical interpretation is as influential as history itself. Mr. Beck organized the unit around the following essential questions: (1) How do ideas influence people's lives? (2) Why is

change sometimes fast and sometimes slow? and (3) Can ideas change the world? One of the central components and performance tasks of this unit was a simulated trial.

For this trial, students were arranged into five groups, with each group representing one of the following constituencies: The Aztecs, Cortes, Cortes's Men, King Charles V, and The System of the Empire. Prior to the actual simulation of the trial, students worked in their groups to research this time period and, specifically, understand the role that their respective individual or group played in the historical events. Each group was charged (see Appendix 3.B for list of charges) with the destruction of Aztec civilization and the mistreatment and murder of thousands of Aztec Indians (fieldnotes, November 10, 2011).

The following fieldnotes capture students and Mr. Beck as they conduct their final preparations for the trial.

Tables and chairs have been rearranged to resemble a courtroom. Students are huddled up in their small groups: the Aztecs, Cortes' Men, Cortes, The System of Empire, and King Charles V. Some groups are huddled around one laptop, whereas others are working together, but from behind their individual screens.

Mr. Beck interjects, "You really need to work together as team. The main place you'll do that is the Google Doc." Each group has co-authored one Google Doc where they have pooled references, websites, notes for defense and cross-examination, images of artifacts, opening and closing statements and more. All students can view the Google Doc at the same time. In addition, students, one at a time, are able to edit the document in real time.

"Don't forget, your Gchat groups should be set up," Mr. Beck adds. "Remember, this is a place you can chat with your team via Google, and you *should* be talking throughout the trial." All of sudden, a student's voice blares through Luke's speakers, "DO YOU WANT ME THERE YET?" Mr. Beck says lightheartedly, "I hear Kamilah." "Was that too loud?" Kamilah asks. Luke laughs and responds, "Yeah!"

Groups take another five minutes to prep. Luke works with Kamilah, who is home sick, through his MacBook to make sure the video feature of their iChat connection is set. Karolyn says to Jonah, "It's 'MissKallieMissKallie'" sharing her gChat screen name for the second time. Jonah hurriedly gets his buddy list in order. Katrina is nervous about her opening statement. She moves to the windowsill with her MacBook open. With eyes locked on the screen and headphones streaming music, she is connected to her group's Google Doc to revise her opening statement one more time.

Mr. Beck, now Judge Beck, calls the court to order. Students face forward, screens still up. Via his MacBook, Mr. Beck clicks his way to the online Moodle platform, then to "World History 10" and finally a hyperlink for "Cortes' Charges." He reads aloud the charges that have been filed and then covers a few ground rules, "Remember, you can only object to say, 'that's not true according to the historical record.' And you have to have evidence." In a moment, Mr. Beck adds, "Oh, and defense attorneys, you can have your laptops open to look at your Google Doc, but you can't be 'talking' to your group. Also, everyone, if you're messing around with your iChat it will be really difficult to participate during the trial. Now's the time to change your iChat status to busy. We're in a trial. There's no reason to be talking to people in other rooms."

The trial begins. A few students move their headphones from their ears and around their necks. Three students have started typing notes on a Word document, a place Mr. Beck expects them to use for individual notes on the trial. I catch myself thinking about the number of screens, documents, people, and texts that students are using right now and how, as the trial unfolds in class, how students will engage these resources. (Fieldnotes, November 16, 2010)

This lengthy fieldnote exemplifies the kind of multilayered learning space that was not just possible, but highly normalized in Mr. Beck's classes. Although students' specific participation patterns, media use, assignments, and projects shifted from class to class and from unit to unit, this kind of interactivity between and among students, via face-to-face contexts and online environments, often simultaneously, and text-density exemplified the concept I refer to as Noise. Noise is a metaphor I use to capture this kind of intense and dynamic learning environment that was the norm in Mr. Beck's classes. In the example above this saturation included, but was not limited to the following:

students' in-the-moment revisions to Google Docs, flashing gChat icons, a student participating in class remotely via vChat, hyperlinks that promised instant access to a range of Internet resources, instant messages being written and transmitted back and forth across the room, and the oral talk of the trial.

Students in Mr. Beck's classes typically worked in this kind of intricate network of people, texts, platforms, guidelines, and tools in order to participate in and contribute to the intellectual work of the class. This class was a dramatic amplification of the porousness of new media: it opened the channels of communication between and among learners, expanded the range and variation of ways to participate in class, connected adolescents to larger knowledge communities, and encouraged students to contribute their unique perspectives with their peers and the teacher.

Students maximized a range of digital media to extend the ways they came together to make sense of and complicate their inquiry into "what happened" during the *Age of Exploration*. Students had the choice and flexibility to use a range and variation of channels from Google Docs and Gchat to oral talk in order to participate and communicate with group members during the trial. These platforms opened up the ways students could disseminate their evolving understandings of different historical perspectives on Cortes's voyage.

As students participated in the simulation, these channels supported real-time collaboration and participation. Even when students did not have a role on the stand or were not conducting a cross-examination, networked forums like Gchat and Google Docs created a medium for students not only to take note of new ideas or questions, but also to

share their ideas, in the moment, with their group. In addition to expanding the number of roles available to students in class, these forums opened channels that helped to extend students' understandings because they encouraged students to pay attention to how other groups positioned themselves, such as in the following example, where one student indicated that he wanted to use a piece of Cortes's opening statement during their later examination.

For Cortes

Did the king tell you to do this? well then why did you say it in your opening statement? (Artifact, student writing, Google Doc, retrieved December 15, 2011)

Here, one student opts to use the live Google Doc to immediately post an idea that was triggered when he listened to Cortes's opening statement for the trial. He believes that he has a good question for their group to ask during the cross-examination. His thought is immediately documented on his group's document and instantly visible to his peers. Students were positioned as active consumers of the information and instantly engage that information with others. Research on youth participation with digital media in out-of-school settings has documented how social media play a central role in adolescents' exchange of ideas, artifacts, and emotions (Ito et al., 2010. Although some of the practices of youth-sociability were similar in these communicative forms, the school-based setting extended and modified some of the practices. Students in Mr. Beck's classes expected to have access to online social networks and leveraged these networks to collaborate with others in the learning process. This finding is consistent with the work of Baird and Fisher (2005) and Barnes, Marateo, and Ferris (2007), who argued that

students expect to exert their online identities in class and see networked forums as a pool of knowledge to which they can contribute and from which they can find support.

One of the most significant shifts in social media practices was that in addition to using social media to build, maintain, and develop relationships with peers, students employed social media to pool their knowledge. The following example is excerpted from a longer, seven-page Google Doc co-authored by the group of students who were representing Cortes:

CORTES? INNOCENT? SAY WHAAA?

Liza: Red Tim: Orange Tasha: Pink Raquel: Purple Jachin: Green Asra: Blue

**

Possible Points for Cortes's Men

Ordered: They are the ones who raped, tortured and killed. Not Cortes. Sure, he gave them the orders, but he never actually did the acts that he asked of his men. Even though, he was leader, most of the brutal slaughtering his men, not him.

**

Points for The System:

"In Peru, that other Spanish conquistador Pizarro, used the same tactics, and for the same reasons—the frenzy in the early capitalist states of Europe for gold, for slaves, for products of the soil, to pay the bondholders and stockholders of the expeditions, to finance the monarchical bureaucracies rising in Western Europe, to spur the growth of the new money economy rising out of feudalism, to participate in what Karl Marx would later call "the primitive accumulation of capital." These were the violent beginnings of an intricate system of technology, business, politics, and culture that would dominate the world for the next five

centuries." (peoples history, zinn) (Artifact, Google Doc, student writing, retrieved December 15, 2011)

In this school-based context, a shared online writing space like Google Docs reflected many familiar elements of adolescents' out-of-school uses of social media life, for example, joking around, informal writing, developing relationships, and generating knowledge. Students' participation via Google Docs resonated with many of the defining characteristics of what Ito et al. (2010) called genres of participation: "hanging out," "messing around," and "geeking out." Distinct to this context, however, was students' use of this space to pool their distributed knowledges around an academic project. Students used networked media to build relationships that sustained and extended their intellectual inquiry. In this case, students deepened their individual and collective understandings about native cultures before, during, and after the age of exploration. Whereas constant communication in school is typically construed as a distraction that takes students away from the material and the unit, here the communication enabled students to be active members of every stage of the trial.

Students' individual ideas were immediately shareable, usable, and revisable. The cumulative effect of students' pooled knowledge was that students could confront these kinds of difficult questions and complex problems together. Forums were not a simple a way to "hook" students into a unit by using a tool they use out-of-school, but rather a way for students to disseminate information that could help them build their case without actually stopping or explicitly interrupting the trial. One of the most important findings about the design of this networked, visible, and shared writing space in relationship to the

unit was that *students*' ideas and contributions were required in order for the trial to operate successfully.

The following is an excerpt from the middle of the trial that offers one image of how some of the knowledge was used in the service of the intellectual work of this unit in progress.

The prosecutors for Cortes come up and start their examination of King Charles V. All of the students' MacBooks are open. I wonder what the students are writing on the Gchat lines. Mr. Beck tells the class, "everyone's doing a good job, but I have not heard the specific historical information, so groups should be finding the information—you have a lot of it on your Google Docs and the link on Moodle" Dimitri starts to ask the King about the letters between King Charles and Cortes. Mr. Beck interjects, "Can I just point out that these letters that are being referred to right now are linked off my Delicious⁵ page. There are quotes from both sides (Cortes and King Charles). (Fieldnotes, November 15, 2010)

When students were on the spot and challenged about their understanding of a piece of the "historical records," they could draw on the "collective intelligence" (Jenkins, 2006; Levy, 2000) of their peers and the teacher. In the example above, we see Mr. Beck reference the texts that have been made available to students and that students have researched on their own. Mr. Beck's Delicious page is evidence of his own evolving identity online and his efforts to build a collection of multimedia resources and information as well as a scholarly community. Students are granted insight and access to their teacher's intellectual searchings and Internet-based research and, via the openness of Delicious, are invited to join their teacher's scholarly community. Sites like Delicious

⁵ Delicious (delicious.com) is a web-based platform to collect and showcase videos, pictures, blog posts, or articles on any topic. Users can easily share items with others. Mr. Beck had collected a range of web-based resources related to Cortes and the Aztecs on Delicious and shard the link to his page with his students.

offer evidence for a practice called "social scholarship" (Cohen, 2007; Taraborelli, 2008), which draws on the affordances of the Internet to connect formal scholarship with more informal, socially networked, Web-based practices. Figure 4.1 is a still image of one page of Mr. Beck's Delicious page that students were expected to navigate as part of their research.

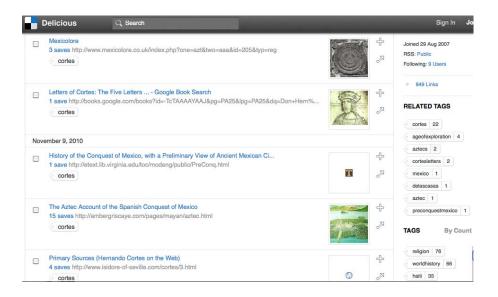


Figure 4.1. Mr. Beck's Delicious page.

Students and Mr. Beck sourced and shared an extensive range of web-based resources. These student- and teacher-discovered and recommended texts overlapped in a number of these classes' shared, centralized spaces online. This finding is congruent with much of the research on youth participation in digitally supported communities, but in this case, collective intelligence from the online space is intricately intertwined with the collective knowledge developing in the face-to-face context. Instead of penalizing one student for not knowing a particular detail or creating a competitive culture between individuals, the

networked publics (Varnelis, 2008) served to develop a culture of collaboration.

According to Greenhow, Robelia, and Hughes (2009), "today's learners expect to participate in evaluating as well as in being evaluated and to share work and feedback among their peers" (p. 251). Similar to a real trial, students were put on the hot seat, and challenged, but they also understood the various lines of support they could draw on via instant communication channels and the shared Google Doc. What stood out beyond the aggregation of texts was the direct way in which students observed and learned how any one artifact or source, like the letters between King Charles and Cortes, 6 could be spun to tell two different stories.

In addition to the collection of shared documents and public communication channels, students simultaneously managed individual and private workspaces during the trial. One such workspace was a private, single-authored Word document. Kate shared that she used a Word document in order to "take quotes that I think could help me as a prosecutor" (fieldnotes, November 16, 2010). As students worked with their peers and navigated a number of public spaces, they simultaneously created and managed individual spaces to trace and develop ideas they determined were relevant to them, but perhaps not necessary to the whole group.

A few rounds into the trial, Judge Beck ordered a short recess for students to regroup now that they had a better grasp on the difficulty of this project and the challenge and need to draw on the historical artifacts. I recorded the following fieldnote.

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⁶ These letters document a series of written exchanges between King Charles and Cortes. The written communication offers perspectives on the purpose and rationale for the expedition, responses to the expedition as it unfolded, and King Charles's commands.

Mr. Beck reminds students they need specific historical evidence in their cross examinations. He says, "So, this may mean going back to the Delicious page and the Moodle Page. You have decent background information, but do not have all the historical resources you need." Vanessa asks, "Does it have to be all quotes? I have pictures." Mr. Beck responds, "No. Pictures are fine too."

Students will use the rest of the period to conduct further research. At one table Chantal's group discusses an artifact. She has at least 7 applications/tabs open: iChat, gChat, Microsoft Word, three Safari window, and iTunes.

Across the room at another table Mara says, "Oh my gosh, Chantal!" She is excited about a new song that Chantal has just beamed to her electronically. (Fieldnotes, November 15, 2010)

Most of the time in Mr. Beck's classes, students had access to people and texts simultaneously. Based on extensive research on youth in out-of-school contexts, layering of media and social interaction has been documented as a central practice in the media ecology that young people inhabit. In the context of these classrooms, digital media enabled and required students' constant shifts in attention and communication between face-to-face and online contexts.

At any moment in these classes, there existed the possibility for students to access multiple sources, communicate with a range of people, and engage with various modes and texts. I use Noise as a metaphor to capture the intense, multilayered, and highly saturated learning contexts in these digitally sophisticated classrooms. Whereas noise is often understood as an interference to a learning environment, in these classes noise *was* the learning environment. I found that Noise was a functional space for literacy learning. Drawing heavily on interviews and student-generated artifacts, this remainder of this chapter analyzes the affordances of this kind of context for literacy learning. It is critical to note that I use the term affordances to suggest the unique characteristics of the space,

yet that does not imply that they are all unequivocally positive. Instead, the affordances of this space are both benefits and challenges.

Layering

Students in Mr. Beck's English and History classes learned day-to-day in this kind of intense, multilayered, and highly saturated learning context. The near-constant, often simultaneous, layering of digital media, social interactions, and intellectual work is critical to understanding the possibilities for literacy learning in this context. In this section I analyze the ways that students engaged the multiple layers of texts, talk, and writing that were part of this new culture of literacy learning. The layering observed in Mr. Beck's classes further support New Media Literacy group's argument that classrooms in the digital age are far from isolated or insular environments (Gardner & Jenkins, 2012) and connected to a multitude of other authors and ideas. Although underlying the concept of layering is the way in which students' texts, talk, and writing overlap and inhabit youth spaces at the same time, I pay close attention to each one, while recognizing that they are not isolated acts.

Multiple Texts

In Mr. Beck's classes, digital media enabled fluid access to a range and variation of online texts. It was common practice for students to read a series of multiple online texts on a given topic as part of one learning opportunity. Prior research has documented how digital media support "convergence cultures" (Jenkins, 2006) in which old and new

media collide and participants engage multiple texts, ideas, and people nearly simultaneously. Mr. Beck's pedagogical design routinely invited students to engage multiple online texts from their MacBooks. At times, these texts were selected either in advance or in-the-moment during a lesson by Mr. Beck; at other times these texts were discovered and distributed by students.

During one segment of the *Age Of Exploration*, students were required to read and respond to two web-based texts that were pre-selected by Mr. Beck. Students' responses were written on a public, peer-to-peer discussion forum via Moodle. The first text was an article published on the *National Geographic* website. Figure 4.2 shows the initial webpage that students encountered on the website.

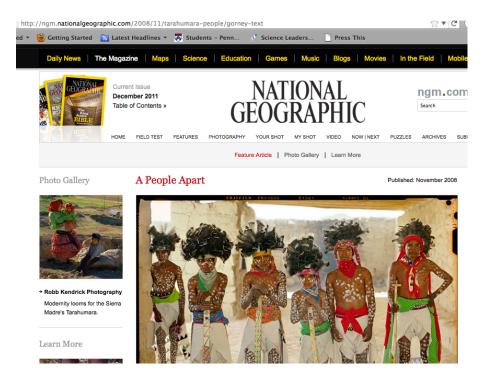


Figure 4.2. Still Image of A People Apart on nationalgeographic.com.

The second was a photojournal essay published on the *New York Times* website. Figure 4.3 shows a still image of the initial page that students accessed and read on the website.



Figure 4.3. Still image of An Ancient Culture in Mountainous Mexico on newyorktimes.com.

Students accessed both texts via hyperlinks on the Moodle platform. The National Geographic text, "A People Apart: Tarahumara," can be accessed by clicking here. The New York Times photoessay, "An Ancient Culture in Mountainous Mexico," by James

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⁷ A People Apart: http://ngm.nationalgeographic.com/2008/11/tarahumara-people/gorney-text

Estrin, can be found by clicking here.
<a href="he

All students were assigned the same broad task, but engaged the invitation differently. Students traced their own reading path and worked at their own pace. Some students dwelled on images in the photoessay, some skimmed all of the material quickly and then returned to linger on a specific area of interest, and some followed a string of various links, reading a collection of related yet supplemental material off of the available sidebars. Finally, some others read the material in small selections, stopping intermittently to discuss the selected chunks with their table neighbors. During this activity, less than half of the students had headphones on (fieldnotes, November 22, 2010). Regardless of the chosen path, all students were expected to come back to the digital discussion forum with an individually authored, publicly posted response.

Students were asked, "What different contradictions and struggles exist for indigenous people in today's world? Respond to this question with both statements, questions of your own. Include quotes from the articles when appropriate" (Moodle artifact, November 22, 2010). Here is an excerpt of one peer-to-peer exchange on Moodle:

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⁸ An Ancient Culture in Mountainous Mexico by James Estrin. http://lens.blogs.nytimes.com/2010/11/08/an-ancient-culture-in-mountainous-mexico/?scp=2&sq=indigenous&st=cse)

- © Frances: "Traditional Tarahumara men wear wide headbands and loin coverings that leave their legs bare even when it's freezing, but many more now wear blue jeans and cowboy hats and pointy-toed boots in leather dyes to match their belts." (Moodle artifact, student writing, Frances, November 22, 2010, 8:56am)
 - © Jachin: So there were two pictures where a young teen was like wearing a bandana and a chain and an eminem shirt and jeans, but I don't see anyone else like that. I think the majority of their civilization is not modern or connecting to anyone or anything on the outside, but as the civilization gets older, they begin to get "up to date." They begin to migrate, and their civilization expands. SO in my opinion, they are not indigenous people. (Moodle artifact, student writing, Jachin, November 22, 2010, 9:09am)

Like many classrooms, students were expected to engage the texts to make sense of ideas in a series of texts; in this case students worked to understand what counted to them as indigenous people and teased apart complex concepts like "civilization" and "modern." Students' engagement with digital media enabled them, in an explicit and embodied way, their own reading path and, based on the combination of texts that were part of their readings, they came to their own varied interpretations. Layering texts with in-themoment peer-to-peer written communication was a consistent, well-developed literacy practice in this new culture of literacy learning.

I found that the relative autonomy students had to direct their reading path supported recent research and scholarship that argues that online reading "is not isomorphic with offline reading comprehension; additional practices, skills, and strategies appear to be required" (Leu et al., 2011). Students' literacy practices in Mr. Beck's

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⁹ On Moodle, students had the option to personalize their profile with a visual image. Although several students incorporated a self-selected image, most often the image was a personal photograph, so I will use Moodle's default icon: ©.

classes further support Coiro (2011) and Leu et al.'s (2011) three key characteristics of online reading: 1) online reading is a self-directed, text construction process; readers choose the texts and links that they read through or connect to in order to solve a problem; 2) no two readers read the same text to solve the same problem; and 3) online reading is not simply an individual process but rather a social and collaborative process.

What is new, however, in these classes, is the interplay between self-directed online reading and the explicitly collaborative reading community that required students not only to read the same texts at the same approximate time, but also to engage in a public, asynchronous communication channel in conjunction with their shared reading. The spirit of collaboration and the participatory nature of this context is sustained by the knowledge that in this physical, embodied space of the classroom, other peers are traversing similar online pathways as well as the awareness and freedom to talk to peers to help make sense of or find one's way through the material. Building on the "persistence" property that boyd (2007) described as one of four aspects of online identity development that differ from offline identity development, students' written responses could be stored indefinitely and, according to students, "hung around" well after they were written. All students had the freedom to pick up on a student's idea several minutes after it had been posted. Students were not limited to one conversation. Similar to Jachin, students could pick up on different responses and follow multiple threads of written conversations, even if they arrived at the forum well after a comment was made. Reading paths continued to be expanded and extended via the peer-to-peer forum. Students were not simply "reading" and "writing" but engaged in a kind of

collaborative sense-making with their peers. Students' patterns of participation embodied what Lankshear and Knobel (2006) referred to as the "participatory" and "distributed" nature of the new literacies that are supported by digital media and networked communication platforms. These students saw themselves as both contributors to and readers of a network of fellow learners. Students were engaged in a new literacy practice that supported self-directed reading within a collaborative sense-making community.

Encounters with texts in these classes required a deliberate and consistent process of making sense of texts—visibly and publicly—within a community of known peers. According to Aldona, "the good thing [about the public forums] is we're able to read what *each* person in the classroom thinks about that one topic and take that into consideration" (personal interview, May 24, 2011). These students harnessed digital media to read *with* each other. When students described discussion forums that were linked to the reading of online texts, it was impossible for them to describe their experiences without referencing the social relationships that were part of their participation with these forums. As adolescents gain experience connecting with peers online in their in-school and out-of-school lives, they are required to gain an awareness of and even anticipate potential positive or negative consequences of their interactions and writings.

Digital media's speed and simultaneity created the conditions for students to write publicly, meaning that what they put forth was visible to their peers, but the pedagogical design created the conditions for students to make *themselves* visible to their peers.

Visibility emerged as a salient aspect of this culture when students had to engage in a

significant concept or idea and were invited to share their various knowledges or opinions to provoke and extend the collective project of the class. This visibility property was linked closely to Mr. Beck's pedagogical design that encouraged and accommodated students as "learning selves in the making" (Ellsworth, 2005) who could expose their vulnerabilities with their peers and the teacher.

Students frequently shared individual readings that pushed back against what they believed were their peers' possible misreadings or oversimplified readings. I found that students were constantly learning how to become critical readers of the abundance of information as well as their peers' individual interpretations of those texts. A consistent benefit and challenge of this common practice of layering was the need to be judicious and discriminating of the interpretations and authorial stance of all texts. The following is another student's response to these two texts:

While looking at pictures i realized that they aren't what i though they would be. Even though I thought they would be totally different people. they have the same religious beliefs as I do (Catholic). I also realized that even tho modern things have to them most still stay true to their ancestors. Then again i saw that two teen boys are dressed more modernly and also while reading what came with the photo essay it said that some were moving to the city and looking for jobs and just leaving their home town to move on to the city life and adjusting to the modern world. I also realized that among them live people who are as modern as we all are. For example, on the essay there were pictures of a man who owned a store. In that too I also saw a picture a something close to a road being build to unite them with the modern city. (Moodle artifact, student writing, Mara, November 22, 2010, 2:52pm)

Mara's encounter with these written and visual texts led her to put her assumptions and experiences up against a broader lens for thinking about the Tarahumara people. The intersection of Mara's prior understandings with the two articles and multiple images contributed to her ability to start to see similarities, like Catholicism, through obvious

differences. Yet she also noticed the ways the Tarahumara, although they might be similar to Philadelphia in terms of appearing "modern," operated with a unique set of cultural practices. Students' active contributions to these collective forums fostered a new literacy practice in which students were simultaneously positioned as consumers and producers of information.

Lankshear and Knobel (2006) argued that one of the mindsets unique to new literacies is what they refer to as a "cyberspatial-postindustrial mindset." Central to this mindset is the tendency to view expertise, intelligence, and authority as that which is generated by collectives, as opposed to that which is singularly located in individuals. Here are three interview excerpts that reflect three students' experiences as readers of these discussion forums:

Marlena:

Obviously, I read my friends' posts, but like Dante—you know him?—I **love** his stuff. He always writes really thoughtful stuff. And people who I think I'd like their opinions or might have interesting opinions of something. I read Dante because he and I usually argue about stuff a lot. So, generally I always try to find his. [...] I'm normally sitting with some of these people too, so we'll usually talk about some of these things before we write. (Personal interview, May 27, 2011)

Maureen:

I always read Isabela's because, she and I used to be really close and we had similar experiences and her mindset is really different, so I'll read her, and then you'll skim the page and say, alright, I'll read this one. (Personal interview, May 27, 2011)

Sue:

I like the forums because it gives you a chance to read what everyone else's thoughts are and how they took different things from the same thing you're reading or doing. And their opinions on it. But, most of the time, after a couple of sentences if it doesn't appeal to me I'll scroll down, but most of the time I read through. I'll always read my friends' posts and stuff. (Personal interview, May 27, 2011)

Students' contributions on these forums reflected the Lankshear and Knobel's (2006) new literacy mindset in the ways that students explored the expertise of these published authors and well-established publications as well as the peer-authored responses *and* in the ways that students contributed their own opinions and reactions. Students exercised their authorial agency across these spaces as well as their freedom as readers. In addition to what happened in the online interactions, students were also constantly initiating and engaging in open talk with peers, as they desired and deemed appropriate or necessary.

One of the most complicated questions these forums raised in regard to students' agency was the kind of in-class networks that formed. Although there was evidence to support how these self-directed and self-built networks expanded relationships, the comments in interview and document response patterns do raise new questions about the extent to which networks could limit students' exposure to a diversity of responses. In other words, this raised new and significant questions about the relationships and balance between production and consumption. Regardless, students recognized the presence of their audience and the distinct kinds of roles they played in the reading, writing, and sense-making community in these classes. In the case of the *Tarahumara Forum*, Mara's contribution joined with several others, offering additional evidence for a new literacy learning practice that was far from a practice in which students passively consumed knowledge or assumed that the authors they read had the last word on the Tarahumara.

This new literacy practice positioned students as active generators of texts and knowledge. Mara attempted to understand how the Tarahumara responded to changes in Mexico's development as a country, but Mara also wrote her way into thinking about the

possibility of an indigenous group being modern and true to one's ancestors. In Mr. Beck's classes, writing as inquiry was a component of students becoming critical readers. Rather than Mara's writing being a way for her to demonstrate mastery of her knowledge of the concepts of language and identity, *in* and *through* her process of writing, sharing, and receiving feedback, she came to new and different thoughts, ideas, and understandings. This encouraged students to articulate both knowledge and knowledge-in-the-making. Although writing as inquiry (Neilsen, Cole, & Knowles, 2001; Richardson & St. Pierre, 2005) is not new, it was refashioned as a new literacy practice because of the public and visible ways in which students wrote their way into new understandings. Students were invited and positioned to "write themselves into being" (boyd & Ellison, 2007).

New media allowed students to exercise their multimodal ways of learning. Images, videos, and audio interviews often helped to challenge students' prior understandings. As we see in the case of Mara, the images challenged her assumption of what "indigenous people" might look like. Students in Mr. Beck's classes relied on and expected having access to the multiple modes typically afforded by or associated with new media to make sense of the meaning embedded in multiple texts and recognize potentially competing messages or an oversimplification of ideas, or in this case, cultural practices.

Adolescents developed new literacies in Mr. Beck's classes in response to the intentional ways in which digital media enabled fluid shifts between students' attention to multiple texts and to their peers. As students accessed important information they stayed

in consistent contact with their peers. The pedagogical design maximized students' commitment to reading by creating a context in which reading was always connected to students' sociability. In the context of formal education, this encouraged students' reflections on their own readings as well as their peers' readings.

There is heightened concern that digital media and technological devices are changing reading and writing too dramatically. Some scholars and practitioners argue that students' reading, writing, and literacy capacities have been weakened or diluted in response to digital media and digital tools and that information is too easily accessible online, making kids "lazy." There is resistance to letting go of the prevailing ideology in school that privileges the kind of intellectual rigor associated with knowing certain bodies of knowledge, essential facts, or formulas. Students in these classes were developing an expansive and sophisticated literacy repertoire to contend with the competing perspectives in available information. This builds on the findings from the five-year longitudinal Stanford Study of Writing (http://ssw.stanford.edu/index.php). Lunsford and her colleagues found that students were writing extensively for a range of purposes and audiences, and were remarkably adept at assessing their audience and adapting their tone, style, and approach to best communicate their ideas. Lunsford reported in an interview about the results of the study with Clive Thompson (2009), "Technology isn't killing our ability to write. It's reviving it—and pushing our literacy in bold new directions."

Online research was a large component of this unit and most other units in Mr. Beck's curriculum. In this case, students engaged in extensive research to build their

individual case for the trial. Here is an excerpt from one group's Google Doc¹⁰ in the early stages of research:

Check this out: http://www.wsu.edu/~dee/GLOSSARY/CAPITAL.HTM
—from Mr. Beck

Cortes's second letter to King Charles:
http://www.fordham.edu/halsall/mod/1520cortes.html
—Mike

Very good link for Explorers in the Age of Exploration. http://www.enchantedlearning.com/explorers/1500a.shtml another one is:

http://www.elizabethan-era.org.uk/the-age-of-exploration.htm—Aldona

Use this to prosecute King Charles V http://www.novelguide.com/a/discover/rens_01/rens_01_00100.html —Mark

Plains Indian Smallpox
http://www.thefurtrapper.com/indian_smallpox.htm
—Lakeisha

Open access offered students access to a seemingly limitless collection of sources, and students were able to exploit the larger knowledge communities and historical resources. Although online searching can seem roundabout, participants developed "fortuitous searching" (Ito, 2009) strategies to find, review, and evaluate texts for their trustworthiness and usefulness to their specific project. Even in the early iteration above, students selected some resources for pointed purposes and others for more open-ended

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¹⁰ Google Docs were an instrumental part of this learning activity. Students were required to create and build a shared document to store all of the group members' research, resources, ideas, arguments for prosecution and defense, and opening and closing statements. Google Docs are free to the public via the Google platform, but do require users to set up a Google mail (Gmail) account and email address.

purposes. Students' searches were not aimless or random, but designed to find information to address their specific questions and accomplish particular goals. In individual interviews, most students spoke about the difficulty of researching primary sources as well as reliable sources for the trial. Students told me they often relied on .edu, .org and .gov sites, pointed Google searches, and library search engines at the Free Library and BDA. This open access was another affordance with clear benefits and constraints. Mr. Beck shared the following:

I think learning research skills along the way, but being realistic. I don't want them to stumble around for 60 minutes and still not have something quality. Like the Cortes trial primary sources—they are there, but they are hard to find. So, I want them to find them but I don't want them to take wrong turns constantly. So I just kind of see how people are doing. Sometimes I have students share strategies for searching, Share a phrase. Also, if someone's struggling, I'll pass them a site. (Personal interview, June 6, 2011)

A new literacy practice essential to this classroom was learning how to critically read the sources they encountered. This project of becoming critical was ongoing. Students constantly tried to improve their searching abilities as well as their ability to interrogate the resources they searched or perhaps stumbled upon. Students learned, for example, that the criteria of .gov, .edu, and .org alone did not grant them access to immediately credible or reliable sources. This was a long, often frustrating process of trial and error, but by default of the abundance of material and resources, a skill that students were required to develop. Students told me that they learned to read authors' biographies to understand where the documents came from and whether they deemed them valuable. Other students shared how they followed bibliographic trails, via hyperlinks, to locate primary source material. Several students talked about the difficulty of finding ample

evidence for one particular perspective of Cortes's expedition. Dante shared the following comment about his searches:

Never be simple-minded. I think that's what I learned. You can always have your opinion, and it's your right to your opinion, but always know that there's always two sides to a story and sometimes even three sides to a story—and always try to understand every perspective of the story, even if you disagree with it. It's something I learned with the trial, but the whole class. So many current events, past events, and so many deep topics, always trying to understand different perspectives and not be so simple-minded. (Personal interview, May 20, 2011)

In Mr. Beck's classes, the layering of texts was not simply about students' access to resources, or easy access to resources, but rather in the face of multiple resources, learning to recognize that each text is authored for some purpose and from some unique perspective. Students developed literacies that supported them to be critical readers of texts and to recognize that all texts are context-specific and highly situated and that there are multiple ways to tell a story.

Simultaneous Texts

New media were routinely leveraged for communication between and among students via Moodle's peer-to-peer discussion forums. Participants engaged in these interactions from behind their individual screens, yet often physically side-by-side in the classroom. Most participants referred to these exchanges as "talk," "discussions," or "conversations." They are all written exchanges, yet read in a register similar to spoken discourse. ¹¹ *The Age of Exploration* unit included two significant Moodle forums, both of

¹¹ Although this section explicitly addresses students' writings (in a fairly quiet classroom space) on Moodle and not oral "talk," I intentionally use the term "talk" to signal the

which launched and sustained whole class "talk." The first forum, *Tarahumara*, took place early in the unit and the second, *Jury Deliberation*, took place immediately after the trial. Both forums required whole class participation, yet different kinds of participation. Briefly, the first forum asked students for open-ended responses to articles and encouraged interactions between authors, and the second forum asked students for a more polished and final deliberation of the trial. Students were required to write out their final verdict and rationale for the trial.

The *Tarahumara Forum*, which I introduced earlier in this chapter, asked students, "In your opinion, what different contradictions and struggles exist for indigenous people in today's world? Respond to this question with both statements, questions of your own. Include quotes from the articles when appropriate" (Moodle artifact, November 22, 2010). One class generated 78 unique posts, totaling 17 print pages, in 34 minutes. Another class generated 51 unique posts, totaling 14 single-spaced, print pages, in 35 minutes.

This "talk" was student-driven, fast-paced, and non-linear. What is significant about these forums was that all of the students in class on that given day were "talking" at the same time. Students did not have to raise their hand, wait for the right moment to make a contribution, or worry about being shut out by more vocal peers. Significant to the new literacy practices in these classes, digital media forums dramatically expanded the number of perspectives in the room. The amplification of student-generated ideas

conversational nature of the online discussion forums and to convey the extensive quantity of information that students publish and consume via online conversations.

illustrated how reading was an explicitly social process by requiring students to interact with one another as they read. Here is an excerpt from one class collection:

- © **Dante**: I think that to be indigenous is to be one. One culture, one religion, and one home. Now that all of these modern cultures are being forced into their lives I feel like even after staying in touch with their roots that they are no longer indigenous because they are not one anymore. (Moodle artifact, student writing, Dante, November 22, 2010, 9:05am)
 - © **Deb:** People were leaving the canyon to seek work in the cities. Yet, at the same time, Mr. Reyes found "many traditional religious practices still being maintained, alongside Catholic observances" (Moodle artifact, student writing, Deb, November 22, 2010, 8:53am)
 - © **Kate**: Own religion? I didn't even think about religion; I would just suppose that someone who is indigenous means one is only of that culture born on that land. (Moodle artifact, student writing, Kate, November 22, 2010, 8:55am)

The freedom and flexibility of digital media enabled students to both carve their own reading paths and, simultaneously, read with their peers. The way Mr. Beck tied these digital, interactive forums *with* students' individual readings of texts supports other literacy research that challenges the notion of "reading" as an individual and solitary act (Bloome, 1985; Luke & Freebody, 1997; Sumara, 1996). Here, digital media intensified the possibilities for what it might mean to read texts together in school, building on Bloome's (1985) and others' argument that reading is always a social act. The digital platforms amplified students' encounters with texts by creating a space in which students could interact around their various and varied readings of the text, thereby deepening their understandings of the texts and their relationships with one another around ideas and student-generated texts.

This extends the research of Jenkins (2006) and others (e.g., Black, 2008, 2009; boyd, 2007) about the role and prominence of participatory cultures in web-based, networked, and digitally mediated environments. Jenkins (2006) posited that a participatory culture is one in which members believe their contributions matter, and feel some degree of social connection with one another about what they have created. Although Jenkins's (2006) research has primarily focused on engagement in digital spaces and worlds out of school, students in Mr. Beck's classes developed new literacies that were congruous with many of the characteristics of participatory cultures, especially the belief that their contributions mattered in school.

Several students characterized their online talk as "heated" or "argumentative." Another student explained that it was a place where "everyone is always trying to get their point across or opinion out there, at the same time" (interview, May 12, 2011). This online, networked space was important because students had reactions and contributions they wanted to make that they believed mattered for the group, and they could share them at the moment the thought occurred, and simultaneous with other students' comments. In this context, overlapping talk was a productive disruption for the class, particularly because its immediate availability, room for all students' contributions, and connections to shared texts sustained thought-provoking discussions. Students were actively and consistently engaging digital media to position themselves as producers and authors in these classes.

The new literacies that students drew up and developed in Mr. Beck's classes supported an extensive and elaborate culture of production. Students were expected or

required not only to produce but also to read, make sense of, and listen to their peers' contributions. At times, students were called upon to respond to peers via writing, but often there was no expectation to respond. Regardless of an explicit written response, students developed a consistent practice of reading their peers. In the upcoming sections, I illustrate some of the ways I observed students developing new literacies practices of "listening" in this kind of multilayered and saturated environment.

Co-Authored Texts

Overlapping "talk" or writing existed in several other learning spaces in Mr.

Beck's classes, including Google Docs. In the *Age of Exploration* unit, Google Docs were fluid, shared, and co-authored collections of students' writing that included various combinations of student writings, images, charts, bullet points, role distribution, resources, and opening statements for the trial. The web-based documents were draft-like spaces that were always available and always open to revision, editing, and expansion.

Google Docs were open and accessible to students at any point throughout the unit, but also until the Doc was intentionally deleted. I never observed the deletion of a Google Doc and, therefore, they remained available, accessible, and editable. Students sourced, pulled, and culled countless resources about this historical event. Here is an excerpt from one group's longer Google Doc. This particular document was co-authored by the students representing Cortes's Men. Typically students initiated a color code to differentiate individual authors' contributions. Mr. Beck expected students to create a

Google Doc to crowdsource their ideas and resources for the trial, but other than that broad structure, students designed their Google Docs according to their own preferences.

—The Aztecs were being slaughtered and killed off unmercifully by the Spaniards and they knew their intentions were to claim their land, yet they still chose to be generous and gift giving toward them? Their kindness was their downfall. Their system was based on generosity toward others and fearing the Gods (They thought the Spaniards were Gods.) They easily could have overpowered the Spaniards or fended them off before they realized they held so much power over them, but due to their system of kindness they failed to do so.

Aztecs:

—Why didn't you retaliate? did you feel that there was nothing else you could do?

Aztecs:

—Why didn't you fight back? You created a system for your people to follow, that was against violence, but it led to your demise. Did you choose not to fight back out of kindness or did you choose to not fight back because you thought you could gain from the Spaniards?

The Aztec's historic Codex Nuttall was a manuscript depicting their history. http://www.chapala.com/chapala/magnifecentmexico/codexnuttall/codexnuttall.html They were violent before Cortes came. Who is to say that they did not spark the war, based on their violent savage ways, who can tell what they might do? They were overpowered as far as weapons, but, they outnumbered the Spaniards by far. They had home-field advantage, they chose to be defeated. Point: The Aztecs were known as warriors. Remember that book, they very vulgar and blood was splattered on every page. And, they were definitely not unarmed. These people had laws, a system, a way of life and if you could not fight. We were told to treat them properly? Please. Check the Letters that were written for over 5 years. (Google Docs, student writing, retrieved December 15, 2011)

Here, students were in the early stages of research in order to build their case for the upcoming trial. As Cortes's Men, this group would try to assign guilt to other groups. In the selected excerpt students narrowed in on the ways in which the Aztecs could be implicated in their own destruction. Drawing on texts that were selected by Mr. Beck and texts students found on their own, students started to develop a possible narrative of the

Aztecs as "too peaceful" and "kind" as well as "violent." Students used Google Docs for the pooling their ideas, but more importantly, students made themselves present to the space by sharing their contributions as well as drawing on and building on the collective intelligence of the space. Students played with a variety of discursive practices, moving from their positions as students learning about this historical period to adopting their roles as Cortes's men or a defense attorney.

Students engaged this space as a collaborative knowledge-generation space. It was a collecting place and, as such, drafty and messy. Across the groups, Google Docs included information in bullet notation, complete paragraphs, and/or tables. Figures 4.4, 4.5, and 4.6 show excerpts from three different Google Docs.

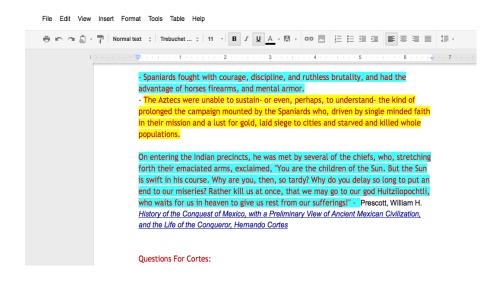


Figure 4.4. Google Doc excerpt from the trial of Cortes.

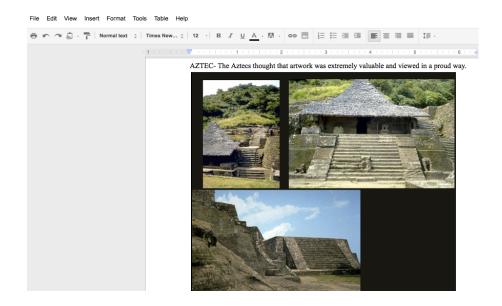


Figure 4.5. Google Doc excerpt from the trial of Cortes.

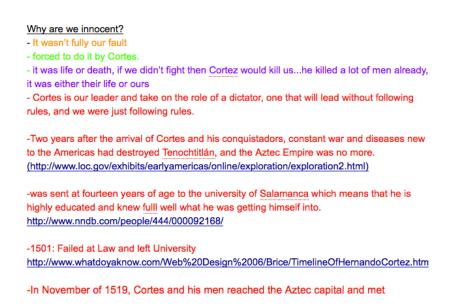


Figure 4.6. Google Doc excerpt from the trial of Cortes.

At first glance, group-authored Google Docs looked like a collection of students' rough starts, preliminary brainstorms, potential resources, unfinished arguments, and/or loosely connected ideas and did not necessarily represent a traceable, final argument. What

students carried out, however, on this forum and through this kind of collective writing space was a shared project. For this learning unit, students in Mr. Beck's classes used Google Docs as a space to come together to write about what they were learning or the resources they were discovering as well as a place to try out various ways to build an argument and approach their enactment of the trial. Google Docs in this unit were understood as works in progress.

For most of the learning activities during which Mr. Beck required students to use Google Docs, the documents were clearly developed and understood as documents "inprocess." The networked communication platform was used to gather the range and diversity of students' individual research efforts, thereby increasing what students could learn on their own about Cortez or the Aztecs or other groups in the trial. The production of this site, however, was significant to the ways that digitally networked sites made visible the diversity of students' processes for researching, thinking, and writing. This abundant collection of texts could be understood as an interference to learning, particularly since it is far more complex and in-the-moment than a body of historical material from a textbook, the abundance and simultaneity of texts intensified the perspectives available and positioned students as legitimate, sophisticated, and knowledgeable authors.

This kind of authorship also reflected some of the principles of "remix culture" (Lankshear & Knobel, 2006) where students drew on and appropriated ideas from a range of books, historical artifacts, and e-resources as well as discourse practices common to courtrooms to create this text. This platform supported students' literacy learning in some

similar ways to the peer-to-peer discussion forums I described earlier, but also in new ways. Students entered and exited this shared, instantly editable, 24/7 document whenever they had additional contributions to make or were curious to learn what new contributions had been made by peers. The kind of latitude students had with the available resources demanded they develop disciplinary literacies (Wineburg, 2001). For example, in the excerpts above, the small group of students representing Cortes's men situated themselves in the specific historical context of the world in 1519 and worked to assume the role of a group of European men on Cortes's expedition to Mexico. Students were not positioned as passive recipients of texts, but as active consumers of texts.

This culture of literacy learning demanded that students, in an embodied way, access and make sense of a range of texts. In this learning environment, texts often competed for participants' attention. Sidebars, hyperlinks, supplemental images, advertisements, and more were embedded in digital readings. From behind the screen, students linked to url after url and scrutinized various webpages. In school, "fortuitous searching" (Ito et al., 2010) positioned young people as attentive, active agents in their pursuit of information. The abundance and simultaneity of texts, talk, and writing constituted a novel and productively disruptive context for literacy learning by serving three important purposes. First, the text-rich environment called for students' attention and required active engagement with and of the texts. Second, the density of texts required students to be close, critical readers of multiple texts by varied and various authors, including student authors. Third, students were positioned as knowledgeable participants and, consequently, positioned themselves as credible knowledge generators.

Criticality

I am arguing that students' uses of digital media in Mr. Beck's classrooms extended current research and understandings of designing and enacting a critical literacy classroom and pedagogy. In the *Age of Exploration*, this was evident in students' extensive engagement with the texts and their peers as observed across the digitally mediated *Tarahumara Forum* and face-to-face conversations. As I discussed earlier, this forum invited students to visit two websites, accessible directly via hyperlinks off Moodle, and to post their responses to a peer-to-peer forum. Although the fluid and layered nature of these texts played a central role in how this saturated space was a functional space for literacy learning, the speed, simultaneity, and spontaneity of these texts played a particularly pivotal role for fostering critical literacy learning.

"I Don't Really Understand"

As I have shown, the immediacy of digital media enabled students to distribute and read instantaneous responses over various peer-to-peer forums. Particularly in the peer-to-peer discussion board, students' texts were produced, disseminated, and read with intensity and urgency. Students were behind their own screens and often directing their own reading paths, but various forums tied students to a community of readers that was at once intellectually engaging and demanding. The fluidity of the space and instantaneous access to peers encouraged students to write to their fellow learners in some haste.

Several students reported that they wrote responses quickly so they could "get to" the forum, whereas other students wrote something "right away" to avoid feeling overloaded

by the wealth of information. Still, some other students reported that they first read as many other posts as possible before authoring and contributing their own post. Although students' rationale varied, some students indicated that they preferred to tack onto an idea that was already initiated because they liked to choose a conversation to enter, whereas other students liked to launch an idea that could start a conversation. Regardless of exact rationale or approach, these forums accommodated individuals' self-directed learning paths, yet always included within a whole-class text. The following is one interaction excerpted from one class's peer-to-peer forum.

- © **Dimitri**: I think they really struggle with adjusting. The world is changing and they're stuck in the past. [...] Children, most of them now in school, were speaking Spanish, while their grandparents spoke only Tarahumara. People were leaving the canyon to seek work in the cities." This meant that the way that they were previously living want's working for them anymore. They couldn't just survive and the land anymore. Some of them went to look for jobs in the city to survive and support their families. The children started to go to school and speak spanish instead of Tarahumara like their grandparents. Modernity is something that they are truly battling with. (Moodle artifact, student writing, November 22, 2010, 2:28pm)
 - © **Roberto**: I think it's important to keep in mind that some of the people in the tribe have different thoughts. Some of them choose to live differently, and some of them choose to stay the same. It's true that they're having difficulty fighting off modernity. I'm glad you brought it up. (Moodle artifact, student writing, November 22, 2010, 2:38pm)

Digital media were leveraged not only for students to author their own texts, but also for students to engage in analysis and interrogation of their peers' texts. Students' writings were folded into the curriculum and instantly and readily accessed as texts that were subject to the same interrogation as historical artifacts. What stood out across students' writings was the way students drew on the digital media to engage in spontaneous

examination of one another's texts, typically authored just minutes prior. Although students had some time to formulate and craft a response, responses maximized the lower-stakes context of this forum and students did not deliberate too long before sharing a response with a classmate. This stands in stark contrast to many university-level discussion forums where written exchanges tend to reflect more polished academic prose and rhetorical flourish.

The dialogue that unfolded in these lower-stakes contexts builds on adolescents' social desires and their habitual engagement with social media outside of school for near-instant communication, and contributed to my finding that online forums were places where students could be comfortably uncertain. The following excerpt illustrates the possibility for uncertainty in these classrooms.

- © Luke: I feel they're not as indigenous as people believe they are. In accordance with today's society, indigenous is almost like tribal. Because of the unknown factor found in the word indigenous . . . ? (Moodle artifact, student writing, Luke, November 22, 2010, 2:37pm)
 - ☼ Mr. Beck: I'm curious to understand more what you mean, Luke. I think indigenous=native to a place. Are you saying they are less native to a place because they don't seem savage or are you saying something else? (Moodle artifact, teacher writing, Mr. Beck, November 22, 2010, 2:43pm)
 - © **Luke**: When I first heard the term "indigenous" what came to mind was actually savage. Because when certain civilizations . . . (Moodle artifact, student writing, Luke, November 22, 2010, 2:47pm)
- © **Stephanie**: I think that the fact that there aren't as "indigenous" as we picture them is one, movies have altered our perception of natives and that they're trying to get along in this world just as much as we are. That means that they might take part in some of the products we've produced, such as Coke and Mauchman (Whatever it's called). (Moodle artifact, student writing, Stephanie, November 22, 2010, 2:43pm)

© Chantal: I don't really understand this post. I understand what you are trying to say but maybe the wording is a little off. I believe the people aren't the stereotypic tribe. They are quite modern. They have similar things with us but they also have things that we consider out of date or old fashion. (Moodle artifact, student writing, Chantal, November 22, 2010, 2:55pm)

In Mr. Beck's classrooms, students' collective engagement of multiple texts encouraged students to put forth their uncertainties. It was not unusual for students to engage the digital forums as a place to try out an idea or share tentative and partial knowings. In this context where ideas rapidly filled the space, 'not knowing' became a frequent and classsanctioned practice. Although Luke's post might appear certain or confident given language like "in accordance with today's society" and "And, I strongly disbelieve," the uncertainty was not overlooked by Mr. Beck or Luke's peers. Students took intellectual responsibility for the ideas they "heard" and responded to Luke's ideas seriously. This habitual practice of responding to peers was developed and enriched over the course of the academic year. In and through this engagement with others' ideas, students became increasingly willing to put forth their own hesitations and/or questions in their responses. Together, Luke, Stephanie, and Chantal worked to tease apart the complexities embedded in thinking about indigenous cultures, and, in the process, raised their individual and collective consciousness about varying assumptions of "civilizations" and "different" cultures.

The above sequence also provided evidence for other salient aspects of the new literacy practices that were part of these digital, online forums. First, it supported close, critical reading and re-reading of student-authored texts. This is not to say that simply opening up the class to the range of perspectives that are available or drawing on digital media to author a range of perspectives will, on its own, build and sustain critical literacy

practices, but rather that the students situated within this class had to bring their own interpretations and ideas to the table. Second, Mr. Beck and students consistently had access to students' various opinions and were not afraid to say "I don't understand" or to explain that someone misinterpreted a term or concept. Third, students were deeply invested in reading what was posted and what was posted in response to their contributions. In this instance, Luke replies within minutes to Mr. Beck's reply. This confirms existing research that argues about the potential for digital networks to deepen young people's construction of themselves as authors with important contributions (Black, 2009). This finding contributes a new perspective, however, on students' willingness to be uncertain in a network with a visible and known audience.

Adolescents showed an ease and fluidity moving between the outside published texts and their own texts. The following exchange took place on the peer-to-peer forum.

- © Lynnette: In today's world, we are sort of wrapped around the wealth of our economy and materialistic things—where as indigenous people may have different values. The way we see struggles are mostly as being financially unable to support yourself—not an indigenous person may see a struggle as struggling to become a man or learn a certain task. An indigenous person in today's world would could survive better than an American could. Though it's weird because with all of the wealth we have it's likely almost don't know how to survive without it my question is, why do we abuse our power? Referring to the way the hotel owners dumped raw sewage into the canyon—where the Tarahumara people live. (Moodle artifact, student writing, November 22, 2010)
- © **Yindra**: I agree fully with your point Lynnette it is important to look at the fact that without money would we be able to survive in the same world as the Tarahumara. (Moodle artifact, student writing, November 22, 2010)
- © **Dimitri**: I don't think people mean to abuse power. I think that they get consumed by it and become blind. Also I think nowadays most things revolve around money. All of your essentials cost money, the world dancing that's what the Tarahumara need. So they start to adjust by

wearing jeans, eating ramen and sending their children to school. (Moodle artifact, student writing, November 22, 2010)

In addition to the ways that students' texts interfaced with outside authored texts, students' contributions, together as a composite text, generated another network of multilayered texts. These in-the-moment texts constructed a new class text that was also open to interpretation and analysis, further deepening the collective commitment to becoming critical. Given this kind of dynamic exchange, lateral, peer-to-peer citations were common in Mr. Beck's classrooms. Students were just as likely to reference or cite an idea authored by a peer as they would an author outside of class. A consequence of this new text was the ways it positioned students as important sources for the intellectual work of the classroom. Building on the critical literacy practices embedded in Mr. Beck's pedagogical design that encouraged students to interrogate and question where texts came from, who authored them, and what power structures or social hierarchies were implicit in them, students drew on/challenged/pushed one another's ideas in a similar manner. Tapping into and initiating the participatory nature of digital media, these adolescents leveraged their diverse backgrounds and perspectives that developed new intellectual relationships with their peers and offered additional evidence for students as knowledgeable members of the class community. Other than an expectation to contribute a response, participation was dramatically unscripted. The ways in which these texts unfolded was resonant with the idea that students and student texts are not "things made, but in the making" (Ellsworth, 2005) The digital culture created favorable conditions for the expression of students' concerns, questions and ideas, and looking to one's peers as valid and knowledgeable participants.

"Not a Simple This Because of That"

Renee Hobbs (2011) and others are involved in extensive research on critical media literacy and critical information literacy. Much of this research and literature suggests the importance of critically analyzing the media we use and the messages and texts communicated across various media. Scholars argued that we must "become aware of what is assumed, unquestioned and naturalized in our media experience" (Warnick, 2002 p. vii). Other research has charted new territory by arguing for the ways in which digital literacies and digital media have created new spaces and new media for students to work to challenge the status quo (Hull, 2003; Hull & Nelson, 2005). A central responsibility that accompanied this kind of open access was the need to examine the issues or ideas embedded in various perspectives. According to Mr. Beck, one of the challenges or dangers of opening up all of these ideas was to "not fully examine an issue and examine different perspectives" (interview, September 24, 2011). During their research for the trial, students engaged in extensive online research. Here are two comments, one from a student and one from Mr. Beck about the wealth of resources online.

Asra:

I was on Cortez. It was hard because everyone's eyes are on you, but we're putting all the blame on them [the other groups]. It was all *our* fault—that's the mindset of all the students. And so, all the research we found was looking to see what they're [the other groups] are going to say and you have to predict it and try to counter it. So, not just .edu and .gov [websites] because most of those places say "it's our fault," but we had to keep up with it all. But—well—it's everyone's fault. But there's always the innocent people, like the Aztecs for the Trial of Cortez, cause you can't really blame them for fighting back because it was clearly an act of self-defense. So it's hard to go against them, but you need to in order to do this trial. You have to look at all the aspects. (Interview, May 2011)

Mr. Beck:

I guess there's a message in there about the complexity of these issues and it's not a simple "this because of that" type of thing. And that, like many things, these are issues that are constantly up for debate and reexamination both from the inside perspective but also as outsiders, trying to learn about it. (Interview, February 29, 2011)

The project demanded that students develop critical research and analysis skills. To be successful in this unit, students had to maximize digital media's extensive knowledge bases, not to learn the facts or get the story "right," but rather to grapple with how all information is able to be spun. This project challenged the idea that school history should impart certain set bodies of knowledge and instead positioned students as critical inquirers. The explicit challenge of their academic project was to tease apart various sources and the interpretations. Students considered power structures inherent in social systems and the hierarchies that have been created. Despite (or perhaps in spite of) the multiple stories, students were critical readers of *why* others (published authors, peers) said or wrote different things; as one student reflected, "I think some people choose only to see part of the evidence or like to prioritize certain things."

The kind of embodied investigation of ideas and unpredictable learning paths that surfaced were resonant of feminist researcher Patti Lather's (2007) understanding of "getting lost" as a way of knowing. There are many non-digital ways to design learning environments where learners get lost. In the saturated learning contexts in Mr. Beck's classrooms, getting lost was a normalized, inevitable dimension of literacy learning.

Digital media in these classes supported a dramatic shift away from the common practice of transporting material or bodies of knowledge from the teacher and specific school-sanctioned texts to student. In this culture of literacy learning, the success of students in

school depended on their ability to read for different truths and wonder about why and how people created different arguments.

This finding illustrated that students' new literacies, those literacies mediated by the unique properties and characteristics of digital media, were valuable for learning because they refashioned two common classroom activities. First, students' new literacies contributed to a shift in how and where students gathered about complicated historical events like the *Age of Exploration*. Second, it extended the ways students interpreted and made sense of the range of ideas that were collected and disseminated by students and Mr. Beck. The role or value of technology, then, in these classrooms was to radically expand how students learned about complicated and significant ideas like Cortes's expedition and conquest of the Aztecs, and not a more efficient or engaging way to cover these historical events. The finding that the new literacies support new kinds of learning cannot be overstated at a time when much of the nation continues to endorse digital media's value or role in schools based on students' achievement gains.

Conflict

This digitally sophisticated setting also facilitated a novel context for developing and extending students' new literacies because of the space it created for open communication and direct exchanges between and among students. The interactions and exchanges reflected an aspect of Mary Louise Pratt's (1991) contact zone. According to Hesford (1999), "A pedagogy based on the contact zone concept does not demand the creation of combative or confessional classrooms but, rather, requires the construction of

reading and writing spaces that enable writers to experiment with a wider range of viewpoints" (p. 53). Students' cross-talk with peers on digital forums, instinct to challenge contradictory or conflicting opinions, and willingness to question implicit assumptions or beliefs that perpetuated social inequities created opportunities for productive conflict or outbursts (Dixon, Archibald, & Varley, 1998) in school.

"Stereotypical Much?"

Conflict occurred in a range of online and offline contexts. The conflicts that surfaced online seemed to tap into some of the specific affordances of digital media's simultaneous, shared spaces for interaction. What follows is a closer look at one peer-to-peer discussion board on 'Indigenous Cultures' with specific attention to conflict. It is important to reiterate that although I focus on the public, peer-to-peer forums that surfaced as powerful *new* spaces of learning in Mr. Beck's digitally rich classroom, private writing between students and the teacher was happening throughout the unit. Furthermore, because of my emphasis on the in the moment discussion boards the data here are overwhelming brief and in draft form. Yet, students in Mr. Beck's classes wrote papers and essays that reflected many of the typical assignments for tenth grade History.

A look across the posts illustrated students' use of a wide range of rhetorical moves. Typical responses included phrases such as "I think," "I have a question," "Referring to the article," "Can you clarify?" and "I don't understand" (Artifact, Moodle Forum). Here is one example that generated much discussion. The following exchange was excerpted from a longer thread:

- ☼ Frances: What I think it means to be an indigenous person in today's world means to be in touch with your roots. I mean, I'm Italian, but you don't see me in the kitchen all day, cooking a giant meal, that my family isn't going to be able to finish later on. There isn't anyone who is in touch with their roots anymore. (November 22, 2010 8:56am)
 - © **Dante**: Well I feel as though that is a stereotype just because you are not in the kitchen doesn't mean you are not in touch with your roots you can still be in touch with them. (November 22, 2010, 9:01am)
 - © **Kate**: ummmm stereotypical much? Just saying; but good point. (November 22, 2010, 9:03am)
 - © **Tom**: Had too many kitchen jokes lately? And yes, that's very stereotypical. However, I do get to the point you're trying to make. Bottom line is that you're trying to compare "stereotypical with "traditional." They're different. (November 22, 2010, 9:09am)
- ⑤ Frances: Okay guys, just for the record . . . I am not being stereotypical, because if I was I would have said for example: Italians spend all day in the kitchen to make the best gravy in the world because they us all Italian Italy crap . . ." BUT!!! I didn't so therefore your points are now really stupid looking. Also . . . I'M ITALIAN! And I'm not offended. Thanks for the opinion, but it wasn't needed, and although I still value it, it made you look like a commoner, because you kids think you know everything about Europe just because you're from there. And, that my dear friends was a stereotype.

P.S. Even though this sounds really bad and offensive, its not meant to be. Thanks. :D (November 22, 2010)

One of the most striking elements of this was that students demonstrated their willingness to challenge their peers, state their opinions, and even offer a quick note of support or disagreement. This thread emerged out of a whole-class discussion and investigation of what students thought it meant to be "indigenous" and what challenges and tensions students saw for indigenous cultures in contemporary society. Interactions in this space were often characterized by comments that became productive disruptions within students' discussions of key concepts. Students' engagement with social media's

students to communicate and make sense of their varied, often conflicting notions about an idea. Beneath the humor and jokes, students used this forum to start an explicit discussion to try to explicate the relationship/difference between stereotypes and traditions. Anger and emotion are often, deliberately, kept to a minimum in high school classrooms. Here, Frances is able to bring her ideas to the table as well as her emotion. The digital forum not only makes room for her anger, but also allows Frances to respond immediately to various peers. She is able to commit to this thread and dominate talk time without diminishing the space for other students' contributions.

Of greater significance, however, is that this forum opened a space for students to start a conversation about important questions about who has the "authority" or status to make derogatory or stereotypical comments about specific cultures or groups of people. It also illustrated students' interest and need to engage in more sustained conversations about the ways in which we categorize groups and label groups, and how students are implicated in the processes of naming as well as being labeled or essentialized. This forum offered insight into how writing can be used for dialogue and cross talk about important issues and illustrated the clear role and significance of the social, cultural, and national identities that are part of students' daily lives in classrooms and schools.

Although casual, informal, and judgmental terms from "ummm" to "stupid" and the reference to "kitchen jokes" permeate this interaction, students reflect their subjectivities and vulnerabilities and find the words that support their way into and across these interactions.

In the interaction above, students began a heated discussion, later carried into the classroom and hallway, to interrogate their understandings of and distinctions between stereotypes, traditions, and "roots." This conversation sparked further discussion in the class that afternoon and, according to students, after school and throughout the week, about shifts in cultural practices around language, concerns about younger generations losing their connection to older generations who have different ways of speaking and living, and students' different opinions about what it means to be "in touch with your roots." Here is one interaction that continued directly across the forum:

- © **Deb**: I both agree with you and Frances. It is true that just because you don't do certain things doesn't mean you are not in touch with your roots. But like Frances said, not many people are in touch with their roots anymore. [...] How many people here are really in touch with their roots? Most people are just American. (9:12am)
 - © **Tom**: You've made a good point there but if you look at it this way, it's gonna defeat the purpose of the word "indigenous." "Americans have adapted to the United States," that however is wrong I believe, it's not that the United States shaped us, it's "we the people" who molded the U.S. this way. That's not called adaptation. The rest is good accurate though. (9:19am)

Frances's instinctive response has encouraged several other students to deepen this investigation of "roots." Heather identifies as a White student and Tom as an Asian American. In this subsequent exchange, Deb and Tom work together to think about what it means to be connected or tied to "roots." In short, quick exchanges that build off of Frances's earlier outburst about Italian stereotypes, Tom and Deb are, together, able to raise consciousness about the idea of a collective national identity, with Tom challenging the myth of all Americans being "just American." I observed that students often revealed

a willingness to offer important opinions and perspectives, even if they may not be popular or supported.

This forum illustrated many of the new literacies practices that were engaged and developed via digitally mediated, nearly instantaneous forums. Spontaneity, humor, and the use of disclaimers, sources, and/or personal examples were often characteristic of those new literacies. Although students use similar styles in some social media outside school, students in these classes developed their willingness to draw on their diverse knowledges in the service of intellectual learning. The urgency, intensity, and seriousness of these interactions were connected to students' knowledge of their audience. Students invited peers into various kinds of interactions and made choices about when and how they wanted to participate in these exchanges. It was important that the space be permissive of less formal, instinctive, in-the-moment responses. The opportunity to write to and with an interested and visible peer audience, simultaneously, was one of the most powerful ways this intense space created a productive and meaningful context for literacy learning. Students' ideas identities, beliefs, and opinions mattered to each other as well as the work in this class.

"Don't Believe The Hype!"

The simultaneous, instantaneous, relatively informal nature of this learning environment is central to why this kind of learning context was able to generate and sustain productive conflict between and among students. Although it was particularly common to the kinds of peer-to-peer discussion boards I shared in the earlier sections,

this was evident in a range of other peer-to-peer forums as well. For example, the *Jury Deliberation Forum* was a place for students to post their individual verdicts after the trial. Mr. Beck invited students to distribute 100 "points" of guilt across the five groups that were put on trial. Students were expected to post a point value as well as a rationale. Although the assignment was individually authored, it was posted to the public, peer-to-peer forum. The numerical results revealed that students had different opinions about the trial and what party was most to blame for the destruction of Aztec civilization. In one class for example, the System of Empire was charged with the most guilt (939 points of guilt), followed by Cortes (585), Cortes's Men (342), King Charles V (475), and the Aztecs (296), yet in another class, Cortes was charged with the most guilt (1166 points of guilt), followed by Cortes's Men (696), King Charles V (475), the System, and the Aztecs (194). Students' written rationales offered a more nuanced understanding of this distribution. Here are excerpts from two series of online exchanges on *The Jury Deliberation Forum*.

- © **Pedro**: I feel like everyone shares the responsibility of the Aztec's demise.

 [...] During the trial, there was a lot of good arguments, both in and out of the classroom. I think that us arguing outside the classroom and getting a bit aggressive when stating out opinions can be a small portion of what every one was under the influence by when the conquistadors conquered Mexico. (1:40pm)
 - © **Mindy**: I can agree. It makes me rethink what I wrote.
- ⑤ **Jamal**: 75% is for the system. Without the system there wouldn't be greed, there wouldn't be lust for power, wealth. They are to blame. The system is the thing who put lust and greed into them, the want for money, the want to kill. The reason why they didn't stop. So without the systems "rules" or "laws" there would have been a voyage, there wouldn't of been wanting of greed and wealth and killings. (November 19, 2010, 1:29pm)

- © Lynnette: Irrelevant. Without the PEOPLE, there wouldn't be GREED. The SYSTEM was created by PEOPLE'S OPINIONS. Don't believe the hype! (November 19, 2010, 1:34pm)
- © **Jamal**: It there wasn't the SYSTEM there wouldn't be any killing because of the fact that the SYSTEM gave us the mindset to kill. (November 19, 2010, 1:37)
- © Lynnette: HOW CAN YOU HAVE A SYSTEM WITHOUT PEOPLE? (1:39pm)
- © **Jamal**: 5% for Cortes (up from 1% prior to this exchange).

There was something both disruptive and productive about this kind of school-sanctioned space. Here, students tapped into and initiated new literacies to voice their beliefs and perspectives but also to challenge others' ideas. This forum was constructed as a culminating "verdict" at the end of the forum. Students had been given the freedom, by Mr. Beck's design, to distribute their points of guilt as they saw fit. Lynnette, however, deeply invested in the course of the Trial, disagreed with Jamal's verdict. She exercised her agency and interfered with Jamal's deliberation. This was another example in which the fluidity and permissiveness of digital media and Mr. Beck's pedagogical design enabled students to share openly, honestly, and candidly. Jamal confronted and responded to Lynnette's interference, not only in written discourse but with a small change in his deliberation. Although some might dismiss this writing as less "academic" and further evidence of the ways digital writing, instant chatting, and/or texting may be diluting the written language, I found that the emergence of such a flexible, easily accessible, and unscripted space created a distinct and new kind of literacy practice that productively expanded understandings of in-school "writing." These literacy practices were studentdriven, and highly visible. Dante commented on the theme and role of visibility in these classes:

You get to learn a lot of perspectives and you get to learn a lot of different things you don't quite know—or you wouldn't ever think of—and even sometimes—you know, if, let's say, "I'm a staunch believer for Donald Trump for president" and "No, I want to vote for Obama again." Even if you had radically different opinions, just reading someone else's perspective can really improve your own—as opposed to someone single-minded. So the public sharing of ideas and opinions is really good I think. (Personal interview, May 10, 2011)

Dante shared the following when I asked if he could elaborate on what happened after all these comments were made visible:

One of the cool things about our class in particular, and things we can do at this school in general, is you can apply all the different opinions and discuss different things. The things that happen online lead to very lengthy and very, very, interesting classroom discussions and I think that's really instrumental to a well-rounded education. (Personal interview, May 10, 2011)

What students shared or reported on these forums mattered—to both the student authors and student readers. The new literacy mindsets and practices in these classes included the ability to write and respond on these forms, to real audiences, and in relation to significant topics and issues. Distinct from what Dante referred to as "applying" what he learned, I found that this was actually representative of students' new literacy practice of making sense of what peers make public and then weaving it back and forth between the online and face-to-face contexts in the service of learning. What emerged, then, was the kind of multilayered "talk" and writing that I introduced earlier in this chapter. The collection of talk and writing was deeply social and situated in rigorous, intellectual work tied to students' ideas about themselves, their peers and the world.

Conclusion: We're All "Talking" At Once

This intense, multilayered context that I call Noise was a productive and meaningful space for literacy learning. Mr. Beck's pedagogical designs drew on the range of affordances and unique characteristics of digital media, adolescents' desires to be social, and challenging intellectual concepts to create a culture that embraced the layered and simultaneous contributions and texts as *part* of learning. There were at least three distinct ways that noise was a functional space of literacy learning: (1) the opportunity to access, generate and make sense of overlapping texts, talk, and writing; (2) the structure and flexibility for uncertainty and criticality; and (3) the use of open channels for various and varied opinions and productive conflict.

These learning contexts are resonant with Elizabeth Ellsworth's (2005) idea of "learning-in-the making." The flexibility and fluidity of digital media repeatedly created contexts where students' lives, identities, and cultural and linguistic resources not only mattered but were also used in the service of learning. These contexts granted room for students to be positioned and honored as "moving subjects" (Ellsworth, 1997). That is, they could learn/unlearn and know / know differently and the knowledge that students constructed was understood as incomplete, unfinished, and open to revision. The layering, criticality, and conflict properties that were characteristic of Mr. Beck's digitally rich classrooms required that students embrace a stance that John Seely Brown (2005) described as "learning-to-be." In contrast to "learning-about," Brown (2005) argues, "learning-to-be" has much to do with contexts that enable students to create and learn at the same time and to find and put content into use immediately.

The youth and the intricate networks they initiated, engaged, and/or sustained showed the possibilities for learning with and within a text-rich space. In and through the multiple, often simultaneous spaces and interactions, students uncovered and examined multiple interpretations of the Age of Exploration, including their own. They negotiated roles as historians, researchers, prosecutors, defense attorneys, and jurors. Students were positioned as knowledgeable agents in these classes who were always working in collaboration with their peers. The opportunities for students to share face-to-face and virtual spaces with peers amplified the possibilities for sustained engagement with peers. Students could trace their own reading and writing paths but were also accountable to the larger discussion with peers. This context demanded extensive production and distributed participation and knowledge generation. The heightened visibility staged a particular kind of accountability for students. This accountability put students into substantive and personally meaningful conversations with their peers and provoked sustained conversations about issues related to topics surrounding race, culture, and identity. Students depended on each other to build the content of this class curriculum.

Chapter 5:

Navigation: Making Moves That Make Sense

A Vignette: "Oh, Try Quitting Out of GarageBand"12

After three intense weeks, it's deadline day. Students are to upload final versions of their Crossing Boundaries podcasts to Mr. Beck's Dropbox¹³ by the end of class.

Laptop screens are open, and the room hums with chatter, keystrokes, and sound clips.

Tomorrow, all podcasts go live to the students' peers.

In a front corner Eleni, Jill, and Greg work at individual screens on their group's podcast. "I really like the music, but mine keeps cutting off," Sam says. "That's why I said, 'send it to me,'" Eleni replies. But Jill has just sent the file to another group member for help.

Across the classroom, Mr. Beck is helping another student with an audio issue.

Greg approaches, MacBook in outstretched arms. He has a problem he can't figure out.

Greg has edited his segment to 9 minutes, yet every time he opens the file in GarageBand, an earlier, longer version opens. Greg rests the MacBook on the table, and he and Mr.

Beck lean in together.

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¹² This vignette is written from fieldnotes collected on February 22, 2011. GarageBand is a multitrack recording application, produced by Apple, that contains a complete collection of audio tools for recording. The application, available on all Macs, can record real audio pieces, play with software instruments, add effects, mix music, create podcasts, and play productions back easily with iTunes or iMovie.

¹³ Dropbox (www.dropbox.com) is a free, web-based service that allows for easy storing and sharing of files. Mr. Beck created a shared folder on Dropbox; students were expected to upload final podcasts to the shared Dropbox folder.

"I wonder if there's something on GarageBand that's making it think it's longer,"

Mr. Beck asks. Pointing to a small segment of his file, Greg replies, "Oh, is it this? This

blank space here?" Mr. Beck thinks he is onto something: "Hmmm. Probably. Wait.

Let's see. Here," he says, pointing, "go up there. What's in that space? Anything?"

Mr. Beck's eyes glance up from the screen. "Eleni, can you help Greg here? He has a GarageBand question. And, oh, Jill," he adds, seeing that Jill is up from her seat and walking across the room, "can you help here, too?" Jill and Eleni, who have made their final contributions, join in the troubleshooting.

Sam jumps in first, and, pointing to a GarageBand file icon, asks Greg, "So, is this your recording?" Greg gives a quick nod and a "yeah," and Jill gets working. "All right. Oh, Wait! Hold on," she says. She scoots in a little more behind Greg and narrows her eyes on the screen. A little frustrated because her first attempt did not work, Jill says, "I don't understand why it's doing that." Eleni, who has been watching carefully, interjects, "Oh, try quitting out of GarageBand and then going back in." Jill disagrees. "That's not going to work," she says.

Greg, leaning back in his chair, is watching closely. Eleni remains convinced her idea is worth a shot. "Try doing that, try quitting out of GarageBand," she insists. Jill, who is controlling the keyboard, is fairly certain that her last attempt is going to work: "No, wait, I think it's converting from iTunes!"

There is a lull: no keys, no pointing, and all eyes watching. Jill smiles and pushes back. Greg grins and leans in. With squinted eyes, he gets close to the screen, just to confirm that Jill's effort really worked. Curious and excited, I lean in, too, and ask,

"What did you do?" Casually, Jill responds, "I reconverted it to iTunes." Mr. Beck, who had spun off to help Marina and her group fix their audio issues, spins around and asks, "Oh. Why would that work?" Jill, dodging a direct answer replies, "Well! It went back to 9 minutes." "Huh, great," says Mr. Beck, with a look that conveys that he still wants to know why. But he is also happy the group has found a resolution for Greg's segment and can move forward to final submission.

Jill tells Greg, "Okay, so now, just send it to me and I'll send it to Ashton. You got an email account?" Ashton, the group's master compiler, is waiting for this final segment. "I have Gmail, but I can't get in," Greg says.

Jill, still hovering close by, waits behind Greg, just to be sure their podcast is uploaded to Dropbox on time. Sam watches as Greg makes repeated attempts to log into his Gmail. Finally, Greg moves back in. "Here, let me try. I know what the file's called, I just named it." Sam gets back behind Greg's keyboard, clicks his music folder, selects the file from iTunes, and emails it to herself. A message pops up on the screen: the file is too big.

Sam says, "There's a different way we can do this. Let me see. Oh, I know, Mr. Beck put up a Forum." Mr. Beck, who has returned after making rounds to other groups, suggests, "You can also go open your email and send it to yourself." Jill tries Mr. Beck's idea, but hits the same roadblock. "Oh, no—it's too big," she says, sighing. Mr. Beck asks, "Is it iTunes or a GarageBand file?" Mr. Beck is surprised to learn that it is iTunes, and it looks like he has another idea, but before he can speak, Sam interjects, "Oh, anyone have a flash drive?" Greg exclaims, "I do. I do!" Confident that this

solution will work, Sam jokes, "Everyone thinks of the good ideas after I've been through all this other trouble! There. See how easy that was? Gosh, I wish Greg had said that he had a flash drive earlier."

Jill runs out to the hallway to see if Aaron received this final segment. Jill runs back into the classroom and exclaims, "He got it!"

This vignette captures key elements of my conceptualization of Navigation.

Drawn from my fieldnotes during an English unit titled *Passing/Crossing Boundaries*, it illustrates the kinds of reciprocal teaching and learning that took place routinely in these digitally rich classrooms. Jill, Eleni, Greg, and Mr. Beck use their distributed knowledges, along with trial and error, to troubleshoot an issue Greg encounters in the final editing stage of his contribution to the group's podcast. Central to the concept of Navigation, this vignette points to the range of tools that students draw on, how tools are used to perform intellectual work, and the responsibility of students to direct not only themselves but also each other. We see that Mr. Beck has set certain "boundaries" with this assignment and that students and Mr. Beck assume roles as co-directors and co-learners.

Introduction

This chapter focuses on adolescents' navigation of the learning contexts associated with their tenth-grade English and History classrooms at BDA. It analyzes the moves and tools, roles and responsibilities, as well as some of the distractions that were part of the student repertoire for participating. I pay close attention to the ways students

directed themselves and others and what those moves tell us about literacy learning in this digitally sophisticated era. Using data from interviews and observations, I relate how student participants described their complex experiences of and engagements with digital media in various spaces tied to Mr. Beck's classes. I also pay attention to Mr. Beck's pedagogical moves in relation to how they supported and facilitated students' navigation in this environment.

Given the intense, stimulating nature of this learning space, it was with great interest that I engaged adolescents in conversations about how they maneuvered in and through this environment. I wanted to understand how they—individually and collectively—managed their daily lives in Mr. Beck's classrooms. As I listened and analyzed their comments, I gained a more nuanced understanding of the remarkable yet completely ordinary moves they made to give meaning to their lives in these classrooms. I refer to this chapter as "Navigation" because I found that participants directed themselves and each other in intentional, albeit often intuitive and unconscious, ways. The concept of navigation works to analyze the movements adolescents made as participants in this space, and the kinds of choices that were involved in determining those movements.

Much of the current rhetoric couches adolescents' use of multiple media in a discourse of "multitasking." This discourse tends to emphasize the consequences of managing multiple tasks simultaneously to the detriment of understanding the unique capabilities that come with the simultaneous use of a range of multiple media. This includes differentiating the affordances of digital media from one another and

considering the role and value of choices that adolescents make when they engage with various media.

I will ground the bulk of this discussion in students' production of a radio show podcast. According to Lankshear and Knobel (2006), podcasting is "designed to meet the principle of 'where I want it, when I want it'" (pp. 173-174). Beginning in 2003, new tools and media file formats increased the general public's ability to create podcasts, which maximize the benefits of audio files and automated online syndication services, making them easily available for listeners to download and listen to at their convenience and on a range of digital devices. Mr. Beck designed the podcast as the culminating project of a larger English unit titled Passing/Crossing Boundaries. The larger unit was designed to investigate issues of race, gender, and class and the different ways that society creates boundaries and categories that hold people back. Mr. Beck hoped that students would analyze the costs and benefits of crossing different boundaries and recognize that there is immense power in collecting and telling people's stories. The following fieldnote offers an introduction to the podcasting project:

Mr. Beck is standing in the front of the classroom. He is poised to talk to the whole class, but waits as students take their seats at one of the seven tables spread out around the room. Once most students appear to be situated and turn their gaze to the front of the room, Mr. Beck introduces the upcoming segment and culminating project of the Passing/Crossing Boundaries unit. "For your English benchmark this quarter, you are going to be making your own radio show." Students' screens are tilted down and most eyes are on Mr. Beck as he continues to describe the radio show that students will design, write and produce. Mr. Beck continues, "On your own, you are going to interview someone on an issue of crossing boundaries. In Larsen's *Passing* 14 (1929), there were so many ways that

¹⁴ All students read Nella Larsen's *Passing*. Written in 1929, Larsen's novel was set in 1920s Harlem and follows two light-skinned Black women who try to escape racism.

boundaries were crossed. In society, too, there are so many ways we cross boundaries. You need to think of someone you can interview. It should be someone you think who will have something interesting to say about crossing boundaries in his/her life. You'll interview them for 45 minutes. You're all going to edit your own piece." Mr. Beck explains that everyone will need to edit down his/her 45-minute, audio-recorded interview to a 10-12 minute piece and then they will begin to work with their group members to create a unified show. He explains, "So, when you get in your groups, everyone will have a 10-12 minute piece. From that, you'll decide how you are going to go about making a unified radio show. You'll have to spend a lot of time thinking about how to structure your show, and all of the individual pieces of the show. (Fieldnotes, February 1, 2010)

This was one of the few occasions during the unit that Mr. Beck stood at the front of the classroom and addressed the whole class in an exclusively "screens down" mode. While he periodically brought the class together for a collective stock-taking or to open the floor for students to share ideas or questions across groups during the three-week project, students were largely responsible for initiating, organizing, and completing the multiple components of the project.

This chapter examines how adolescents directed their relationships with the people, spaces, and projects mediated by their digital devices *as* they worked to complete their radio podcasts. As I listened to students, watched them participate in class, and analyzed their written work, I wondered: How do these adolescents navigate this space? Do they navigate with purposes, and if so, for what purposes? As I will show, Navigation was a highly complex and demanding task that required extensive individual and collaborative work, much of it dependent on digital media. All students, however, found their way through it and successfully completed their podcast.

This chapter is organized around three key ideas. The first section introduces a range of moves adolescents chose and the tools they used, with close attention to

participants' uniquely tailored systems that helped them operate from day to day. The second section shows how this learning context radically refashioned students' roles and responsibilities and dramatically shifted time-honored traditions and approaches to "doing school." The third section highlights some of the distractions that were an inevitable part of this kind of learning context. This final section addresses pressing questions about accountability for the intellectual work produced in the classroom.

Moves and Tools

As argued in Chapter 4, the school day as we typically know it was radically refashioned at Big Dipper Academy. The wide embrace of digital media and participants' awareness of the anytime, anywhere contact it allowed made for a remarkable permeability between participants' in-school and out-of-school lives. The 'always on' nature of this learning space required constant decision making. Participants' uniquely tailored systems shared at least one characteristic: they were all designed to help them make progress towards their goals.

"I Use Spaces"

Adolescents engaged multiple media as they worked on their podcasting projects, from behind their screens and with their peers. Here is an excerpt of what I observed in the classroom:

Most students have headphones in their ears, or at least close at hand to listen to their audio-recorded interviews, podcast drafts, or iTunes. All the students at my table have at least three applications running on their MacBooks, including, text edit (to type interview logs), GarageBand/iTunes (to play their audio-recording),

and Mozilla Firefox (to access Moodle and other Internet sites). On my left, Maureen quickly hits a two-key shortcut and her iCal calendar flies into the screen's center and her other screens instantly absorb into her screen's pink and black checkered "wallpaper." I see her cell phone lying on the table to the left of her computer. Jonah, on my right, hits a key. GarageBand flashes center screen and iChat disappears. Along the bottom of his screen, several Internet tabs seem to be active. I easily recognize four of them by their icons: Moodle, American Public Media, and ESPN. He is slowly playing and pausing his interview. Every time he pauses the recording, he swings the cursor back to a TextEdit document where he is logging the interview. I notice an iChat icon blinking. He ignores it for a few minutes, and continues to log his interview. (Fieldnotes, February 6, 2010)

Students shared with me some of the most basic systems they used to navigate the multiple media as well as the various relationships accessible via their digital devices. I asked students to describe how, when they sat down behind their MacBooks, they managed their life behind the screen. Although students reported a range of responses, almost every student mentioned MacSpaces, ¹⁵ a specific, Apple-sponsored application. Students used this application as a tool to manage the range of resources and connections potentially available to them via digital media. Although students' descriptions of their uses of MacSpaces were critical to my analysis, results yielded insights about students' moves to use such an application and not about what specific brand or application was deemed "best." Consistent with the constantly shifting nature of new media I recognize that MacSpaces and any other specific tool mentioned herein will be modified and/or replaced by a newer media. The following interview excerpt shows how Dante used MacSpaces:

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¹⁵ Spaces is an Apple application designed to reduce clutter on the desktop. Users are able to group application windows according to the way they work and easily switch between the windows.

On our laptops, there are such things as "spaces." It's sort of like having multiple desktops to go to. What it was designed for was to decrease clutter. So, what I usually do is—maybe this window [pointing to an imagined screen] is like the "fun" window and "fun space" and then this [pointing again to the other side of an imagined screen] will be the "work space." And, well, I just try to go back there [the work space] when I'm working. (Interview, May 20, 2011)

For Dante, who saw this exchange not only as a chance to share his use of MacSpaces, but also to teach me about this application, "Spaces" functioned much like an interactive filing system. Students not only to drew on this resource as a tool, but also used it to distinguish between "work" and "fun." Dante's 'work space' housed sites directly tied to school assignments or projects, whereas his fun space was reserved for entertainment-focused programs like iTunes and iChat. Whereas Dante used just two spaces, Asra used six. Asra explained in an interview:

I have six spaces. Over here [pointing] would be my iTunes. These two [pointing] are usually my work spaces. This is iChat, *if* I have it open, then games, and then, just work! And, because I read a lot, sometimes I use one for a reading space. (Interview, May 24, 2011)

Spaces was a tool that supported students' digital participation both in school and out of school. Asra, for instance, kept her reading space open all day, in school, so she could drag and drop any articles that caught her attention to read later, when she had time.

MacSpaces was a tool that students accessed and relied upon continuously.

Students themselves elected to download Spaces and subsequently decided how to make the application work for them. The range of approaches students used offered insight into how all students—regardless of approach—actively and consciously made their way in and through the varied texts, people, and resources (school-sanctioned and other) that were potentially accessible in this context. In Mr. Beck's classrooms, figuring out a way

to work with multiple applications, networks, and texts was part of students' day-to-day lives. The moves students made in relation to this multi-screen context were a common, intuitive part of adolescents' participation in this space. Students' moves made sense to them. This is not to say students' approaches were fixed or rigid, but rather that they were a necessary and taken-for-granted *modus operandi*.

"Go to Moodle"

Students' MacBooks were a seemingly natural extension of participants' bodies, usually no more than an arm's length away and accompanying them from class to class and from home to school. In the halls and café, MacBooks were open and active as students ate lunch, socialized, and completed school work. Indeed, the MacBooks are such a normal and routine feature, so taken for granted, that after a while they ceased to seem remarkable, or even noticeable. More than a mere machine, however, MacBooks were a central platform for learning and a critical medium for participation and human connectivity.

This section, "Go to Moodle," describes how adolescents engaged with and leveraged their MacBooks in order to participate in the intellectual work of class and to connect with others. Moodle was a central aspect of navigation because it was tied to nearly every learning activity and opportunity in Mr. Beck's classrooms. Whereas "Go to Moodle" was a literal cue in these classrooms, Moodle itself was a complex, dynamic platform on which student learning took place. Students needed a collection of moves and tools to participate in and across this interactive space.

During my time in Mr. Beck's classes, Moodle was tapped for a very wide range of purposes and in a variety of ways for everyday learning. For example, in units outside the podcast, students used Moodle to respond to novels, peer-edit essays, and access PDFs and hyperlinks. Moodle stored students' grades, class emails, and schedules. The platform itself underwent dramatic revisions and upgrades during my two years at BDA. Now, there are direct links from the Moodle site to BDA-sponsored Google Docs and students' Gmail accounts and a community portal.

In the podcasting project, nearly all the materials required to complete the work either existed on or were accessible via a centralized English 10 Moodle site designed and managed by Mr. Beck. The site included assignment rubrics and descriptions, peer-to-peer forums for interview questions, radio show outlines, and a place to submit completed interview logs and podcasts.

As an example of their engagement with Moodle, students completed interview logs at an early stage of the project. All students were expected to create a detailed log of their interview and post it to Moodle. Mr. Beck delivered a verbal overview of the log to students, but with a quick click, students could "Go to Moodle" and review his instruction: "Cut and paste the log of your interview here. This should be a record of times and significant points from throughout the interview" (Moodle artifact, February 2010/2011). Students' analysis of interviews and interview logs were instrumental to the development of the radio show.

As students learned from three how-to-podcast YouTube videos that Mr. Beck streamed into class, interview logs are widely recognized as a key step in planning and

organizing a story in the radio news industry. Mr. Block saved the YouTube files to his MacBook desktop at home in order to work around the SDP's block of YouTube in schools. Ira Glass, host of American Public Media's *This American Life*, narrates the three videos (fieldnotes, February 9, 2010). Regardless of students' individual approach or pacing, students were expected to listen to their interviews multiple times and submit a log that detailed the content and use value of their interviewee's comments with regard to their chosen theme. Table 5.1 includes excerpts from two interview logs posted to Moodle. Georgia's log represents her analysis of an interview with her brother and sister for a show focused on boundaries related to health and illness. Katrina's log represents her analysis of an interview with a teacher at BDA. She was interested in understanding the teacher's background and how he overcame difficult past relationships.

Table 5.1: Interview Log Excerpts (Moodle artifact, student writing, February 2011)

Georgia's Interview Log	Katrina's Interview Log
23:30-25:27 Little more about the injury and its physical pain (might use some of this but it's not needed)	0:43 how did the divorce effect you (KEEPKEEPKEEP)
25:27- 26:48 What he thinks about society accepting his injury (Good information, about what	0:46 Startes explaining, disturbing, no concrete memory
he has to deal with and how society impacts it) 26:48 28:03 about his family and friends treating	1:17 Explains living with his mother, felt close to his father but wasn't
him differently (Need to use some of this, it's about the change he is forced to go through)	1:30 How was school life for you? 1:35 "That's a loaded question explains reform
28:03- 28:45 Feelings toward other people looking at him differently (Might use this, but not all of it.)	school and abuse" keep this 2:20 Explains school life- very interesting
28:45- 30: 38 Emotions toward injury, (Using some of it, but not all.)	2:59 Did reform school help you at all?
30:38- 32:18 How has this injury change his	3:03 "No it wasted 6 years of my life" well childhood- Keep this interesting part in life
prospective of other people with injuries. (Only some is needed)	3:41 Explains how he graduated high school a year early (keep this it goes on to how his life is
32:18 35: 02 How his prospective has changed (Some, but not all, it repeats itself a little)	3:45 Edit my word mess-up

Georgia's Interview Log	Katrina's Interview Log
35:02 36:58 How this had effected his confidence, (YES, this is great and really shows the point of my	4:15 keep this its interesting, funny moment in the interview
interviews)	5:20 keep this important moment "Deep" moment
36:58- 38:02 Support (Maybe some but not all is needed)	5:56 Is there anyone in your life that you still have a positive relationship with
38:02- 39: 23 Emotions on the injury (I don't need this because he said something like this before.)	6:14 explaining friendship keep this
39:25- 42:39 More on life (Only need to use bits and pieces to get the point across but not all of it.)	6:46 trust question *KEEP* explains about his guard
42:39- 43:52 About going through the pain of this injury. (this is like an overview and its not really needed)	8:04 "Whats your exact job"
	8:20 Edit out phone ringing
	8:33 cut out "excuse the annoyance"
	9:06 Explaining his work with mr. Jordan
	10:15 Laughs in conversation (keep)
	11:50 Difference between whats important and whats urgent
	14:00 talks about his foster son problems with that
	16:00 Story of Adoption Keep

Georgia and Katrina's logs show students carefully analyzed their audio recordings to identity the most compelling material for their argument regarding crossing boundaries. They sought out excerpts that contributed to their story as well as specific details that strengthened the structure of their show. The individual interviews were the sources for the group podcasts. Because the logs were available on Moodle, group members could look across the logs to begin to identify themes to link everyone's work in a single podcast. This task required managing at least three different platforms: the web-based Moodle portal, their digital audio file, and a word-processing application.

For the phase of the project represented in the above example, students went to Moodle on three occasions: (1) to review the assignment description; (2) to access, via

hyperlinks, podcasts Mr. Beck selected and recommended; and (3) to post their completed logs. Moodle was both a *space* and a *tool*. First, Moodle is a highly interactive, networked learning platform. Students connected via written discourse with peers and Mr. Beck, and accessed articles or instructional videos via hyperlinks that worked to extend learning and facilitate students' knowledge generation. Second, Moodle is a tool that is available 24/7. Students connected to a centralized, interactive portal of resources and tools to support and submit their work and, as they progressed through a project at their own pace and with their own style, Mr. Beck, and most of the time, peers, could read and respond to students' work in progress.

Part of students' repertoires in these digitally rich contexts was the awareness that Moodle and other spaces they used did not turn off at some fixed moment, thereby extending available times for them to compose and submit their work. The 24/7 nature of Moodle offered students the flexibility to visit and revisit resources, at their discretion, that could support their academic work over time.

Most students finished their interview logs outside of class, but students were given class time to talk, face-to-face, with small-group members about their interviews and to start, with peers at their side, their interview logs. In my fieldnotes, I noticed that Mr. Beck had written the following instruction on the white board: "1—talk to your group. 2—start to log your interview—"kill the crap, keep what's good" (fieldnotes, February 9, 2010).

During class, students worked on their individual logs on their individual laptops, yet it was far from an individualized experience. The process of designing, scripting, and

crafting the finished product involved extensive, ongoing engagement with multiple media, resources, and people. Mr. Beck's above instruction signaled two seemingly straightforward tasks; "Kill the crap" was an intertextual reference to the three Ira Glass–narrated YouTube videos that streamed into the class earlier. Mr. Beck cited this line to remind students of Glass's message to be ruthless with their interview data and keep only the most compelling parts.

During in-class work time, students talked with peers and Mr. Beck and played segments of their interviews from their MacBooks. I heard a range of comments from students during this structured, open-talk work time. Here is a snapshot from my observations of students in a screens-up space.

Students are sitting at a table with their respective podcasting group. Mr. Beck mentions that students' interview logs are due by Thursday to Moodle. He says that this might mean doing follow-up with your interviewee, if needed. He directs students' attention one last time to the board, where he had written a sample interview log and the two tasks for the rest of the class period. Without hesitation, students jump into conversations with their fellow small group members. There is an energy with which students begin to share learnings, noticings, questions and challenges with their interviews. I scan the room and begin to listen to the exchanges among the small groups.

I hear one group in the front of the room talk about what they are beginning to notice across their collection of their group members' interviews. One student in the group, Sekai, indicates that all of their interviews deal with boundaries pertaining to relationships and, more specifically, that within the theme of relationships, all of their interviews take up boundaries related to being sexually active and pregnant. I hear Sekai add that she thinks they have something to say about how being sexually active or pregnant informs relationships with parents, especially Moms. From another table group in the far right corner, I hear one student, Nical, tell his group that he is upset because the beginning of his interview with his mom is really good, but then it "got away" from him. I turn my attention to third group, I hear one student, Kari, exclaim: "My grandma is so blunt. You gotta' hear the thing she says at the end. I might do a voice over kind

of thing with it." When I look closer at this group, I see that all students have their individual screens up, and even ear buds in, but they are all directing their attention at that moment to the student talking about her grandma. One group member, Kyla, was particularly eager to hear what Kari means about "the thing at the end." She scoots her chair a little closer to Kari. Kari hands Kyla one of her earbuds. Kyla pops it into her ear and starts to listen to Kari's interview with her grandmom.

I turn my attention to a fourth group and hear two students, Maria and Chris, talking together about how hard it is to process and log the interviews. This idea resonates with me. As I watch students listening to their recorded interviews and incessantly pressing what I know are the pause and play command on their keyboard, I was thinking about the difficulty of this activity and the number of decisions and forethought incorporated in distinguishing the anecdotes, examples, reflections or moments of the interviews that will best serve the story they want to tell. Chris says, "I'm going to have to listen again." To which, Maria responds, "Me too. He [my Dad] talks so slowly and he rewords his answers. I was like, uh, it's so much I can't process it all." Finally, I look at the fifth small group huddled together around their table. They are taking up issues that I characterized as problem-solving and trouble-shooting. One student, Dean, lets out a sigh of relief to the group. He spent the first several minutes of the group talk time incredibly worried because, as he reported, "I'm scared because I thought part of it erased." Another group member, Maureen, told her group that she interviewed her sister and gathered "some good stuff, but no good long stories." In consultation with her group and Mr. Beck, who has popped into this group's conversation, she decided that she wants to continue with her sister, but needed to conduct a follow-up interview. A sixth small group is huddled in a circle in the hallway directly outside Room 307. (Fieldnotes, February 1, 2010)

This kind of intense, unscripted collaboration increased students' investments both in their own projects and their peers'. This collaboration also provided a sanctioned space for working through individual and collective struggles. The intensity of sharing these interviews and analyses along the way contributed to building real audiences for their final podcasts.

Moodle connected students to their learning. In this unit, students often went to Moodle by themselves or in their small radio show groups, but at other times during the

year, they went to Moodle to simultaneously take part in a shared activity, to connect to articles or videos on sites including the *New York Times*, PBS, or *National Geographic*, or to link to a class-built poetry or world religions wiki. Moodle signified a broad and dynamic media ecology that students had to navigate in order to participate, moment-to-moment, in this new culture of literacy.

"If I Can Set It Up Right"

Mr. Beck's pedagogical stance and design played a vital role in creating conditions in which students had the freedom to direct themselves and others. The way Mr. Beck constructed his job as a teacher, for this unit and many others, required that he frame the complete project at the beginning of the unit. Mr. Beck's early and intentional framing of the podcasting project was essential to the freedom and flexibility that students experienced from that point forward. Although his framing looked different across units, Mr. Beck consistently and explicitly designed for student freedom and choice. Students depended on Mr. Beck to put forth his goals and expectations and recognized that, in the process, boundaries had also been defined.

Much of the current research on young people's literacy learning with digital media places great emphasis on a do-it-yourself (DIY) culture supported by the information surplus online. Many youth voluntarily spend significant time in DIY cultures where they learn highly technical practices such as movie making, film editing, clothing design, novel writing, and computer programming (Kafai & Peppler, 2011). Central to the DIY culture is the idea that young people are the central designers of their

learning environment (Collins & Halverson, 2009; Kafai & Peppler, 2011; Knobel & Lankshear, 2010; Peppler & Kafai, 2007). Although the DIY title may suggest otherwise, individuals' work and learning within this environment is far from solitary. Kafai and Peppler (2007) documented the significance and centrality of the learning community in their study of young people's DIY engagements with programming.

Within these formal educational contexts in Mr. Beck's classes, Mr. Beck was responsible for the overarching design and ongoing moderation of the learning environments. However, Mr. Beck's design included opportunities for several key characteristics of DIY media, including student-directed and peer-to-peer learning. What I observed as a clear introduction of a unit's overarching goals could be described as a good teaching practice in any context, but it played a distinct and crucial role in these classrooms. Mr. Beck's framing did not simply communicate expectations and learning objectives; it *created* the conditions for students to drive their own learning through the entire project. As Mr. Beck said in an interview:

I can almost take for granted the production of the actual project *if* I set it up right. If I can set it up right, the students will figure out the technology part. If I get them, well, if I know how to get them started. So, it's not like I need to become a tech teacher, you know, because they *can* do these very advanced projects. (Interview, June 6, 2011)

Mr. Beck's comment shows his move to set up the podcasting project "right" served a dual function: students were granted the freedom and opportunity to take the lead, and Mr. Beck was not required to be a technology expert. It also implies several premises: Students already know a lot about digital media. They can be expected to use their expertise to help the class progress toward polished podcasts. Students have the

intellectual capability to grapple with a significant concept about crossing societal boundaries. Thus the freedom and flexibility the students experienced hinged on a design that asked for their deep, sustained engagement around a topic of their choosing. Students required Mr. Beck's frame to understand what they needed to accomplish and what tools and resources were available.

Although students were responsible for directing themselves in this space, Mr. Beck was an instrumental resource to students throughout the project. I coded moments in the data when Mr. Beck integrated a kind of "check-in" with students. These were moments when Mr. Beck brought students together in class or designed an assignment that would ask students to share an update on their project. Three assignments during the Podcasting unit that surfaced as check-ins included students' posting their interview questions, interview logs, and outlines of students' shows and recording schedules to Moodle.

As opposed to constraining student engagement and inquiry, a clear map of the project extended engagement. Students were free to design a radio show around their own ideas about crossing boundaries. They needed to grapple with important issues in society such as teen suicide, access to higher education, abuse, and long-term illness, and collect and analyze primary source data. Students were left largely in charge of figuring out the technical and aesthetic elements of creating a thematic radio show. This required a tremendous amount of peer-to-peer teaching and learning and self-directed learning and will be discussed further in the next section, "Roles and Responsibilities."

In Mr. Beck's classrooms students' navigation was always directed toward a central learning focus. However, instead of being directed to one pre-determined goal, students used their freedom to take up issues and ideas that were important to them. Hence, students consistently were positioned as knowledgeable participants and as knowledge generators. The central focus for the podcast was to think extensively and critically about boundaries that people face in society and to craft a show that told a powerful story about several people crossing various, interrelated boundaries. Students were invited to take on a challenging concept and a challenging genre of production and broadcasting. In the following written reflection, one student, Tim, shared what he learned from his podcast writing experience.

At the beginning of this project, I was really nervous because I didn't think my family had ever accomplished anything interesting or involving "crossing borders." As I started to talk to different members of my family and around my neighborhood, I realize that I was way off in my thinking. To cross a "boundary," to me, it means that you are expected to not do something or keep doing something because no one has thought of it or did that thing that you aren't supposed to do and you do it anyways. For example, my grandmother was expected to stay at home and help out with the house along with her mother, but she wanted to be a cabinet maker in Germany a woman had never been a cabinet maker and so she became a cabinet maker even to the judgment harassment.

[...] I wish I had more time to interview more people that I don't know that much about. This project helped me learn a lot of my family's history and how I am here. (Moodle artifact, student writing, February 2011)

Tim's engagement with the podcast challenged his prior assumptions about his family's history. In learning a story about his grandmother's history as a pioneering cabinetmaker, the project changed his belief that his family did not have important stories to tell about crossing boundaries.

Tim's surprise that family members, friends, or neighbors had powerful stories about crossing boundaries was shared by many students. Another student, Liza, uncovered previously unheard stories about her grandmother. She found the stories emotionally difficult, but important. Here is Liza's reflection:

The barrier or boundaries my grandmother had to overcome was major abuse from her father and the fact that she was expected to raise her younger siblings. This topic was hard for her to talk about and want to share. It was also really hard for me to think about. I couldn't imagine my own grandmother being put into a horrible dangerous situation she is such a strong and stubborn woman I could never see her being harmed. I learned a lot about my family passed from this including the fact that I am a descendent of royalty. I also learned my great uncle was not a bad man like I had thought my whole life he was just an abused child who use drugs to escape the fear. (Moodle artifact, student writing, February 2011)

The knowledge and history her grandmother shared with her offered a perspective on her uncle that she had never considered, and potentially shifted her relationship with him. Like Tim, she grappled with an important and personally meaningful and powerful issue.

Mark reported that he came to a new understanding of "revolution" and a shifting relationship with his father via his work on the podcast. Mark was eager to interview his father, particularly in light of the social unrest and revolutions in Tunisia, where his father once lived, at the time of the project. This project created an opportunity for Mark to have a conversation about the revolution with his dad and to learn about his father's experience. From his interview and analysis, he also came to realize that revolutions are context specific and carry different meanings for people. Mark wrote:

The one big thing I realized during this assignment was that a revolution isn't what everyone thinks it is. A revolution isn't just one definition; it can mean

something different for each country. In my podcast I interviewed my father, who had lived in Tunisia for a good portion of his life, and gave me great information. He told me what a revolution is in his eyes, and he told me how it differed from what we think revolutionize. Another key point he said was that, the action of the street vendor could change the face of the world, this truly is history he had a lot of great information, though, he had personal stories, personal connection to what was happening in Tunisia, and great inside stories to make this situation clearer for people. (Moodle artifact, student writing, February, 2011)

Taken together, these reflections offer images of the kinds of learning that students directed themselves toward in this podcasting project. Students' stories were broadcast to their peers and made available to the public on BDA's website and through iTunesU. Some students told me they shared them with their family, former teachers, and friends. Mr. Beck designed a schedule in which students listened and offered feedback on their peers' podcasts. Given the focus of this unit on telling stories, the podcasting medium, including GarageBand, was positioned as a tool students didn't need to master but rather needed to find a way to use in support of the stories they wanted to tell.

In Mr. Beck's classes, "right" meant that adolescents exercised the invitations to guide and direct themselves toward the end goals of the project rather than achieving a specific, universal learning outcome. The freedom and structure allowed students to follow an inquiry of their choosing. In the end, they developed radio shows about a significant and complex concept that had meaning to them and that were based on data they gathered, analyzed, and edited. This kind of work was the result of students having to grapple with a significant and complicated concept such as crossing boundaries. The range of digital media created spaces for students, simultaneously, to engage this concept as readers, researchers, and writers.

While the Navigation required for the podcast project bore similarity to other projects throughout the year, it was not the same. Each project required students to learn and exercise a different kind of approach and develop a wide variety of moves, tools, roles, and responsibilities. Across the range and variation of units, however, and the different kinds of navigation that students needed, Mr. Beck took responsibility to set up specific conditions that would enable students' learning experiences. The cumulative effect of such a range of projects and kinds of navigation required across the projects was that adolescents had to be active and versatile participants in these classes.

Roles and Responsibilities

This second aspect of Navigation addresses the roles and responsibilities that were part of adolescents' repertoires. The intense and saturated context that led to a refashioned school day also refashioned the roles that students adopted or initiated as participants. Closely intertwined with adolescents' new and evolving roles were several new and evolving responsibilities.

Distributed expertise and individual and collaborative knowledge generation built relationships between and among peers as well as between students and Mr. Beck with profound impact. Students worked in contexts that precipitated deep and prolonged learning about learning. An affordance of the transparency and interactivity supported by Moodle and other online spaces such as YouTube, Google Docs, and Wikis was that adolescents learned *how* to learn: from people, from tools, and from texts. There was not one right way to complete this podcasting project, or others across the year, and there was

wide variation across the class in terms of the particular societal boundaries students, individually and collectively, rendered in their shows.

As discussed in "Set It Up Right," Mr. Beck's classes demanded that students direct much of the project. The moves students chose and the tools they used or created to navigate their projects blurred many of the boundaries between "teacher" and "student." Many of the roles and responsibilities typically associated with the "teacher" were shared with students. This section will show how that the range of platforms available for various individual and collaborative learning opportunities worked together to shape and reshape students' roles and responsibilities in this learning context. The priority to work in groups and collaborate with others did not eliminate individual responsibility. Rather, it dramatically expanded it. Students had to be responsible—as individuals—to their group, the class, the teacher, and themselves. These classrooms shifted where and when adolescents "do school" and traditional thinking about who is responsible for directing intellectual work and participation in school. This new culture of learning demands a dramatic reconceptualization of the roles and responsibilities that adolescents assume as participants in these classrooms.

"I Get My Work Done"

In the face of the complexities and distractions of this environment, students repeatedly and consistently spoke about "getting [their] work done." This phrase, which emerged as an emic concept, was critical to my analysis of how students managed the people, screens, and networks that were part of this new culture. In these classrooms,

"getting my work done" operated as a universal and unifying driver of the roles and responsibilities that students assumed. To participate in the flexibility of this context, adolescents were unequivocally accountable for completing their academic work.

As shown earlier, students not only named but also carved out specific spaces and times for school-based and non-school-based projects. They knew they needed to design an environment that could accommodate their varied collections of games, leisure reading, music, social network sites, instant chats, and sports sites, yet meet what was expected of them as students.

The following interview excerpt provides an example of one student's perspective on how students managed their role as co-directors of their learning space:

Dante:

Well, with the talk, some people go on iChat. And, in some cases, talk is collaboration, but it can also just be fooling around. I think ultimately people get their work done. In some cases, once in a while, the music helps me concentrate because it kind of blocks out everything else and it makes it easier for me [to do my work]; it [the music] makes sure I don't get distracted. (Interview, May 12, 2011)

Dante's comment acknowledged that students' moves—talking and listening to music—and tools used to execute moves—iChat, iTunes—served different purposes at different times; it was up to an individual student to manage how and when those moves and tools were operating in the service of his learning. As Dante pointed out, sometimes students' moves aligned well with school-sanctioned tasks and projects, but at other times, students' moves were clearly "fooling around." However, both kinds of moves were normalized parts of the learning space, and students were expected to monitor potential distractions.

Here is an exchange I had with another student, Frances.

Frances: When I'm at home, to get my work done, I usually talk to Larry [fellow

student].

Molly: And—talk—on the phone?

Frances: No, we video chat. And, well, that's the only way I can get my work done.

(Interview, May 12, 2011)

Regardless of approach, students organized their responses and assessed the relative "success" of their approach in relation to whether they finished their work or not. Students directed their moves with, according to Larry, a "nagging" awareness of an expectation to produce high-quality, on-time work. In this classroom, students were aware of the moves they made and had to take responsibility for the extent to which they worked in concert with school-assigned goals. Although this new culture is extremely permissive and flexible, it is in no way free of boundaries, deadlines, guidelines, or expectations.

"Submit by Midnight"

The refashioned school day meant that many of the time-honored procedures and typical rhythms, schedules, and ways of "doing school" were radically revised.

Adolescents, together with Mr. Beck, created a set of norms to navigate this context. I analyzed how this unwritten code structured the ways students and Mr. Beck participated in these classrooms and completed their work.

In Mr. Beck's classrooms, instead of the long-standing practice of "turning in" homework/papers/assignments, students would "submit by midnight." This phrase was used by Mr. Beck to signify that work should be completed and submitted on a particular

date, but instead of an in-class submission, students posted assignments to Moodle (or another specified platform).

For example, during the podcasting project, students' lists of interview questions were required to be submitted, after school hours, to Moodle. For most students, interview questions were submitted from their homes, but not all students had Internet access available from their homes. Students without reliable Internet access at home found ways to address this expectation. Some students arrived to school early, stayed after school, or found public spaces or libraries with free Internet access. The cultural norm and expectation that students would submit assignments after school hours and connect to peers via digital, networked platforms was another factor that students needed to navigate in order to succeed in these classes. This raises important questions for teachers, researchers, and policymakers about the realities and challenges of new media access and equity.

Students posted their lists at a range of times, from a Thursday afternoon to a Sunday afternoon. This practice of "submitting by midnight" meant students had to pace themselves. It also created an open forum in which students, at their discretion, could rely on other students' contributions. As soon as a list was posted to the peer-to-peer public forum, other students could look over them and generate ideas for their own lists.

This staggered and shared submission schedule supported students as individual literacy learners within the collective. The way of submitting student work was not simply a new, more efficient method to conduct an old practice, but rather a new practice

that took advantage of the "always-on" capability of Moodle's public discussion forum.

This facilitated individual pacing and peer-to-peer teaching and learning.

For example, several students discussed the difficulty of preparing for and conducting an interview. Georgia reflected:

I found it hard for people to get deeper into issues. I really never knew, I didn't know how hard it was. In a sense I was clueless. Interviewing was not easy. I interviewed my family and it was hard getting information that wasn't just plain fact about what you knew they were going through. (Moodle artifact, student writing, February 2011)

Similarly, Liza reported, "Getting a person to share their story and stay on topic proved to be a harder task than I thought" (Moodle artifact, student writing, February 2011). Yet, other students were confident about their interviewing skills and questions. Katrina wrote, "My strength was my interview skills" (Moodle artifact, student writing, February 2011). These observations point to the value of open, peer-to-peer forums as a place to share strengths and support one another. Students could, from school or home, reference peers' lists of questions and/or get feedback on their own.

Students who had not selected an interviewee, or what boundaries they wanted to address, or how best to develop interview questions could check the peer-to-peer forums for ideas. Also, these forums never expired; they remained open and active throughout the unit. A few students returned to the forum to revise or extend their lists. The phrase "submit by midnight" came to represent a way of "doing school" in these spaces that embodied the fluidity of the school day, as well as the ways that students controlled where and when they submitted their work.

A series of other in-class cues were part of this collection of norms that students and Mr. Beck created to help direct themselves in these spaces. "Submit by midnight," and the range of other cues that emerged organically in this space, stemmed from as well as shaped the range of roles and responsibilities available for students. The following fieldnotes illustrate some of these cues:

February 9. School was closed yesterday due to snow and the schedule has been shifted for the week. Students take their seats. As is custom, most students have their laptops on the table and screens are up. Mr. Beck is ready to start class. He begins, 'I hope everyone enjoyed the snow day. We are going to start with journals. Laptops closed.' At this point, laptops are closed, journals are open and pen-to-paper writing begins.

February 9. All laptops are now open and students are, individually, working on a Moodle assignment. About a quarter of students are wearing earbuds or headphones. A few students, at this moment, have phones in hand and are texting. Three students at a table in the far right corner are talking about the assignment, one student is standing at the printer, waiting for a document she printed. I hear someone's music. Mr. Beck does too. He says aloud, to no one in particular, "That is so loud. Who is that?" One student, Kari, looks up. She says, "It is?! I'm sorry." She turns it down.

February 10. Mr. Beck is transitioning the class to listen to and watch Ira Glass's YouTube videos on podcasting. For the most part, screens are down. He introduces Ira and pauses to say, "Screens should really be down." He adds, "Kwame, you with us? Kari, you with us? You can finish that project later." Mr. Beck could discern that Kari was trying to finish another project.

Similar to most high school classrooms, students quickly learned the standard operating procedures and understood when screens should be up or down. For the most part, students responded to Mr. Beck's straightforward "screens down" cue and understood the space should be unwired and laptop-free. Similarly, "screens up" was Mr. Beck's cue that laptops were now needed. If cues failed, students either missed important information or they might receive a more direct comment, such as "Laptops really should"

be closed" or "Are you with us?" The unwritten code of conduct and accompanying cues helped students to be accountable because they created a broad, class-wide system for understanding what kind of work could be accomplished at what times.

Typically, students submit assignments and the teacher offers some kind of assessment or evaluation. Although that kind of submission and response was still very much a part of Mr. Beck's classes, in this new culture students consistently tracked and assessed their own and others' progress. One such example surfaced in the radio show outlines and work schedules that groups posted to Moodle. Here is Mr. Beck's instruction for the assignment:

Below your group should post an outline for your show. This should include each person's interview subject(s) and ideas or themes you see emerging in each interview. If you have ideas about the order of the pieces and/or how they will be linked record them as well. One post per group is fine—every group member does not need to post. (Moodle Forum, February 3, 2011)

The assignment was a kind of "check-in" that gave Mr. Beck an idea where students were in the project. However, students themselves took ownership over the space. The following two posts were submitted by one small group:

RE: Outline!

Posted by Isabela, February 3

Mark: Grandmother's experience during Hitler times in Germany

Tasha: Drug addicting, and/or Single Parent

Frances: Interview on little brother who is deaf, boundary: hearing and silence

Isabela: Teenage motherhood and transition into a whole new life

RE: Updated Information!

Posted by Isabela, February 14

Frances: One who listens to the final piece, gives advice on what could be better and records narration before her piece. For Frances: her piece is coming along.

She has cut it down to 20 minutes and plans on editing some more and fixing some of her narration.

Mark: He is the one who puts the music in the project and records the narration before his piece. For Mark: he has about 20 minutes left to cut and needs to cut out his voice.

Isabela: Isabela will be the one compiling them all together. She kinda has "the hard job." She will also be recording the narration before her podcast too. What she has left to do is compiling all the pieces to make a full piece.

Tasha: Tasha needs to add the narration before her podcast piece as well. She also needs to add some music and record another interview to make it as great as it can be! (Moodle artifact, student writing, February 2011)

In addition to naming where they were at the moment, the students in the group offered an assessment of how they were—individually and collectively—doing on the project. Students offered each other feedback on ways to improve elements of the podcast and estimated timelines to achieve remaining work. They also named the specific jobs that they chose to distribute. Students completed the requirements of the log, and, simultaneously, used it as a resource to assess their group's efforts and coordinate compilation.

Students revisited this forum as a map of what remained to be accomplished and to remind them who was doing what tasks. Students used the space to accommodate their individual group's needs. The platform surfaced as an intuitive place for students to keep coming together to stay on top of their work. As students evaluated their progress, Mr. Beck received valuable information that he could use as he supported groups in person during class.

Across the groups' posts, a willingness to be honest, uncertain, and tentative was evident. Posts included phrases including "not sure who interviewing, but about age

boundary"; "unsure of topic"; and, "not sure how they will be ordered yet." Other groups included detailed information about individual roles. This included "the person who does narration," or "music and volume control," and "master compiler." The notes were brief, but they represented prior negotiations that students made about the strengths across the group and who was best suited for what roles. A few groups chose to use this forum, in an ongoing way, until the end of the assignment, to periodically touch base and update their progress toward their goals.

Groups established their own deadlines and expressed concern if they were not met. All of this work served a dual function of keeping group members as well as Mr. Beck up to date on a group's status and progress. Beyond that, however, it positioned group members as the leaders, regulators, and decision-makers of their podcasts.

Another benefit was that students as well as Mr. Beck could use the information to find out who was good at "transitions" or "music" and, therefore, a potential resource. Mr. Beck used these forums to gather information and connect students to one another. For example, he connected Eleni to another group to help them with "transitions."

Mr. Beck paid close attention to what students shared in their check-ins. In class, he used that knowledge to work with students one-on-one and in small groups. Mr. Beck visited Wayne's desk to talk to him about trouble he reported with his interview with his Mom, and about not getting any "good material." He approached Vanessa to talk through an interview that she reported as "not going anywhere." He proposed scheduling a follow-up interview, and they talked about how to prepare for it. Mr. Beck knew from Kari's work on the interview log that she had concerns about her mom's language use

and made a quick stop by her table to talk about it. The following fieldnote captured this exchange.

Kari: But, My Mom has so many degrees, it ain't funny. She's saying—"It ain't.

It ain't."

Mr. Beck: Well, I wonder if you could point out that intelligence isn't judged by

language?

Kari: BUT, Mr. Beck, she's saying ain't and ain't and ain't—all the time!

Mr. Beck: You could bring it back to language though, and our work during the

language autobiographies. You know, maybe you could have your

reaction as part of your narration?

Kari: But all this "ain't" and "ain't." It makes me look bad. I don't know. It

doesn't fit. Not with her education. I don't know how I could incorporate

it.

Mr. Beck: Well, maybe your response itself is something to explore in the narration

and explanation of your show? Might be really interesting actually.

As students worked hard on their data analysis, Mr. Beck worked his way around the room. He used this time to work as an intellectual thought partner with students. This meant that Mr. Beck was constantly refreshing the online forum and reading what students posted as he made his way around the room. Mr. Beck's conversation with Kari focused exclusively on the development of her story and pushed Kari to stop and consider how her story might relate to another unit during the year. Mr. Beck's one-to-one engagements further deepened students' and Mr. Beck's investments in their shows and enhanced the quality of their final shows.

Students also took on the role to make decisions about who was responsible for various facets of production. They could make these decisions because they had intimate knowledge of one another's strengths and how best to maximize the strengths across the

group. Students also gave one another instructions. One group wrote: "Everyone in the group has some serious editing to do. We are all currently going through each other's individual podcasts and we are all telling each other how to improve our work" (Dante, February 14). Other groups commented on their relative command over certain technical aspects, opening themselves up for support. For example, Tom posted:

Right now, I'm done with my interview. However, I'm not done editing/trimming and my Garageband is acting up a bit. I will make the attempt to completely finish editing tonight or tomorrow. Neither am I good at using Garageband. (Moodle artifact, student writing, February 14)

There was a transparency and honesty across students' updates in terms of their actual status, including relative quality and progress, as well as delineation of roles. In dividing up roles, students recognized their strengths and were not afraid to admit struggles with unsuccessful interviews or the intricacies of GarageBand. The space was not used as a punitive space when goals were not met, but rather was used to trace progress and, as needed, offer additional support or guidance as appropriate.

As both a practice and belief, the concept of "submit by midnight" is emblematic of my finding that the altered school day demanded a refashioned approach to teaching and learning. The possible opportunities for peer-to-peer learning in school and after school reconstituted some of the hierarchies and enabled students to take on several roles in which they directed their learning. For "submit by midnight" to work, students had to be willing to take on a wide range of roles, including a near-constant peer-to-peer teaching role.

"You Can Just Go Like This"

Although the value of shifting what are typically characterized as "teacher" or "student" roles is not a new finding, these digitally rich spaces required students to assume and leverage a new range of responsibilities. These new responsibilities were especially significant with regard to participants' evolving knowledges of digital technologies and how to harness digital technologies for the kinds of innovative and dynamic learning that took place in the classrooms. Informal, spontaneous, and in-themoment instructions from students, for example, "You can just go like this" (Vanessa, 2010), were commonplace and required in this context. Vanessa's comment, shared with peers as they worked to learn GarageBand, represented a typical example of students contributing technology tips in the moment and along the way. Although this section will illustrate some of the ways students harnessed their distributed knowledge of GarageBand to tell powerful stories about crossing boundaries, this was one of many digital platforms students engaged for peer-to-peer teaching and learning. For example, in other units, students helped each other create wiki pages to publish their poetry and use iMovie to craft and publish digital stories.

Mr. Beck shared in an interview how little "real teaching" he felt like he did during the podcasting unit. His comment stood in stark contrast to what I observed. Students relied consistently on Mr. Beck as they progressed toward a polished podcast, and Mr. Beck actively used information gleaned from online activity and observations to confer with students. In Mr. Beck's classes, however, I found that this new culture entailed a differently defined teaching on Mr. Beck's part. Teaching and learning in this

context required Mr. Beck to be continuously vigilant about his pedagogical design and student work. Here is an excerpt from my fieldnotes:

Students continue to work on their radio show podcasts. As of last night—or early this morning—most students' interview logs were posted to Moodle, which means students have completed their interviews and started to analyze them. I notice that students are clustered around tables with their podcasting group members. Mr. Beck reminds the class that the bulk of their time today should be spent editing their individual interviews. Students should start to work with their material *in* GarageBand and select the chunks they want to use for their show. For the moment, it's a screens down space and Mr. Beck maximizes students' attention to remind them their show needs "a story and a larger idea." I watch as students look towards Mr. Beck. Mr. Beck continues. He mentions that students should keep in mind the overall parts of their story and that, similar to *This American Life's* Tomgirls episode, students' shows should have narration and explanation, and not a lot of direct questions from the interview.

On a cue from Mr. Beck, all students open their screens and click on a hyperlink to the "Podcast Rubric," posted on Google Docs. Wayne and Maureen click on the hyperlink, off of Moodle, and start to read aloud the rubric. Students learn they will be graded for design, knowledge, application, presentation and process. There are 20 possible points for each category. [See Appendix 4.A for the complete rubric.] Mr. Beck reminds students the rubric is posted off Moodle. Then, Mr. Beck's opens the floor for an open, student-run tutorial on GarageBand. Mr. Beck mentions that students have different levels of experience with GarageBand and explains that he wants students to jump in and share any tips they have about the application. Mr. Beck has a mock file on his computer ready to go and students jump on this opportunity to share and receive advice on GarageBand. (Fieldnotes, February 16, 2010)

Mr. Beck took the floor for just a few minutes of classroom instruction and used his time to point to various resources available to students for this project and to highlight key tips for organizing a compelling show. He pointed to texts the class had already read or watched together and introduced two new texts, the rubric and a sample GarageBand file that recorded several students talking during a break between classes. Mr. Beck turned to

students to run a leaderless lesson on GarageBand. The following fieldnotes capture part of this lesson.

Luke is first to jump on the chance to contribute to this leaderless lesson. I know that Luke is a D.J. and imagine he has a lot of experience with mixing music. He jumps up front to work from Mr. Beck's computer, so that his movements are visible on the SmartBoard. He moves the cursor to the "eye" icon and says, "Whenever you want to start fresh and you don't want any effects on it, go to the eye." Luke moves back to his seat and Kadrion is already at Mr. Beck's computer. "Let's say you want to say something new. You just hit record and start talking." Kadrion's tip is important for adding narration or a transition. Kari is on her way to the front of the room. She starts talking and clicking, "You can also, so, when you fragment it"—Kari clicks on 'measures'—"and the bar will move in quarters." Kari notes a way to format your GarageBand tracks to work in smaller sections. I hear Mr. Beck add, sort of under his breath, "Oh, interesting," indicating his learning something new. Kari, picking up on Mr. Beck's and others' interest, continued, "Yeah, you can play with pitch. And then mix voice and make audio higher or lower." Mr. Beck asks Kari, but really everyone, "Let's say Kari recorded something new, how can she lower the volume on just that part?" Kari responds, "You can't." But, Vanessa jumps in, "Yes, you can [she pops up from her seat and goes to the front board and Mr. Beck's computer]. You just go like this [she walked us through how to change the volume on just one track]. So, hit track volume, click on the line and bring it lower. Then just go to the next part." Vanessa is motioning with the mouse to the little arrow icon on the GarageBand platform.

At a few points, Mr. Beck jumped in with questions. Some were sparked by what a student shared, and some were raised because Mr. Beck knew they were important for creating a radio show. For example, toward the end, he asked, "Who wants to mix in music to their piece?" Waynette, who had yet to contribute, jumped in:

Waynette jumps up. I was happy to see her make her first contribution. She says, "You can use one of the loops or a jingle from 'the eye.' You can use any random one, you just [as she executes this step on Mr. Beck's computer, projected on the big screen] drag it up. You can also use track volume, so it's not too loud. Don't want someone listening to it and then they are yanking out their headphones." When Waynette is finished, Kari jumps in again and says, "You can also loop it." To which Luke comments, confidently, "That's obvious." Kari responds, "Well, not everyone's a D.J." With no delay from the exchange between Kari and Luke,

Waynette is excited to add, "And you could also get something here" [pointing to another pre-generated list of music]. Mr. Beck adds, "And you could pull from Creative Commons."

Vanessa asks, "Wait, what if you want music to start and stop?" Mr. Beck validated Vanessa's question, "Great question," and re-routed it to Waynette. "Waynette, how do you do that?" Mr. Beck seems encouraged by how Waynette has inserted herself in to this all-class exchange, as she tends to be among the less vocal students in a whole group activity. Waynette confidently asserts, "You could split it and mute it." Mr. Beck then adds, clearly having another, maybe easier option, "Splitting is one option, or you can just drag down that track's volume to mute."

This lesson lasted for fifteen minutes. Roughly half the class contributed tips or advice and about a third of the class asked questions. Students jumped in as knowers and non-knowers and Mr. Beck joined as a co-learner and co-teacher. At one point, a teacher visiting the class for the day leaned in to ask one student, in amazement, when they "learned" this program. The student explained that she had done a GarageBand project in ninth grade. Many students, however, were fairly—or entirely—new to the application. This visitor's comment reflected a belief in much of the current literature and national rhetoric that we need to explicitly teach programs like GarageBand before we can draw on their potential for learning, or that they are not practical if the teacher does not have proficiency with the application.

The concept of Navigation rests on participants accepting and embracing a stance of not knowing all the technicalities of GarageBand, or any other digital program.

Moreover, Navigation requires students and the teacher to commit to a stance of not knowing, and to learning along the way. Students and the teacher take on the task of developing various working proficiencies needed in their pursuit of the intellectual work and expectations of their class. The GarageBand lesson was the most explicit technology

instruction in Mr. Beck's classes. Students depended on a wide range of sophisticated digital programs, but never explicitly "learned" a program.

Instead, students learned programs in the service of the learning goals of the broader unit. GarageBand was used to support students' design, production, and publishing of a thematic radio show on crossing borders. As such it was instrumental to the end product, but secondary to investigating societal boundaries and rendering a compelling story about the costs and benefits of crossing different boundaries. Students were not expected to be (or become) GarageBand experts, although they certainly would increase their proficiency with the platform. GarageBand was one of many tools students drew on not as something to "master," but rather as something to help them communicate and distribute an important story.

In this classroom, digital media supported a range of new roles and responsibilities for students and the teacher that explicitly challenged and complicated the construction of teacher as expert and student as novice. It was common practice for students to solicit and offer support, both technical and more content oriented. It was also common for students to huddle around a computer and engage together in trial and error to find a solution to a problem. Mr. Beck called upon students to support one another and him. In the opening vignette, instead of turning the troubleshooting over completely to Jill and Eleni, Mr. Beck stayed in the conversation and watched and learned along the way with them. Questions like "Why would that work?" were not uncommon from Mr. Beck. Likewise, students reached out to Mr. Beck for ideas and support, as co-learners.

Trial and error was a critical part of Navigation. In this context, students and Mr. Beck regularly said "I don't understand why," "Try this," and "That's not going to work." The culture of trial and error enabled participants to be both tentative and uncertain and to position themselves as knowledgeable and important contributors.

Taken together, these practices supported my finding that students assumed and initiated a range of roles and responsibilities in this literacy learning context. These shifting responsibilities allowed students to learn with and from each other as well as Mr. Beck. Lateral teaching, specifically students teaching other students, and in-the-moment learning, students learning on their own and/or with others via tinkering and experimentation, were common practices. This builds on research that suggests that experimentation and tinkering are the best ways to develop and expand our digital literacies and capacities. Important to my study, however, was that in addition to supporting students' evolving literacies with digital media, these roles expanded students' responsibilities. Students depended on and often needed one another to engage the intellectual work expected in this space. Although the classes were not focused on the teaching and learning of specific digital media or skills, students were able to engage with and learn digital media in small bursts along the way. Students and Mr. Beck repeatedly and instinctively sought out and shared, along the way and in the moment, technology support they needed to complete the assignment. Digital media, in short, were learned in the service of the intellectual work of the class and, more often than not, through a collective process of trial and error.

Although this process of directing one's learning was deeply engrained in this culture, it was not easy. Regardless of students' familiarity with various digital technologies, this project was difficult and challenging. Completing this podcast demanded a commitment from students to tinker with digital media and exercise patience to find ways to use digital media in ways specifically beneficial to their goals in class.

Instead of creating a dichotomous culture between digital natives and digital immigrants (Prensky, 2001), as is common in much of the current literature, this culture was sustained by a collective commitment to tinkering and experimentation. This flexible mindset flowed directly from Mr. Beck's recognition of the need to "set it up right," a stance and approach that productively accommodated his uncertainties as well as those of his students. Here are three excerpts from student's reflections on producing their podcasts:

Kate:

Some parts were difficult such as timing, editing, music, and for me translations because I interviewed my grandma who is Spanish and we talked about her life and stories in Spanish, so I had to make another track containing the English translation, but that was difficult because I wanted my words to match with hers at the same time. (Moodle artifact, student writing, March, 2011)

Jie:

Podcast editing was such a hard job because it wasn't working as I intended it to. The GarageBand wouldn't open two files at the same time and, when editing, I had to listen to all the things over and over again to make sure nothing was left with gaps of silence. I kind of got tired of listening to both my interviewees speak again and again in GarageBand. But at the end, it turned out good even though it took 9 hours to finish editing it. (Moodle artifact, student writing, March 2011)

Marina:

It was a lot of work with editing voices on the podcast track, then having to rely on someone else to send you their file. Our podcast didn't want to work on iTunes. It just cut my part out. It was a mess. We tried over and over again. Mindy was absent and was still trying to fix the file. Finally, Caitlin [not in group] helped me and we were able to participate in the switching and listening to podcasts. (Moodle artifact, student writing, February 22, 2011)

In addition to learning how to edit audio, loop music, or record narration and voiceovers, students had to familiarize themselves and adhere to Creative Commons¹⁶ licensure and copyright laws. Although there were several challenges and frustrations inherent in "figuring out the technology part," students met the task. This addresses an underlying concern in much of the current research (Cuban, 2001) about teachers' hesitancies to integrate digital media with which they may not feel proficient. Mr. Beck leveraged digital media to support meaningful learning objectives, and, simultaneously, developed students' proficiencies with various digital media. Despite the challenges students encountered with the kind of effort, time, and focus it took to figure out how to build a podcast, their descriptions of these challenges were inevitably tied to how well or to what extent they communicated an aspect of their story that was important to them. For example, the frustration Kate reported with her GarageBand tracks was explicitly tied to her commitment to telling a story that included English and Spanish.

Adolescents' roles as co-directors of their learning required near-constant vigilance and heightened attention to finding the resources they needed to meet their desired goals. A strong sense of learning-in-the-making was evident in much of

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¹⁶ Creative Commons (http://creativecommons.org/) develops and stewards legal and technical infrastructure that maximizes digital creativity, sharing, and innovation.

participants' talk and in my observations about how adolescents enacted their role in these intense and saturated spaces. This stance was a productive way to respond to both the uncertainty and the possibility that accompanied this dense environment. Students had to learn continually how to direct themselves and others in this context in a way that would allow them to meet their unique goals, interests, and agendas. In these classrooms, there was evidence of "self-directed" learning that was congruent with much of the research on youth participation with digital media outside of schools, but unique to the formal educational context, self-directed learning was not only out of self-interest and individual progress, but rather linked to the work of the class goal. Instead of maximizing self-directed learning solely for students' individual pursuits and contributing to creating a classroom of isolated learners or a culture of competition, students learning was always taking place in relationship to the learning of their peers.

"Distractions"

While all of this serious investigation was going on, students encountered what many would regard as "distractions" to the work at hand. In this new culture, however, instead of interferences to learning, "distractions" were part of learning. A critical part of Navigation was deciding how to manage the range of connections to people or opportunities that could take them "away from" their learning. As students worked to log their interviews, I observed the following activities in my fieldnotes:

Chris looks away from his computer screen and to his cell phone screen, resting to the left of his computer. He looks to Mr. Beck and asks, "Mr. Beck, can I go to the bathroom?" Mr. Beck responds, "Yes." I notice Chris get up and look to see if he takes his phone. At first he doesn't pick it up, but then I see him walk back to

his table and pick up his phone. As anticipated, he takes his phone with him. I am struck anew how, *in-school*, BDA adolescents are in a constant contact loop with multiple people. It appears that Chris either has someone trying to share something with him or he feels an urgent need to reach someone. I wonder: Who is he communicating with, and about what? I wonder why it couldn't wait until the lunch period or the change of classes? All of sudden, I see Maria slip her phone down to the left of her leg and quickly dash off a text. This is a rare occurrence for Maria: she is rarely, if at all, observed texting or even sitting with her phone in plain sight. (Fieldnotes, February 9, 2010)

As shown above, the wide embrace of digital media dramatically expanded opportunities for students to engage with texts, resources, and one another around school-sanctioned projects, but it also opened possibilities to engage with family, social networks, and websites not tied to Mr. Beck's explicit curriculum. Like Maria and Chris, students had agency to determine how much time, at what time, and for what purposes they engaged in activities or interactions not directly related to their school work. In Mr. Beck's classrooms, because digital media was not heavily policed or patrolled, students could also navigate the multiple opportunities for constant connectivity via phones and social networking sites like Facebook and iChat.

From students' perspectives, they could describe in detail how they knew when a connection or opportunity was taking them away from their school-sanctioned learning and how they developed approaches to tune in or tune out potential distractions. All the students acknowledged using spaces that yielded diversions for them but were also focal sites for learning. Students listed sites such as iChat, NPR, iTunes, *New York Times*Online, and Facebook, all of which surfaced throughout the year as focal sites of learning but also carried potential diversions. Here, two students talk about the role of Facebook:

Jie: Facebook is a big distraction for me! It's like a habit: *every* time I open a

new tab I just type 'f' and 'oh—I'm on Facebook' And it's like—'how did

that happen?'

Karyntha: Yeah, like oh, 'I don't really want to do this.' But you click around and

you notice you're wasting all your time and look down and it's like,

'hmmm.'

Jie: And, there's really nothing to do but read other people's stuff. I'm like,

'Why am I on there? It's distracting.'

For sites almost exclusively about social networking, students recognized the ways in which participation on Facebook may take them away from their work, but that, for many of them, such social networking sites were an almost indistinguishable part of their day-to-day lives. Although many students recognized that Facebook may be a distraction, I observed that participation on Facebook was often used to talk about schoolwork, share photos from school, and build relationships. I observed students broadcast news about school projects over Facebook or post questions about an assignment in addition to news about students' accomplishments on the running club or pictures from prom.

Jie suggested that it was a "distraction" for her, but I found that the insight gained via status updates and from what she casually referred to as reading other people's stuff" was important for the building of relationships and youth's social worlds in school. I often heard students make comments such the following: "Just read my status," "Is that what your status meant?" or "Didn't you read my status?" Students were expected to know and internalize information from social networking sites. Social networks were indistinguishable from students' lives in school. Jie and Karyntha followed their comment on Facebook with the following exchange about instant messaging:

Jie: I always ask for people's opinions about my writing.

Karyntha: Like last night!

Jie: Yeah, last night, I was having so much trouble with my thesis paper and

well—I went to her [Karyntha] for help. And then she just left me there

[online], as I was still talking to her! (Interview, May 24, 2011)

Karyntha: Well, it was 11 o'clock. But, I like helping people. I understand things a

lot easier than most people and like to explain it to them. Sometimes I understand something better and can help. (Interview, May 24, 2011)

Constant connectivity was part of "doing school" both at school and at home.

Students were not "just chatting" with others, but rather making a choice that made sense to them at the time in this context and with respect to their goals, priorities, and agendas.

The agency students had to make these kinds of choices and decisions was one of the most challenging but also rewarding aspects of Navigation. Students frequently shared shifts they noticed in their own behaviors and abilities to manage the "distractions," especially since ninth grade, when the openness of this learning environment context was such a novelty. Virtually all the students had a deep awareness of the times when technology was not serving their school-based goals, although that did not necessarily make it easy to control. This was especially difficult since these technologies often *required* accountability via these same digital networks to their peers.

In addition to student-driven participation, parent-driven communication also permeated the classrooms. Parents texted and emailed their children during the school hours and students learned, ongoing, how to navigate relationships with family in the middle of the school day. The openness of these classrooms meant that students had to find ways to manage the pull between the school-sanctioned curriculum and

"distractions." One student, Dante shared, "Sometimes, when you're really trying to do work, you really just need to close all that stuff [iTunes, iChat] down. I should do that more often: just close it all down and get to work." Although Dante acknowledges how much it can help to "just close it all down," doing so is not always appropriate, nor is it easy. Students, like all of us, showed how they were learning to make conscientious moves in relation to the freedom and constant connectivity of digital media. As Mr. Beck himself observed:

It's really the same way that all of us, adults too, confront potential distraction: when we go to open up our laptop to write whatever it is we need to write, at first we're like: 'Oh, I really need to check my email' or 'I wonder what's on whatever site?' or 'Have I updated my status?' So, part of it is about acknowledging that there are certain little kinds of addictions we all have, but helping people to think about when they need to be focused and how they need to do that. (Interview, June 6, 2011)

This is particularly significant because the vast majority of current literature and school curriculum emphasizes how to monitor, measure, and regulate students' time "on task" when digital media are engaged. Perhaps the most challenging characteristic of digital media is that, by design, it demands that the users learn how to use it so as to maximize its affordances and minimize what are commonly regarded as simply "distractions." To participate in this learning environment, students made a commitment to "get their work done," yet constantly had to face the hard task of deciding how to navigate toward that goal.

Conclusion: This Is Not Just a Project

Adolescents in these classes were doing many of the same things as adolescents in other high school classrooms. They developed research skills, collected and analyzed data, and wrote and published a thematic radio show. Like many other high school students, these students had the freedom to choose a topic of their interest and draw on a number of digital media to support their work. Like other teachers, Mr. Beck harnessed digital media for literacy learning in these classes in the service of students' deep engagement with each other, with their research skills, and with their own writing. But as evident in this new culture of literacy learning, participants in Mr. Beck's classes developed a constantly evolving repertoire of moves, tools, roles, and responsibilities, always in the service of the driving ideas of a given project, but nevertheless essential to the intellectual work.

By its very nature, this *new* culture challenges the belief that educators, school leaders, or district officers need to carefully craft what is on or off limits or explicitly teach the skills of "multitasking." This new culture challenges the belief that classrooms need to define strict boundaries for students about turning our digital media "on" or "off," but recognize that learning how to do this is part of learning in this saturated context. Students' published podcasts were immensely complex collections of stories about a range of individuals, many of whom were students' friends, teachers, and family, and both the power and challenges of crossing social, emotional, racial, and countless other boundaries.

Although all of the stories built on the theme of "passing," students' ability to direct their own path leveraged diversity and enabled students to take the theme in multiple new directions. Students completed their own work, yet this new culture drew explicitly on the participatory nature of digital media and students did not work independently. The collaboration and transparency deepened students' investment as an audience for each other's work, particularly since they had all produced a podcast. This project, in addition to the value it offered students for thinking about societal boundaries, had immediate value for students' abilities to listen to other people's podcasts, radio shows, and even YouTube videos. Students developed important critical media literacies. To learn to navigate this kind of classroom, adolescents needed to learn how to exercise agency and task orientation; as I learned from the youth, they developed a repertoire that enabled them, in this saturated learning environment, to actually "get their work done."

This learning context, with its freedom and choice, room for individual and collective spacing, and extensive, inherent collaboration—indeed the whole ecology of the social system in Mr. Beck's classrooms—makes sense in these digital times, most especially because it makes sense to adolescents. The spaces were not simply spaces that supported self-directed learning, freedom, and choice because students completed their work, but rather spaces that maximized the possibilities of digital media and adolescents' digital mindsets. The affordance of designing and enacting a pedagogy that embraces digital media in these ways was that more than completing a unit or creating a final project, students developed a whole new way to learn.

Chapter 6:

Negotiation: A Collective Intellectual Process

Introduction

This chapter continues to examine the lived experiences of adolescents in these classrooms, but with specific attention paid to students' literacies. Whereas Chapter 4 focused on this learning environment and Chapter 5 centered on how adolescents maneuvered in and through this context, Chapter 6 is focused on the intellectual work students accomplished. From the perspective of literacy as a critical, social, and cultural practice, adolescents' literacies and the range of texts they read and produced as participants in these classes were uniquely constructed within and shaped by this novel setting.

I refer to this third dimension of the new culture of literacy learning as

Negotiation. This concept is central to understanding Mr. Beck's classes because it

illuminates the dialogue, give-and-take, cross-talk, bargaining, mediation, diplomacy, and
power that are often linked to negotiation processes. Because negotiation always

presumes the presence of another person or group, this concept foregrounds the intensely
social nature of literacy and allows a focus on the interactions between and among
learners as a central unit of analysis. In the context of Mr. Beck's classes, adolescents, by
design and by choice, were part of a literacy experience much larger than their individual
literacy learning trajectories. Importantly, these adolescents were part of a collective of
literacy learners, each of whom played a vital part in developing a collection of rich and

varied new literacies that altered the kinds of intellectual work students generated in these classes.

This final dimension draws heavily on students' perspectives, as observed and reported, as well as student-generated and published texts to analyze how adolescents interacted with their peers to accomplish the intellectual work required in their classes. Attention to the many ways students worked together offered new insights on the profoundly social dimensions of literacy in these classes. New literacy practices deepened existing relationships and facilitated the formation of new relationships with peers, the teacher, families, and communities. In addition to investigating the nature of participation in these classrooms, this chapter considers how knowledge was constructed by, for, and with adolescents within and across these spaces and, consequently, the significance of adolescents' literacies for collaboration, participation, and knowledge generation.

Language and Identity

This focus on Negotiation is explored through students' engagement with an English unit titled *Language & Identity*. During this unit students explored language in its many forms along with the premise that everyone has unique language experiences and histories. Students studied the relationships between language and identity as well as between language and stereotypes. Specifically, I focus on how adolescents took up an invitation to author their language autobiographies. According to Mr. Beck's written plan, the larger unit was organized around two essential questions: (1) What are the relationships among language, power, and culture? (2) What does it mean to achieve

individuality within a larger system of conformity? By the end of the unit, students should "understand that language is a powerful and flexible tool" (Google Doc artifact, Unit Plan).

Students were expected to write and publish language autobiographies in two forms: (1) a written essay and (2) a digital story. Students investigated themes from the larger unit on language and related them to their own lives; they combined personal experiences with a broader analysis of and reflection on language-in-use. Students' autobiographies were published on the school-wide blog, and digital stories were published on YouTube, SchoolTube, or Mr. Beck's Dropbox.

I examined adolescents' literacies linked to their production of these language autobiographies. Students' literacy autobiographies were a critical literacy practice because of the ways in which students questioned their own and each other's assumptions about language and literacy. I consistently wondered: What happened when students wrote and rewrote aspects of their language identity in these contexts? Likewise, what happened when students read, viewed, and responded to peers' simultaneous investigations of and writings about language and identity? During my time at BDA and in my analysis, I wanted to know: What were the distinct affordances and functions of digital media for literacy learning in these spaces? What were possibilities, challenges, and complexities of using a range of digital media to support literacy learning specifically related to language and identity?

In Chapter 4 I argued that these classes were intense and saturated learning environments. This saturation was due, in the case of this unit, to the near-constant

generation of student texts, which were published, read, and often responded to across multiple digital platforms and which drew on a range of media and modes. What is critical to the concept of Negotiation, however, is not simply the constant proliferation of students' texts, but rather the role these texts played in relationship to the intellectual work—individual and collective—involved in the unit on language and identity.

Adolescents expected, relied on, and needed the information to negotiate productively the people, ideas, texts, and curriculum in these classes.

Building Knowledge: What Counts as Information?

Central to any process of negotiation is information. In these classes, students harnessed the potential of digital media, and specifically interactive, peer-to-peer forums, to expand what counted as information, who could author it, and for what purposes.

Adolescents were positioned and positioned themselves in ways that leveraged the networked properties of digital media to distribute their own ideas quickly and publicly, and simultaneously, to read and interpret valuable information and beliefs about language and identity from their peers.

"Get Your Ideas Out There"

This unit put a premium on multiple invitations to students to remember, reconstruct, and render the particularities of their lives. Students produced paper journals and online journals; orally performed poetry in front of the classroom and built webbased poetry wikis shareable with a click; and held whole- and small-group discussions

both in the classroom and online.¹⁷ One of the most common peer-to-peer online discussion forums used in Mr. Beck's classes was what I called a "quick thought" forum. This type of forum invited students to contribute a quick thought, reaction, or idea about a broad issue or in response to a text that the class had read/watched/heard. Typically, this invitation was extended during face-to-face class time and required students to, on-the-spot, think, write, and publish their contribution to the peer-to-peer discussion board via Moodle.

This kind of forum required full participation and typically took place in roughly five to twenty minutes, depending on the question or topic. Three examples of prompts Mr. Beck used to introduce different quick thought forums were "Watch the following video and respond"; "From your perspective, is race relevant in our society or not? Why?"; "Read this article and share what you think." In many instances, a quick-thought forum asked for students' instinctive opinions explicitly in response to an article, book, video, or other text that students had previously read. Although this chapter looks carefully at the writings students wrote and made visible to their peers, students also wrote pieces on Moodle that were visible only to Mr. Beck.

The following prompt launched one of the quick-thought forums during Mr.

Beck's *Language & Identity* unit. The prompt read, "Share a thought or question that surfaced for you as you read the language scenes." Although students' quick thoughts were written and posted with some speed, they were not superficial. For this particular

¹⁷ Here, I use "discussion" to refer to students' interactions via Moodle's "discussion threads." Although resonant with many characteristics of oral discussions, I found that online "discussions" represented a new, distinct literacy practice.

forum, students wrote in response to their experience of or reactions to reading the class collection of language scenes. Language scenes were students' descriptive scenes about an event in their lives that showed some part of their language identity. Many of the scenes depicted events and interactions with friends and family. Students were expected to capture just a moment in their scene, include dialogue, and write in a way that people could visualize what was happening. Here is an excerpt from one collection of students' responses.

Grace:

While I was reading the post of other people's scenes I came to notice the way language is so different. When I was reading I noticed that most people talk ghetto or improper and sort of disrespectful when they are around just friends, but when they are talking to an adult or someone older they put on their sweet side and act all innocent. Another thing I noticed is when the student is talking to a teacher and not their friends they make their self look intelligent. That's the way I see language. It makes me wonder, well, if everyone talked the same would the world be interesting anymore?

Roberto:

I think that language is not only a barrier that separates communication in the world, but what sets a standard for people we talked to, sort of like a barrier in our society. Some of us ignore the stereotypes that come along with an accent or dialect and accept people as what they are, human.

Chantal:

I noticed that some people use dialect. I wonder what some people's voices sounded like in the scene. Some people didn't describe what the person speaking sounded like.

Pat:

I noticed that the way people talk, and the difference in dialects, is almost a way of segregation. Even in the classroom, I noticed that the people whose writings were similar, often sit next to each other every day. People group around what they are familiar with because it comforts us in a way.

Charlie:

I have noticed that people had very similar problems in their scenes with the languages no matter what language it was. The way people talk is just something that is always there and whether it is looked on as improper not standard or not it is normal to them when they speak it. I wonder if there will ever be a time when we do not have any language problems or accents that make the world different. I wonder that but I doubt it. Anne:

i have noticed that "acceptable language" is determined by the society and the bosses that control the corporate world. everything is the way the higher power understands it.

Yindra:

- 1) I wonder how it must feel to other people, when they realize the dialect.
- 2) I noticed that some of the stories are about a type of identity, while others are just realizing the difference in slang and explanations of words. (Moodle artifact, student writing, December 9, 2010)

The collection from which the above sequence was drawn included 29 total posts and was composed in 13 in-class minutes. Every student made at least one contribution, and all of the posts were visible, nearly instantaneously, to their peers. This forum reflected adolescents' diverse and evolving perspectives on language and the range of ways adolescents responded to the same collection of language scenes. Whereas Roberto and Pat shared more direct interpretations, other students, like Marybeth, used the unscripted space to wonder. Chantal and Yindra drew on the idea of 'dialect' from a recent discussion of Hurston's *Their Eyes Were Watching God*¹⁸ and evaluated how others wrote their scenes.

What was extended as an invitation for students' individual and quick thoughts came together to form a collection of ideas that were at once single-authored ideas and a loosely intertwined and co-authored collection of ideas. Although written, the document shared many characteristics of an oral conversation. The complete collection of students'

¹⁸ First published in 1937, this novel by Zora Neale Hurston traces the story of Janie Crawford, a proud and independent Black woman living in the South working to understand her identity. Hurston's novel is regarded as one of the most widely read and highly acclaimed novels in African American literature. The novel is emblematic of the Harlem Renaissance, Southern literature, and feminist literature. In the context of Mr. Beck's classes, students examined Hurston's bold and poetic use of the language of her native South as well as the racial conflicts, tensions, and violence of the early twentieth century.

observations, wonderings, and interpretations coalesced into a coherent text that students read as part of their continued examination of language and identity. Students did not read and respond in isolation, nor did they respond to "prove" or merely document that they had completed the assignment. Instead, these forums represented what Dennis Sumara (1996) referred to as a kind of "commonplace location" that served as a collecting place for students' thoughts, evolving understandings, and ongoing interpretations.

This space was an essential platform that allowed students to be simultaneously in dialogue with the texts and their peers, and it routinely brought their readings of texts into conversation with others. When students described their interactions with the forums they indicated how they bounced back and forth between the shared texts, their written contributions, and "refreshing" the Moodle page to read the latest comments. Building on the idea that this was a space where students read and responded together, this networked space not only deepened and extended students' peer-to-peer relationships and their connection to these ideas, but also expanded adolescents' abilities to both engage and extend the curriculum. The speed, simultaneity, and transparency characteristic of this quick-thought forum created opportunities for adolescents to write and share their own understandings of language and identity. Moreover, the expectation for students to read *across* the collection of ideas and perspectives leveraged these ideas in the service of the larger unit. In an interview, Georgia shared the following:

It's actually really cool, because with the language thing—we all have our own language. I didn't know everybody talked in their different languages. I just didn't know that. I knew Asra talked, like her family *has* their native language, but I didn't know that they speak it all the time. There are so many cultures, especially

in this school, that you can't be narrow minded with your culture—reading other people's writing really broadens your mind a lot more. I think you have to embrace the beauty of everything else, you can't be so, "I'm Italian and that's it. We do our thing." You have to open up. There's so much stuff out there and you can't be so narrow minded. (Interview, May 12, 2011)

In Mr. Beck's classrooms, students' ideas launched new, vital texts for the class. Students relied on that information, ongoing, to participate and collaborate. Georgia shared how prior to reading her peers' language scenes she didn't know or understand that "everyone had their own language" (personal interview, May 12, 2011). Pat's interactions with peers' texts prompted an inquiry into the ways that the language habits and practices in their classroom draw lines between different groups and led to ongoing discussions examining how the judgments they make about people are based on language, and how language often, intentionally and unintentionally, excludes people from a clique. Other students initially resisted some of the ideas their peers posted about the powerful role of language and the extent to which race and culture were intertwined in language.

Digital forums were not constructed as places to close in on ideas, but rather as spaces to open up ideas. They served a dual purpose of expanding students' analysis of language and identity and deepening students' understandings of their own and others' beliefs. For example, Roberto included the following idea in his response: "Some of us ignore the stereotypes that come along with an accent or dialect and accept people as what they are, human." Roberto's scene began to explore stereotypes and accents in his own language history and his instinct to be "human" or American and not judged on the basis of his native Spanish tongue.

Several students shared scenes that described the kind of pride, cultural connectivity, and loyalty they felt in relation to their native languages, in contrast to Roberto, whose stance was influenced by his own experiences and his desires not to be singled out. Continued interactions with peers around this topic and the opportunity to share another language scene helped Roberto to critically examine his view on accents and develop deeper understandings of and appreciation for his cultural and linguistic resources and background. Students did not need to agree on understandings, but they did have to commit to an ongoing process of sharing and negotiating their understandings.

In online discussions, all students were expected to participate. Many students reported a preference for online forums because they accommodated different patterns of participation. According to Georgia, they enabled more students to "get in" on the conversation:

Sometimes, it's kind of hard to get your ideas out in here with voices, because I know people with strong opinions, they tend to talk over people or always try to get in there and shut out the quieter people. Like, I'll have an idea about something and get shut out because someone's talking so loud. (Interview, May 12, 2011)

Full participation not only created room for all students to share their ideas, but also dramatically increased the amount of information that was available to the class. In these classes, there were social affordances to letting more people "in" on the conversation.

Asra, a student who identified herself as "one of the quiet people," shared the following:

Usually when I have something to say, the rest of the class has jumped onto a new topic, and I feel awkward because if I bring something up that they've already said, well, not already said, but we've already finished and pushed aside with that and so it is like, okay, you had a big idea but it's gone. But, if you have posts, you can go and reply to it. You continue the thread and keep going with it and add

your ideas and it's not like you won't be heard. You'll still have your ideas out there for someone to read, which is why I like posting better, because it's still there. (Interview, May 12, 2011)

Asra's comments show how digital forums were able to capture ideas that might have been missed in another medium. These forums thereby exponentially increased the number of perspectives available to students and, in turn, the number of opportunities students had to interact across this peer group. They enabled all students, especially those like Asra, the freedom to position themselves as active and knowledgeable contributors to the class.

Adolescents' active and repeated effort to make their thinking, no matter how tentative or uncertain, visible and to open themselves to feedback was one of the new literacies that emerged from students' consistent engagement with various digitally mediated platforms. This literacy practice significantly enhanced students' participation because it created contexts in which information that would be necessary for ongoing negotiation with the people, texts, and curriculum of the class was generated, made visible, and read.

"It's a Lot Like Tagging On"

Adolescents in these classes engaged a range of literacy practices to participate in this classroom. In many high school English and History classes, written work is most often submitted to and read by the teacher. In contrast, these dynamic platforms created fundamentally different ways of thinking about who is in the room and what counts as an academic piece of writing. Students used these forums to share pieces of writing that

were often early drafts and intentionally less developed, but still significant to their academic work. Two students wrote the following responses to reading their peers' language scenes.

- © Georgia: Language is how you sound/say things.

 Everyone's language is so different. Does it have to do with race, ethnicity, neighborhood?? ALL? (Moodle artifact, student writing, December 9, 2010)
- ☑ Mindy: As I'm reading all these different stories I noticed how people talk different based on their race or culture. I've noticed that white people talk more proper while black talk more ghetto and slang. There's nothing wrong with that at all. Everyone is an individual. Everyone can talk the way they want to. It makes them who they are. Sometimes people talk different from their race. For an example, I'm Vietnamese, but I don't have the Asian accent. I talk more like a Puerto Rican person because I grew up around those types of people so I adapted to it quickly. I wonder why there are so many different ways in speaking? And how did it start? (Moodle artifact, student writing, December 9, 2010)

Students used the freedom of this space to write responses to ideas or questions that were informal and unedited, but still represented intellectual effort. Georgia shared a statement, an observation, and a question. Her use of capital letters and exclamation marked her uncertainty and willingness to get help from peers in addition to communicating a sense of urgency to address this intellectual curiosity. Similar to those of Georgia and Mindy, most students' contributions illustrated their agency to direct their individual learning and to share the questions and ideas with which they were grappling. At this early stage of the unit, the flexibility of the forum stylistically facilitated writing as inquiry. Students wrote their way into questions and into new knowledge. Georgia is the same student who in an interview cited previously said she had not realized everyone had their own language until her engagement with this unit. She used this forum, and the assumption of a peer

audience engaged in the same broad exploration of language, to write her way into a complicated question about the ways in which social and cultural identities inform language.

Whereas Georgia used this space to consider the possibility that race, ethnicity, and neighborhood may be tied to individual differences in language, Mindy used this opportunity to write her way into an inquiry about the extent to which language identity is something that belongs to "individuals" versus the ways it is rooted in individuals' specific socio-cultural contexts. In this case, Mindy harnessed the writing space to examine her life text side by side with her peers' life texts. Mindy tried to write her way into understanding language difference as that which could be attributed to specific racial and social groups when her own experience challenges and supports that idea.

The opportunity to engage this space for writing as a forum of inquiry reflected the ways in which these forums support adolescents in the process of creating themselves and the classroom, peer groups, communities, and worlds they inhabit. From the perspective of the "construction of adolescence" (Nakkula & Toshalis, 2006), this student-driven forum created a school-sanctioned place for adolescents to actively make meaning of their experiences and thereby create and recreate themselves. The distinctive pedagogical design of these forums supported students in the productive imagination of their lives and created a meaningful space for students, together with their peers and Mr. Beck, to co-author their educational stories and development. Nakkula and Toshalis (2006) argued that teachers play a critical role in what they refer to as the reciprocal co-authorship of students' lives. "We too often miss the mark and waste time and effort

when we co-construct or coauthor ideas independently," they wrote. "Optimal co-authorship can only occur through collaborative mental engagement and the open, transparent negotiation of meaning" (Nakkula & Toshalis, 2006, p. 9). Students in these classes indeed did engage digital media to support reciprocal co-authorship with their teacher as well as their peers. In this new culture, students had a profound responsibility to share their thinking with peers and to learn how their peers thought.

The conditions that were created for students' explicit authoring in these forums were remarkably low-stakes. This builds on current research that argues that low barriers to artistic expression and civic engagement are a central characteristic of "participatory cultures" (Jenkins, 2006) of engaging with digital media. Extending this research, however, I found that in formal school contexts, low stakes for entry not only enabled a participatory culture but also informed the content of students' contributions and continuously reshaped their ideas and relationships with peers. As students developed their relationships with their peers and Mr. Beck, they were increasingly willing to put forth opinions that ranged from tentative and uncertain to confident and fully formed.

The flexibility and permission students had to post less than polished pieces and to post them with some speed was critical to fostering a literacy learning culture wherein students could publish ideas so deliberately in process. For example, in Anne's post—"i have noticed that 'acceptable language' is determined by the society and the bosses that control the corporate world. everything is the way the higher power understands it"—she was singularly concerned about contributing her *idea*. This intentional design took

advantage of the speed and simultaneity characteristic of many wired communication platforms to encourage students to publish unpolished comments.

There was intertextuality in this space created by the range of different texts—texts of students' lives (language scenes), articles (e.g., Rose's *I Just Wanna Be Average*), ¹⁹ literature (Hurston's *Their Eyes Were Watching God*), and writings done by their peers (the peer-to-peer forum). Students created a new kind of intertextual, hybrid literacy space. This finding builds on recent research (Black, 2009; Jenkins, 2006; Lankshear & Knobel, 2006) on adolescents' literacy practices in online writing communities in out-of-school contexts. In this school-based context, however, student-authored ideas, for example the quick thoughts students posted to the discussion forum, were directly linked to the language scenes students had written and read.

Students co-emerged through the consistent and habitual practice of reading and writing individually and collectively. Students were constantly creating new life texts and new educational stories that demanded they pay attention to one another and commit to ongoing co-authorship. One student observed in an interview that participation with peers and Mr. Beck in these asynchronous forums was a "lot like tagging on, creating one giant idea." This metaphor, referring to the playground game of tag, captured the idea that students brought their individual ideas and interests to the group, worked in concert with others' ideas, and diligently and intensely pursued individual and collective projects, but

¹⁹ Mike Rose's *I Just Wanna Be Average* (1989) was one of several essays that Mr. Beck made available to students prior to writing their Language Autobiographies. In this essay, Rose considers the relationships between his autobiography, language, and his experiences of public schooling, specifically in a vocational education track.

the space did not exclusively work toward one large idea. Instead, these forums sustained both the smaller, individual ideas as well as the larger, collective ideas.

"Our Ideas Matter"

A vital component of the forums is that the students were consistently positioned as valued, credible, and knowledgeable contributors to the class-authored texts. Students were expected to create the information that they needed to negotiate the *Language & Identity* curriculum. The literacy practices that unfolded and were initiated across this space could not be mapped onto typical classroom literacy activities. It was not a conversation or a discussion as we typically understand them, nor was it elaborate enough to be considered a journal or log as we tend to think of them in school.

In Mr. Beck's classes these forums were occasionally constructed as a place for students to offer a pointed response to peers' ideas and writing. During the unit on Language & Identity, students posted a letter of advice they were assigned to write to one of the characters in Hurston's Their Eyes Were Watching God. After the letters were posted, students were invited to read and respond to them. Their Eyes Were Watching God was read as a class during this unit because the novel addresses several themes related to language and identity and supported students in thinking about their own language histories and autobiographies.

The selection below is excerpted from a series of students' interactions around one student's letter of advice. The letters were fairly polished pieces that students posted prior to the start of class. During class, students read the letters and responded to them.

The following sequence illustrates students' replies to Luke's letter to Nanny in which he shares his understanding of Nanny's concern about Janie's safety, security, and well-being as a woman but questions Nanny's decision to make these decisions for Janie when Janie was still so young.

Lynnette: I agree about your views on the situation. Nanny was right that Janie

would need to be married before Nanny left her, but the decision of who was a rush for her, because Nanny wanted to be sure that Janie wouldn't be lonely or mistreated. Nanny didn't know exactly how long she had to live, so it would have been a bad idea for Nanny not to take that step if she

wanted to ensure Janie would be okay. (9:11am)

Yindra: Luke . . . wow that was very insightful and caused me to see things

differently. I think Nanny would have really taken this letter seriously, but she also most likely would not have like people looking into her person business or what she thought was right. But all in all, this was a great topic

and perspective. (9:11am)

Caitlin: I think you made great points. Yes they lived in a time where anyone

could be raped and yes Nanny was looking out for Janie. But don't you think Janie should live her own life and learn from her own mistakes?

That's why life is all about, isn't it? (9:15am)

Jessica: Luke I respectfully disagree with you. her Nanny did only what she

thought she had to. She didn't really care about what Janie's feelings.

(9:18am)

Kathleen: I so agree with you Luke she is only looking out for her. (9:19am)

(Moodle artifact, student writing, November 16, 2010)

Students' responses included a combination of appreciations, agreements, disagreements, surprises, challenges, and recommendations. For example, Jessica respectfully disagrees, whereas Natalie agrees. Caitlin offers a compliment about the points Luke makes, but poses a question that she has about what she thinks Janie should do and her perspective on what life should be about, suggesting she takes some issue with how Luke has

constructed the scenario. Yindra also makes a similar move to compliment Luke on his work, but questions how upset Nanny would have been to have someone meddling in her business. The discussants have created their own norms, in which heterogeneity of discourse moves makes for a particular kind of rich discussion.

Students put forth a variety of meaningful responses in relationship to their interpretations of peers' contributions. This forum was one of two assignments at the end of the unit. Instead of a culminating test or strictly individual synthesis of this book, students had the opportunity to author individual pieces that reflected their unique understandings of the text and to receive feedback from peers. This space greatly intensified/amplified/enhanced what it was possible for students to learn at the end of a class's engagement with a text and stands in sharp contrast to most English classrooms, where a student would get feedback on an assignment only from the teacher. In the selection above, for example, Luke's initial construction of the relationship between Nanny and Janie as supportive and one in which Nanny was looking out for her granddaughter's best interest was challenged by others' beliefs that this relationship usurped Janie's agency and that Nanny's decisions were driven by her own interests. In addition to the ways that Luke's ideas were pushed, so, too, were the responders' ideas. This offers further evidence for the ways in which this pedagogical design harnesses digital media for spaces for co-authoring between and among peers and the teacher.

Across this forum, students exercised agency and intellectual responsibility to push their peers' thinking based on their interpretations and unique subjectivities, and instead of ending the book with a clean and crisp interpretation, were confronted with

multiple interpretations and were forced to recognize the range of ways texts can be read.

Students were attentive to one another's beliefs and ideas and played a critical role in responding.

On a surface level, adolescents praised peers for specific ideas or stylistic choices and appreciated a particular stance. Students also evaluated their peers' content or the perceived validity of their ideas, from their individual locations and identities. Tables 6.1 and 6.2 illustrate the types of responses students put forth as well as the kinds of activities that were prompted as a result of students' engagement with this forum. I explore these types of responses and range of activities in relation to the unit on *Language & Identity*, but they were evident in similar forums across units.

Students explicitly noted ways that one student's thinking interacted with their own thinking. They took their roles as participants and active responders seriously, challenging one another and offering new ideas, but also, together, building new ideas. In the examples above, students had different beliefs about right and wrong, justice, love, and power and were compelled to share these beliefs. In these classrooms, adolescents' ideas were embraced and open for discussion. They were also positioned as evaluators of student work. Lateral feedback was built into this curricular design and endorsed as a rich part of the intellectual work in this class. Students engaged with their peers and the teacher in the kind of consistent, transparent negotiation of meaning and collaborative mental engagement that Nakkula and Toshalis argued is critical to co-authorship.

Table 6.1: Nature of Adolescents' Responses Across Moodle Writings

Nature of response	Example
Appreciation	Yindra: Nice way to promote female independence and power.Pat: Your exploitation of his jealousy and fear was interesting.
Validation	Lynnette : I think he's afraid of losing power to her also. He likes to be in control of what's going on. If he gives Janie a voice, some of that power goes away. Good job☺
	Luke: Good real-world connections between story and your life.
Praise	Lynnette: Strong analysis (11/17)
	Yindra : Dang, Roberto, that was very powerful and definitely would get a reaction out of someone. Nice way to get Logan thinking.
Agreement	Frances : I totally agree with what you're trying to say. I mean if he really did love her legitimately, then why would he continue to treat her as if shes lower than any other person? I mean, it's not okay for him to be doing this, but yeah. (11/16)
	Mindy : I definitely agree with you. Every woman deserves to be treated like a queen and deserves to be respected. I think she should leave also.
Disagreement	Jessica : I respectfully disagree with you. Nanny did only what she thought she had to. She didn't really care about what Janie's feeling.
	Mark: I agree with you how she went from guy to guy but I don't think it was her choice to marry Logan.

Students' responses activated their interpretations of various texts that were part of this learning environment and drew on the possibilities of digital, hybridized literacies to disseminate their distributed knowledges. Frequent, highly public drafting built a culture of literacy learning in which students shared tenuous interpretations as well as deeply rooted beliefs. Learning was maximized in and through students' interactions around ideas about marriage, love, control, money, family relationships, and feminist ideologies. The permissiveness of this space accommodated informal and casual

language, occasional emoticons, and superfluous punctuation because these choices helped students emphasize important points, express solidarity, and communicate to others that this was an idea or piece "in process."

Table 6.2: Kinds of Activities Moodle Interactions Prompted

Kind of activity prompted	Example
Provoked a new thought	Maureen : Great point with connecting a lot back to her slave life. I never thought about a lot of what you said.
	Teresa : Wow, that was very insightful and caused me to see things differently.
Generated a question	Mr. Beck : It seems true that Jodie must care about Janie's feelings so why does he keep treating her the way he does?
	Frances : You definitely give the readers a look at how Janie would be if her father was in her life. Do you think that she would have married so young if she had that male figure in her life?
Initiated a challenge	Caitlin: I think you made great points. Yes, they lived in a time where anyone could be raped and yes, Nanny was looking out for Janie. But, don't you think Janie should've lived her own life and learn from her own mistakes?
	Lynnette : I agree with you Charlie, but to a certain point I believe that Janie should be free-spirited and shouldn't have to put up with what she doesn't want to. Meaning, it's okay to run away. She has the opportunity to fix this problem, all she needs to do is act on it.
Triggered an answer	Elizabeth: I know when I'm REALLY busy and going through changes, I am mean and ignore almost everyone around me. It's something we learned about in health class that people do. Think of it that way. He is going through a lot of stress. It's hard to control at first. So he may tend to ignore her.
	Jon : I think it's important that you mentioned Nanny not fixing her own problems. I think she's trying to prevent nanny from the kind of problems Nanny had when she was young.

The Language & Identity and Letter of Advice forums nourished the intellectual production in this class because they both stemmed from and generated student knowledge. Students were actively, constantly, and publicly examining and reexamining the texts and experiences of their educational lives and using them, together, in the service of current and future learning. According to Barbara Kamler's (2001) framework for a critical writing pedagogy, writers use all available designs and materials to produce new representations of reality and, in turn, new available designs. Kamler wrote, "It is through the processes of designing that writers produce new representations of reality and at the same time remake themselves—that is, reconstruct and renegotiate their identities" (p. 54). The combination of Mr. Beck's pedagogical design, the unique affordances of digitally mediated communication, and students' interpretations of texts and interactions in school amplified the number of designs and materials that were available to student writers and extended the possibilities for students' critical literacy learning.

It was particularly significant that this constant knowledge exchange and generation took place between students and Mr. Beck as well as among students. This dynamic and common literacy practice in Mr. Beck's classes had implications for students' consideration of audiences as well as the intellectual work that was produced on and across the forums. This space demanded that students be attentive to and connected to their audience to participate in this class. This happened in simple, everyday interactions on digitally mediated forums as well as in face-to-face interactions. This classroom hinged on students' attentiveness and their commitment to learn with and from one another, as Mr. Beck acknowledged:

The ideas are generated by them [students]. It's about what they feel they learned and not what they heard from me about what they should have learned or something like that. So, in some ways it flattens or democratizes it. Where it's just—when you see all your peers have posted all these different ideas. It points out—it makes them [students] much more credible. (Personal interview, June 3, 2011)

Mr. Beck's comment, coupled with my observations, revealed the profound way in which students' ideas as well as specific memories and experiences of their lives together created a legitimated, critical, and meaningful text of the curriculum. A central and powerful aspect of adolescents' literacies in Mr. Beck's classrooms was that student-authored texts—individually and collectively—were integral to the learning. These collections of students' ideas were significant because students not only shared but also gathered ideas and interpretations about that would be used to negotiate this unit, including central concepts like confronting assumed or imposed identities as a result of language use.

Maximizing Time: "The Behind the Scenes Part"

A second critical aspect of negotiation was time. I found that over the course of the academic year, the consistent exchange of ideas and evolving understandings of the various and varied perspectives in the class allowed students to build and extend meaningful relationships with their peers. The steady participation and accumulation of information increased adolescents' investment in and commitment to each other and to this collective.

"Discovering Different Truths"

In Chapter 5 I argued that adolescents had the intellectual responsibility to compose and publish their work at their own pace and according to their own interests. Students were also responsible for making their ideas public. Students consistently had the opportunity to be "read" by their peers and, simultaneously, to "read" their peers. As Georgia said:

With typing you put your idea there and click posts and you see and read other people's ideas and you might respond to this one or that one and when you're talking verbally, you talk over people. (Personal interview, May 12, 2011)

In this text-dense space, students were expected to be close, active, and judicious readers of their peers' ideas. Part of Mr. Beck's pedagogical design was to create spaces to fully examine an issue from different perspectives. Although students examined a range of perspectives represented in texts outside the classroom, the range of their perspectives in the classroom was equally important. Georgia shared the following:

'Cause everyone kinda has their own idea and everyone wants to argue their idea is right. That's what a lot of people want to do. It's like, the thing with forum posts is that they're quick. It's quick and compact and it's in one space and you read, and you scroll, and you read all the ideas and then you post comments back. Like, "no, no, no, I think this, I think that," and then you go to the next person and you go, "oh my gosh," or you get into a kind of back and forth thing with another person. (Personal interview, May 12, 2011)

Here, Georgia pointed out ways in which she approached the interactive forums, specifically forums that require fairly instantaneous, on-the-spot responses. Georgia highlighted how these spaces supported a constant "back and forth" among peers. Of particular significance was her observation that students often used the forum as a place to argue that certain ideas or beliefs were "right." Mr. Beck's units consistently took up

complex issues linked to hot-button topics including race, religion, human rights, and globalization. Mr. Beck intentionally incorporated digitally mediated forums as a place to start discussions about these particularly contentious and challenging subjects. Students often shared or worked to defend a position or view that was "right." In the language forum, for example, one student wrote to his peer group and Mr. Beck:

People start to involve the culture, then compare and somehow end up exploiting their disadvantages/advantages through their opinions. That's what spurs up from just language. However language is just a language, a way to speak and communicate with one another. (Tom, Moodle artifact, student writing, December 16, 2011)

Tom recognized that many of his peers shared language experiences and memories that "involved" culture, for example, several peers' exploration of the ways society marginalizes English-language learners. As he shared in class, Tom gravitated toward a premise that sometimes culture is given too much weight and leads to unnecessary conflict. His belief that "language is just a language" bumped up against others' beliefs about the ways language was more than "just a language" and often contributed to harmful and inhumane experiences, including social segregation, discrimination, and racism.

Students were often directly challenged by peers about beliefs they held to be "true" or "right," but I found that students, as they built and extended their relationships with one another throughout the year, developed the intellectual responsibility and sophistication to recognize that there was not one "right" viewpoint nor one universally accepted truth. One of the pedagogical affordances of digital media was that the constant circulation and interpretation of ideas forced students to recognize multiple truths.

As a result of adolescents' sustained participation via digitally mediated platforms, and the accumulation of student-generated texts and co-authored educational experiences, students developed more nuanced understandings of both the topic and their peers. Students paid careful attention to what was shared across the forums and, like most adolescents, cared about what they shared with and to their peers. By their own account, students tended to read peers' posts first. For example, "You want to read and get all the ideas in. But, Caleb, I like to stop at his posts, and like Eli too, because they have really strong opinions." Another student said that she always read a student with whom she tended to disagree, while yet another said she started with one student whose "really amazing posts put things in a way she would never have thought of on her own."

The almost constant opportunity for adolescents in these classrooms to make their ideas and beliefs known to peers and in turn to have access to their peers' ideas and beliefs extends current findings on the principles of "participatory cultures" (Ito, 2009; Jenkins, 2006). Much of the research on participatory cultures is situated in contexts where the participants are not working with other participants daily over the course of a school year. While relationships fostered across diverse context are undeniably powerful, I argue that powerful critical literacy opportunities were fostered in this context because students were required to engage and interact, consistently, extensively and over time, with other adolescents who were part of their day-to-day life in school. In formal educational contexts, participatory cultures cultivated a transparency with *known* peers.

This finding also builds on the research that documents adolescents' need to be social (Ito, 2009; Kett, 1977). This construction of learning in these classes satisfied that

need within an academically challenging environment. Over time and with attentive, consistent engagement, students tapped into information from digital forums as well as face-to-face spaces to build deeper understandings of one another as adolescents, but also as individuals who shared diverse identities and backgrounds. Even with the abundance of information and multiple opportunities to share and collect information, it took time and concerted effort for students to build a culture that could sustain extensive, risky, and sincere cross-talk. The following is an excerpt from an interview with one student about going public with her writing in the language autobiography unit:

So, I think writing is a step toward getting to know someone better. Like with my culture, it was like, everyone was like "Oh, snap—you're Ethiopian?" And, I've known these people! And [expressing disbelief] they're like "Oh, snap, you're Ethiopian?" I was like "yes, hello, I've been in your class for a good 3 months!" (Asra, personal interview, May 6, 2011)

Here, the consistent and sustained interactions between Asra and her peers via online literacy spaces facilitated a critical incident for Asra that illustrated the transformative and revelatory potential of public writing. Although there is increasing research (boyd, 2011) that documents the potential of networked publics for adolescents, especially those with marginalized identities in schools and/or society, to build meaningful relationships, many online networks are designed as affinity groups. Here, however, Asra relied on the networks to build relationships with individuals outside her cultural identity. Asra turned to networked media to make public various aspects of her cultural identity as she examined some of the challenges and struggles she faced because of a language barrier with her grandmother. In addition to engaging her own individual inquiry into her family's language history, she created a meaningful space for peers to share their

thoughts and experiences, both similar and different, about this struggle. Public writing created a number of opportunities for students to make themselves visible to peers. The ongoing interaction and continued visibility served to deepen relationships and, now and again, like Asra's example above, contributed to a connection or opportunity in which students felt "seen" by peers that were part of their day to day lives.

Building further on the concept of reciprocal co-authorship, Asra was simultaneously invested in and committed to understanding the range of identities and social positions that were part of her peers' lived experiences of school and the world.

Asra read her peers' language autobiographies with a commitment to learning from them. She shared the following comment about reading another student's language autobiography:

He was talking about how he talks with his parents versus his teacher. And how he doesn't speak to his parents as "adult-like" as he would with his teachers. It was like, through his writing, you could really tell when he talks adult-like and when he doesn't, and—well, I've seen him do it. And then, at parent-teacher conferences, there he was walking with his parents and he said to me, "This is my mom, this is my dad," and we had a good conversation. I was like, "oh, yeah, I see it." I completely understood everything. So, I guess, I don't know—I just learned something. I think writing does that. (Personal interview, May 2011)

Asra recalled how she gained, through multiple interactions with her peers' public writing as well as a later face-to-face encounter, new understanding about her classmate's family culture and the relationships between family culture, identity, and language. Specifically, Asra realized that her classmate initially felt stigmatized and embarrassed about the code switching he did between the highly educated and sophisticated talk common at BDA and what he called the less-adult-like talk he used at home with his parents. The student analyzed the ways in which language was a proxy for educational

attainment. Asra's comment heightened attention to the significance of the role of both face-to-face and online interactions.

Through the rapid, student-driven production and constant peer-to-peer interactions that took place over the course of the year, adolescents expanded their understandings of their peers and of why they—individually and collectively—think in different ways about language, identity, race, or culture. As Mr. Beck observed:

They had interesting perceptions of *why* it is that certain people believe different things. Not just that certain people believed different things but the behind the scenes part. I think some people choose only to see part of the evidence. Or, prioritize certain things. They had different ways of saying it, but it was like the thinking behind the thinking. Instead of just finding out the 'truth' they were discovering how people create different truths. (Personal interview, September 24, 2011)

This level of understanding did not happen overnight. Students, steadily and patiently, and often unconsciously, read one another closely. The constant access to some of their peers' thinking behind the thinking, and the opportunities to make public their own thinking behind the thinking, greatly extended their views on language.

Going Public With Our Projects

I have focused on several of the learning opportunities that drew on digital media to facilitate students' almost instantaneous and relatively instinctive interactions, and have argued that this practice creates a culture in which student exchange is normalized, thereby increasing students' inclinations to share candidly and honestly. Although Mr. Beck's classes drew heavily on digital media's capacity for near-instant interactions and immediate, on-the-spot responses, several platforms did not require students to contribute

instant responses. During the Language & Identity unit, one such example was the invitation for students to post a second language scene to the public forum. Designed to support students' efforts toward their final language autobiography, this was a second chance to write a brief descriptive scene that investigated and examined a language experience or memory. Although these scenes could be viewed by the whole class and exemplify the well-documented "visibility" property (boyd, 2011; Jenkins, 2006; Parker, 2010) of new media, there was no expectation to respond. The following is an example of one student's language scene:

Mario: Are you sure you Mexican?

Me: Duhr. Why wouldn't I be?

Mario: It just doesn't sound like it.

Me: O. Youhhh A-Holee!

This isn't the first time that i have been confronted with this question. Where is you accent? Donde esta tu acento mija? And I always think to my self how am i suppose to know that? What is a mexican accent? Yeah of course my english sounds much more different than other mexican teenagers I know but does an accent really define me? Does an accent determine if im mexican or now, why should it? I mean sure my voice isn't like most Mexicans but why does the way i sound matter. I love tacos, I have like a million cousins, I'm funsized like every other Mexican so why should my voice and the pronunciation of my words matter.

Mara used this opportunity to evoke and examine her common and frustrating experience of being questioned about her "authenticity" as a Mexican American because she does not have a stereotypical "Mexican" accent. She reconstructed this memory to render a scene that complicates many of the most common assumptions about accents and the

habitual ways accents mark (or not) our identities, and effectively presented a counternarrative to accents that underscored the ways immigrants to the United States are stigmatized, discriminated against, or singled out because of their accents. Here, Mara challenged the idea that she is less Mexican because she doesn't have an accent. She made a number of authorial moves to prove her identity, including the use of Spanish and direct questions to the reader. In this rendering, Mara, paradoxically, closes the scene by proving her authenticity with a list of some of the most stereotypical foods and traits of a Mexican American identity, arguing that that should be evidence enough.

Students were willing to go live with their writing and make themselves visible and vulnerable to peers in part because it had become a normalized cultural practice in this space. They also understood that they could gain valuable feedback. In revealing her frustration and anger toward those who challenged her Mexican-American identity because she lacked an "accent," Mara shared a life text that was personally meaningful and important to her, but she also shared this specific scene with an audience that she knew included, based on earlier interactions on the forums, several students who were questioning the way people interpret accents.

This forum supported Mara's work, along the way, toward her autobiography. The process of publishing pieces without an immediate response demanded patience and wait time. Students had to wait for responses in small-group oral discussions or a one-to-one peer edit, a way that prompted students' examination and re-examination of their texts. Wait time created a context for students to re-read and re-write their language scenes and to ask for feedback from peers and Mr. Beck. Wait time runs counter to the

properties of speed and immediacy that dominate much of the discussion around digital media, yet in Mr. Beck's classes wait time was a salient dimension of the learning environment. Students confronted wait time on several occasions and in a variety of forms. For example, students experienced wait time when they posted something that they hoped would generate a response from a peer as well as when they shared something in writing but there was no expectation of a written response. In this instance, students debriefed their scenes with face-to-face conversations with peers and Mr. Beck and were given time in class for additional drafting. One piece of feedback Mara received was to re-visit Gloria Anzaldúa's *Borderlands*.

In and through peer-to-peer talk and re-reading of her scenes, Mara found new ways to challenge and talk back to classmates', friends', family members', and even strangers' expectations or assumptions that she would/should have a Mexican accent. Specifically, Mara dramatically revised the section of her language scene where she used stereotypically Mexican identities, "I love tacos, I have like a million cousins, I'm funsized like every other Mexican," in an effort to claim her Mexican heritage. In her final autobiography, Mara ended the scene with a more confident narrative about the unique cultural practices and strengths that are part of her identity as a Mexican teen growing up in the United States. Although she may not adopt stereotypical customs, "dressing Mexican, acting Mexican, or sounding Mexican," her culture is still alive within her. The end of Mara's autobiography reflected this from her drawing on ideas and confidence from her re-reading of Gloria Anzaldúa's *Borderlands*, with a confident embrace of her identity as a Chicano. Mara's final language autobiography retains the

brief exchange with her friend Mario who asks about her accent, but closes with the following:

I think that at times Mexicans teens that grew up in the United States are put down for not dressing Mexican, acting Mexican or sounding Mexican. People judge us without even thinking about what made us like this. Growing up in an entirely different country we face challenges. One of them is being able to stay true to our culture and keeping it alive within us. I refuse to forget who I truly am on the inside. Part of being Chicanos, is being able to accustom to a different country, different traditions and different people surrounding me and still being able to stay true to my Mexican side is what makes me a Chicano Sin Acento! (Mara, student writing, December 2011)

In Mara's final autobiography, she also extended her thinking about the complex relationships between language and identity by considering the ways in which she is also an outsider in Mexico, where she says she would be a "Frijolera Agrigada, A White Beaner," as well as the challenge and rewards associated with learning the English language.

The invitations that students had to write and make public their ideas in the making not only spurred their own processes of re-examining and re-writing, but also helped peers understand an idea that could be significant or true in their own experience or from their perspective that they had not yet articulated.

Facilitating Risk: "It Will Push You Further"

Adolescents' literacy practices in these classrooms created an important and radically new context, *in school*, for spontaneous risk-taking. Students' contributions within and across the multiple literacy spaces in these classes ranged from uncertain and hesitant to argumentative and challenging. Adolescents made choices within the context

of intense and difficult academic work that opened up or made visible aspects of their lives. Choices looked markedly different from one student to the next, but they shared in common students' efforts toward the expression of a unique self. On both ends of this spectrum, and at points in between, adolescents consistently put themselves in a position of some risk with their peers.

In their work *Understanding Youth*, Nakkula and Toshalis (2006) coupled adolescent risk-taking with creativity. They argued that "much of the adolescent risk taking is an effort toward creative expression, an effort to create an interesting and unique self" (p. 42). Central to Nakkula and Toshalis's work is developing ways to support teachers and counselors in what they refer to as the risk-creativity dialectic. They believe that schools and classrooms can play a critical role in creating challenges for youth that are risky, and in turn, a space for a powerful learning opportunity. Central to the risk-creativity dialectic is examining risk taking as a meaning-making activity. Viewed with Nakkula and Toshalis's framework, I found that the extensive production, sustained visibility, and constant exchange of ideas with peers that was characteristic of Mr. Beck's classes supported productive risk-taking in schools.

In these classes, adolescents' productive risk-taking was a critical component of their ability—individually and collectively—to maximize the opportunities available in this highly saturated context and to exercise their agency to shape this environment for personally meaningful and intellectually challenging learning. Risk-taking stemmed from and generated adolescents' power to negotiate what they produced in these classes and shaped how they grappled with and made sense of the significant ideas of the class.

"People Respond Instead of Judging"

The low stakes for entry, speed, accessibility, and visibility that were characteristic of digital media use in these classes in conjunction with Mr. Beck's pedagogical designs created a learning environment that encouraged and honored adolescents' spontaneous contributions. The following excerpt is from an interview about Asra's experience as a participant on the forums.

Asra:

We're really commenting back and forth. I think that using the computer for this is just much easier for us, not just the fact that we're used to it, but —yelling across the room and like, being angry at each other. I don't know. Here, we can just get out our thoughts and like, just calmly have a conversation. I think it's a better way to have a conversation that's school-based and like, not completely argumentative, it's a conversation. It's more of a conversation because you go back and forth and it's not like grrr, grrr, and like fighting each other.

Molly:

When you say it's a better way to have a conversation, better than what? Or, compared to what?

Asra:

Compared to talking out loud. Because on strong subjects like this and like racism and like religion and so forth, we all have strong ideas and we would kind of get angry and say something to insult someone and say "that's not right." Instead, on the forum, I just talked back to them, or I guess replied back because I gave them my ideas without getting angry. (Personal interview, May 12, 2011)

Students spoke at length about the ways the digital forums enabled constant interactions, often around difficult or culturally sensitive topics. Asra, for example, used words like "calmly" and "not completely argumentative," as well as "talked back" and "like fighting each other" to depict the tone of the digital discussion boards. I found that what Asra attempted to characterize was the kind of deep yet spontaneous intellectual engagement that was common on these forums. Even on some of the most challenging subjects and

subjects that are easy to avoid in high schools, these adolescents harnessed the unique properties and affordances of digital media to engage in sustained and sincere conversations with their peers and the teacher. These conversations reflected adolescents' risk and spontaneity as they negotiated their ideas, beliefs, and knowledges with their peers.

In the following excerpt, Asra elaborated on her description of the forums.

We're arguing but through a computer. It's more civilized. It's modern. Well, not modern, but it's more advanced compared to what we're used to. It's not common here in Philly or anywhere else in America, but to us it's a better way of getting our ideas out there without being judged for it. Because these are our thoughts and sure, we can be wrong, but people respond instead of judging which I think it a much better outcome of it all. (Personal interview, May 12, 2011)

Although these spaces were not necessarily judgment-free, students were willing to put forth ideas that are often easily judged. Students consistently offered ideas that tend to be avoided or withheld in high schools for a range of reasons, including but not limited to fear of judgment, fear of offending someone, fear of being "wrong." Or, borrowing from Adrienne Rich (2003), students "could be laughed out of school, set upon in the schoolyard, they would wait for you after school, they could expel you. The politics of the schoolyard, the power of the gang" (p. 34). Here, however, according to Asra, the "worst" that would happen is people would "respond." These classrooms were intentionally and carefully designed to accommodate and foster this kind of argument as places where real intellectual work could be accomplished. These spaces encouraged spontaneous risk-taking because the stakes of participation were lowered and participants' commitment and investment were thereby raised. Adolescents took seriously

the construction of their responsibility for creating a collective intellectual process unique to their individual interests, goals, and identities in school and the world.

In the language autobiographies, students published stories about language barriers with family, learning English in U.S. schools, struggles with dyslexia, growing up hearing with deaf parents and a deaf brother, living with autism, code-switching, being the family translator, and reconciling language differences between home and school. Students' commitment to make themselves visible and to be attentive to and responsible for others' contributions created both a space and a culture for the class's engagement in reciprocal co-authorship.

Spontaneous risk-taking, in tandem with digital media's speed and simultaneity, surfaced as one of the most prominent features of students' postings. This finding supports current research that suggests the significance of speed and reach (Moje, 2011), but I argue that spontaneity was equally significant to adolescents' new literacies in digitally rich spaces, as Asra indicates here:

At first you think, it would be weird to share an essay like *that*. But, you get used to it after a while. This is our second year having to deal with the laptop. Uploading stuff and having other people read it. And get feedback. It's kind of better that way, I would say, 'cause you get feedback and you get to make improvements on your work. I think it's a really good experience—it takes a lot of getting used to, but it's good in the end. It will push you further. (Asra, personal interview, May 12, 2011)

Asra's comment supported the finding that sharing one's work publicly was not immediately easy or comfortable, but that students not only grew accustomed to it but also relied on it. The kinds of improvements Asra flagged affirmed the important role of feedback from her fellow students. As Asra explained, "I think because you get feedback

from several different people and not just a teacher saying this is what you can improve upon—like with red marks—I think having people your own age say what you could change, it's probably a bigger influence on you" (personal interview, May 12, 2011).

Drawing on Selman's (1980) work on interpersonal negotiation, students' literacy practices represented a range of levels in Selman's framework of impulsive, unilateral, cooperative, and collaborative approaches to negotiation. Selman (1980) studied the actions adolescents took to meet their various needs within relationships. In his framework, Level 0 strategies are impulsive responses to one's environment and are enacted without significant thought about other social actors or potential consequences. Level 1 strategies are defined as unilateral. Unilateral strategies only hold on to one person's perspective. Selman (1980) described Level 2 and Level 3 as more sophisticated negotiation strategies because they indicate some level of mutual understanding. Level 2 was defined as cooperative, and Level 3, collaborative. According to Selman (1980), the primary distinction between the cooperative and the collaborative is that collaborative strategies, the highest level of interpersonal negotiation, exhibit reciprocity. In other words, adolescents' actions reflect that they are interconnected with others.

Building on Selman's (1980) findings, the actions that students took in Mr.

Beck's classes to meet their needs within relationships to their peers and the class as a collective can be seen as illuminating an emerging framework for interpersonal connectivity strategies. The most sophisticated approaches I observed illustrated high levels of relational awareness and adoption of a collaborative and relational stance with peers. Critical to my argument in this chapter, however, is that while students'

contributions were spontaneous, they were not impulsive or without thought. They were intuitive and direct as often as they were unknowing and uncertain, but they were not released without some understanding of potential consequences. The kind of spontaneity and risk-taking I found across adolescents' participation in these classes was in the service of and in direct relationship to individuals' work within the larger collective.

This Is "Not Okay"

Students had agency over when, how, and in what kinds of ways they made themselves visible to the collective. In these classes, individuals' risks might be facilitated in part by their peers. Students often asked questions that prompted or urged, intentionally or unintentionally, a peer to take a risk. The following selection is excerpted from one student's publicly posted language scene during the Language & Identity unit. Although all language scenes were expected to be published publicly and would be read by the class, written responses were not expected or required, since there was an opportunity for face-to-face feedback. The following scene, authored by Jamal, generated a response from two classmates.

Jamal: I was on the train when I overheard a very cool conversation.

Characters

Black guy

White guy

Dawg I bet I can beat you in any sport out there

Nah bro you can't, not football, nothing

Nigga I can beat yo ass in anything me and my dogs out here gonna rock yo ass

Dude come on me and my boys would destroy you in anything. (Moodle artifact, student writing, December 13, 2011, 8:25am)

Chantal: Not okay.

And you need quotations marks and need to identity the speakers of each person. (Moodle artifact, December 13, 2011, student writing, 8:29am)

Anne: we don't know who is saying what and when so fix it. Why did you

choose this one out of all the things you have seen or been through?

(Moodle artifact, student writing, December 13, 2011 8:34)

Jamal posted his language scene to the peer forum from his seat in English class. Chantal and Anne authored and posted their responses to Jamal's scene within minutes of his post. This quick response illustrated students' attentiveness to what was published on the forum. Importantly, since students were not explicitly required to respond to peers' scenes, it also demonstrates adolescents' commitment to or interest in their peers' work. Several students shared that they had developed a range of relationships over the forums, always being sure to read certain people's responses. Several other students mentioned that they often thought of specific people in their class when writing a certain post, with the hope that they would read it and start a conversation. I noticed that if people had not posted on time, people would ask, "Where's your post?" Similarly, when students posted late, it was common to see them apologize, not just to Mr. Beck but to the whole class.

Chantal and Anne were provoked by Jamal's language scene and exercised their intellectual responsibility by sharing their reactions and feedback with him. Both Chantal and Anne offered meaningful and honest feedback, and did not couch their remarks in any superfluous text. In Chantal's brief and immediate response, she said directly that

what Jamal was trying to do was not working for her. Chantal and Anne offered important recommendations that highlighted that both of them, who identify as Black, recognized the need to connect speech with the speaker and saw the dangers that come from writing in a way—especially in Jamal's context of a Black guy and White guy—that leads the audience to make assumptions about who says what. Finally, Chantal and Anne's interested response, although a challenge, illustrated that they cared about Jamal's contributions to the collective and felt some disappointment. The way in which these two students, acting on their investment and belief in Jamal, challenged him to develop this scene further showed how students' exchanges were deeply rooted in their existing and developing relationships.

Adolescents drew on prior relationships and knowledge to negotiate skillfully the range of interactions in these classes. The profound closeness that emerged in these peer-to-peer relationships grew out of meaningful, significant academic content. Students' beliefs, recommendations, and ideas were shared *and* received within the deeply situated, highly contextualized context of students' lives in these classrooms. Like Chantal and Anne, students took seriously their intellectual responsibility toward and for their fellow students' ideas and were willing to support them in thinking through and interpreting the ideas they put forth. Students made suggestions not to be dismissive, judgmental, competitive, or demeaning, but to help one another to critically examine the texts they produced and also to refine and reexamine their own beliefs and opinions.

In addition to the ways students offered feedback and evaluated peers' work, individual students also consistently engaged in self-evaluation. I saw that some students

posted language scenes, which were designed as in-process pieces toward their final autobiography, and then discarded them in favor of a new idea related to language and identity. These students were motivated to change course after reading additional scenes from their peers and further examining what their peers had to say about language and identity in light of their individual experiences and histories. Even silently or from a distance, the ideas of the group remained important to their ongoing thinking. I found that this new culture of literacy learning was centered around feedback and a constant give-and-take between and among students. The group functioned as a creative collective working toward rich intellectual pursuits. These students did not turn away from difficult, demanding, or challenging conversations. Indeed, they came to expect feedback as a critical part of this class. Mr. Beck shared his perspective on the role of feedback:

The overall idea being that you share thoughts with the creator of the work and that the creator of the work gets to take it or leave it. They should be thinking, examining each idea, but ultimately it's their work and they get to decide when it's helpful—when it's something that will improve their work and when it's something in the end, it's not the direction they're going or something like that. (Personal interview, June 3, 2011)

A central dimension of learning in Mr. Beck's classrooms was re-examining and rewriting critical, personal experiences and making these texts public. In an interview about the goals of his class, Mr. Beck said:

Re-examining personal experience and looking at personal experience through a much broader lens, a more analytical lens, and in the context of writing. So, being able to express oneself in order to develop the thinking on your own, then the ability to express that to readers in an engaging way and in a way that shares insight about whatever it is students are writing about. (Personal interview, April 29, 2011)

Students took risks as they encountered unfamiliar ideas or bumped up against ideas that challenged their current beliefs or ways of thinking. Students' risk-taking contributed to the quality of the work that was generated in these classes and how the classroom became a text open for examination, which facilitated critical literacy in these classes. Students' efforts to examine and reconstruct their personal experiences through a broader, sociocultural lens led to a routine naming and questioning of many taken-for-granted concepts or assumptions, such as "language is just language," "Black English isn't a language," or "improper" English connotes a lack of intelligence.

Students' ongoing negotiations with *each another* around sophisticated and demanding academic content in this structured, yet unscripted environment suggested a novel context for critical literacy. This critical literacy was distinct because the combination of adolescents' individual and collaborative inquiries was a powerful intensification of young people's ideas. The depth and quality of the work in these classes was linked to what *students* made visible to themselves, their peers, and the teacher. Students' ideas, within the context of the teacher's pedagogical design and structure, shaped and reshaped the classroom, relationships, and the curriculum. In an interview excerpt about an exchange on Moodle that stood out from class, Asra recounted:

I remember one time when Maureen said something like "I feel sorry for her" [a Muslim woman who wears the Hijab]. And I was like "what?" And so I responded, "why?" [She said] "because she doesn't seem to like it." So I said back, "If you want to, you could have asked someone who wears a scarf, someone like—I don't know—me!" And then, we just went into like a conversation and other people were like—kind of listening—as if we were talking. But I gave her my idea and tried to overflow her with information so she wouldn't just say "I feel sorry for her." Because, it's a religion. And sure, my religion is not exactly as I would like, but I'm trying to explain to her there's a good reason to as to why we do things. (Personal interview, May 12, 2011)

Here, Asra, who earlier had identified herself as a quiet student who rarely talked in class, exercised her agency as an author of the collective on these forums. This example shows how interactions via networked forums facilitated opportunities for students to come together to disrupt some dominant perspectives on matters like some Muslim women's cultural practices. The specific visibility, simultaneity, and individualized pacing afforded by this networked forum created a space in which Asra, in her own act of resistance, engaged Maureen's conventionally Western reading of a practice inextricably linked to Muslim faith. They leveraged the diversity of their perspectives and experiences not in an effort to come to a single fixed understanding, but to acknowledge the ways that Muslim women's dress is a deep-rooted cultural practice that has its own contextualized meaning. In the interaction Asra took responsibility to counter Maureen's interpretation and tried to explain the history and rationale of her religious practice. The interaction also prompted Asra to reexamine her own beliefs. This was risky behavior, but allowed students to "write back."

In these classes, relationships were fluid and actively shaped and reshaped the learning. In this new culture, I found that students, as much as the teacher, were responsible for creating the context for critical literacy. In addition to Mr. Beck's pedagogical design and selection of texts that intentionally challenged some of the power dynamics and social barriers in many habitual ways of being, students themselves created texts that were, by their choice, open for critical analysis. I found students' agency to launch such examinations to be a powerful critical literacy practice.

Current research suggests that digital media platforms facilitate dialogue and interaction across difference, arguing that digital forums can create a kind of "safe space" for students to tackle important questions or issues linked to adolescents' identities, specifically adolescents who are marginalized, particularly in middle and secondary schools, in some way (boyd, 2011). While this research is significant, my findings suggest that the potential of digital media to foster meaningful ways for adolescents to interact is maximized in hybrid environments, where networked spaces are tied to face-to-face exchanges. The identity work and collective knowledge generation I observed took place, primarily, in context with a peer audience that students saw not just in class or online, but in multiple interactions during the school day and in after-school activities.

Although there are several occasions when anonymity is necessary or desirable for adolescents, the new culture of literacy learning in these classes depended on sustained contact, over time, with *known* peers. This raised the stakes of participation because it could heighten students' sense of accountability to their peers. However, analysis revealed that the opportunity to engage in conversations with individuals in the spaces that youth participate in every day amplified the intellectual work and relationship building in these classes.

This finding offered additional support for the proposition that digital media, on their own, could not create a meaningful space where students were willing to engage in productive risk-taking; students had to actively build and invest in their audiences.

Although in its early stages, there is emerging research on the ways in which digitally mediated environments can help individuals to talk across differences. Some preliminary

evidence shows that there is a tendency for young people in digital forums without face-to-face connections to argue their position and point, but rarely to engage alternate views (Matthew & Raina, 2012). In an interview excerpt about the affordances of visibility that I observed in these classes, Mr. Beck noted:

So I think it's much more for the collective process in that way—the collective intellectual process. Whereas I think if your work is just your own and you write your own paper, and there's no discussion or pausing within there, I just think—I think the ideas are less developed you know. It's a fraction of students that have really sophisticated work at that point, versus a majority. (Personal interview, June 6, 2011)

Students' new literacies in this culture where participation was the norm magnified the possibilities for working with multiple peers through a variety of formats. Adolescents developed new literacies that leveraged both the "peer-to-peer" and "many-to-many" (Ito et al., 2010) connections supported by digital platforms. This culture of learning opened itself to the possibility that students were intimately involved in the creation, development, and maintenance of a collective of learners. This collective was built on and sustained by the intersection of multiple adolescents' rich literacies. Like the earlier case of Mara where her intellectual engagement with the concepts of language and identity were expanded because she drafted her ideas in the company of peers, she looked at her work from a Chicano-focused lens. Students used the porousness of these classes to facilitate an intimate network of learners. All the channels and all the production within and across such an intimate network led to a rich new literacy practice of productive risk-taking.

Conclusion: Who Has The Floor?

These digitally rich classes, as designed by Mr. Beck and engaged by students, included a sophisticated and thoughtful combination of face-to-face and online interactions that contributed to a new kind of learning culture. This new culture required adolescents to develop a whole new collection of literacy practices that were deeply relational and directly linked to students' intellectual work in school. The ways in which adolescents exercised their new literacies shifted the possibilities for relating to peers *in school*. In a learning environment that was not overly directed or overly structured and that leveraged the flexibility and porousness of digital media's communication channels, students became engrossed in real work with each other that relied on learners' memories, knowledge, and experiences. The ideas and relationships became a very text of the classroom that was open to interpretation and examination.

Students used their literacies to take a deeply relational stance toward one another and, consequently, figured out ways to create an extremely intimate space in which to talk to one another and help develop and extend one another's thinking. The intimacy of this space was not strictly censored and overly measured, nor did they have to produce a polished or brilliant contribution every time they spoke. The exchange of ideas and the interactions that students made visible informed the relationships in these learning contexts. Students drew on their new literacies to make spontaneous, candid contributions. A collective, composed of active, interested, and known peers, was significant to both the expansion of students' current literacy practices and the evolution of new literacy practices in these digitally rich contexts. The constant, ongoing collection

of students' writings dramatically shaped the intellectual activity and production in the classroom.

Chapter 7:

"It's more civilized": The Futures of Adolescents' New Literacies in School

Introduction

The question that sparked this inquiry and stayed with me for the two years I spent learning with and from the adolescents in Mr. Beck's classes is still with me today: In these digital times, what are the new possibilities for adolescents' literacies *in school?* As the federal, state, and district-wide debates continue around the role and purpose of technology in schools and about whether our investments in digital media yield measurable results in students' academic achievement or not as defined by standardized tests, I consider what I learned from the adolescent participants in this study about the roles and purposes of digital media in their English and History classes. These adolescents, whose voices are largely absent from debates on digital media in secondary schools, have much to teach us—educational researchers, practitioners, and policy makers—about the complex, multiple new literacies that shape youth's everyday meaning-making and literacy learning in digitally rich classrooms.

In response to Moje's (2002) call to recognize youth as a resource in the study of adolescents' literacies, I will use this final chapter to share what I learned from these adolescents about their new literacies in these digital times and the implications of my findings for research, policy, and practice. I call upon these youth, then, to help re-frame the debates about digital media from discussions of control and censorship to those of flexibility and literacy possibility. Although my emphasis was intentionally on the

perspectives of participants, because of my immersion in the context, my perspective as an outside observer was essential to my analysis. To begin this closing chapter of my dissertation I want to return to Asra's comment that this learning environment was "more civilized, more modern." As Asra further explained, she thought the learning environment in Mr. Beck's classes was more advanced than in other schools and speculated that "it's not common here in Philly or anywhere else in America." I found that what Asra refers to as modern, civilized, and advanced are the rich and varied literacy practices that young people in Mr. Beck's used to engage and participate in this educational context. As we near the middle of the second decade of the twenty-first century and confront an increasingly digital and networked society, we have the opportunity to harness digital media to expand adolescents' literacy opportunities in school and to push what counts as literacy learning in secondary schools. I present what I learned from Asra and the over one hundred other adolescents in Mr. Beck's classes in order to offer images of the richness of adolescents' new literacies in school and some of the ways those literacies were used/activated/leveraged in tenth-grade English and World History classes for deep and sustained participation and engagement with others.

In this study I aimed to understand what happens when *all* the resources and mindsets that adolescents who have grown up in these digital times carry with them are brought to bear on learning in formal educational contexts. My study of eight tenth-grade English and History classes in a digitally sophisticated school that invited adolescents' ways of thinking/being/learning into the classroom revealed a diverse range of new spaces, times, and interactions that reshaped the classroom environment. I found that

what students do to participate in these kinds of classrooms constitutes new literacy practices.

These literacy practices radically alter the learning potential of the classroom environment, suggesting a new culture of literacy learning. This culture is distinguished by the collection of endlessly varying and rich language and literacy practices. These literacies make students' audiences as well as their responses to ideas highly visible. Increased visibility contributes to heightened accountability to peer audiences and the potential to alter students' relationships with one another and the various ideas and concepts of the class. I argue that these new literacies are changing the culture of literacy learning in schools in ways that require a reconceptualization of adolescents' in-school literacies, classroom practices, and pedagogy.

Summary of Findings

I present three distinct dimensions as a way to make sense of this new culture of literacy learning. On their own, each dimension refracts one unique reading of the new literacies that these adolescents used/developed/created to participate in the intellectual work of these English and History classes. Together, these three dimensions build our understanding of the potential for literacy learning in digitally rich schools. I refer to these three dimensions as: Noise, Navigation, and Negotiation. I will briefly summarize the central findings of each dimension.

I refer to the first dimension as Noise. Noise is a metaphor to capture the intense, multilayered, and highly saturated learning environments in these digitally sophisticated

classrooms. At any moment in these classes, there existed the possibility for students to access multiple sources, communicate with a wide range of people inside or outside the walls of the classroom and school, and engage in a range and variety of modes and texts. Whereas noise is often understood as an interference to a learning environment, in these classes noise *was* the learning environment.

I found that Noise was a functional space for literacy learning. The density of texts in these classes, including texts authored by students as well as outside authors, required students' constant attention and active engagement with the ideas of the texts. The abundance and simultaneity of texts, talk, and written discourse contributed to students' becoming critical readers of multiple kinds of texts, raising important questions about who authored a text, when, and for what purposes. Leveraging what we already know about digital media's capacity for participatory cultures and collective intelligence, students in these classes positioned themselves as knowledgeable participants and credible co-authors of the class curriculum. Students' engagement with the range of open channels for communication developed a new literacy practice that encouraged students to make themselves visible to their audiences of known peers. Embedded in this literacy practice was a willingness to be uncertain and to make oneself vulnerable to a conflict. These literacy practices worked together to build an environment of critical literacy.

The second dimension, Navigation, represents a whole new way to learn in school. Specifically, this dimension illustrates the repertoire of moves, tools, roles, and responsibilities that students develop in order to maneuver purposefully in this space. The

collection of moves, tools, and roles that were highly normalized in these classes at Big Dipper did not fit within any typical categories or understandings of "doing school."

I found that this repertoire is itself a rich, fluid literacy practice that students constantly refine and adapt in order to participate in the intellectual goals of the class. To learn in this kind of saturated context, adolescents needed to learn how to exercise their individual agency and task orientation within a collaborative environment. The new literacies refracted by the concept of Navigation are how students direct their own learning paths in these profoundly collaborative environments. Students are responsible for choosing and exercising their agency productively. Taken together, this repertoire shows us that what students were doing was more than a collection of insignificant or unintentional moves, but rather a uniquely tailored, constantly evolving literacy practice.

Finally, Negotiation makes apparent the profoundly social dimension of literacy. I found that the literacy practices that were part of this learning context foregrounded this social dimension because students were constantly interacting with others in these classes. In these classes adolescents were part of a learning experience in which they were intricately linked to a collective of literacy learners, each of whom played a vital part in developing a collection of rich and varied new literacies that altered the kinds of intellectual work students generated in these classes. What is critical to this dimension of the new culture is not simply the proliferation of student-generated texts, but also the role these texts played in relationship to the intellectual work—individually and collectively—involved in any academic unit. Adolescents expected, relied on, and needed

the multiple layers of texts, authorial perspectives, and distributed information to negotiate productively the people, ideas, texts, and curriculum in these classes.

The combination of students' visibility to peers and the endlessly varied opportunities to engage this space for inquiry—individually and collaboratively—reflected the ways in which these classes supported adolescents in the process of creating themselves and the classroom, peer groups, communities, and worlds they inhabit. The distinct pedagogical designs and spaces of these classes supported a space for students, together with their peers and Mr. Block, to co-author (Nakkula & Toshalis, 2006) their educational stories and adolescent development. I found that in these digitally rich learning environments that were not overly scripted, students developed a collection of literacy practices that uniquely leveraged new media's open communication channels to engage with their peers around significant issues and intellectual risk-taking. The ideas and relationships that students made visible became a rich text of the classroom that was open to feedback, including critical interpretation and examination.

Discussion

This new culture of literacy learning radically altered the ways in which these adolescents "do school." The collection of new literacy practices I found was fundamentally linked to adolescents' individual work within a collective of learners. The new literacy practices reflected across all three dimensions of this new culture suggest the intricate ways that adolescents in these classes not only collaborated with one another, but also co-authored, consistently, the educational and life texts of these classes.

The affordances of digital media and the seemingly endless opportunities for students to build relationships, negotiate ideas and identities, and take intellectual responsibility with invested others runs counter to the more individualistic system in our nation's high schools that places emphasis on individual grades. This is not to say that the individual student is irrelevant or that teachers should deemphasize the role of an individual student, but rather that, to maximize the literacies facilitated by digital media, individuals must be situated in and recognized as contributors to the broader collective of students. Adolescents' individual identities, perspectives, and beliefs, as well as their experiences, memories, and life texts, were vital to these literacy practices. Yet, individual students were always operating in relationship to and in collaboration with a peer group. This peer group was invested in the intellectual work of the classroom. It mattered deeply to the work of the class that students saw themselves, inevitably, in relation to their peers and were willing to make their lives, identities, and ideas visible to peers in ways that provoked significant, difficult, and challenging literacy work.

Students in these classrooms were writing their way into new formats and new genres of writing. From the explicitly shared, co-authored Google Doc to the single authored, yet threaded, collective online discussion forums, students were engaging in a range of literacy practices that are not typically recognizable as part of a high school curriculum. I found that the kinds of intellectual conversations and academic work that were possible with/when digital media used in pursuit of *creating* and *accessing* rich content were dramatically expanded.

This builds on the NML's explication of the "innovative" trait of the new media landscape (Jenkins, 2006). The innovative trait aims to explain the ways that new media promotes and supports social and aesthetic experimentation. This trait is particularly significant because it emphasizes how each new technology comes with a range of different uses that encourages a variety of responses and is taken up and used by a diverse group of users. Within and across the classes, I found that individual students, small subsets, and individual class cohorts had different ways to take up digital media and, inevitably, created different completed pieces. The expansion of possibilities broadened students' options for creation and expression, for example, the persistence and salience of students' lateral citations of their peers. This kind of move can only come with a familiarity of the range of ideas that others have posted and an effort to understand those ideas, emphasizing how students are becoming close readers and re-readers of their peers. Although in many of the cases, students were taking up critical issues and ideas that are recognizable as important parts of a high school curriculum (e.g., age of exploration, descriptive writing), there were an extensive number of ways to write about, respond to, and discuss those ideas. This maximizes students' experiences of different kinds of tasks and assignments, invites students into a range of sophisticated literacy practices, and diversifies production.

This raises important questions about how we define "success" in these kinds of classrooms and, in turn, how we understand the range of student "success" in this culture and how we assess what students produce, both individually and collectively. We need new language to describe co-authorship as well as individual writing/pacing in an

explicitly collaborative context, and we need to consider seriously how to respond to composing environments that have multiple authors and multiple media.

The role and value of the collective intellectual process relates closely to my finding about the power of public, visible writing among peers in school. This finding on public writing and the role of audience stands in stark contrast to most of the writing that happens in high schools. In James Britton's (1970) study of the school writing for 11- to 18-year-olds, 99% of students' work was written for the sole audience of a teacher. In 2012, it still is the case that most students' writing is negotiated solely between the students and the teacher. I found that digital media radically increased students' awareness of different audiences in their writing and also pushed students to recognize their critical role as audience members and responders. I found that this literacy practice was not easy or without struggle and conflict. Students reported a wide range of responses to this, from excitement to hesitation to fear, but for all students this practice became a routine literacy practice. In this culture, where public writing was cultivated as a literacy practice that invited inquiry and uncertainty and, over time, created a space where students could share ideas that were knowingly not pinned down and where students, by design and by choice, did not have to come to a universal or shared understanding, students built their individual and collaborative inquiries. This literacy practice included a mindset of healthy intellectual and personal risk-taking among peers. Several students came to see the role of feedback and the value of other students' perspectives. The visible and public nature of writing in this space overlaps with several questions in the field of digital media about public and private domains and suggests the

need for further research about the role of the public in digitally rich public school classrooms.

The co-authored writing that was prevalent in these class contexts as well as common remixing and "poaching" (Jenkins, 1992) practices surface important questions about our long-standing conceptions of authorship and specifically regulations around intellectual property rights and copyright laws. Several scholars (Black, 2009; Jenkins, 1992) have discussed the bricolage, mixed-media genres, and "cross over" (Black, 2009) genres that are widespread meaning-making practices in digital contexts. Some scholars (Lessig, 2005) have argued that intellectual property acts as a hindrance to the kind of imaginative, intellectual, and creative capacity of young people's digital media literacies. Student writers have access to multiple networks of communication and informationsharing that continuously publish and circulate texts that are instantly available and usable. Although students are cognizant of intellectual property laws and work to honor them, the remix culture of digitally mediated communication and participation is at odds with most current regulations. The co-writing, co-construction of knowledge, and remixing of available textual resources from a diversity of authors both inside the classroom and outside the classroom, are illustrative of the new literacies and suggest the need for a reconsideration of authorship and ownership in these digital times.

This culture of learning, specifically the ways in which new literacies encouraged the constant production of texts and ideas, enabled students to co-construct the curriculum with the teacher. Students' lives were treated as real texts of the class curriculum and thereby positioned as knowledgeable contributors to the content of the

class. There was no question that students were authors in this classroom and responsible for generating texts to build and contribute to the intellectual work. One important question for discussion is: What counts as listening in this kind of saturated context? The kind of production that unfolded in these classrooms illustrated students' agency as authors and idea generators as well as knowledgeable and valuable members of a participatory community. As I mentioned, this facilitated students' productive risk-taking that enabled students to recognize the ways in which their identities and social and cultural histories as situated and context-specific and rooted in various power relations. This offered the teacher and fellow students powerful insights into one another's world-views and how they were engaging the various goals and ideas of the class, but it raised questions about the teacher's capacity for response. The question that surfaced consistently is how students and teachers are responsible to all of the ideas that are generated.

How do we build pedagogies that are responsive to the saturation that was characteristic of this learning environment? Students' constant production intensified the ways in which students were positioned as authors and knowledge generators and the kinds of relationships that were built between and among students. Despite the affordances of students' constant production and distribution of texts, we need to think about how teachers make sense of and respond to these texts. Adapting the idea of culturally responsive pedagogies, I wonder what important approaches we need to consider as digitally responsive pedagogies. As we reimagine pedagogies and support teachers to build curricula that embrace the flexibility and openness of new media, we

will need to think further about how new pedagogies are responsive and responsible to texts that are generated because the context is open, inviting, and non-punitive.

Throughout this study and my observations in Mr. Beck's classes, I was simultaneously engaged in reimagining my pedagogies as a graduate school instructor and constantly looking for ways to extend my own digital life. The opportunity to spend two years immersed in a culture where digital media was ubiquitous dramatically expanded my digital repertoire. Nearly every day I observed at BDA, I learned a specific new move and/or tool that spanned from how to make a podcast on GarageBand to learning about the attributes of an application like MacSpaces. Over the course of this study, I grew more comfortable with a range of new media technologies, but more than claiming proficiency or sophistication with any specific practices, I learned how to commit to and accept the trial and error that are essential to any digital repertoire. The study, particularly my findings about public writing and making oneself visible, pushed me and supported me in going public with my own work and writing. Finally, a specific by-product of this study was my design of a new graduate-level course at the University of Pennsylvania titled Digital Literacies. My study fueled my interest in developing a course for current and future teachers to think about the role of digital media in classrooms and schools and how to support teachers in maximizing the benefits of digital media. Mirroring much of what I have observed at many public schools, digital media have hovered on the periphery of many graduate-level courses in education.

The development of the course pushed me to redesign my own pedagogy. I integrated, recognized, and used a wider range of new media throughout the course and designed several lessons that required that students tinker with various digital media. Furthermore, this class created a space in which I could think more deliberately and seriously about developing a new kind of pedagogy for middle and secondary schools in light of the shifting landscape of new media and how to support teachers who are just starting to think about the salience of participatory cultures, anytime anywhere contact and public writing in relationship to their classrooms and school communities.

Finally, it is important to address the idea of "relevance" in relation to new media in schools. Although I found it significant that these learning contexts are in tune with the new media literacies that are part of adolescents' everyday lives out of school and work in the service of making school more relevant for young people, I argue that more significant than whether the media is relevant is how the pedagogical design draws on new media's close connection to adolescents' lives. In this study, new media are drawn upon to refashion the very school day by building classrooms committed to a collective intellectual process.

Implications for Research

This study presents one rich portrait of adolescents' experiences in digitally rich English and History classrooms. In order to further our understanding of how young people are experiencing new media as part of their lived reality of "doing school" and our understanding the collection of new literacies for adolescents in secondary schools, we

will need more rich portraits of the ways adolescents engage digital media in classroom environments. In order to redesign classrooms and schools and revise curricula and pedagogy, we need additional research that studies adolescents situated in a wide range of digitally rich classrooms, and classrooms that are situated in a wide range of schools and geographical locations. My work is one start to thinking about adolescents' literacy practices in classrooms in which new media are ubiquitous. BDA is just one kind of school, Mr. Block's classrooms one pedagogical approach, and the youth one group of digital youth. In order to extend what we know about how adolescents engage and make sense of such novel contexts, we need additional portraits of young people's literacy practices in digitally rich schools.

The results of this study also suggest that we need for additional research that carefully traces the kinds of literacy learning ecologies that are sustained by this new culture of literacy learning. As I mentioned, I found that adolescents were part of an intricate network of learners, texts, and literacy-learning events. To study all the resources and literacy practices that adolescents bring to bear on these kinds of learning environments and the range of ways adolescents interact with others, we need additional studies that draw on new research approaches and methodologies to follow the multiple, simultaneous ecologies that are part of this school environment.

Implications for Theory

This study has important implications for theory. How do we use digital media to re-theorize new literacies in school? Given the collection of new literacy practices I

found in these in-school learning environments, this study puts forth a revised framework for what it means for adolescents to be "in school." Knowing that young people are, and will continue to be, learning within the formal context of schools, we need to rethink how adolescents "do school." New theoretical frameworks are needed in order to understand the literacy work that young people are doing. This study contributes to the important work of other scholars of adolescent literacy (Alvermann & Hinchmann, 2011; Moje, 2002; Moje, Overby, Tysvaer & Morris, 2008) that take seriously what youth can teach the field about literacy practices. The contributions that youth made to this study represent one group of adolescents in one school in the urban context of Philadelphia. Educational theory, specifically as it relates to adolescents' literacy practices in school, has much to learn about youth, but also *from* youth. This study suggests the need to develop theories that make space for adolescents to contribute what they know about the complex new literacy practices that are part of their everyday lives in school.

Implications for Practice

This study has several implications for practice. First, the multiple new literacies that contribute to this culture of literacy learning are embedded in a radically revised pedagogy. This new culture is not simply about using digital media within existing curriculum or pedagogies, but is rather altering current pedagogies and approaches to curriculum. This study suggests that in order to maximize digital media for the kinds of rich and varying new literacies I found in these eight English and History classes at BDA, teachers of adolescents will need to teach in radically new ways. The new literacies will

require us to develop curricula and pedagogy that can cultivate and adapt to these new literacy practices in schools. Within teacher education, we will need to develop new ways to support teachers of English and the Humanities to design and enact curriculum that are rich, provocative, and challenging, but also engage new media in ways that will be flexible and malleable to the new literacy practices.

The new pedagogy required here demands that teachers adopt a kind of uncertainty and flexibility in the classroom, particularly with regard to new media. The results of this study found that the teacher needed to adopt a stance in which he had to "loosen up the reins" and let go of some of his time-honored approaches to and systems for teaching and learning in his high school classroom. Like the students, Mr. Beck developed a repertoire of moves, tools, roles, and responsibilities that enabled him to teach in this learning space. Although Mr. Beck's repertoire was not the focus of this study, I observed that his collection of moves and tools were continuously examined, refreshed, and revised. Furthermore, this repertoire dramatically expanded many of the roles and responsibilities typically associated with being a teacher.

There is increasing concern among some educators that digital learning and online teaching and learning will substitute, reduce, or eliminate teachers. Others raise concerns that teachers may not be needed "as much" because of what can be discovered and learned online. The sophisticated collection of literacy practices that Mr. Beck developed to teach in this culture of learning suggest that designing with and for digital media demands *more* of teachers. For example, the additional possibilities for how Mr. Beck could showcase student work could become an additional pressure for teachers. Mr.

Block explained that one of the affordances of digital media was that it allowed student work to "go viral" or "get beyond" the classroom, especially to people across the school community and students' families. This raises important questions about our expectations for teachers in these digital times and about how schools and districts will support teachers to meet these expectations. This study suggests the need for teacher education programs and ongoing professional development opportunities in schools, and districts will need to develop ways to both encourage and support teachers as they learn to flip some of the traditional roles and responsibilities of the teacher to the student and to help students design for flexibility and freedom.

This study raises important questions about assessment and evaluation. How do we evaluate and assess these multiple, frequently simultaneous literacy practices in school? The teacher in this study, like other high school teachers around the country, was not exempt from assigning students grades and assessing the students' intellectual engagement and academic work. We need to rethink the ways we assess learning in this new culture and take seriously the challenge to develop ways for secondary school teachers to evaluate and assess learning that is individual, yet collaborative, deeply relational, and rooted in students' commitment to collective intellectual processes.

Implications for Policy

In the face of the set of new literacy practices that digital media facilitated, required, and developed for adolescents' in these novel learning environments, we need to shift the frameworks and measurements that tend to be used to determine whether new

media "works" in schools or not. Consistent with the current era of high-stakes testing and accountability, new media's effectiveness and usefulness in schools is primarily linked to student achievement on state standardized tests. This study suggests that the affordances of digital media are the set of literacy practices that students engage in and through their participation in this learning space. The value and meaning of these literacy practices for adolescents' learning are not linked to or measurable by current tests. This study also suggests that the use digital media in schools is also not about learning specific, discrete technological skills. Although the results of this study found that students had to learn new technologies and develop fluency with a range of new media tools, it was always in the service of learning significant concepts or ideas. This suggests that we pull back on current policy initiatives to develop tests that evaluate iSkills, "21st Century" skills, or digital literacies. A final implication for policy is to suggest that new media and digital technologies are not a "luxury" for affluent schools or a resource to be distributed in a discriminatory fashion based on students' achievement levels. This study suggests that digital media has the potential to support and extend all students' literacy practices.

Closing Considerations

One of the adolescent students co-authored the title of this chapter. As I reflect on all that I have learned with and from these students, I hear the Asra's words again—
"more modern, more civilized"—and I am reminded how much these adolescents have taught me about going to school in this kind of text-rich, collaborative, and dynamic

learning environment. These adolescents' sophisticated and constantly evolving repertoire of new literacy practices illustrated the potential for a radical reconceptualization of "doing school." These new literacy practices both constituted and required the possibilities for a new culture of literacy learning.

I hope that what I learned from watching these young people engage this culture for intellectual work in schools will inform work in other classrooms and schools as well as educational research and policy about the range of ways to design for productive, challenging, and meaningful literacy learning in digitally sophisticated schools. Asra later told me, "If you see people, your people—15 year-olds—doing such amazing work it makes you strive to do better" (personal interview, May 16, 2011). I hope that my work with the collective intellectuals in Mr. Beck's classes can help us strive to do better in how we imagine and design for literacy learning in secondary schools.

Appendix 1.A: Examples of Web 1.0 and Web 2.0 Internet-Based Applications and Approaches

Web 1.0		Web 2.0
Ofoto	>	Flickr
Britannica Online	>	Wikipedia
personal websites	>	blogging
publishing	>	participation
content management systems	>	wikis
directories (taxonomy)	>	tagging ("folksonomy")
Netscape	>	Google

Note. Adapted from What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software, by T. O'Reilly, 2005. Retrieved October 19, 2009, from http://oreilly.com/web2/archive/what-is-web-20.html.

Appendix 1.B: Examples of Mindsets 1 and Mindset 2 in the New Literacies

Framework

Mindset 1 Mindset 2 The world is much the same as before, only The world is very different from before more technological, or technologised in more and largely as a result of the emergence sophisticated ways. and uptake of digital, electronic internetworked technologies. • Value is a function of scarcity • Value is a function of dispersion • Production is based on an "industrial • A "post-industrial" view of production: model": Products are material artifacts and Products as enabling services; A focus on leverage and non-finite commodities; Production is based on participation; Tolls are increasingly infrastructure and production units are tools of mediation and relationship centers (e.g., a firm or a company); technologies • Tools are mainly production tools • The focus is increasingly on "collectives" as the unit of production, competence, intelligence • Expertise and authority are distributed • The individual person is the unit of production, competence, intelligence and collective; hybrid experts • Expertise and authority are "located" in • Space is open, continuous and fluid individuals and institutions • Space is enclosed and purpose specific Social relations of emerging digital media are increasingly visible; texts in change • Social relations of "bookspace" prevail; a stable "textual order"

Note. Adapted from *A New Literacies Sampler*, by M. Knobel and C. Lankshear, 2007, New York, NY: Peter Lang.

Appendix 2.A: "Laptop and Tech Help" Page on Big Dipper Academy's Moodle Page

Lappie broken?

Go to 306 ONLY after school

Need an application?

Go to 306 ONLY after school

Home wireless not working?

IM or call Ms. Throne for help.

[im] msthrone@me.com

[txt] 215.1234567

[e] msthrone@bigdipperacademy.org

[mm] write me a Moodle message [mm] to msth

Can't understand something on your computer?

Use the google

Where do your printed documents go?

• Ask your teacher if they have a networked printer and get the IP address.

- Enter the IP address in your printer preferences in System Preferences
- All other printers will need to be plugged into your laptop with a USB cord.

Laptop Tips

This laptop, battery, and charger are property of the school that is being entrusted with you. You are responsible for keeping them in good condition and protecting them from harm. Take care of your laptop and it will take care of you.

You must pay:

\$85 to insure your laptop at the start of every year

The first \$100 of each insurance claim.

\$80 to replace a lost or abused charger.

Your Laptop

DO be gentle with your bag when your laptop is in it

DO keep your laptop clean

DO protect your laptop in the rain

DON'T lay the weight of your books on your laptop

DON'T eat over or around your keyboard

DON'T leave your laptop unattended, even at school!

Your Battery

Your battery is only warrantied by Apple for 300 charge cycles. After that, a replacement battery will not be available. If you take care of your battery, it may still hold 2 hours or more when you're a senior.

- **DO** plug in your laptop when an outlet is available
- **<u>DO</u>** let your battery drain completely at least once per month
- **DO** turn of your airport when not in use
- **DO** dim your screen to the lowest comfortable level

Your Charger

Lost or damaged chargers must be replaced at the student's expense.

- **DON'T** wrap you cord too tightly
- **DON'T** allow pets near your charger
- **DON'T** let chairs roll over your cord, or even leave it on the ground near rolling chairs
- **DON'T** let anyone **EVER** borrow your charger
- **DO** prevent the ends of your cables from being bent excessively
- **DO** wrap your cord when your charger isn't being used

Technical Support

Ask your friends! Search online. If all else fails, come visit the tech squad (room 306 after school) - be prepared to demonstrate your problem.

Broken Laptops

Bring your laptop to the tech squad <u>(room 306 after school.)</u> Most common problems will be repaired for free under Apple's warranty. Any physical damage however will be your responsibility to pay for. Your laptop insurance will cover everything after the first \$100 of such a repair. Structurally damaged laptops must be turned over for repair as soon as possible or the damage may spread.

Spill Recovery

- Disconnect power adapter and remove battery immediately.
- Pat dry all liquid on your laptop and in the keyboard.
- If liquid spilled into the keyboard, lay the keyboard face-down on an absorbent cloth with the screen open over the edge of a table.
- Get the laptop to a technician as soon as possible after drying it.

Appendix 2.B: Interview Protocol

Molly Buckley

Ph.D. Candidate

Digital youth in digital schools: Adolescents' literacy and learning in School 2.0 classrooms

Interview Protocol

Introduction

Thank you so much for speaking with me. You have been selected to speak with me because you were identified as someone who has a great deal to share about literacy and learning in digitally rich spaces. My research on the whole focuses on the trying to learn more about the role and meaning of going to school in a classroom and school that use a wide variety of media to support the learning environment and that draws on your own experience with digital technologies. I am interested in learning more about the choices you make in the classroom surrounding new media and your literacy practices in these classroom-based spaces. My study does not aim to evaluate your work or experiences. Rather, I am trying to learn more about the role it plays in your school life.

I want to let you know that all information you share with me today will be held confidential. I also want you to emphasize that your participation is entirely voluntary; you may stop at any time if you feel uncomfortable. To facilitate my note-taking, I would like to audio tape our conversation today. I have planned this interview to last no longer than one hour.

Thank you again for agreeing to participate. Before we get started, do you have any questions or concerns?

Questions

I. Interviewee Openers/Background Questions

- a. Where did you go to school prior to BDA?
- b. How would you describe the kinds of technology that were used in that space?
- c. Possible follow-ups: How would you compare the technology in your old school to this school? Can you give me an example? What were some of the challenges to transitioning to the technology at BDA? What were some of the highlights?

II. Questions

Part I: General: What stands out?

- a. What was the most memorable part of the year for you in Mr. Beck's class?
 - i. What stands out most about it?
- b. Can you describe the project (or unit or lesson) to me in your own words?

Part II: The role of new media

- a. Tell me about some of the greatest benefits of the technology at BDA? b The greatest challenges?
 - i. Does it ever "get in the way"? Can you give me an example?
- c. What do you perceive to be or believe to be the goals of having technology as part of the everyday life in school?
- d. What do you feel like you are able to do because of the technology?
 - i. Can you give me a specific example?
 - ii. Walk me through this example?
 - iii. What makes you say that?
- e. How does the technology play out in day-to-day interactions in the classroom
 - i. And at home?
 - ii. When you are sitting behind your screen, tell me what's typically going on? How do you manage your life behind the screen?

Part III: New media with others

- a. In what ways does technology inform the kind of group work you do in school and at home?
- b. How do you interact with your peers via technology?
 - a. Can you think of an example?
 - b. What are the benefits to technology and collaborative work?
 - c. The Challenges?
- c. Can you tell me about a particularly significant moment that has something to do with the use of technology in schools?
 - a. What makes it significant?
- d. What are some of the major challenges you have faced as a member of this class?
- e. What are some of the greatest opportunities you think you have had as a member of this class?
 - a. Follow-up: How have you addressed those challenges/opportunities? Can you walk me through the steps you took to address that challenge/capitalize on that opportunity?
- f. How would you describe your relationships with other group members?
- g. Can you tell me more about how you interact with each other during class and online?

Part III: All-inclusive: Is there anything else you'd like to share with me?

Appendix 3.A: Age of Exploration/Scientific Rev/Renaissance Unit Plan

Establish Goals:

Understand key events of and larger issues relating to the Age of Exploration, Scientific Revolution, and Renaissance

Understandings: Students will understand that...

- This time period expanded many people's understanding of the world
- This time period changed the way that many people viewed the world in terms of individuals, societies, and systems.
- Historical interpretation is as influential as history itself

Essential Questions:

- In what ways do ideas change people's lives?
- Why is change sometimes fast and sometimes slow?
- Can ideas change the world?

Students will know . . .

- Native cultures before, during, and after
- Different perspectives on Cortes's explorations
- Galileo's discoveries and the response
- Changes in the way art was created and how this reflected changing thought
- Enlightenment philosophers and different ways that they explained the world
- Europe is given much credit but many of the European discoveries and ideas were assimilated from other cultures.

Students will be able to . . .

- Know specific information about a Renaissance artist
- See how Enlightenment philosophers viewed the world

Performance Tasks:

- Age of Exploration Maps
- Columbus Research and Trial
- Galileo Packet & Journal Entry
- Artist Response Paper
- Philosopher play with annotations
- Museum trip

Other Evidence:

- Gladwell reading and journal
- Renaissance artist exploration
- Philosopher research
- Machiavelli reading & response

Learning Activities:

Inquiry- Questions for trial, Connections between philosopher & modern society

Research- Info for trial, philosopher research

Collaboration- Trial groups

Reflection- Play cover sheet

Presentation- Trial

Appendix 3.B: Cortes Trial Charges

Cortes Trial

Indictment: You are charged with the destruction of Aztec civilization and the mistreatment and murder of thousands of Aztec Indians.

Cortes

While living in Cuba, you became a man of substance with a repartimiento (gift of land and Indian slaves), mines and cattle. This shows that from the beginning you had no problem accepting stolen land and believing that you had the right to own other human beings.

You followed the orders of Diego Velázquez de Cuéllar (even after they had been revoked) and went to claim land in Mexico for the Spanish crown, an empire thousands of miles away.

From the beginning of your time in Mexico you massacred unarmed Indians.

Your journey shows that your only wish in Mexico was to find gold, acquire wealth, and establish a Spanish colony on Indian lands.

Cortes's Men

Without you Cortes's orders to kill Aztecs would have been empty words.

You did the dirty work. You raped, killed and tortured.

You may try to blame your superiors, Cortes, or even King Charles V. But because someone orders you to commit a crime does not free you of the blame for committing it. You could have said no. There were Spaniards like the priests Antonio de Montesinos and Bartolome de las Casas, who refused to mistreat Indians and spoke out on their behalf. Why didn't you?

Without the soldier there is no war. Without you there would have been no genocide.

King Charles V

Without your support and endorsement, Cortes couldn't have launched his plan to conquer Tenochtitlan. Without you he was an unemployed sailor.

You encouraged him and others like him to "discover" and claim new lands. Thus you are guilty of conspiracy to steal the territory of people you didn't even know, who had never bothered or even harmed you.

Really, you didn't care what Cortes did, so long as you got rich. At the time you could have ordered that the Indians be treated humanely. But you took no action to stop the Indian genocide. Had you wanted the cruelty to stop you would have ordered all your subjects home. But then you wouldn't have gotten any more gold. And that was what you wanted, right?

Because you were the boss and you paid the bills, you have more guilt than had you been the ones wielding the guns and swords.

Aztecs

While you are the victim of this crime, you are also guilty of committing it. You failed to effectively fight back against the Spaniards. This meant that you brought the fate of death upon yourselves. How can you explain the destruction of your vast civilization by such a small number of Spaniards?

From the very beginning you must have known what Cortes meant to do. He claimed your land as his own. He was interested only in finding gold. When your people were cut by Spaniards swords he and his men showed no concern. All this you must have known.

Who knows why the Aztecs did not throw out all the Spaniards? Had the tribes worked together and not fallen for Cortes's tricks they might have beaten the Spaniards.

However, as a result of this Native failure, all the Native peoples of the Americas suffered.

The System of Empire

This gets complicated. You are not a person but a system. We like to blame crimes on people, but in this case the real criminal is not human.

True, Cortes's men did the killing, Cortes gave the orders and King Charles V took the profits. But what made them behave the way they did? Were they born evil and greedy?

The real blame lies within a system that values property over people.

European society was organized so that an individual had to own property to feel secure. The more property one owned, the more security, the more control over one's destiny. There was no security without private ownership or property. If you were poor, you could starve. The Aztecs were not perfect, but they had no "poor" and no one starved. Indians commented that Europeans' love of gold was like a disease. In fact, this attitude was the product of a diseased system.

In order to get more wealth, Cortes and his men committed horrible acts against the Indians. They justified this by telling themselves that the Indians weren't Christian, so "we" can control "their" land and labor. The European system saw only white Christians as full human beings.

It was life in a system that valued private property, (especially gold) and approved of violence against foreigners and non-Christians to get it, that made Cortes and his men enslave and kill. Sane people do not kill hundreds of thousands of other human beings. It was a rotten, insane system that led Cortes and the others to behave the way they did. You, as the representatives of this system, are guilty for the genocide committed against the Indians.

As a final test to see who is guilty, ask yourself: If it had been some other "explorer" besides Cortes, would he have let the Indians keep their land?

You know the answer. Any European conqueror would have been every bit as bad as Cortes. Why? Because the system of empire was to blame, not any particular individual.

Appendix 4.A: Passing/Crossing Boundaries Unit Plan, Tenth-Grade English

Establish Goals: Investigate the different ways people cross boundaries

Students will understand that . . .

- "Passing" or wearing a mask are large phenomenons that always have consequences
- There is immense power in people's stories

Essential Questions:

- What are different ways of understanding the concept of race?
- What are the different ways people cross boundaries?
- What are the costs and benefits of crossing different boundaries?
- In what ways does race matter in our society and in what ways is it irrelevant?

Students will know...

- Race is a modern idea that has no genetic basis but is a social construction
- Literature logs are a way to access different aspects of a novel.
- The structure of a radio show.

Students will be able to . . .

- Reflect upon the decisions made by Clare and Irene in "Passing"
- Draw out "big ideas" and themes from a novel's specific story.
- Develop a new way of understanding the way the idea of race is used in our society
- Conduct an expert interview and edit it into a compelling radio program.

Performance Tasks:

- Lit logs
- Interviewing
- Editing and structuring show
- Mask poems
- Dramatic response/analysis of book

Learning Plan:

- Close reading and class discussion of text
- Fugees "The Mask" analysis of lyrics and concept of masks
- "We Wear the Mask" poetry analysis and writing Mask poem
- Unpacking the Invisible Knapsack
- Race: The Power of an Illusion and class forum

- Brainstorm "crossing boundaries" / analyze form of TAL
- Interview techniques and strategies
- Group structuring of show

Connections to Core Values:

Inquiry- Questioning the idea of race, investigating the idea of crossing boundaries

Research- Learning about the structure of a radio show, readings about race

Collaboration- Radio show groups and reading discussion groups

Reflection- Evaluating radio show

Presentation- Creation of radio show and posting to iTunes channel

Appendix 4.B: Passing/Crossing Boundaries Unit, Podcasting Rubric, Tenth-Grade English



Podcast Rubric

	Exceeds Expectations (20-19)
Design	This project shows a superior knowledge of quality storytelling as well as a unique narrative voice. The show and each piece have a clear progression. They are also intellectually and emotionally compelling.
Knowledge	Both the written and audio components of this project illustrate an understanding of different ways, meanings, and costs or benefits of crossing boundaries.
Application	The interview is conducted in a way that draws out meaningful stories and larger emotions and reflections.
Presentation	The audio component of the project is flawlessly edited. The sound quality is superior. Music is carefully chosen and used strategically.
Process	All parts of the project were completed on time and most were fulfilled beyond the necessary requirements.

Appendix 5: Language & Identity Unit Plan

Establish Goals:

Understand that language is a powerful and flexible tool.

Essential Questions:

- What are the relationships between language, power, and culture?
- What does it take and what does it mean to achieve individuality within a larger system of conformity?

Understandings:

Students will understand that . . .

- Language has many forms each of which has strengths and weaknesses.
- There is value in folklore.
- Everyone has a unique language experience and history.
- There are different lenses that provide different tools for analyzing literature.

Students will know . . .

- The power of dialect as an expressive piece of art.
- Students will be able to know . . .
- Language = identity
- Language = stereotypes

Performance Tasks:

- Close reading/Analysis of Their Eyes
- Tree Drawings
- Language Autobiographies
- Literary lens project -- Re-imagined scene from Their Eyes

Other Evidence:

- Reading of and note-taking with language essays
- Letter of advice
- Say/Mean/Matter charts

Journal Entries:

- Record five points about Hurston's life (Alice Walker radio piece)
- What different struggles is Janie facing?
- In your opinion what does Janie want? What is she searching for? Do you think she'll ever be able to find it? Why or why not?
- What would it mean for you to find your voice and discover yourself?

Other Learning Activities:

NPR piece with Alice Walker talking about Zora Neale

Tree Drawing

Use Audio CD

Letter of Advice

Student-led discussions of different chapters.

Use of literary lenses to analyze different parts of the book.

Student dramatization of section.

Viewing "American Tongues" (PBS Video)

Readings:

"If Black English Isn't a Language, Then Tell Me, What Is?" by James Baldwin

"This is the oppressor's language // yet I need it to talk to you," by bell hooks (excerpt written up on Google Doc)

"How to Tame a Wild Tongue," by Gloria Anzaldua

Excerpt from "Hunger of Memory," by Richard Rodriguez

"Mother Tongue," by Amy Tan

Excerpt from "The Woman Warrior," Maxine Hong Kingston

Inquiry: Language Autobiography, Daily approach to text

Research: Reading of Language Essays

Collaboration: Table groups for reading, reader's theater, peer editing of papers

Presentation: Sharing of papers and digital stories!

Reflection: Final reflection (journal & discussion) on book, Cover sheet to language autobiography

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