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Speaking Back to Structure:
Critical Multimodal Media Literacy and the Politics of School Reform

A Dissertation Presented

By

KATE WAY

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May 2014

College of Education

Teacher Education and Curriculum Studies

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Speaking Back to Structure:
Critical Multimodal Media Literacy and the Politics of School Reform

A Dissertation Presented

By

KATE WAY

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DEDICATION

For my parents, Nancy and Kendall Way, who will be always in my heart.

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I would like to thank the members of my dissertation committee. Nat Turner, thank you for these many years of excellent advising, for your friendship, and for your indomitable spirit. You have kept me smiling throughout this process, always making the work of academia authentic, meaningful, and practical. You have an enormous heart, you do such good work in the world, and you know how to make things happen. I am so glad to know you and have you in my life. Sangeeta Kamat, Martha Fuentes-Bautista – and, for much of the work leading up to my dissertation, Paula Chakravartty – I appreciate so much all of your dedicated feedback and encouragement over these past few years. The incredibly important and compelling work that each of you does has inspired and motivated me, and it has been an honor to work with such powerful women!

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The appreciation of and respect for my students - both those involved in this study and others I have worked with over the past twenty years - is too great to describe here. This work is all about my desire to honor the incredible power I've come to know in so many of you, and that I've had the honor to be surrounded by for so many years.

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ABSTRACT

CRITICAL MULTIMODAL MEDIA LITERACIES
& THE POLITICS OF SCHOOL REFORM

MAY 2014

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This study explores the development of critical multimodal and media literacy skills in high school aged students against the backdrop of current state and national education policy. Following the progress of students in a semester-long writing course that focuses on critical multimodal and media literacy, the study examines how critical literacy skills develop within different modes and mediums – particularly those enabled by new media and digital technologies – and considers the implications of critical multimodal and media literacy skills for student engagement, agency, and achievement. The study further analyzes the impact at the institutional level of educational reforms incentivized by No Child Left Behind (2002) and Race to the Top (2009), and considers how current policy defines and measures literacy, achievement, and technology use. With a specific focus on issues of racial and socioeconomic equity, the I argue that critical

multimodal and media literacies develop in students essential tools with which to forge personal, social, and educational change.

Data collection and analysis employ largely qualitative research methods including the following: detailed ethnographic observations and fieldnotes; student interviews; analysis of student work; interviews with school staff; and analysis of relevant institutional and policy documents concerning technology and literacy. In order to better understand and address the complexity of factors impacting student literacy development, connections are drawn throughout between micro practices in the classroom, meso-level institutional factors, and the macro influences of education policy.

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CHAPTER 1

CRITICAL MULTIMODAL MEDIA LITERACY & THE POLITICS OF SCHOOL REFORM

On the surface, critical multimodal media literacy (CMML) practices and the politics of school reform might seem to exist in different conceptual realms, appearing to be unlikely topics for the same study. However, upon closer examination, we can see that not only are there important points of comparison and contrast between the two topics, but that the thorough study of one necessitates a thorough study of the other. Largely speaking, both the current trends in education reform and the critical multimodal media literacy curriculum studied here seek to re-imagine the shape and purpose of public education – and by extension to change larger social and economic systems -- but they do so from very different ideological standpoints, and to very different ends. Addressing both macro and micro issues, both seek to change practices within classrooms and schools, and both center technologies of the digital age as powerful tools in each of these efforts. In the broadest sense, the current iteration of education reform – a movement that has been underway for the better part of the past two decades – reflects a top-down approach in which the federal government and public-private partnerships have taken much more control over shaping public education than has been the case historically. On the other hand, the development of a critical multimodal literacy curriculum represents a ground-up, grassroots approach to making educational and social change.

The differences between a top-down and ground-up approach are central to the problems facing public education and to the proposed solutions. While I clearly argue for the values and efficacy of the ground-up approach in this study, I also recognize the

sources and rationale for many of the initiatives reflected in the top-down approach. While the latter benefits from a bird's eye view of a massive system of national public education, it must, by necessity, understand education quantitatively. And while the former often lacks a connection to the larger picture – as teachers and students become their own private universe for 50 or 60 or 85 minutes together each day, and schools are often pejoratively viewed as separate from the "real world" – it benefits from the kind of intimacy and understanding that can only come from day-to-day human interaction, relationships, and community. In between, and often mediating the two worlds of practice and policy for one another, are the schools which as institutions are organized around the needs of specific communities; the mandates and funding of local, state, and federal governing; and, ultimately, the individual and collective practices of both the educators and the students who comprise them. It is with the relationship between these structural and individual forces that I am most interested in this study.

Statement of the Problem

Let us begin with the premise that both current education reform and CMML are rooted in an articulation of the same problem, namely that there exist in both our educational system and in our larger society a clear divide in educational achievement, workforce earnings, health care, and living conditions, and that this divide falls mostly along racial and socioeconomic lines. Many theorists have written about the ways in which the educational system in the United States perpetuates these inequities (Bowles & Gintis, 1976; Bourdieu, 1993; Giroux, 1984), and numerous policies have been implemented in attempt to level the educational playing field. In our current era, however, a massive and unprecedented overhaul of the system of public education is

underway, claiming to have as its central aim "closing the achievement gap" in education, which, its proponents argue, will serve eventually to level other social inequities such as workforce earnings, housing, and health care.

In need of closer scrutiny at the outset is the very conception of the achievement gap itself. As Gloria Ladson-Billings (2006) reminds us, the concept of the achievement gap – rooted in a logic of deficit – is itself misguided; instead, she offers the paradigm of the "education debt" that has accumulated for communities of color as the direct result of a long history of discriminatory social, political, and economic practices and policies. Low achievement on the part of particular racial and socioeconomic groups reflects an advantaging of values of the dominant culture in educational systems more than a deficit amongst non-dominant groups. Critical Multimodal Media Literacy (CMML) is one approach – among others – that while also beginning with the premise that the educational, social, and economic divides in our society are the most pressing problems of our time, seeks to expand the acceptable vernacular of formal education by more equally privileging multiple perspectives and forms of communication.

This study also addresses still uncertain and contested terrain regarding how best to make use of technology in the service of diffusing inequalities in education. Much of current reform utilizes technology on the macro level for things like the collection of massive amounts of data, the implementation of a federal regime of on-line standardized testing, and to reduce brick-and-mortar and staff costs. On the micro level, in the classroom, current reform frames technology as having the power to increase the efficiency of teaching and learning, to personalize learning, and to prepare students with skills necessary in today's workforce (NETP, 2010). This study problematizes these

notions, examining an alternative paradigm of technology use rooted in authentic critical literacy development.

The Role of Technology in Education Reform

Recent trends in education reform in the United States – which seek to reorganize and reconceptualize the structure and purposes of public education – position digital technologies as central to the prosperity of students, workers, and the nation as a whole. In the prevailing discourse linking education and the economy, technology is seen as central to the skills students will need in the 21st-Century labor market and as part of what is painted as the larger national 'race' for global economic dominance in the Information Age. Obama's education plan, outlined in his public speeches and in the official documents released by the White House, highlights the essential role of technology in global economic competition, and the need to restructure public education around a business-oriented model and specifically to feed into a the workforce of the high-tech knowledge economy (U.S. Department of Education, 2012). However, absent in public discourse about education reform is any real debate about the inequalities bred by and inherent in such an economy, as well as whether it should be the role of the education system to perpetuate it.

Within the dominant discourse, technology use is framed by politicians, education reformers, and the media as the potential answer to the long-standing inequalities in educational achievement within the public education system, and is proposed to improve learning and quality of life for all. Beyond applications of technology to classrooms themselves, much of current education policy focuses on uses of technology at the macro level in an effort to close the achievement gap and to raise educational standards across

the board. In the name of equality, current education reformers have positioned technology as central to a massive overhaul in the management and oversight of the public education system – described in detail below – utilizing it as a tool to track, sort, and supposedly hold "accountable" schools, students, and teachers.

The technological tools necessary to manage and analyze the massive amounts of data required of schools since the passage of No Child Left Behind (2002) and Race to the Top (2009) have become big business for education-technology companies, as have the development of tests, test-preparation materials, curricular content, and teacher training modules, all aligned with the mandates of reform (Burch, 2009). At the same time that education reforms have led to the opening of new markets to educational technology companies, much research has documented that many of the practices stemming from this data-driven orientation have actually widened inequities and disparities in quality of education, particularly for low-income, African-American, and Latino students (Lipman, 2004; Hursh, 2008).

In contrast to this, if we are serious about reforming education in ways that will address the social and economic inequities that exist so clearly along lines of race and social class in our society, then pedagogical practices and curricula that employ the use of digital technologies to critical, democratic ends must be examined. This study intends to examine the *tensions* between these two worlds -- that of the technology focus in policy driven by current education reformers, and that of actual practices in a critical multimodal media literacy classroom. By examining the experiences of students using digital technologies for the development of critical literacy skills within a system that is bound

to the mandates of federal and state reform, I will uncover students' processes of learning in the day-to-day classroom as a central site of working towards equity.

Introducing Critical Multimodal Media Literacy

At the outset, it is essential to unravel the myriad terms connected to this area of inquiry, and to be very clear about how these terms are used here. Both literacy and technology – and their many offshoots -- are terms that get used in loosely defined ways, individually and together, and in multiple iterations, leaving many of us working under different understandings of their meaning. As will be explored in the following chapter, within the field of Literacy Studies itself the term 'literacy' has undergone decades of debate, with each conception rooted in differing ideological and political beliefs and each leading to very different pedagogical and curricular prescriptions. To further confuse matters, the term is often combined with various derivatives of technology – which, as it exists in the 21st-century generally implies digital technology – and we end up with terms such as digital literacy, computer literacy, 21st-century skills, technology literacy, media literacy, new media literacies, multimodal literacy. While many of us know that they are important when we hear these terms, we do not always understand them through a common language, which is crucial in the drafting and implementation of classroom curricula, institutional goals and practices, and in particular, state-driven policy. Thus, much of Chapter Two will be dedicated to further defining and tracing the theoretical origins of the terms used throughout this study.

Found in the CMML classroom is a model for using new media and digital technologies as vehicles for critical literacy pedagogy and emancipatory practices in education. Increasingly theorized in the field of literacy studies, such a model stands in

stark contrast to notions of literacy, learning, and technology being forwarded in current education reform, and remains underrepresented in debates about the shape and purposes of education. Despite the increased use of standardized testing in primary and secondary public education – and the corollary emphasis on skills associated solely with print-based texts -- there is generally accepted within scholarship on literacy a radical shift in textual analysis and production as a result of the digital revolution. Rather than the more traditional view of literacy as the acquisition and mastery of a fixed set of skills – usually fluency with written text – many theorists define literacy as something inherently social, contextually created, and multiple in form. Multimodal medial literacy is a curriculum and pedagogical approach that foregrounds different modalities (in this case, still visual, moving visual, and aural) and mediums (video & film, photography, and audio productions) within a critical, sociocultural approach to the teaching of literacy.

One of the most promising aspects of a true critical multimodal media literacy curriculum is that it seeks to uncover larger social, political, and economic systems to students, and to make their exploration part of what is talked about in schools. The media system itself is one such system – and one that saturates most young people's lives – and students are eager to understand and take part in shaping it. In addition to exploring some of the structures of mass media systems, a CMML curriculum seeks empower students to use digital technologies produce alternative, independent media pieces with the express purpose of making social change.

Background to Dissertation Study

The trajectory that led to the development of the CMML curriculum in this course was specific to my own development as an artist and educator, as well as to the unfolding

of the digital revolution of the past two decades. Whether in a stand-alone Writing classroom, or as part of a regular ELA curriculum, at the time of this study I had been teaching traditional writing skills for over twenty years in various positions at both the secondary and university levels. Leading up to this research study, I had taught literally thousands of students between the ages of fourteen and twenty-six, from various socioeconomic, racial, ethnic, and religious backgrounds; international students; English Language Learners; learning-disabled students; emotionally and behaviorally troubled students; physically and sensorially impaired students; students labeled gifted and talented; and students with a range of background-knowledge, skill-level, and educational motivation. Over this time, as most effective educators do, I spent years honing in on a tweaking the kinds of approaches that worked best for various learners – specifically in regard to the development of writing skills -- and I developed strategies for more effectively reaching the range of students I worked with in any given setting.

These experiences, coupled with an early awareness of the connections between language and personal and social power, always oriented me as a critical educator concerned with disparities in verbal fluency, traditional academic achievement, and educational trajectories of students from differing socioeconomic backgrounds. Each year that I spent as an educator in the mainstream system reinforced for me the reality that the social and economic inequalities in our larger culture were largely being reproduced through our model of schooling, an empirical understanding I was later able to explore through theories of cultural reproduction and alternative schooling (Bourdieu, 1993; Gatto, 1992). My dual desire to work against this trend, and at the same time to help my students cultivate the kinds of literacies required of their success in the mainstream

academic system, has been central to my development as a classroom teacher and is very much in line with the critical multimodal media literacy focus of this study. What I saw time and time again was that disenfranchised or struggling students – often outside of the dominant, white, middle-class culture around which traditional schooling is constructed -- made breakthroughs in their literacy when they began to understand the larger systems organizing their schooling and society, and when they began to feel a sense of agency in determining their own paths and in impacting these systems.

Approximately nine years into my career as an educator, I also began to formally study and practice the art of photography, and my interest as a photographer began to intersect with my practices in the classroom. It was during this period that I became keenly interested in the overlapping qualities of both writing and photography as powerful forms of expression for youth, as well as in the concepts and skills that were inherent to each. In particular, I became interested in the ways in which photography might serve as a vehicle for opening up more traditional literacy skills in students who struggled with verbal expression, and/or for those who had become disenfranchised by the mainstream educational system. From my early endeavors in this area – much of which was inspired by the pioneering work of photographer Wendy Ewald (2001) – I immediately began to see enormous potential in combining visual and verbal literacy instruction, in particular for the purposes of reaching youth who were not being served by traditional methods of schooling.

The years in which I was making these connections also coincided with the rise of the Internet and the ensuing digital revolution and proliferation of digital technologies. When I began teaching in the early 1990's, the school at which I taught did not yet have a

computer lab, and very few of the digital technologies that are commonplace today existed. By the time I was formally studying and practicing photography, the Internet had risen and home and school computers were just becoming ubiquitous. The availability of relatively cheap quality digital cameras in the early 2000's allowed me to begin to experiment working with students on joint writing and photography initiatives. I wrote a pilot curriculum for a local chapter of a Boy's and Girl's Club in my area, and for one year ran an after school workshop there for low-income middle school children that combined writing and photography to explore issues of social identity. Later, in the mid-2000's – after returning to teach English in a public high school -- I obtained grant funding to start a similar after school project, and over the four years that the project ran I was able to further hone a curriculum exploring what I termed "photo-literacy," which pinpointed literacy skills and constructs shared between writing and photography. In each of these initiatives, I saw students who were greatly struggling with verbal expression in an academic setting – literally, several who for years had not put pen to paper at all, and spoke very little in a school setting – begin to express themselves when asked to see the world through photography and writing together.

Pivotal to the development of my current CMML work, in 2009 I was invited by a local international education organization to travel to work for one week in The Hague with inner-city, immigrant youth using a version of my photo-literacy curriculum. This project focused strongly on exploring social identity, in that these students were almost all low-income, first-generation immigrants, Muslim, and living in a segregated neighborhood of the Hague where they experienced social and religious discrimination. At the same time, the project also foregrounded language and literacy development

slightly differently than in previous iterations, in that all of the students who participated scored well academically in their school, but were at various levels as English Language Learners, and so I worked to tailor the curriculum to the skills specific to their language acquisition. I found that a photo-literacy curriculum was equally effective in developing expression in students who struggled not from lack of skill or motivation, but from the difficulty of navigating a foreign language. This experience helped me to further hone my photo-literacy curricula in ways that might specifically benefit the many English Language Learning students I worked with in my home classrooms.

The fundamental constructs at the core of this photo-literacy work were later applied to a course I taught in Media Literacy. Traditional media literacy has often focused on the interpretation of media messages, with varying schools of thought about the motivation for and end-goals of doing so, and with media production taking a secondary role. In line with my pedagogical orientation, I designed a Media Literacy curriculum that focused equally on interpreting media messages, understanding media policy, and producing independent media. The production portion of the curriculum, in particular, gave me the opportunity to begin expanding the core aspects of my photo-literacy curriculum to other digital mediums, namely audio and video production. Within these three digital mediums, I was able to expand and deepen the number and type of literacy skills and constructs covered in the curriculum. For example, our study of making effective transitions grew tremendously when we were able to compare how to most effectively do so in writing, compared to in an audio piece, compared to in a video production, etc. Understanding how to create an effective narrative arc took on greater depth when discussing the differences between stories told through photographs, video,

or through audio alone. Once again, not only did I see my students more engaged than I ever had in the past, but there was also a dramatic improvement in the level of their critical thought and the quality of their work in all mediums, including writing.

The non-production portions of the Media Literacy curriculum centered on constructs essential to a critical analysis of both mass-produced and independently-produced media. The course served as an introduction to understanding the fundamentals of media ownership, journalism, the advertising industry, and the massive social changes associated with the rise of the Internet and new media. Students were fascinated to learn about topics such as media consolidation, and how monopoly ownership by only a few giant corporations influences the content available to them. We took up issues such as net neutrality, journalistic freedom, and stealth advertising – highly complex, political topics with which the general public, and particularly youth, are rarely invited to engage. In addition, we practiced close examination of popular media messages through the critical lenses of gender, race, sexuality, social class, and age. The course focused on introducing these critical media literacy topics and skills to students so that they might further pursue them later in their educational careers.

During this time period I had also returned to school to begin pursuing the degree for which this study is the culmination. Both my studies and lived experiences of the massive federal and state changes being imposed on the system of public education made concern for policy another central focus of my work. The trends and policies of the current wave of education reform – described in detail in Chapter Two – have increasingly been felt over the past decade in very real ways on-the-ground in actual schools and classrooms. Within the high school in which this study was conducted, which

was a recipient of Race to the Top money, an increased emphasis by administration on data collection, the beginning stages of a new teacher evaluation system, and the shift in standards focus to the new Common Core State Standards (CCSS, 2010) were all part of the changing terrain for teachers and administrators. As policy will, these new mandates unfolded with varying degrees of acceptance and resistance, and were complicated by the material and human complexities of actual schools.

It was within the context of these experiences and realities that I began in earnest to integrate aspects of multimodal media literacy into my own mainstream ELA, and particularly my Writing classroom practices. Rather than being an 'addition' to the required aspects of the curriculum – which would stretch the bounds of the allotted time for coverage in a given course -- CMML became a tool that worked in the service of building both traditional and non-traditional literacy skills. Much as it had in the stand-alone programs and courses I had taught, I found that CMML both enhanced student interest and engagement, and provided me with a tool to reach a much wider range of student needs and levels in my classes. Coming after several years of experience which reinforced my belief in the efficacy of CMML -- during which time I also continued to refine my curriculum and pedagogical approach -- this study was largely the attempt to capture the specifics of how literacy skills would develop in individual students in a given semester of CMML, as well as how personal, institutional, and policy-level factors added to the complexity of these teaching and learning processes.

Purpose & Importance of the Study

The purpose of this study was to examine the development of critical multimodal literacy skills in high school aged students, and to consider how these experiences played

out in relation to the institutional culture of the school and to current policy mandates. More specifically, the study sought to examine the ways in which current education policy – particular in regard to its framing of technology use -- either supported or inhibited critical multimodal literacy practices. Particularly closely examined was the intersection between the stated ideals within education policy documents and the lived, material and social realities within the school and classroom that might support or prohibit the enactment of those ideals. Research on technology and educational inequalities has largely shown social and economic differences to be reproduced through technology use (Attwell & Battle, 1999; Becker, 2000). The dominant discourses often emphasize what may be possible educationally within the virtual world, without adequately accounting for "material and social conditions of technological infrastructures" in the physical world (Monahan, 2008).

Thus, in addition to offering an alternative paradigm of technology use in the classroom through CMML, the study also provides insights into the kinds of social and material realities faced by many schools today. Further, because so much of the push in current education policy centers around implementation of technology for data-driven practices – which are claimed to be the remedy for disparities in student and school achievement – it is essential to offer in-depth examples of pedagogical approaches and curricula that stem from a paradigm that instead centers on the inherent cultural, political, and historical components of schooling and literacy.

While there is a substantial body of research to date that reveals the ways in which education reforms are unfairly and disproportionately targeting largely low-income, African-American, and Latino populations – and are in fact leading to greater

inequities in the system (Lipman, 2004; Hursh, 2008) – there is a need for more research on the individual, personal experiences of individual students and teachers in the classroom. It is precisely these personal experiences that are obscured by education reforms driven by data, which promote the classification and evaluation of students, teachers, and schools based on quantitative measures alone. A pedagogical approach and curriculum that is centered on the development of critical multimodal literacies, on the other hand, refocuses the lens on the human aspects of education, making central the social, cultural, and historic contexts in which students learn, teachers teach, and schools exist as communities.

Outline of Chapters

In Chapter Two I provide the theoretical framework for this dissertation study, defining the specific use of terms in CMML, examining the fields by which it is most influenced, and a reviewing some of the seminal literature in each area. Sociocultural theories form the foundation upon which the study is built, emphasizing the social, cultural, and historical context of literacy, learning, and technology use. The fields of new and multimodal literacies specifically inform the design of the CMML curriculum, providing a framework for the development of multimodal literacy skills within socially authentic learning contexts. Critical pedagogy and critical media literacy further reflect the underlying purpose of work done in the CMML course, with an explicit emphasis on understanding larger structures and systems, and on using CMML for enacting social change. Finally, in Chapter Two I also consider the larger movement of education reform, locating it within a larger framework of neoliberal policy and tracing the ways in which it has become increasingly corporatized. Because the movement of education reform

continues to unfold in highly contested ways even at the time of this writing, many journalistic sources are considered in addition to traditional academic research.

Additionally in Chapter Two, I consider some of the research on within the larger field of technology and inequalities, as well as the application of these ideas specifically within educational contexts. Chapter Two presents an essential overview of the current system of education reform that represents the larger context in which the study must be understood. I trace both the political and ideological origins of the movement of education reform and recount much of what research has revealed about its results to date. In addition in this chapter, I analyze the specific ways in which technology has been implicated in reform efforts, closely examining several constructs central to the National Education Technology Plan (2010).

In Chapter Three I explain the methodological approach used in the study, including a description of the focal site, students, and class studied; data collection and analysis methods; the underlying view of literacy as socially situated; and an exploration of researcher positionality. I provide a broad profile of the entire class in order to establish the larger context in which learning and teaching takes place, as well as describing more specifically the focal students in the study. In addition in this chapter I present my use of ethnographic research methods including taking extensive fieldnotes; examining and assessing student work; conducting informal and formal interviews with students; distributing student questionnaires; analyzing national, state, and local policy documents; and conducting interviews with school staff and administrators. I explain how each of these forms of data was collected and analyzed, and further problematize my role as both researcher and instructor.

Chapter Four addresses the first of three research questions: What constitutes a critical multimodal and media literacy (CMML) curriculum and pedagogy? Because the class was newly designed in its current iteration, and because it had only been taught as such once before the time of the study, the curriculum and pedagogical approach themselves became data to be examined, analyzed and refined. In this way, the study represents aspects of action research, in that I strove to improve curriculum and pedagogy through it. Thus, in Chapter Three I explore in detail how the CMML curriculum was designed; the rationale for this design; and representative lessons, activities, assignments, and assessments; as well as limitations of the curriculum. I locate the CMML curriculum within the theoretical traditions of critical curriculum theory; multicultural, culturally responsive, and social justice curriculum theory; as well as critical media literacy theory. I provide background the development of this iteration of the CMML curriculum, explaining the original Writing curriculum into which it was integrated, as well as the evolution of my own teaching of CMML-related curricula.

Additionally in Chapter Four I include a section on section the core constructs framing my pedagogical approach, which include and the following: The cultural and historical location of self & others, and positioning student work as applicable in real world

1) The awareness of larger systems organizing society – political, economic, educational, etc. – and how these might impact knowledge and information
2) Understanding knowledge, information, and learning as co-constructed
3) The ability to discern connections between topics and pieces of information
4) An awareness of importance of structure and design on meaning

5) An awareness of audience and purpose

6) The development of CMML for social change

Each of these is explained in detail, providing insights into both the design of the curriculum and the overall pedagogical approach used in its enactment. I further provide a description of the specific multimodal literacy skills targeted by the curriculum, and explain how units and lessons were designed to develop them. Finally, I also in this chapter detail my methods of assessment of student literacy growth.

Chapter Five answers my second research question, breaking down the specific areas in which students showed traditional and multimodal literacy growth, and qualifying how and in what ways this growth took place. This portion of the study is the most extensive and reflects the micro processes of teaching and learning within the classroom. I begin by framing my understanding of students' literacy growth within the larger theoretical context of sociocultural, adolescent, and critical literacy studies. I then describe the methods I used to assess the growth of specific literacy skills. Before detailing the development of the skills themselves, I include a section theorizing the underlying factors of engagement and meaning-making in contributing to students' sense of motivation.

The bulk of Chapter Five presents specific analysis of excerpts from students' work, interviews, and my own observation logs concerning the development of specific literacy skills. I consider growth in the areas of topic choice and thesis development; development of ideas and depth of analysis, including close reading and use of textual evidence; discernment; meaningful editing and revision; discrete and technical skills; trouble-shooting, problem-solving, and student-centered, collaborative learning. Each of

these is analyzed using specific examples from students' work, my observations, and notes on pertinent contextual information concerning influences on the learning process.

Chapter Six considers CMML classroom practices within the larger context of institutional norms and policy mandates. I again consider the theory informing my work in the chapter, reiterating the importance of a socially situated view of literacy and examining notions of technology and educational inequalities. I analyze the larger discourses that concern the intersection of education reform, technology, and literacy practices, in key documents including the National Education Technology Plan (NETP, 2010), the Common Core State Standards (CCSS, 2010), as well as the technology plan and mission statement of the school in which the study took place. Additionally, I include excerpts from interviews with members the school's staff and administration concerning larger institutional practices and state mandates.

Also in Chapter Six I include sections on the material and social realities of technology use within the school, as well as on a consideration of the ways in which resources are being allocated, illustrating some of the ways in which institutional and policy ideals are complicated in the day-to-day workings of schools and classrooms. Finally, within this chapter I examine the central paradigm of literacy being forwarded in the new Common Core State Standards (CCSS) – including the ways in which digital literacies are addressed -- and consider the an alternative model of literacy offered by the CMML curriculum.

CHAPTER 2

THEORETICAL FRAMEWORK

This chapter outlines the major theoretical influences framing my study, drawing from sociocultural theories, and the fields of new and multimodal literacies; critical pedagogy and critical media literacy; as well as the politics of education reform. The Critical Multimodal Media Literacy (CMML) curriculum and pedagogical approach are inherently interdisciplinary, both in terms of the content of the course – which draws on contemporary social issues connected to numerous fields – as well as in the numerous theoretical traditions by which it is influenced.

Rooted most firmly in a sociocultural perspective, new, multimodal and media literacy studies understand literacy in within specific social, historical, and cultural contexts, and value a multiplicity of texts. The importance of these fields and what they offer to our understanding of literacy development has grown exponentially with the burgeoning of new forms of digital communication in the past two decades. In light of the digital revolution and the constantly changing landscape of communication it is essential now, perhaps more than ever, for educators and policy makers understand literacy as local, variable, and plural. Critical studies further foregrounds the inherently political nature of literacy and technology use within the CMML framework, shedding light on what is at stake in their development, and shaping the ways in which it frames the purposes of schooling. Each of these is explored below, followed by a section locating and defining multimodal literacy, a section detailing the current movement of education reform, and a section considering larger theories of technology and inequalities.

The design of the CMML curriculum and the classroom practices and literacy development examined in this study must also be viewed within the larger context of public education reform that has been underway for the better part of the last two decades, as well as within a larger framework of the relationship between technology, inequalities, and education reform. Similar to the views of literacy development explored below, my understanding of technology is also rooted in theories that foreground the role of its social context, usage, and cultural and historical specificity. The specific role played by the educational institution of the public school in which this study took place is also an important site of examination, both as a singular community with unique characteristics, and as part of larger state and national systems defining its shape.

Sociocultural Theory

My understanding of and approach to pedagogy, and literacy pedagogy in particular, is grounded in sociocultural theories, which contend that learning is contextual, taking place as part of social processes that are culturally and historically specific. Distinct from structural approaches, in which language is seen as a closed system with a fixed set of rules that can be straightforwardly transmitted, sociocultural theories take language to be inherently social and contextual. Rooted in the work of Vygotsky (1962; 1978) and Bakhtin (1981; 1986), sociocultural theories of literacy have important bearing on the ways we approach literacy education. Emphasizing its fundamentally social nature, Vygotsky theorized language, learning, and thought in terms of the relationship between social and individual processes. According to Vygotsky (1978), we acquire knowledge through interaction with and guidance from others, moving from social to inner speech. Inspiring later discourse theories, Bakhtin (1981;

1986) similarly argued that all human utterances are dialogic in nature, representing an assimilation of others' speech. The social, dialogic nature of literacy development is in itself an example of the role of mediation in literacy development, another central tenet of sociocultural approaches. Theorized in the work of Vygotsky (1962; 1978), Bakhtin (1981; 1986), and James Wertsch (1991; 1998), psychological and material forms of mediation play a central role in how we acquire knowledge.

Sociocultural theory heavily informs my conception, design, and enactment of the CMML curriculum in multiple ways. The CMML curriculum seeks to develop specific literacy skills within authentic social contexts, both within the classroom and beyond. Conventions, genres, and usage in a multiplicity of texts are addressed within their social, cultural, and historical contexts, rather than as a fixed set of rules of right and wrong. In the broadest sense, students in the CMML classroom are encouraged to locate themselves and their work within the larger systems of which they are a part, to share knowledge, and to work towards greater social ends. More locally, lessons and activities are all designed with individual and social components, and the collective aspects of learning are emphasized. Finally, it is hard to overstate the importance of mediation in the CMML curriculum, as literacy skills are studied comparatively through their mediation in different mediums and modalities.

New & Mutlimodal Literacies

New Literacy Studies

In attempting to get to the heart of the relationship between visual and verbal literacy it is essential to examine the changing role of literacy studies and the implications of this new research on pedagogical practices. There has been an important shift in the

field of literacy studies over the past several decades to models that emphasize the contextual nature of literacy. Scribner & Cole's (1981) study of the Vai in Liberia was groundbreaking in forwarding the notion that literacy alone, separate from a social context and use, brought no particular advantage in consciousness or life trajectory. Their notion of "literacy practices" – later distinguished from "literacy events" (Heath, 1982) – was picked up in earnest during the 1980's by theorists working towards a broader conception of the role of literacy education.

The New Literacy Studies (NLS) movement (Gee, 1990; Street 1996; Barton & Hamilton, 1998) furthered the notion of literacy as a hybrid phenomenon, and one that is always socially and culturally constructed and positioned within relations of power (Street, 2003). Heavily influenced by sociocultural theories, NLS positions literacy as inherently and inextricably social, contextual, and epistemological. Street (2003) frames this distinction between literacy as "autonomous" and literacy as "ideological," the autonomous model being based on the belief that literacy is something to be acquired, and which once learned, will have farther reaching social and cognitive effects. In other words, Street debunks the traditional notion that "[i]ntroducing literacy to poor, 'illiterate' people, villages, urban youth etc. will have the effect of enhancing their cognitive skills, improving their economic prospects, making them better citizens, regardless of the social and economic conditions that accounted for their 'illiteracy' in the first place" (p.77).

Street argues that in contrast to the autonomous model, New Literacy Studies "suggests that in practice literacy varies from one context to another and from one culture to another and so, therefore, do the effects of the different literacies in different

conditions" (2003). This is important in both the curricular design and pedagogical approach of the CMML course, underpinning an approach to literacy that recognizes different cognitive processes in students, emphasizes an understanding of the ideological context of what students are leaning, and creates a space for literacy learning to lead to different ends. Street argues that literacy practices are "…always embedded in social practices, such as those of a particular job market or a particular educational context and the effects of learning that particular literacy will be dependent on those particular contexts" (2003, p.78).

Given this, NLS further understands literacy as inherently ideological -- the ways in which people view, approach, and use literacy are based in their fundamental worldviews and beliefs about the construction of knowledge (Street, 2003). If we take this as a fundamental premise of literacy learning, then we must understand students' learning in relation to their own personal and social histories, and out-of-school literacies; within the context of the curriculum, pedagogical approach, institutional culture within which they are learning; and within the even larger political and economic systems shaping society.

Multiliteracies & Multimodality

Perhaps most importantly in relation to CMML, New Literacy Studies opens the door to the recognition and use of a multiplicity of literacies in the classroom, rather than the unilateral dominance of the written text. In this vein, a body of work also emerged with a focus on the notion of "multiliteracies," which can be seen as a logical extension of movements such as NLS and others that seek to transform pedagogical approaches to literacy. The term "multiliteracies" was first used by the New London Group (1996) – an international consortium of language and literacy scholars -- in recognition of increasing

diversity in hybrid cultures, languages, and forms of texts within the context of late 20th-century globalization and the digital revolution. A pedagogy of multiliteracies centers on the concept of 'design,' which according to Cope and Kalantzis (2006), has three main components: 'available design', in which "are the found discernable patterns and conventions of representation"; 'designing,' through which learners make their own meaning from the available designs; and, finally, 'the redesigned' in which "the world and the person are transformed," and the newly designed becomes part of what is now available to others (p.10-12). Cope and Kalantzis (2006) describe the ways in which so many forms of new media, particularly through digitization, increasingly cultivate synaesthesia, or the transfer and integration of learning processes in differing modes (p.12-14). They argue that the trend in school-based literacy instruction has been to separate different modes, whereas the trends in the age of new media – even over only the past ten years – ought to be more and more towards synaestehic processes.

Connected to multiliteracies, the concept of multimodalities, developed in large part by theorists such as Kress & van Leeuwen (1996) and Jewitt (2008), is rooted in theories of linguistics, semiotics, and meaning-making. Grounded largely in the tradition of social semiotics (Hodge & Kress, 1988; Thibault, 1991), which seeks to understand communicative signifying practices within their social contexts, multimodality stands in contrast to earlier structuralist theories of linguistics and semiotics. Structuralists such as Saussure (1983) and others, sought to understand the internal structures of sign-systems as closed schemas with underlying organizational patterns and rules. In reaction to this, the field of social semiotics arose, positing that meaning-making cannot fully be understood through the study of signs within self-contained systems, but rather only

within the particular social contexts of its use.

Much like multiliteracy theories, multimodality theories overturn the centuries-old hegemonic privileging of the written word, arguing that meaning is made through a myriad of modes, of which language is only one. As a most basic characterization, multimodality "attends to meaning as it is made through the situated configurations across image, gesture, gaze, body posture, sound, writing, music, speech, and so on…" (Jewitt, 2008, p.246). Technologies of the new digital age are inherently multimodal, utilizing text, moving image, still image, and sound to make meaning.

A central focus of multimodal theory resides in the importance of both the design and interpretation of messages, and the ways in which these meanings can shift in relation to their social, cultural, and historical context. In contrast to fixed composition, a key aspect of multimodality is "parole," its fluidity and malleability, and its variation as it is adopted differently over time and place (Hodge & Kress, 1988). Jewitt writes that, "any given mode is contingent on fluid and dynamic resources of meaning, rather than static skill repetition and use. These modes are constantly transformed by their users in response to the communicative needs of communities, institutions, and societies: New modes are created, and existing modes are transformed" (p.247).

These concepts become central to the findings presented in this study, which attempt to account for the specificities of local, institutional, and societal contexts of students' literacy practices within the CMML course.

Critical Pedagogy & Critical Media Literacies

By definition, critical pedagogy is centrally concerned with student empowerment and the leveling of inequalities in society. Heavily influenced by the mid-century, neo-

Marxist thinkers of the Frankfurt School (Horkheimer, 1982; Adorno, 1973; Marcuse, 1969), critical pedagogy seeks to break down traditional hierarchies and to instill consciousness that will bring about social change. Further theorized by thinkers such as Friere (1970; 1995), Apple (1982; 2004) and Girioux (1984; 2001), critical pedagogy asks students to locate themselves culturally and historically, to become agents in their own education, and to use literacy as a vehicle for liberation.

Critical literacy actively engages students in understanding themselves and the issues that surround them within context of their history, politics, and society, and enables students' participation in 'naming' and transforming the world around them (Friere & Macedo, 1987). Friere's notion of "praxis" informs the CMML curriculum, which engages students in reflection and action on the world around in order to make a more just society. This kind of engagement and agency, particularly for students who have become disenfranchised by the system of education, can bring new meaning to literacy development, which is too often taught as a set of discrete language skills to be measured in standardized tests, detached from its inherently social and political nature. By asking students to explicitly engage with questions of structure as part of their learning – and to examine the systems of which they are a part – critical literacy foregrounds issues of power and inequity, and develops in students the tools with which to make change.

Multimodality is well suited to a critical approach to literacy, as well as to developing in students a meta-awareness of their own learning processes. Critical literacy asks students to problematize knowledge and learning (Shor, 1987), to consider the power and politics of language in forming identity and epistemology, and to question

unequal power structures (Fairclough, 1989; Gee, 1990). Particularly for students' whose cultural backgrounds and home literacies are often not reflected in traditional school curricula, critical multimodal and media education can be essential in contextualizing codified knowledge and in offering examples of alternatives. At the center of a critical literacy approach is the consideration of the multiplicity of voices and perspectives present in all texts (Luke & Freebody, 1997; Nieto, 1999), even those that are excluded or made invisible. Perhaps most importantly, critical literacy asks students to understand their own agency in the world, and to use literacy as a vehicle for social action (Friere, 1972). When used for these purposes, new digital media – and the multimodal literacy required by their use – can act as technological tools in the service of greater social and educational equity.

Critical multimodal literacy also foregrounds the study of media and popular culture in the classroom, as a site of important and contested social representations and power-structures (Kellner & Share, 2007). Critical scholars have theorized the democratizing power of media literacy both in terms of student consumption and production (Kellner & Share, 2007; Gainer, 2010; Goodman, 2003). Critical media literacy applies similar tenets of situating media within its social, historic, and political context, particularly concerning issues of power and control. This kind of orientation goes much beyond the kinds of media literacy prescribed in current education reform efforts such as the Common Core, which emphasize fluency with non-print texts. As Sut Jhally and Jeremy Earp write, in addition to studying the content of media, "…we need to take seriously the importance of getting educated about the origin and nature of the mass media system we have today, about where the system came from, the decisions that

formed it, why these decisions prevailed, and how and why alternative visions failed" (Jhally & Earp, 2003). Beyond helping students to critically analyze their media consumption, this kind of structural analysis of the media system can serve as a corollary to their understanding of the education system and the contents and purposes of their schooling.

Similarly, multimodal media literacy education that uses new digital technologies critically can have profound ramifications for students' understandings of the origins of knowledge production and the their own agency in helping to create it. Many scholars have written about the democratizing potential of new digital media production (Jenkins, 2006;), in which traditional gatekeepers can be bypassed and cultural production shared much more widely. In an era where virtually all mainstream, commercial media is controlled by one of five or six massive international corporate media conglomerates (Bagdikian, 2004) – narrowing the range of media diversity of content -- there is in new media and the Internet the potential power of individual producers to share freely. The tension between these two forces – the top-down control of corporate interests and the bottom-up power of individual users of new media – is an important component of what Jenkins describes as the new age of "convergence culture" in which we live (Jenkins, 2006). As corporate Internet service providers push to monetize access to differing content on the Internet, the kind of critical media education that will inform students about the fight for New Neutrality becomes even more pressing.

Corporate Education Reform

The relationship between education reform, technology use, and socioeconomic inequalities is multilayered and complex. What they all have in common is the larger

context of close to two decades of neoliberal socioeconomic policies centered on the belief in a liberal, free-market economy. Rooted in classical liberal economics of the 19th-century, neoliberal theory became established in the mid-20th century in the work of Friedrich von Hayek, Milton Friedman and others in the Mont Pelerin Society, a group of economists and political thinkers dedicated to forwarding economic liberalization and open markets (Harvey, 2005). Gaining ground globally in the 1970's and throughout the following decade, neoliberalism fully took hold in the United States with the articulation of the prescriptive economic measures of the Washington Consensus in the 1990's (Harvey, 2005). In the U.S., Europe, and other advanced economic nations, neoliberalism replaced the post-WWII welfare state based on Keynesian economic theory -- in which basic social programs such as education, health care, and subsidized housing were seen as primary responsibilities of the government – with a state driven exclusively by market concerns. Neoliberalism has materialized in the ongoing privatization of public assets and services; the promotion of a free, unregulated economy; severe cuts to spending in the public sector and on social welfare services; and the imposition of a free-market logic in sectors across the board.

In the United States and elsewhere, what neoliberalism has meant for institutions such as public health, public education, and other social services has been untenable budget cuts – with at least thirty states spending less on education budgets in 2011 than they did four years before (State Budget and Tax, 2011) -- and increasing infiltration by the corporate sector. What historically have been public goods provided and protected largely by the state, have been under neoliberalism left to be supported by mechanisms of market competition. Similarly left unchecked by state regulation, the 2008 financial

collapse caused by the hyper-competitive banking industry and the ensuing taxpayer bailout has gutted the funding of public services even further. Responsibilities that have historically been held by the state are increasingly shifted to the individual, reflected in education, health-care, and other public-sector policy. The market has become both the vehicle and the rationale for public sector reforms, as services such as education and healthcare are further subsumed under the logic and efficiencies of corporatism.

An economy driven by corporate interests at the expense of the public good has been commonplace under the neoliberal state, and has spawned policy from both Republican and Democratic administrations alike. The current iteration of re-fashioning education to feed the economy reaches back to the notorious 1983 report *A Nation at Risk: The Imperative for Education Reform*, published under the Reagan administration. In the midst of the recession of the 1980's, the report blamed the education system for failing to provide a skilled, educated workforce, and fed public fears about the United States falling behind other nations economically (Hursh, 2005). Not only did this shift attention away from the responsibilities of corporations and the state in creating a healthy economy (Apple, 2001), it further opened the door to corporate involvement in educational policy decision-making.

The increase in federal control with the implementation of the *No Child Left Behind Act* of 2002 (NCLB) under the George W. Bush – whereby all states were mandated to develop standardized-test based systems of accountability -- heralded a new era of high-stakes testing that changed the face of public schooling. While even critics concede that NCLB brought needed attention to the plight of urban failing schools, which had long been overlooked by politicians and the media (Goldstein, 2012), the direction in which it

has taken education has increased educational inequities (Lipman, 2004; Hursh, 2008). NCLB has represented a dramatic shift away from educational policy-making at the local and state level, under which "the federal government has determined which subject areas take precedence, limits the ways in which they may be taught, and designates what reform options are available to schools and districts that fail to improve sufficiently their aggregated test scores" (Hursh & Martina, 2003).

In 2009, as part of the American Recovery and Reinvestment Act (ARRA), President Obama and U.S. Secretary of Education Arne Duncan announced the Race to the Top (RTTT), a fund of $4.35 billion for which states were invited to compete. While eliminating some of the more blatant shortcomings of NCLB, RTTT continues to make choice initiatives and high-stakes testing a centerpiece of education reform, requiring states to implement more standardized tests tied to common standards, to tie teacher performance to student test scores through notoriously unreliable value added measurements, and to lift caps on the number of charter schools allowed (ed.gov).

Also under ARRA, the federal government announced $650 million Investing in Innovation (i3) Fund, intended to "foster innovation" in education reform and matched by millions of dollars from private funders (ed.gov). By making compliance with both accountability and choice measures a requisite to even be eligible to apply, RTTT and the i3 competitions have facilitated massive changes in legislation as states scramble to comply with contingencies (Barkan, 2011). Further, community agency is being taken away as management of schools is increasingly handed over to corporate Educational Management Organizations (EMOs), locally elected school boards are replaced by mayoral control in many cities around the country (Saltman, 2011), and in others school

board members who support choice and accountability measures are being hand-picked and their campaigns funded by corporate reform organizations (Nichols, 2011).

Corporate reforms in K-12 education can been seen most clearly in school choice initiatives (in the form of vouchers and tax credits for private schooling, and the proliferation of charter schools) and accountability initiatives (in the form of Common Core standards, increases in high-stakes standardized testing, value added teacher assessments, and other data-driven initiatives). Current reforms have become highly corporatized both through the influx of private, corporate money and the application of corporate management and operation models to the public education system (Saltman, 2011). The language of business and the marketplace now saturates education rhetoric, as schools are held accountable for their levels of efficiency and productivity, parents and students are seen as consumers, teachers as laborers are assessed according to their value added scores, and school districts are run by CEOs (Saltman, 2011; White & Lowenthal, 2009).

By shifting responsibility to the individual through choice and accountability measures, the state has largely absolved itself of its role as a welfare-providing institution. Public-private partnerships are openly promoted in education reform efforts, often without examination of the conflict of interest in the promotion of privatization. It has been widely reported on in the media and openly championed by politicians that education reforms are increasing profits for private vendors, in a market estimated to be close to a $600 billion (U.S. Census Bureau, 2013). Public education policy presents a fascinating study of the shifting roles of public-private partnerships and ties between industry, philanthropy, and government. The charitable arms of for-profit ICT and media

corporations that are heavily invested in the education market – such as the Gates Foundation and Microsoft, or the Pearson Foundation and Pearson -- have been at the forefront of funding education reforms. Private foundation money has bankrolled a dizzying array of advocacy, think tank, lobbying groups, and media programming, all aimed at shaping public opinion and promoting pro-reform policies (Saltman, 2010; Burch, 2009; Lipman, 2011; Barkan, 2011). In turn, private corporations are profiting from the provision of services and materials necessary to implement mandates around high-stakes testing, new teacher evaluation systems, data collection, and new curriculum frameworks, many of which have been shown through research to be both educationally unsound and to be increasing inequities (Hursh, 2008; Lipman, 2004; Ravich, 2010; Au, 2009).

Corporate reforms have further shifted the focus and purpose of education to be solely vocational, undermining its potential function as a vehicle for personal and social transformation, participation in the democratic process, and for critical engagement with the world. The paradigm of vocationalism has been completely naturalized by the reform movement and the mainstream media, so that it is now commonplace to have industry leaders as the spokespeople of education. The propositions made by industry leaders and corporate education reformers about the current labor market, and the role of education in supplying it, largely go unquestioned and unchallenged in the dominant discourse.

Yet the practical implications of neoliberal logic and policies must be understood not only in terms of the larger trends just described, but also within the actual day-to-day social and institutional contexts in which they play out.

Technology & Inequalities

Before exploring the concrete ways in which technology is being used in the implementation of education reforms, it is first useful to examine larger theories concerning the relationship between technology and inequalities. It has been widely documented that contemporary discrepancies in income correlate to technology use (Mossberger, Tolbert, & Stansbury, 2003), leading to concerted political and social effort beginning in the 1990's to overcome what came to be known as the "digital divide". Much of the criticism regarding policy addressing the digital divide focuses on its overemphasis on the notion of access, divorced from the myriad institutional, social, and historic factors also contributing to its use. This logic is very similar to that of the limited structuralist views of literacy development, as well as to that of education reforms that champion choice and their assumption of a level playing field. A deterministic focus on technological access assumes that once the technology has been provided, agents will have an equal ability to use it to ends in their own best interests.

Broadly speaking, there has been a growing recognition of the complexity in the relationship between technologies and socioeconomic inequalities, whereby technologies can often advantage those with resources more than those without, and often perpetuate or increase inequities rather than remedy them (Mossberger, Tolbert, & Stansbury, 2003; van Dijk, 2005). This has shifted debates about applications of technology to inequalities from a focus primarily on access to a recognition of the myriad nuanced and complex factors influencing its use, such as motivation and purpose, skill level, support, and institutional factors (Warschauer, 2003; van Dijk, 2005). Such "socially embedded" views of technology seek to describe the more varied ways in which technology use can

impact inequalities, as opposed to more simple deterministic explanations. The application of these ideas to the field of education -- media and literacy education in particular – helps to provide a framework within which to understand students' learning within the CMML course.

Many scholars have written widely about the ways in which a shortsighted focus on access to technology has failed to improve social and economic inequities (Mossberger, Tolbert, & Stansbury 2003; Warschauer, 2003; van Dijk, 2005) and have enumerated alternative, more nuanced models for understanding the complexities of technology use and inequalities. Largely studying practices surrounding second language acquisition, Mark Warschauer (2003) offers the concept of viewing technology in terms of "social inclusion," which he distinguishes from more traditional notions of the digital divide. Warschauer (2003) argues that it is people's actual abilities to make use of technologies and the information gained through them – which is influenced by myriad social, cultural, and economic variables -- that leads either to social inclusion or exclusion through technology use.

In addition to his examination of the ways technology is taken up differently in different social situations, and how technology can shape social situations, Warschauer (1981) further discusses the ways in which social relations impact the "development and deployment" of technology itself.

> Educational technology reform programs that have been more successful…have devoted only a small portion of their attention to purchase and placement of equipment, and have placed much greater emphasis on human and social development through formation of school-community coalitions, implementation of long-term teacher training programs, and promotion of local autonomy for teachers, schools, and districts.

A thorough understanding of technology and educational inequalities must account for social relations both in terms of its deployment and actual uses. This view underlies many of the on-the-ground experiences examined in this study, as the various needs and difficulties of students, teachers, and administrators converge within still unfolding technological infrastructures and systems of deployment.

The view of technology as socially embedded, particularly in relation to inequalities, can be mapped onto a critique of current education reforms. As will be examined in Chapter Six of this study, much of the rhetoric surrounding technology use in education reform acknowledges social and contextual factors in students' learning. Yet, an analysis of the actual deployment of technology – both as it has been globally applied to make systemic changes, and more locally in its implications for pedagogy and curricular changes -- implies trends that are favorable for education markets, but are leading to greater inequities in education.

Technology & Education Reform

Beyond applications of technology to classrooms themselves, much of current education policy focuses on uses of technology at the macro level in an effort to close the "achievement gap" and to raise educational standards across the board. In the name of equality, current education reformers have positioned technology as central to a massive overhaul in the management and oversight of the public education system, utilizing it as a tool to track, sort, and supposedly hold "accountable" schools, students, and teachers.

Technology has been implicated in choice initiatives in several ways, perhaps most glaringly through the proliferation of on-line schooling. Lee Fang's (2011) expose "How Online Companies Bought America's Schools," recently published in *The Nation*,

chronicles the massive push by corporate-interest groups to pass state legislation expanding on-line schooling, a market cornered by a handful of for-profit companies (such as Apex, k12 Inc., and Connections Academy):

> From Idaho to Indiana to Florida, recently passed laws will radically reshape the face of education in America, shifting the responsibility of teaching generations of Americans to online education businesses, many of which have poor or nonexistent track records. The rush to privatize education will also turn tens of thousands of students into guinea pigs in a national experiment in virtual learning—a relatively new idea that allows for-profit companies to administer public schools completely online, with no brick-and-mortar classrooms or traditional teachers.

Fang uncovers an intricate network of technology corporations, education-reform think tanks, private foundations, and lobbying groups that have been able to "achieve sweeping legislative success" in expanding – and in cases requiring – on-line schooling. "[P]olicies designed to boost the bottom lines of education-technology companies are cast as mere attempts to improve education through technological enhancements, prompting little public debate or opposition" (Fang, 2011).

Technology has been also implicated in accountability measures in numerous ways. The analysis and management of the massive amounts of data required of schools since the passage of NCLB has become big business, as have the development of tests and test preparations materials (Burch, 2009). This has only been furthered by more recent requirements in many states – and again, as a requirement of RTTT funding – to use value added measures to link teachers assessments to student test scores. In addition, curricular content and teacher training modules aligned with core standards are also largely provided through education-technology companies (Burch, 2009), and are in higher and higher demand as accountability measures are increased. At the same time that education reforms have led to the opening of new markets to educational technology

companies, much research has documented that many of the practices stemming from this data-driven orientation have actually widened inequities and disparities in quality of education, particularly for low-income, African-American, and Latino students (Lipman, 2004; Hursh, 2008).

Productivity & Efficiency

It is made clear in the discourse of current education reform that technology is paramount to the process of re-making the education system, acting both as a rationale for and an end-goal of the kinds of reforms discussed thus far. These concepts coalesce most clearly in the National Education Technology Plan (NETP), released in 2010 by Secretary of Education Arne Duncan, the details of which are at the heart of Race to the Top (RTTT) legislation. The paradigm underlying the NETP, the "most rigorous and inclusive process ever undertaken for a national education technology plan," is clearly vocational in nature, and centers on the argument that technological skills are critical in today's knowledge economy, both for domestic employment and for international economic competition. While briefly mentioning other rationale for a strong education system – such as the connection to democracy and the need to foster creativity – the foundation of the NETP and its unifying thread throughout is the tie between education and economics. The opening line of the plan – "[e]ducation is the key to America's economic growth and prosperity and to our ability to compete in the global economy" (p.1) – serves as the anchor for the rest of the report, is the central logic through which other issues are rendered.

The NETP (2010) reflects the corporatization of education, calling for a business-oriented model rooted in neoliberal ideology. A disdain for the bureaucratic inefficiencies

of the public sector, a hallmark of neoliberal thought, is seen throughout the document, and technology is offered as a cost-saving, productivity-enhancing solution. The plan calls for the leveraging of technology to streamline and maximize productivity, advising that public education be remade in the image of the private corporate sector (p.12). Perhaps even more importantly, the uses of technology outlined in the NETP are specifically meant to provide a solution to the ongoing cuts to spending on public education. The U.S. Department of Education (2012) states: "Increasing educational productivity by doing more with less will not be easy. It will mean graduating a significantly greater number of students—with higher levels of mastery and expertise—at a lower cost per outcome," naming making "better use of technology" as one of the key components of doing this.

Technology-Enabled Personalization & the Idealized Learner

A central promise of technology in education in the NETP is the implementation of more flexible, individualized models of delivery of educational content. Reflective of a neoliberal shift in responsibility from the state to the individual – and very tied to the virtual schooling movement -- proponents of the current model of educational technology tout its ability to individuate and personalize learning. Concepts again borrowed from the world of industry, the practices of flexible production and mass customization are hallmarks of the technology-enabled Information Age, contrasted with the mass production model of the Industrial Age. While many of the claims of personalization in education have value as ideals, they largely fail to account for social, economic, and material realities, and serve the function of decontextualizing and depoliticizing the roles of both students and teachers. Discourses of personalization through technology are a

prime example of the access fallacy in notions of the digital divide analyzed previously.

It important to note that personalization, as it is thought of in current reform, is enabled only by fully functioning, accessible, and up-to-date technology, a material reality rarely found in schools (Monahan, 2008). Explicit in the promise of personalization for education is the notion that each student's individual needs will be met; implicit is the belief that in-the-flesh peers, teachers, and schools are ultimately superfluous. Discourses of personalization in education reform call for a move away from an "industrial age assembly line" model of educational delivery – in which all students have the same "inputs" in the set time and space of school (Wolf, 2010) – to a mass customization model in which each students' needs can be individually met. There is a notable dichotomy in education reform between the call for individuated input through technology use, and standardized output in the form of technology-driven data.

The concept of personalization in the provision of public sector services has been particularly influential in recent policy debates in the UK (Campbell, et. al., 2007; Pykett, 2009). Campbell, et. al. (2007) trace the evolution of the construct of personalization in the public sector of the UK, and more specifically in the field of education, locating it in the work of Charles Leadbeater (2003) and the think tank Demos. According to the authors, Leadbeater's work proposes the reorganizing logic of personalization of public sector services, whereby "users become co-producers of the good in question…and professionals become advisers and brokers of services, not providing the services themselves so much as helping clients generate pathways through the available range of provisions that meet their particular needs" (Campbell, et. al., 2007, p.137). Applied to

education, students would have more control over the trajectories of their studies beyond a basic curriculum while being guided by professionals.

Cambell, et. al. note that "[t]he aim of personalization is not the marketization of education so much as the promotion of self-realisation, with children constructed as active and responsible co-authors of their educational script" (p.138), which, the authors point out, is very much like the Vygotskian (1934) constructivist learning tradition by which students are scaffolded in learning to construct their own knowledge. However, Cambell, et. al. go on to argue and illustrate through case studies that the theory of personalization has not borne out in policy or practice its original intent, and conclude the following:

> …those most at risk from the implementation of deep personalization in learning are students from those social groups least well equipped, in terms of their families' cultural, social and financial capital, to develop self-regulation in learning and access to, choice over, and voice in, learning opportunities beyond their formal schooling (p.152).

The authors note that Leadbeater explicitly acknowledges this risk, and calls for the skewing of public resources toward less advantaged families, which in the UK, as in the U.S., has been a largely unrealized and ineffective strategy. While the more advantaged may benefit from personalization of public services – having the resources, support, and capital necessary to take advantage of choices in an empowering way – the risk for those most in need is transferred from the state to the individual, as essential public services are cut back and socioeconomic inequities grow.

Discourses of personalization in U.S. can be viewed through a similar theoretical lens. The NETP highlights that "…[t]he challenging and rapidly changing demands of our global economy tell us what people need to know and who needs to learn. Advances

in learning sciences show us how people learn. Technology makes it possible for us to act on this knowledge and understanding" (p.x). In their much-lauded book *Rethinking Education in the Age of Technology* (2009) – which appears in the bibliography of the NETP and is heavily drawn from throughout -- Collins and Halverson delineate a move towards personalization in multiple realms of education, linking each to a historic antecedent which has been newly recycled in the current technological era. For example, in the section of their book titled "Responsibility: From Parents to the State to Individuals and Parents," the authors describe this trend:

> In the present lifelong-learning era, responsibility for education is shifting away from the state and back to the parents (for younger children) and to the individual (for teenagers and adults). This movement reflects the emphasis on customizing education to the particular learner's needs, interests, and abilities (p.92).

Noting the same trends in the area of 'expectations' – "[f]rom social reproduction to success for all to individual choice" – the authors withhold any truly critical analysis and largely describe these movements as they are occurring, painting them as natural and inevitable.

While they offer some interesting suggestions for ways in which schooling might revamp itself in the age of technology – such as a system of awarding credential certificates in more specified areas of interest, and mixing ages and physical locations of learning -- Collins and Halverson are unwavering in, and uncritical of, their vision of a technology-driven model:

> If schools cannot change fast enough to keep pace with advances in learning technologies, learning will leave schools behind….As older generations continue to impose established methods of learning in school, technologies will leech critical learning resources, such as student motivation, attention, and resources, out of the education system. Trying to reassert the identification of schooling and learning will be a losing battle (p.131).

Framing technology as though it has a life of its own beyond the will of those implementing it ignores the highly political and contested nature of how it is implemented. Further, the authors tacitly approve of the current era of privatization, commercialization, and competition – or, again, at the very least hold it to be inevitable – and while they call for the governments and schools to make the appropriate changes to accommodate these realities, they do little to question their inevitability, or even their desirability.

In August of 2010, an invitation-only symposium to explore and plan for an agenda of personalized learning in education was held in Boston as an initiative of the Software & Information Industry Association (SIIA), Association of Supervision of Curriculum and Development, and the Council of Chief State School Officers (CCSSO). The symposium report touts the same language and rationale as both Collins and Halverson and the NETP, and lays out a direct plan to further research and development in support of personalized learning, to "support public-private partnerships to advance key technologies, including common metadata and technical standards needed to enable interoperability of various applications, data, and content resources to form a more seamless integrated learning platform," and to 'form a policy action network' to push for state and local policies for personalized learning (Wolf, p.7). In this vision of personalized learning, students are fully positioned as consumers in the marketplace, and education as a product like any other:

> Students have come to expect personalization in other aspects of their lives, such as through services such as Facebook, Netflix, and iTunes. If Google and Amazon can thoughtfully leverage customer data and virtual communities to better serve each person's unique preferences and interests from afar, then education can do so for each student from the near to understand each one's learning performance level, whole child tenets and preferences and then adjust instructional strategies and

content to meet those needs.

While the democratic ideal of public education being equitable has never reached its potential, within this highly-commercialized, market-based logic the notion itself is virtually abandoned: "Personalization provides the opportunity to dramatically redefine the concept of equity: from one that goes beyond providing all students with the same educational inputs…to one in which all students have access to a unique learning experience (and resources) based upon their individual needs" (Wolf, p.9).

Collins and Halverson are quite clear that concerns of socioeconomic equity are very much at stake, and that the benefits – namely more engaging, tailored, 'anywhere/anytime' learning – will largely go to those who already possess economic and cultural capital. In fact, they see "equity issues in education increasing with the penetration of technology into education," and they acknowledge the ways in which this is already happening. This makes their failure to take a stand even more egregious, as they largely depoliticize these changes in our society, economy, and education system: "Whether the potential losses outweigh the potential gains of the emerging education system remains a matter for debate" (p.111). This speaks to the remaking of the education system such that some youth are simply disposable (Lipman, 2011; Giroux, 2012).

While the answer is certainly not standardization or blind paternalism on the part of the state or of educators, what is missing in much of the personalization discourse such as this is any concrete, clear plan to account for the vastly different levels of social, cultural and economic capital (Bourdieu, 1986) possessed in our population. Further, the rhetoric of technology-enabled personalization denies the most essential element in a truly personal education, one in which a student is known, understood, and supported by in-

the-flesh peers, teachers, and others within his or her community. Much of the language of the NETP, while recognizing exceptions, frames its understanding of technology around an idealized construct: “Outside school, students are free to pursue their passions in their own way and at their own pace. The opportunities are limitless, borderless, and instantaneous” (p.x). The NETP seems to recognize that not all learners are headed towards limitless futures, and in places the language smacks of an entrenched reproduction of the tiered class system: “The challenge for our education system is to leverage the learning sciences and modern technology to create engaging, relevant, and personalized learning experiences for all learners that mirror students’ daily lives and the reality of their futures” (p.x).

In line with the education policy of the past two administrations, mandates are coming from the top down, while cash-strapped states and local municipalities are set up for failure in the face of untenable mandates: “States, districts, and others should develop and implement learning resources that exploit the flexibility and power of technology to reach all learners anytime and anywhere” (p.23). It is unclear from where the Herculean financial resources necessary to do this will come, particularly in an era where public funding continues to be slashed year after year.

Vocationalism and Lifelong Learning

In addition to technology serving as the vehicle for re-making public education, corporate reform discourse also positions the high-tech economy as the rationale for doing so. The widely theorized reproduction of class through education (Bourdeiu, 1977) is deepening under current reforms, which hold workforce training as the central purpose of schooling. Not only does this emphasis on vocationalism supersede more democratic

goals of education such as civic participation and critical engagement, but it works in the service of a highly stratified and inequitable labor market. Largely a product of the IT-enabled corporate restructuring described earlier, today's workforce is characterized by the instability and volatility of markets, and is growing increasingly unequal (UNHDR, 2010). Education reforms' answer to this – very much intertwined with concepts of personalization – has been the notion of 'lifelong learning' (NETP, 2010).

According to Schiller (1999), fear of unemployment after the mid-1970's recession shifted the focus of education both to an increased vocationalism and a perceived need for ongoing retraining of the workforce. Rooted in the post-war upswing of science-based industry, dramatic increases in research and development – specifically by corporations – created a new need for "incoming streams of scientific and technical knowledge" to fuel innovation. In the climate of a new "perpetual-innovation economy," vocational training became even more important and in-house corporate retraining programs expanded (Schiller, 1999, p.157). Schiller recounts that at first, until neoliberalism fully took hold during the Reagan era, this kind of corporate retraining had an "important paternalistic element," ensuring lifetime employment for its workers. However, after the massive corporate downsizing during the 1980's and 1990's, Schiller argues, corporations and politicians began to extol the need for "lifelong learning," where "individuals would have to master whatever skills they might come to need – or take the consequences" (p.159).

Evidenced today in the proliferation of industry technical certification and credentialing programs, predatory for-profit educational lending institutions, and non-credit, revenue-producing offerings at traditional universities, demands of lifelong

learning are strong. The concept has been applied at the global level, seen in the World Bank's publication *Lifelong Learning in the Global Knowledge Economy: Challenges for Developing Countries* (2003), enumerating the need for a workforce ready to adapt to the unstable demands of the market. Current education reforms are rooted in a similar logic, furthering the kind of reorganization of labor around capital described by both Castells (1996) and Schiller (1999). Rather than promoting an educational system that might empower students to engage civically and democratically, and provide them with the tools to understand and remake the vastly unequal economic landscape of society, corporate education reforms are driven by the very perpetuation of the system as it currently exists.

Bolstering the concept for lifelong learning, the discourse of corporate education reform posits that the U.S. education system is not graduating students skilled for the information-age workforce, thus forcing corporations to offshore to find labor. Nowhere in the discourse are the profit-seeking motives of corporations acknowledged, when "…[w]hat really drive capitalists to outsource are the huge wage differentials, ratios over eight to one in salaries abroad" (Lakes, 2008). Nor are the realities of the labor market available to high school and college graduates reflected in Obama's "college or career ready" plan. The rhetoric that everyone will need and will benefit from the skills connected to a high-tech information economy requires far greater scrutiny.

Within wealthy countries, the trend has been toward greater disparities between information analysts and production and service workers (Castells, 1996), and it is projected that jobs in the service sector will continue to grow at a faster rate than professional jobs (Lakes, 2008). Specifically, as Warschauer (2003) argues, there is a big

difference in the ways in which higher-level workers make use of computer technology – "…for analysis and interpretation of data; creation of new knowledge; international communication and collaboration; and development of complex multimedia projects" – and the more 'routine' uses of those in lower-level jobs.

Thus, many critics have argued that the real motive of corporate education reform is to perpetuate a stratified workforce – including, in addition to students-as-future-workers, the labor of teachers, administrators, and other school staff -- that will advance the privatizing interests of capital (Saltman, 2011; Hill, 2006). Drawing on Zizek's (2009) theory of the "enclosure of the commons," Saltman argues that through privatization, corporate school reforms enclose the collective labor of school employees and students. "The promise of corporate school reform for its proponents is that it increases the efficiency of the teacher-laborer through the enforcement of discipline (tighter controls over time, subject matter and pedagogical methods) and that such efficiency increases the delivery of knowledge to the student-consumer, increasing, in turn, the potential economic efficiency of the future student-worker" (Saltman, 2011).

CHAPTER 3

METHODOLOGICAL APPROACH

This chapter outlines the methodological approach used in the study, including its purpose, rationale, central research questions, design, and types and methods of data collection and analysis. In addition, I also describe the focal site and participants, as well as my own positionality as the researcher. I begin by noting that this study – as laid out in the initial two chapters – represents a merging of several different subfields within education, including curriculum and pedagogy, education policy, and media and information technologies. Within this study, each of these is connected under a larger umbrella of concern for greater social and educational equity.

Purpose & Rationale of Study

The central purpose of this study was to examine the intersection of a specific pedagogical and curricular approach to literacy – namely, that of critical multimodal media literacy (CMML) -- and the practical implications and effects of education policy on-the-ground in schools. Classroom practices and education policy are often understood in isolation by both policy-makers and practitioners, and studies such as this, which consider their intersection, are needed for a more nuanced understanding of their complex intersection. Claiming to address the achievement gap in education, current education policy specifically prescribes state-sanctioned concepts of literacy and math, as well uses of new media and technologies. While many of these prescriptions represent fundamental skills that all educational stakeholders would likely support, most, upon closer examination, are also deeply ideological and political. Thus, another central purpose of this study was to deconstruct educational policy discourse, much of which has

become naturalized by policy-makers, school administrators, and the mainstream media. Finally, focused specifically on pedagogical uses of new media and digital technologies, this study sought to bring together the significant body of theoretical and empirical work on media literacy, information technologies, and inequalities, and to consider them within the context of classroom practice in the current era of education reform.

Guiding Research Questions

With this central purpose in mind, my interest was most keenly in understanding how literacy skills – both traditional and critical – developed in students moving between different communicative modalities and media forms, specifically those enabled by new digital technologies. As is described in detail in the following chapter on the critical multimodal media literacy (CMML) curriculum, my focus was both on the critical reading and production of multimedia texts. I hoped to understand the specificities of a CMML classroom within the larger contexts of the institutional, community, and policy climate in which it was enacted.

Given this, the study centered on the following research questions:

1. What constitutes a critical multimodal and media literacy (CMML) curriculum and pedagogy?
2. How and in what ways did the CMML curriculum and pedagogy affect students' literacy development?
3. In what ways do community and institutional cultures, federal education policy, and the classroom practice of CMML converge with or diverge from one another?

Design & Methodological Approach

The data gathered for this study comes from a detailed ethnographic study of a high school writing classroom – of which I was the instructor – which used a critical multimodal media literacy (CMML) curriculum. The details of this curriculum are outlined in Chapter Four. Data collection took place over the semester-long course. This portion of the study included detailed observations of students and student interactions, one-on-one interviews with students, student-produced artifacts, questionnaires, and interviews with district and school administration and support personnel. Each of these is explained in detail in the data collection section below.

I chose to use largely ethnographic methods to conduct this portion of the study in order to most effectively immerse myself in the day-to-day lived experiences of a multimodal, media literacy classroom. I engaged daily in recording the kind of anthropological "thick description" (Geertz, 1973) that is a cornerstone of ethnographic research, and which can only come from close, daily, sustained observations of students' learning processes within an authentic context. Because so much of my concern was with the influence of trends in education policy on student engagement, achievement, and literacy growth, it was essential that I include in the study ethnographic vignettes illustrating how these elements often unfold within the context of schools and classrooms. Ethnography best reflects the theoretical foundation on which the study is grounded, positing that policy cannot be evaluated without knowledge and understanding of the human beings involved, the larger cultural and historical context of which they are a part, and the realities of their everyday lived experiences.

Because my intent was to analyze my findings within the classroom in relation to the prescriptions and rationale of education policy for media, technology, and literacy practices, the tenets of institutional ethnography (Smith, 2005) and interpretive policy analysis (Yannow, 2000) have also been useful in bridging the micro and macro aspects of this topic. Sociologist Dorothy Smith (2005) emphasizes that "…the prescriptions of the law do not exist in an abstract theoretical space; they are locally incorporated into people's work and the coordinating of their work in a sequence of action" (p.67). Yannow (2000) argues that policy analysis in particular has tended to ignore and devalue "local knowledge," and calls for "philosophical presuppositions that put human meaning and social realities at their heart" (p.4).

Part of what policy analysis, no matter how attuned, cannot capture are the specificities of each live classroom, and the myriad varying factors that go into pedagogical efficacy; Davies (1999) describes this "recognition of the separation, yet interdependence, of the two levels of the social structure" as essential to reflexive ethnographic practices (p.25). While I came to this project with previous experiences in similar realms, I continually reflected on my role as an instructor and researcher in this particular classroom.

Further, the importance of the specific cultural and historical context within which education policy is being enacted is paramount. Drawing on Bakhtin's (1986) theory of dialogism, Smith (2005) also refers to an acknowledgement of a time continuum central to an institutional ethnographic approach, in which local specificities can only be understood within the historical continuum within which they exist. In this way, we see that the realms of both policy and school and classroom culture are also affected by the

larger social, political, and economic trends of the past thirty years, as I described in detail in the previous literature review chapter. In an era where education policy is increasingly being taken out of the hands of local actors and is coming from the top down, studies that connect the local to policy are crucial. Yet these local specificities can only be fully understood within the larger institutional, community, state, and federal climate in which they are enacted, all of which is specific to a particular historical and cultural context.

Focal Site

The site for this study took place in a medium-sized high school in the Northeastern United States serving a small, mixed-income city as well as a number of students from surrounding cities and towns who 'choice in' through lottery selection each year. Under the Massachusetts School and District Accountability and Assistance System (Massachusetts Department of Education, 2012), each school in the state is given a rating from 1 (being the highest score, with no accountability status) to 5 (being the lowest score, indicating full takeover by the state) based on progress made in disaggregated Massachusetts Comprehensive Assessment System (MCAS) scores within each demographic subgroup. Under NCLB, schools with levels over and including a 2 are subject to increasing levels of "corrective action" or "restructuring" imposed by the state (Massachusetts Department of Education, 2012), often leading to the required use of scripted curricula, or outside oversight and management of schools.

I chose this school not only because of my access as an employee there, but also because of its standing at the time of the study as a Level 2 school – and thus subject to minimal state intervention – and its relatively socioeconomically diverse student body,

with close to 25% non-white and 25% low-income students reported (Massachusetts Department of Education, 2012). It is important to note that the kind of flexibility and autonomy I had as an instructor to incorporate the CMML components into my curriculum likely would not have been sanctioned for any teacher in a school with a higher accountability designation by the state. As was discussed at length in Chapter One, schools serving low-income, African-American, Latino, and English Language Learning students are disproportionately scoring poorly on state standardized testing. Thus, while offerings incorporating aspects of CMML might exist in after-school programs, the likelihood of a CMML-centered course as part of students' regular academic day – either as a core or elective offering – diminishes in the face of a policy-driven school ranking system such as the one in Massachusetts.

Course & Participants

The course used as a site of the study was an academic writing course required for graduation from the high school, in addition to four years of a regular ELA courses. While the details of the curriculum are outlined in the following chapter, it will be helpful here to explain the basic background of and rationale for the course. The requirement for a separate writing course beyond the typical requirement of four years of ELA had been implemented at the school approximately eleven years before the time of this study, three years prior to my employment there. Over the course of the nine years I taught at the school, both the requirement and the design of the course were subject to many rounds of debate within the English Department and with the school's administration. Debated and changed several times over the duration of many years were if and how to allow strong academic writers to 'test out' of the requirement for the course, what essential elements

the curriculum should include, and whether to offer two levels of the course for writers with different proficiencies. These areas of consideration went through multiple iterations, but at the time of this study an agreed upon fundamental curriculum had been reached, and students had not yet been offered the opportunity to test out of the requirement for the course, and the class remained offered at one level. As a result, writing classes almost always were comprised of heterogeneous groupings of students, with very different abilities and needs. The details of both the fundamentals of the curriculum, as well as the CMML components I integrated into it, are described in detail in the following chapter.

The make-up of the classroom used in this study was quite diverse in terms of ability-level, special needs, first-languages, and ethnic and national origin. In addition, as any group of students will, this class represented a range of differing family and home situations, personal interests and hobbies, past school experiences, and physical and mental health issues. Central to my methodology was the recognition and consideration of each of these factors in analyzing individual students' literacy growth.

Whole Class Profile

The section studied included twenty-seven students, seven more than had been the recommended cap when the writing class was first implemented at the school. The breakdown in terms of race, ethnicity, gender, and grade was as follows: three Latina females in the 9th-grade; one Latina female in the 12th-grade; one Latino male in the 9th-grade; one African-American female in the 9th-grade; one African-American female in the 10th-grade; one African-American male in the 9th grade; one Asian male in the 9th grade; two Asian-American females in the 9th-grade; six white females in the 9th-grade;

seven white males in the 9th-grade; two white females in the 10th-grade; one white male in the 10th-grade. For the purposes of this study, all names and other identifying features of all participants – as well as the exact dates that the study was conducted -- have been changed to ensure anonymity and privacy.

Range of personal & social backgrounds, and literacies. Students came to this class from a range of different personal and family situations; with varying past academic experiences; with myriad social, emotional, and health issues; and with strengths and interests in a number of different activities outside of school. Further, many of them had developed literacies in areas other than those taught and sanctioned in traditional academic curricula, ranging from song-writing, to video-making, to auto-mechanics. As much previous research has illustrated (Hull & Shultz, 2002; Moll, 1992) far from being marginal, each students' interests and out-of-school literacies are essential to a full understanding of his or her literacy growth in any given semester or class.

The chart below outlines a sample of the range of personal and social backgrounds of students in the class, as well as their out-of-school literacies and interests; while it does not include all details about every single student in the class, it represents a wide sample in order to get a sense of the kinds of diversity in the classroom. This information was gleaned from questionnaires given at the start of the semester, as well as with discussions with students, parents, and support personnel throughout the semester. This table is meant to provide a birds'-eye-view of the entire class – or at least a large sampling – whereas a more detailed profile of each of the focal students is given in the following section.

Table 1: Sampling of personal and social backgrounds

Past academic and literacy-based experiences in school	**Home or alternative literacies**	**Interests, hobbies, activities**	**Other personal circumstances that might currently impact school**	**Dynamics within THIS class that might impact learning**
Ex. Student A claims to have always "hated reading and writing," but has gotten good grades because he can figure out easily "what the teacher wants."	***Ex.*** Student R has been making home movies for years, and is advanced with many different video editing programs.	***Ex.*** Student Y competes in local and state horse riding competitions on the weekends and practices 4 days per week after school.	***Ex.*** The father of student M is currently being treated for advanced-stage lung cancer.	***Ex.*** Students L and Q are best friends and have trouble not being social together during class time.
Ex. Student S likes to read when it is something she chooses, but "has trouble writing essays, especially the conclusions."	***Ex.*** Student G writes, performs, and records rap songs in his spare time	***Ex.*** Student M is the only freshman on the varsity swim team and practices or competes every day after school and often on weekends.	***Ex.*** Student H is struggling a great deal with depression; his guidance counselor reports that his parents are trying a new medication that so far is making him anxious and restless, especially after lunch.	***Ex.*** Student P and student G were both suspended last semester for getting into a fistfight and cannot work together.
Ex. Student Q has been to four different schools in the past five years due to family moves	***Ex.*** Student D speaks only Spanish at home and with most of her friends.	***Ex.*** Student Z loves to skateboard and spends most of his spare time practicing	***Ex.*** Student N has chronic migraines and misses a lot of school.	***Ex.*** Student H returns 15 minutes late from the lunch break almost every day.
Ex. Student Y self-identifies as being "bad at school"	***Ex.*** Student L has been working on writing a mystery novel since last summer, and has written 75-pages so far.	Student H plays video games in his spare time	***Ex.*** Student F babysits her younger sister every day from just after school until her mother gets home in the evening.	***Ex.*** Student Y frequently misses school due to a chronic health issue

Range of institutionally-identified special needs. Also critical to understanding the dynamics at play in a course meant to develop literacy are the special needs identified and labeled by the institutional and legal systems surrounding public education. There has been significant growth in the number of students receiving special education

services in public education over the past three decades (NCES, 2013), and it has been documented that males and students of color are disproportionately labeled with learning disabilities (Blanchett, 2010). While this trend was not reflected in the makeup of the student body in the class used in this study – in that there were proportionally as many females and white students receiving special education services -- it is important to acknowledge that these labels have been used for social sorting within schools, and frequently carry both social stigmas and changes in academic experience. For example, special education students often take reduced course loads, have little room in their schedules for courses other than core academics, are sometimes separated physically from other students, and frequently are given modified or alternative assignments.

In the class examined for this study, nine of the students had what are known as Individual Educations Plans (IEPs) -- legally-binding mandates for special instruction and accommodations for in-class and out-of-class work, and often behavior – in this case they were for issues including Attention Deficit Disorder, Asperger's Syndrome, an anxiety disorder, one case of chronic migraines, and several others for non-specific learning disabilities. The IEPs for these students require the teacher to make individualized modifications to things ranging from assignments, to seating, group work, and assessments, as well to communicate regularly with each students' Special Education teacher and attend periodic team meetings on each students' individual progress. In addition to the students with formal IEPs, there were two other students in this section who were on 504 Plans, which are not official IEPs, but also legally binding plans for academic or behavioral modifications.

Also in this section were five students for whom English is a second language – four of them were currently enrolled in the school's English Language Learning (ELL) class, and the fifth student had taken the ELL courses and been mainstreamed, but still solely spoke Spanish at home and struggled with English at times. One of the ELL students was an exchange student from Argentina, whose English was intermediate, and two others had recently moved with their families from Guatemala, one at an advanced beginning level of English and the other at a very beginning level. The two students from Guatemala sat next to each other – by request – so that the advanced beginner could translate occasionally for the beginner.

In addition to these students, there were at least three others in the class who I learned early on in the semester – when I followed up with guidance counselors and the Vice Principal out of concern – had quite involved social and emotional issues (which was also the case with several of the aforementioned students on IEPs and 504s, but these were students who had not been identified as having any specific learning issue or need for accommodation). From the very first day of class, these students – all three of them boys – presented as non-participatory and non-performing; in other words, they would not participate in any of the class activities or discussions, would not complete any of the in or out-of-class assignments, and were generally unresponsive, even after several individual meetings, meetings with support staff, and calls home.

Finally, there were ten other students in the class without specifically identified special needs or issues, and who ranged widely in academic proficiency and writing skills. For example, there were two female students who, it became very clear to me early on in the semester, had already mastered the majority of the skills and concepts to

be covered in the regular required curriculum for the course, and were writing at the college level. Again, the English Department and the school's administration had been working on a plan for several years to allow students to 'test out' of the required Writing course, but that had not yet been implemented and thus all students in the school had to take the course in order to graduate. Several others were competent writers and strong students, but from my initial and ongoing assessments would definitely benefit from the core, required aspects of the curriculum. And finally there were several students who had not been identified with any specific special needs, but who clearly struggled greatly with academic writing.

In addition to these characteristics, students in this class also had a wide range of interests and outside-of-school activities that were important to their identities and development. In the table below, I have listed those students who identified these aspects as major parts of their lives; this information was gleaned both from beginning-of-the-year questionnaires, and from my discussions with students over the course of the semester.

Table 4, below, outlines the breakdown of students in terms of the special needs that had been institutionally identified for various students in the class.

Table 2: Range of institutionally-identified special needs

Students with Individual Education Plans (IEPs)	**Students with 504 Plans**	**English Language Learning (ELL) Students**	**Students with pronounced emotional/behavioral issues (not on IEPs)**	**Students without any identified special need**
1 for Asperger's Syndrome, with advanced traditional literacy skills	1 for anxiety	2 Mainstreamed students – low intermediate level English	1 complete non-performer. In foster care; in legal trouble; suspended twice previous semester.	2 with very advanced traditional literacy skills
1 for an anxiety disorder, with intermediate traditional literacy skills	1 for digestive medical condition, with advanced traditional literacy skills	2 ELL-Program students – 1 advanced beginning and 1 very beginning level English	1 attempted to participate, with very low traditional literacy skills / diagnosed with Learning Disability halfway through semester	3 with low-average traditional literacy skills

1 for chronic migraines, with intermediate traditional literacy skills		1 exchange student advanced intermediate level English	1 complete non-performer. Living with non-immediate relatives; medicated for depression; failing all academic classes.	3 with very low traditional literacy skills
1 for Attention Deficit Disorder, low traditional literacy skills				
1 for Attention Deficit Hyperactivity Disorder, with very low traditional literacy skills				
4 non-verbal Learning Disabilities, with low to intermediate traditional literacy skills				

As often happens when faced with meeting the needs of so many differing students, I began lobbying the school Principal from the start of the semester to provide me with an in-class aide, particularly to help with the Special Education and ELL students. One student, in particular, who was diagnosed with Asperger's Syndrome, had had a one-on-one aide who attended classes with him up to this point in his academic career, but this semester that aide was re-assigned to another student in the school with greater need. After several meetings and strong requests to the school's administration, approximately halfway through the semester a Spanish-speaking tutor was assigned to my classroom for two days per week to help with the Spanish-speaking ELL students.

This diversity in academic and personal background represents a typical amalgam of students encountered by many public school classroom teachers who teach mixed-level classes. As a veteran teacher, over the years I had learned multiple strategies for effectively meeting the range of needs and abilities represented by my students, as well as the tools needed to navigate the school's administrative and support teams. In fact, the

integration of CMML into the standard curriculum was one such strategy for reaching the diverse needs and proficiencies of my students.

Focal Students

From the group of twenty-seven students profiled above, I chose seven core students on whom to focus most closely, while continuing to analyze more generally the literacy growth of all students in the class. For the seven focal students, I was able to go into much greater detail about each of the kinds of factors described above, and to analyze more closely the possible factors contributing to literacy growth. These students were chosen because they began the class with a range of traditional literacy skills, they came from different cultural and social backgrounds, and each had unique interests or circumstances that might impact his or her literacy growth during the semester. Here I will give a brief sketch of each of these seven focal students and an overview of both their personal and institutionally-identified profiles; each of these factors, and how it played into each students' literacy growth, is analyzed in much greater depth in the later findings chapters.

Table 3: Overview of focal student profiles

Focal Student / Gender & Grade / Race	**Relevant personal, social, cultural background**	**Institutionally-identified labels**	**Level of traditional literacy skills at start of semester**	**Out-of-school interests, hobbies, or alternative literacies**	**Other personal circumstances that might currently impact school / dynamics within this class**
Rosie F- 9th White	Educated family involved in community outreach work; double-parent home	IEP for language-based learning disability	Average for grade-level; some struggles with written expression	Reading; writing poetry; community outreach work with family	Rosie has been struggling with anxiety this year; her best friend is in this class and the two often socialize
Maria F-9th Latina	Moved from Puerto Rico several years ago with single mother; bilingual	Had moved through ELL program at this school	Average for grade-level; typical ELL language issues	Cooking; time with family	Maria takes care of her younger brother and sister each day after school until

	- Spanish spoken exclusively at home				after dinner time when her mother returns from work
Scott M – 9th White	Very little parental supervision at home; in trouble with law; multiple disciplinary suspensions from school	Red flagged as socially-emotionally troubled; assigned outside case worker by court	Almost no written output – actual skills very hard to decipher	Skateboarding	Scott has a court-assigned case worker following his progress in school
Adita F – 9th Asian-American	Two highly educated, involved parents; Bilingual (French, English)	None	Very advanced for grade-level	Dance; reading; theater	Adita is currently enrolled in two other Honors-level and one AP-level courses; her best friend is in this class (Rosie) and the two often socialize
Henry M – 9th White	Receives a lot of encouragement from both parents at home	IEP for language-based learning disability; ADHD	Average for grade-level; struggled with mechanics and usage	Advanced computer and technology skills; very involved in after-school theater tech crew	Henry has a friend who frequently distracts him in this class
Erin F – 9th White	Receives a lot of encouragement from both parents at home	IEP for eating disorder	Advanced for grade-level	Avid reader; Intense daily regiment of practice for varsity swim team	Erin frequently misses school due to illness
Carlos M – 10th Latino	Father to a 1yr old child; moved from Puerto Rico this semester to live with single father, who is a military veteran; moves between two residences during week	In ELL program	Very low for grade level, even in native Spanish	Digitally records rap songs at home as hobby	Carlos is having a difficult time adjusting to the academic expectations and culture here, which he experiences as much more demanding than in PR

Data Collection & Analysis

Data collection took many different forms, intended to supply a wide enough sample of items from which to draw connections and to see patterns emerge. In addition

to collecting observed and first-hand accounts of classroom experiences – as well as student-produced work – I also sought out sources of data outside the classroom that would help to triangulate themes as they emerged. I collected multiple forms of data related to students' traditional and critical media literacy skills, engagement with the curriculum, growth in literacy, and overall sense of social and educational agency. I was most interested in understanding how these areas were impacted by a critical media literacy curriculum. All students in the class and their parents were given a letter describing the study, and Assent and Consent Forms to give permission for participation (See Appendix A).

Observations & Fieldnotes

Over the course of the semester I kept detailed fieldnotes in observation logs on each day's class. It was particularly useful to me that this course fell last in my daily schedule, so that I was able to use the time period just after class ended each day to write fieldnotes on what I had observed transpire. My fieldnotes generally included a mix of observations about individual students, group interactions, and whole class discussions. I deliberately recorded both what I considered to be successful and unsuccessful aspects of each day's lessons and activities, as well as the kind of "thick description" (Geertz, 1973) prescribed by ethnographic research. Most of the thick description focused on the seven focal students, both in terms of their individual work and their collaborative work with others. In addition to classroom observations, I kept careful fieldnotes on meetings I had over the course of the semester with various support staff, parents, and administrators – particularly extensively on those concerning focal students -- as well as on larger department and faculty meetings.

These observation fieldnotes proved to be a major source of data, and I found myself with more to write about each day than I often had time for. Thus, I attempted to also continue my written reflections in the evening when possible. In the findings of the study, I have drawn heavily from these observation fieldnotes, where many patterns and themes emerged during the data analysis portion of my research.

Student Work

Much of the data collected for this study included the written and multimedia work produced by the students participating in the study. These ranged from short pieces done as practice exercises to more polished pieces handed in as formal assignments, to major projects done at benchmark points during the semester. As is outlined in Table 5 below, and is detailed in the following chapter, these artifacts included written pieces, audio recordings, photographs, and video pieces. For each traditional and CMML lesson, activity, or assignment used for this study, there was a pre-assessment, in-progress-assessment, and post-assessment component. For all students in the class, I collected examples of work produced both with and without the integration of CMML components. The more specific objectives, procedures, and methods of assessment for all of these assignments are described in the following chapter.

Student Questionnaires

As part of my regular practice as a classroom instructor, I also distributed multiple questionnaires to students at various points during the semester, which solicited the feedback of all students in the class about their perceptions of certain assignments and their own growth. These questionnaires proved to be extremely useful in uncovering aspects of students' experiences and perceptions that I had missed or misinterpreted in

my observations, and also gave students a chance to bring up aspects of an assignment that I may have overlooked. As a classroom instructor I have always used these kinds of questionnaires to better understand my students, to improve my own practice, and to encourage students to reflect on their own learning processes. A preliminary questionnaire was distributed at the start of the semester, which asked about students' academic history, study habits, literacy development, interests, and home life. Then, after each culminating assignment, questionnaires were distributed to gather specific information about each student's experience with a particular unit of study. The questionnaires worked in tandem with the individual interviews, in that they helped me to get a pulse of the entire group, while also giving me insights and directions for following up with individual students. These questionnaires can be seen in their entirety in Appendix B.

Staff & Administrator Interviews and Policy Documents

I also conducted interviews with three different school administrators or support staff members, once each, in order to gain a greater birds'-eye-view of trends in traditional literacy achievement and technology use overall in the school, as well as their views on what was proving to be effective or ineffective for leveling the so-called achievement gap at the institutional level. These interviews were intended to provide access to understanding the ways in which federal and state policy become operationalized at the institutional level. I was interested in talking with administrators and support personnel about both the philosophy and policy guiding institutional procedures and programming; I crafted interview questions tied to the school's mission statement and technology plan, the state standards driving curriculum, as well as the state

and federal educational policy to which the school and district are held accountable. In addition, I hoped to hear from the support staff member in particular the kinds of stumbling blocks faced by individual students in terms of achievement, literacy development, and engagement. As a classroom teacher over the years I have developed my own sense of what these impediments often are, but I felt it was important to speak to someone who has a more removed view from the classroom, and where students often present and share differently than they do in a formal academic setting.

In addition, I relied on school administrators and staff to further flesh out the technology plan for the school, which is very much tied both to particular institutional needs coming from below and policy mandates coming from above. Specifically, one of these interviews was with the districts' Director of Technology in order to better understand the overall technology plan for the school, where and how he saw current technology initiatives being implemented, and what he considered to be areas of success and struggle. I hoped to unravel through this interview how much of technology development in the district was being driven by institutionally-articulated goals and core values versus state imposed mandates, what was presenting as obstacles to both, and how each of these might improve student literacy, engagement, and academic achievement.

Student Interviews

I conducted individual interviews with over twenty different students during the semester. Informal interviews, done twenty-two times over the course of the semester, were primarily conducted just after class had ended, or before class began the following day; these were generally brief, single-question interviews, and focused on asking a particular student who I had seen either struggling or doing well with an in-class activity

to describe in more detail what he or she had been experiencing. Informal interviews were done with 12 different students, three of them were with focal students and were conducted three times each, four other students were interviewed twice each, and five other students were interviewed only once. I chose these students based on who stood out on any given day as having had either a notable breakthrough or notable struggle with that day's lesson or activity. I made note of responses to these shorter, less formal interviews in my fieldnotes, paraphrasing students' responses. The formal interviews were conducted after school or during a free period, most lasting between 30-40 minutes, and were audio recorded for later transcription. In these, I had the opportunity to ask students to describe in more detail their perceptions of their learning processes and literacy development while working in particular modalities. I conducted formal interviews with four different focal students – those who had not been informally interviewed -- two of them twice, and the other two once.

Questions in the first round of interviews – which can be seen in their entirety in Appendix C – took place approximately two-thirds of the way through the semester, and focused on both general questions about students' perceptions of their own experiences with education and literacy, as well as more specific questions about the multimodal and media components of the course. The second round of interviews, which took place at the close of the semester, similarly focused on students' experiences with and perceptions of the multimodal and media literacy components of the class, as well as on their feelings about how they perceived the potential reach and impact of their work. These questions can likewise be seen in Appendix C. I relied on these interviews for more open-ended, broad-sweeping questions, which students might take in any direction, in contrast to the

more specific, pinpointed questions asked in the questionnaires. Responses in these interviews lent themselves readily to the kind of open and axial coding described below, in that patterns and themes could organically emerge.

Table 1 below indicates the sources and typed of data collected for this study. The numbers in parentheses after each data type indicates how many of each type was collected.

Table 4: Sources and Types of Data

Sources of Data	**Types of Data**
Participant-Observation	• Fieldnote entries (53) • Individual student files (27)
Student Work	• Whole-class, pre-unit writing samples (5) • Whole class samples of developmental/practice assignments (34) • Final research papers & CMML projects (16)
Questionnaires	• Whole-class start-semester (27) • Whole-class, post-unit (3x) = 27 students (minus absences) = 116 • Whole-class end-semester (27)
Documents & Artifacts	• CMML lessons & activities • Common Core State Standards • National Education Technology Plan • District technology plan
Interviews	• Informal student interviews (22) = three focal students, three times each = four non-focal students, two times = five non-focal students, one time • Formal student interviews (6) = two focal students, two times each = two focal students, one time each • Faculty Member (1) • Administrator (1)

Data Analysis

I analyzed the content of interview transcripts and observation fieldnotes using a combination of open and axial coding and recording themes and patterns as they emerged. I did this coding twice – both during the collection phase and at the end of the collection phase. Doing this while the study was still in progress allowed me to make slight changes to data collection procedures for interviews or questionnaires not yet

completed to more fully draw out themes that I saw emerging, or to clarify my presentation of questions that may have been unclear to participants. Further, the process enabled me to better sort out the categories of analysis specific to CMML development, as in some cases groups of codes could be bundled together into larger themes, and in other cases more general codes were better broken down for closer scrutiny of each component element. These categories of themes and constructs are reflected in the breakdown of sections in the findings chapters.

Whole-class questionnaires were analyzed both qualitatively at the line-level for important insights made by individuals, as well as collectively, to gain some quantitative sense of the efficacy of a particular assignment or construct. It was helpful, for example, to be able to tally that 80% of students in the class found a particular assignment or activity engaging, or that the class was evenly split in their understanding of a particular concept. While the majority of my coding and analysis relied on my own qualitative description – either from my observation notes or from first-hand accounts – the questionnaires provided a student-generated check to the patterns I saw emerging, and also provided new insights I could not gain through observation.

Student-produced Literacy Artifacts

My analysis of students' literacy development centered around assessments of their written and multimodal work for the course. For each unit in the class, I collected written pieces from all students before, during, and after instruction. Some of these pieces were ungraded and served either as beginning benchmarks or as practice exercises, on which students received credit for participation as well as my narrative feedback. Graded assignments were assessed through rubrics containing skills and constructs gone

over in class, and on them students were given both narrative feedback and point values. The rubrics for major assignments were designed around state and departmental frameworks, as well as around my knowledge of traditional, multimodal, and media literacy; the rubrics for major assignments are illustrated and explained in detail in the following chapter. For the purposes of tracking literacy development for this study, I assessed and analyzed work done before, during, and after specific CMML instruction. While I was not always able to discern a direct cause-and-effect relationship between literacy growth and the addition of a CMML component, I was able to qualitatively describe how particular literacy skills and constructs were developing in individual students. Ultimately, it is this kind of analysis that is at the heart of the study – an attempt to qualify specifically describe how and what kinds of literacy develop occurs within a CMML classroom.

Institutional and Policy Documents

Analysis of school and state documents that outline goals for technology use and literacy provided me with an initial framework within which to measure the effectiveness of the CMML curriculum. I culled these documents for references to specific literacy skills and uses of technology, noting which of these I saw being developed through a CMML curriculum, and specifically how. Perhaps more importantly, I also considered the kinds of multimodal and media literacy skills that these documents might be missing that are afforded by a CMML curriculum. In my findings I analyze these classroom and institutional level constructs within the context of the larger national discourse on literacy and technology use in current education reform.

Institutional and policy documents also framed both the construction and analysis of my interviews with administration and support staff. Because within the bureaucratic hierarchy of the public education system administrators are situated in between and stand accountable to both classroom practitioners and the state, these interviews were rich sources of qualitative data about their intersection. In particular, I relied heavily on the administrator's views about the impact of new educational mandates and how these might be influencing the institution as a whole. This kind of bird's eye view is often lost on individual classroom teachers, who are mired in the close work of their own classrooms. Similarly, administrators are also pressured by the needs and will of a school's faculty and student body, and can gain a unique pulse on patterns that emerge within an institution from 'below'.

Thus, in my analysis of these interviews and documents, I took coded themes and patterns and then triangulated them with my own experiences as a classroom teacher and with the experiences of my students. The complexity of how policy and practice impact one another could begin to emerge within the intersection of these three perspectives around identified themes. This kind of repetitively recursive process, in which themes emerge and then data is revisited, is a hallmark of a grounded theory method (Glaser & Strauss, 1978).

Socially Situated Literacy Development

My analysis of all data was filtered through an ongoing awareness of the incredible complexity of literacy processes, and the myriad factors that can contribute to learning and development for each individual. As a tool to assess these complex processes in my students, I created an electronic file in which I recorded notes on any

information that I thought might be relevant to a given students' literacy development. More specific than the fieldnotes I took on the basis of my observations each day in class, these notes were specific to the literacy skills I saw emerging in each individual students' verbal and multimedia communication. While some of the information in the individual students' files overlapped with my daily fieldnotes, these notes allowed me to disaggregate some of the group and whole-class observations I had recorded after class sessions, and consider each student individually. In line with the sociocultural theoretical foundation of the study, I chose to focus on literacy development within its social context (Gee, 1996; Bourdieu, 1991; Halliday, 1973), but I also wanted to be able to study each students' progress individually as carefully as possible. In addition to considering the interactions that took place between and amongst students in the class, this also included looking at students' previous experiences in school and with traditional literacy exercises; their alternative or home literacy practices; their other interests or hobbies; activities or circumstances that might enhance or detract from school; as well as the specific experiences and processes of each student during units of study in my class.

As is described in detail below, students began work in this course with profoundly different levels of traditional literacy skills and proficiencies, different histories of academic achievement and engagement with school, as well as numerous distinct personal circumstances that might impact their academic and social functioning. Specifically distinct from what can be measured by and analyzed through the use of standardized assessments, I attempted to capture the multiplicity of factors influencing literacy development by studying each student's work within the context of his or her individual experiences and circumstances. While staying grounded in the actual literacy

artifacts produced by students, my analysis of student work and literacy development took into account the whole student.

Researcher Positionality

The trajectory that led to the development of the CMML curriculum in this course was specific to my own development as an artist and educator, as well as to the unfolding of the digital revolution of the past two decades. Whether in a stand-alone Writing classroom, or as part of a regular ELA curriculum, at the time of this study I had been teaching traditional writing skills for over twenty years in various positions at both the secondary and university levels. Leading up to this research study, I had taught literally thousands of students between the ages of fourteen and twenty-six, from various socioeconomic, racial, ethnic, and religious backgrounds; international students; English Language Learners; learning-disabled students; emotionally and behaviorally troubled students; physically and sensorially impaired students; students labeled gifted and talented; and students with a range of background-knowledge, skill-level, and educational motivation. Over this time, as most effective educators do, I spent years honing in on a tweaking the kinds of approaches that worked best for various learners – specifically in regard to the development of writing skills -- and I developed strategies for more effectively reaching the range of students I worked with in any given setting.

These experiences, coupled with an early awareness of the connections between language and personal and social power, oriented me as a critical educator concerned with disparities traditional academic achievement and educational trajectories of students from differing socioeconomic backgrounds. Each year that I spent as an educator in the mainstream system reinforced for me the reality that the social and economic inequalities

in our larger culture were largely being reproduced through our model of schooling, an empirical understanding I was later able to explore through theories of cultural reproduction and alternative schooling (Bourdieu, 1993; Gatto, 1992).

My dual desire to work against this trend, and at the same time to help my students cultivate the kinds of literacies required of their success in the mainstream academic system, has been central to my development as a classroom teacher and is very much in line with the critical multimodal media literacy focus of this study. What I saw time and time again was that students – particularly disenfranchised or struggling students -- made strides in their traditional literacy skills when they began to understand the larger systems organizing their schooling and society, and when they began to feel a sense of agency in determining their own paths and in impacting these systems. In addition, I found that students were best able to access the often foreign and rigid structures of traditional academic literacy skills when they could connect their work to literacies and interests they had already developed in other settings. For many 21st-century students, digital media in one form or another are something with which they have more interest, familiarity, and often, advanced literacy. As many scholars have studied (Kress, 2003; Morrel, 2004; Jenkins, 2006), students in the generation of 24-hour access cable television, high speed Internet, and mobile smartphone technology have developed whole new sets of literacies that must be understood and integrates into traditional literacy education.

These experiences over the course of close to twenty years in the classroom have also coincided with significant shifts in the culture of traditional schooling, many of which are discussed at length in the opening chapters. I approached this study with the

firm and overt belief that the current era of education reform, including the ways in which high-stakes testing is being used, has been and continues to be damaging to the quality of public education, and particularly so in terms of widening the so-called achievement gap along the lines of race, socioeconomic status, and non-traditional learning needs. Therefore, throughout the design and implementation of the study I had to be very careful to frame my questions and observations with as little bias against what I perceive to be the detrimental effects of much of current policy prescriptions, and toward what I perceived to be the benefits of a CMML curriculum.

In an attempt to balance these potential biases, I framed all questionnaire and interview questions as neutrally as possible, asking for the subjects' opinions or experiences, and omitting provocative, leading language. In my daily observation notes, I specifically kept two columns to record both positive and negative elements of each day's lesson or activity, and I collected student-produced artifacts that I considered to be both successful and unsuccessful. It is worth noting that these practices were important to me both as a researcher and as an educator continually trying to improve her own practice. In this way, this portion of the study naturally reflected elements of action research (Torbert, 2004; Whitehead & McNiff, 2006), in that a built-in part of my practice as a teacher was the continual improvement of my curriculum and pedagogical approach.

Collecting data in a classroom in which I was the primary instructor also presented me with both advantages and disadvantages as a researcher. First, it gave me much greater and more intimate knowledge of and connection to the students, the curriculum, and the school structure than I ever could have had as an outside researcher. Thus, elements that might have been difficult for an outside researcher to access or

navigate – such as information about a student's academic history, or the development of a particular curriculum – were available to me with relative ease. On the other hand, this kind of inside knowledge and access – as well as my own stake in wanting my students to grow and have positive experiences – required a great level of reflection on and questioning of my own assumptions and motivations throughout the study.

CHAPTER 4

ACADEMIC WRITING & THE CMML CURRICULUM

Offerings for youth related to digital media often focus largely on production, and are taught through workshops, programs, or courses separate from traditional academics. Many such after-school and community programs exist around the country, and some better-funded schools are able to offer video, photography, or audio production classes, and sometimes even media literacy classes, as electives. These programs and courses range in sophistication from relatively unstructured spaces with undeveloped curricula to extremely thorough, planned programming, yet media literacy – even where mentioned in state frameworks – has yet to be established as core curriculum in most U.S. secondary schools (Kubey & Baker, 2000). This decoupling of core academics and multimodal- or media-based curricula is perhaps most notably reflected in both the skills and content covered in the standardized testing to which schools are increasingly held accountable. Because it is rare to find mainstream core academic courses in public schools with curricula explicitly built around the integration of digital media, this study sought to examine the thorough integration of digital media into a core academic course with an explicit focus on literacy development.

The course examined for this study represented the second time I had taught this curriculum. While I had taught many aspects of the course in smaller units or assignments in previous classes, I had only once before (in several sections simultaneously the previous semester) enacted the entire CMML curriculum described here. Given this, I considered both the curriculum and my pedagogical approach to be

works-in-progress, and I made examining and reflecting on them paramount to the focus and goals of this study. Thus, this chapter answers my first research question:

1. What constitutes an effective critical multimodal and media literacy (CMML) curriculum and pedagogy?

In addition to articulating parts of the curriculum design and pedagogical approach that worked well, I also discuss aspects that I would do differently were I to teach the course again.

As described in the previous chapter, the setting of this study was a public high school academic writing class required of graduation, which all students in the school were required to take in addition to four years of a regular English Language Arts classes. In this chapter, I will describe both the regular core curriculum for the course and the critical multimodal media literacy (CMML) components integrated into each unit, as well as the methods of assessment and analysis used for this study. It is worth noting again that it was because the school was in good accountability standing with the state – and perhaps also because of my advanced tenure as a secondary teacher, in addition to the general autonomy and flexibility granted to all teachers in the building – that I was given explicit permission by the school's principal to integrate CMML into the writing curriculum in my classes.

Theoretical Frame

In addition to the larger theoretical frame informing my work outlined in the first chapter – which covers theories of social and economic neoliberalism, critical and multiliteracies, and theories of multimodality -- I will consider here the scholarship most relevant to my first research question regarding the nature of the CMML curriculum. The

development of my CMML curriculum is grounded in schools of thought that explore the complicated relationship between reproduction of and resistance to the dominant culture through schooling, and specifically the ways in which the tools of the digital age are deepening and altering these theories.

Critical curriculum theory understands schooling and curricula as inherently social, political, and ideological. Radical theorists such as Michael Apple and Henry Giroux -- influenced heavily by the Frankfurt School, neo-Marxist thinkers, and the work of Antonio Gramsci (1971) – have helped to forward an understanding of earlier theories of schooling and social reproduction (Bowles & Gintis, 1976), or the ways in which modern schooling and curriculum can serve to transfer values, norms, and codes of behavior of the dominant culture. The ways in which social reproduction through schooling is further complicated by aspects of agency and resistance has been widely theorized by scholars such as Friere (1970; 1995), Apple (1982; 2004) and Girioux (1984; 2001). Bourdieu & Passerson (1970/1990) further help us to understand the ways in which cultural components play a role in the negotiation of schooling, and the nature of the reproduction or resistance take place. A CMML curriculum is informed by these theories in that it both seeks to engage students in understanding the systems of schooling and larger society of which they are a part, and to provide them with tools to resist inheriting the status quo and to construct a new paradigm of learning and sharing knowledge.

As an extension of this critical orientation, CMML is further informed by theories of multicultural, culturally responsive, and social justice curriculum and pedagogy. By asking students to engage with the causes and potential solutions to pressing

contemporary social issues, the curriculum necessitates the study inequities and injustices connected to race, class, gender, sexual orientation, and/or ability. This begins with and includes striving to understand the ways that inequities are reflected in the schooling system itself (Banks, 1997), as in the opening unit in the CMML on exploring the purpose of education. A CMML curriculum – particularly in communities that are predominantly white or affluent – emphasizes the importance and relevance of social justice to everyone, not just socially or economically oppressed groups (Nieto, 1996; 1999). It includes culturally diverse and relevant content that draws on students' prior experiences and knowledge, encourages links between home and school practices, and honors different cultural identities (Gay, 2000). Perhaps most importantly, a CMML curriculum focuses on contemporary social issues with the express purpose of developing tools for current and future social activism (Sleeter, 1996).

More specifically, a CMML curriculum is informed by scholars who have taken a critical, culturally-responsive, social-justice oriented approach to media literacy pedagogy and curriculum. Sholle & Denski (1994), Jhally & Earp (2006), and Kellner & Share (2007), and Morell (2002; 2008), among others, have argued for and theorized a critical approach to media literacy pedagogy. Scholars such as Goodman (2003) and Turner (2012) have focused specifically on the critical pedagogical applications in media production for youth, merging social justice imperatives, education, and the production of new media. The CMML curriculum designed here draws on these traditions and seeks to understand and apply them within a traditional academic context bounded by institutional and state frameworks for writing instruction.

Background & Overview

Before I integrated CMML, the core curriculum for the Writing course included units on various rhetorical modes frequently encountered in academic or essay writing. While undergoing many revised iterations over the years, at the time of this study, the writing types agreed upon by the department for this course included descriptive writing, narrative writing, analytic writing, and persuasive writing. For each of these rhetorical modes, students were to read and analyze example texts, practice relevant writing skills through shorter exercises, and finally to write multiple drafts of full essays in each format. In addition, the course included a major research project, through which students learned the fundamentals of the research process and wrote an academic research paper. Each of these units of study incorporated ongoing instruction in grammar, vocabulary building, and the use of standard academic writing conventions. Because the majority of students took the Writing course during their freshman year (with some exceptions due to scheduling issues, transfers, or retention), instruction specific to state standardized testing – which students take in their sophomore year -- was also a part of the curriculum, with particular attention given to providing textual evidence in writing and using context clues in reading.

I integrated CMML into the core curriculum of the Writing course both thematically and in relation to skills and concepts covered. While integrating CMML substantially changed the nature of the course, it was my explicit intent to allow the traditional curriculum to guide the design of my course, so that I could ensure that students left with the same writing skills they would be getting in sections of the course taught by other teachers. It is worth noting that a very different CMML curriculum might

be built from the ground up, rather than being integrated into a pre-existing curriculum; in this case, both the design and content of the curriculum were driven by the school-sanctioned skills and content for the writing course.

In terms of content, it had long been a point of debate within the English Department at the school as to whether the Writing course should center around a particular theme, so that skill-based reading and writing assignments would be tied to the study of a unified subject. While no consensus had been reached on this, many Writing teachers did in fact build their course curricula around a unifying theme of their choice. In keeping with the critical nature of my course, I chose the thematic focus to be 'social change,' and the ways in which writing and media production might be used as tools to tackle the most pressing social issues of our time. This critical orientation of the course was integrated into the fabric of most assignments, and played a particularly central role in the extensive research projects done in the final third of the semester.

The CMML curriculum was designed to focus on specific literacy skills common to expression in writing and in the multiple digital mediums used in the course. In addition to print-based text, we focused on three digital media formats – still photography, audio production, and video production – each of which employs differing visual or aural modalities. In the curriculum, I paired each of these respectively with one of the rhetorical modes, making the CMML focus of study the particular skills that could be developed through the combined use of these digital mediums and writing.

In addition to studying photography, audio, and video production – and the multimodal literacy required of their use – I also included a more traditional media literacy unit on the study of the advertising industry and ways to interpret media

messages, which was paired with the persuasive rhetorical mode in writing; this portion of the curriculum is also described in detail below. While many other non-production-based media literacy topics and skills could also be integrated into a traditional writing course, for the purposes of this course and the design of this study – which, again, were being driven by the pre-existing curriculum -- I chose to limit this to one topical unit on advertising.

The goal of the CMML portions of the curriculum was to introduce the study of different multimodal skills each first in isolation, and then to build toward an understanding of and level of fluency with their integration for the culminating multimedia research project. Not only was each skill introduced and practiced in isolation, but also each digital medium was introduced and studied individually; both of these were intended to have a cumulative trajectory, with an understanding of each skill and medium deepening as the course progressed. As each new digital medium was introduced, previously studied literacy skills were revisited with a widened lens of comparison. For example, our discussion of and practice with the use of sensory detail in the early unit on descriptive writing and photography was broadened once we could compare how sensory detail might be conveyed through audio production in the narrative unit.

Pedagogy Guided by Core Critical Constructs

In examining the curriculum as it was enacted over the course of this study, I was able to identify seven core constructs that repeatedly informed my pedagogical approach in the course. These constructs were implicitly integrated into lessons, assignments, and activities, and were explicitly proposed to and discussed with the class on an ongoing

basis. Following is a list of these constructs, each of which is then explained in more detail below:

1) The cultural and historical location of self & others, and positioning student work as applicable in real world.
2) The awareness of larger systems organizing society – political, economic, educational, etc. – and how these might impact knowledge and information.
3) Understanding knowledge, information, and learning as co-constructed.
4) The ability to discern connections between topics and pieces of information.
5) An awareness of importance of structure and design on meaning.
6) An awareness of audience and purpose.
7) The development of CMML for social change.

Constructs 1-3: Knowledge & Power

My pedagogical approach is rooted in the firm belief that all education is ideological and political, and while teachers should be extremely careful not to force their personal beliefs on students, it is impossible to design a course or teach in a way that is not rooted in a particular worldview. Thus, my intent has always been to be both explicit and transparent with my students about what I perceive to be the ideological and political orientation of my courses and why they are designed as they are, and then to actively invite and introduce alternative orientations as the course unfolds. This is especially reflected in the first two guiding pedagogical constructs, which are: 1) All learners, and particularly adolescents, should seek to locate and understand themselves within the context of their personal and social histories and cultures, and begin to see themselves as able to actively participate in public discourse around important issues. In other words, I

wanted students to begin to see their distinct places in culture and history, and to understand that the future is not simply something they will inherit, but something that they can help to create through their own learning and engagement.

This is also intimately tied to the second core construct: 2) Students should develop an understanding that knowledge and learning are socially constructed; I wanted them to understand that their education, and all information, comes filtered through particular systems that are governed by particular rules, that are made by particular people, within particular personal, social, cultural, and historical contexts. I wanted my students to consider that even "expert" knowledge – namely, that presented by their teachers and their textbooks and their news sources – is most often reflective of a particular worldview, and that to understand it critically requires asking questions about its origins and context, and about what has been omitted. Even more, I wanted them to consider the ways in which the digital revolution and the new media forms we were studying in the class further complicated notions of expert knowledge, what counts as valid information, authorship, and the ways that information and learning are shared. I wanted students to see the ways in which new media and digital technologies have changed traditional forms of gatekeeping around the sharing of knowledge, and that with proper access and strong critical multimodal and media literacy skills very powerful pieces can be produced and disseminated by almost anyone. Connected to this, as a third core construct, I wanted them to see themselves and each other as valid sources of information and learning, rather than looking solely to me as the instructor, or to traditional expert sources: 3) Knowledge, information, and learning should be co-constructed, and should not solely come from traditionally deemed expert sources.

These first three constructs were integral to the important research skill of assessing the validity and potential bias of various sources during students' research projects, and also framed many of our discussions about academic writing conventions. Frequently students at this level fail to dig behind the sources of information they find, a phenomenon greatly exacerbated by the ease and abundance of sources on the Internet (O'Sullivan & Scott, 2000). At the same time that I was asking students to consider non-traditional, non-expert sources as potentially valid and useful, I wanted them to develop the skills necessary to be discerning and think critically about them. Multiple assignments throughout the semester asked students to do investigative-type digging to learn more about the authors, publishers, the time period of publication, sources drawn from, and clues regarding the ideological orientation of various sources they found. For example, after having samples modeled by me in class, they were asked to do this in a Web- and book-based type of scavenger hunt, where they worked in teams to uncover information about particular sources - print, video, audio and photographic. Students also did this through repeated questions guiding a close reading and investigation on a series of news articles, about which students took turns sharing with the rest of the class.

In their own writings and media productions, students were also asked to take the role of authentic authorship, considering their positions as adolescents with distinct personal and family histories, attending a Northeastern public school, and in a community and larger society with specific historical, cultural, and political attributes and values. Through modeling and scaffolding, students were asked in all assignments to consider these larger contexts of which they are a part, to take ownership their specific academic

voices, and it was suggested to them that if researched and crafted critically their voices were as valid as many of the formal sources of information to which they are exposed.

In this same vein, the first three critical constructs informed much of our work around the study and practice of academic writing conventions. I frequently asked students not just to memorize a rule, but to try to understand where it might have come from and why it might exist. For example, I introduced students to the background of the MLA format they were required to use for citations (and that they should have been using APA for their social science topics, but the department wanted only one form to be taught at this level). We discussed why using in-text citations was important and useful, and we considered the information and format of bibliographical entries. As another example, we considered the ramifications of traditional academic writing instruction emphasizing erasure of any personal pronouns, asking student-writers to imagine themselves as objective analytical outsiders to the world of ideas they are exploring. By the time they have reached high school, most students have internalized that rule – never use "I" in academic writing – without even considering why it exists, what impact it has, or how their own voices and experiences might be effectively integrated into academic writing (as it is in most published scholarly texts).

Despite a great deal of rhetoric about empowering students as critical thinkers, this kind of pedagogical approach stands in direct contrast to much of traditional academic writing instruction, as well as to trends inherent in the new Common Core standards. Swinging the pendulum even further in the direction of detaching students as people from their academic pursuits, the new Common Core ELA standards – while covering many important skills – find their roots in the mid-20th century literary

theoretical tradition of New Criticism, which emphasizes texts as self-contained and self-referential, as opposed to being reflections of their cultural and historical context. Teachers are being encouraged by the new standards to de-emphasize these aspects of literature, and to discourage personal responses and interpretations by students. In contrast, my CMML curriculum is grounded in the strong belief that not only are meaningful academic analysis and personal and cultural reflection not mutually exclusive, but that true critical thinking centers on their integration.

Construct 4: Discernment

Another key construct guiding the class was integrated into multiple assignments, including the close reading and sharing of current news stories mentioned above, as well as a "Get Curious for Research" series of assignments described in the next section: 4) As critical thinkers, students must always be seeking to make connections between various topics and pieces of information. This includes skills such as inductive and deductive reasoning – and being able to see the larger and more specific connections to a topic – but also being able to understand how topics and ideas relate to one another and how they are relevant for particular purposes and within particular contexts. Keri Facer (2011), in her sweeping look at education, technology, and social change, refers to this as "discernment," and identifies it as one of three essential attributes students need in the new technology landscape along with multiliteracy and responsibility:

> Discernment is about the ability to judge not only the traditional qualities of information – trustworthiness, reliability and so forth – but, more importantly, to judge the relationship of information to other information, to your own goals and interests, and to the contexts in which it is used. In other words, discernment is the attribute we need when we realize that the main problem we face in a rich digital landscape is not primarily a 'filtering' problem but a 'relational' problem, a problem of judging value against context (p.70).

This kind of critical thought when faced with any information – the ability to make connections, understand relevancy, reason inductively and deductively and extrapolate – is in itself an essential skill that can both be taught through, and is being changed by, the digital revolution and multiple platforms through which we learn. It emerged as a central component of the design of a CMML curriculum and pedagogical approach.

Constructs 5&6 – Structure, Design, Purpose, & Audience

Two more central constructs that guided the pedagogical approach to this CMML course were more specifically concerned with texts, both written and multimedia. These underlay each of the types of writing and digital mediums studied: 5) The structure and design of texts must always be considered as paramount to the ways in which they convey meaning, and 6) All texts should be analyzed and crafted with an awareness of their intended purpose and audience. Thus, our focus for each piece of writing that we read or practiced, and for each piece of media that we consumed or produced, took these constructs as a starting point. Students were always asked to consider what meanings were trying to be conveyed, to whom and for what purpose, and how effectively the structure, design, and choice of medium contributed to conveying those meanings.

Construct 7- CMML for Social Change

Finally, as an overarching construct, I emphasized throughout the course that, 7) *our* larger purpose for educating ourselves and learning the skills embedded in this course – in other words, becoming multimodally and media literate – is ultimately to be able to affect social change. This construct was perhaps the most explicitly and specifically political, in that some would argue there are other more important purposes for education. This orientation also stands in contrast to the rhetoric of current education reform, which

– as described in the opening chapter -- values most highly the vocational purposes of education. Thus, I proposed the possibility of affecting social change to my students as a possibility to try on, and I encouraged them to consider throughout their work in the course questions such as: How effective and powerful were each of the mediums we were studying at making social change? Was social change possible? Desirable? Around which issues? Whose responsibility is it to make social change? How would various social changes affect each of them? This emphasis on using multimedia literacy to make social change, and the more specific ways in which it was integrated into the curriculum, is explored in the next section.

Focus on Social Change Woven into Curriculum Content

In addition to the construct of making social change through CMML, topics relevant to social change were also woven into the content of the curriculum. For example, as part of the critical orientation of the course around making social change, we began the semester with a brief unit on the public education system itself, and where and how students saw themselves and their community within this larger federal system. At the time, fierce debates were unfolding within our local community about impending budget cuts to our public schools, and what this would mean for programming and the quality of education offered. This was one of only a few forums where students were being asked to engage with this debate in a substantial manner, and as part of their regular curriculum. Students did readings and took in other multimedia pieces about the roots of public education, how it is funded, and what some of the central debates are concerning how to make it better. They wrote about their own educational experiences and what they thought the purpose of education should be. They worked collaboratively

in groups to envision what an ideal school would look like, and why. Beginning the semester with such an important social issue, immediately relevant to each of their lives – especially one in which they were able to grapple with the same complexities and problems being debated in larger society – oriented students as active social and political agents through their work in the class. Additionally, this unit allowed for the introduction of our reading of powerful multimedia pieces on the topic – including writing, photography, video, and audio pieces – and gave us a forum to begin discussing their differences as mediums and as tools for social change. Finally, it provided me – as an instructor – with substantial samples of each student's writing to use as a beginning benchmark.

Another way that social change was woven thematically into the curriculum for the course was that at various points during the semester, students were asked to bring in current news stories that they thought reflected an important social issue to share with the class. Different students were chosen to do this each week, and were asked to find articles and practice the kind of close-reading and note-taking strategies taught in the class, which would be required of their later research. This led to discussion, thinking, and writing about many contemporary social issues to which students might not otherwise have been exposed, and allowed for a pool of potential research topics to begin to form for later in the semester. The specific skills and constructs embedded in these assignments are described in detail in the next section.

Finally, the theme of social change was integral to the research projects on which students spent the final third of the semester. I made it a requirement of the project that students choose a contemporary social issue that they felt was important and around

which they hoped to see change. In addition, as part of topic development and as an extension of the kind of "discerning" critical thinking described previously, students were required to incorporate both a "local" and a "larger context" component to their research, as well as both secondary and primary research – for example, one student who chose to study GMO's did secondary research on the larger societal debates concerning GMO's, and did primary research on a local store that carried both GMO and non-GMO products. The local, primary research was intended to get students into the field, hopefully using the media production skills they had learned to gather first-hand accounts and material, and able to make connections between larger topics and their own community.

Multimodal Media Skill Development

The skills developed through the curriculum ranged from basic proficiencies in each modality and medium to more advanced skills, as well as deep critical thinking skills. As was explained earlier in the previous chapter, students came to the class with a diverse range of writing skills and proficiencies in each of the digital formats covered, and in particular in writing. Some students in the class were writing at the college level, while some literally struggled to form a sentence in writing. Likewise, several students in the class had advanced knowledge of computer hardware, software, and usage, and others needed instruction in basic tasks such as saving files or sending emails. As much as possible, I attempted to individualize instruction to meet students' needs, and I designed the curriculum to cover the basics, allowing room for more all students to move forward from the skills with which they had begun the course.

Hardware & Software Skills

For each digital medium, instruction covered basic use of hardware and corresponding software. I intentionally recruited students who were already adept at using hardware and software to help others in the class and share their knowledge. As is discussed in section on core constructs, rather than being exploitative or holding these students back from their own work, this created a culture of mutual learning and a non-teacher-centered structure to which students responded positively. Calling on classmates for technical assistance or expertise created a culture of collaboration and student-driven learning, which – as will be detailed in the following chapter -- I observed numerous times augmenting students' sense of interest, motivation, and follow-through. I also worked with the more advanced students to push themselves to learn new types or components of software that they did not already know well, and to push themselves into new territory and stretch their skills and knowledge. During the media production portions of the course, students were able to work at a more independent pace, and – while keeping the important literacy skills a constant -- I was able to modify assignment expectations in terms of length, quality, etc. according to each student's level of proficiency with the hardware and software.

Not only did this allow for student-centered and student-driven learning in much of the class, but it further developed essential troubleshooting and problem-solving skills in students. For many media production assignments, I had students work in pairs or groups, and I encouraged them to call on one another for help while working in the Lab. The need for this kind of problem-solving was exponentially complicated by frequent hardware and system malfunctions at our school, and I made this process an explicit part

of the course, letting students know that there would be much frustrating work of learning new technology and dealing with computer errors, and that learning to troubleshoot these issues was part of the learning process.

Rather than a curriculum that includes direct instruction around these kinds of technological skills – as many computer literacy classes might – a CMML curriculum allowed for students to learn technology skills by necessity within an authentic context of intellectually higher-order work of multimodal production. Lessons leading up to technology use for media production work had centered around important constructs such as perspective, design, and organization – or many others illustrated in Table 6 below – so that by the time students were in a position to produce a media piece they had quality material to work with and were motivated to learn technology skills necessary to produce a piece in which they were genuinely invested.

Multimodal Literacy Skills

More direct, carefully-planned teacher-initiated instruction came in the form of introducing students to the fundamentals of each type of writing and each digital medium, and through the creation of activities and exercises that would allow for practice with and analysis of them, as well as the development of CMML skills. The focus was both on the essential grammars and conventions of each form overall, as well as on the specific literacy devices or skills most important to a given rhetorical mode. Throughout the course, we studied grammar and academic writing conventions that are important in all rhetorical modes – for example, we continually revisited how commas, or paragraph topic sentences are important in conveying our meanings effectively in writing. In addition, for each unit, we focused in on elements that were specific to conveying meaning within a

particular rhetorical mode – for example, by using sensory details in descriptive writing, organizing chronologically in narrative writing, or formulating a strong thesis in persuasive writing. These conventions and skills – while not unique to these rhetorical modes alone – form the basis of instruction for each writing type in many standard academic writing courses and rhetoric anthologies.

Keeping these conventions and skills at the center of our focus, we set out to develop fluency with them as writers through a series of assignments that combined writing and multimodal activities. In the descriptive unit, for example, we zeroed in on several elements that writing and photography have in common, and used the two forms in tandem to explore their ability to shift perspective, use symbols and metaphors, to provide sensory information, and to provide a frame. Depending on the skill or construct, we would allow the photography to inform the writing, or the writing to inform the photography. Table 6, on the following page, outlines the corresponding units of multimodal, media and writing focus, as well as the overlapping concepts and skills covered for each.

Table 5: Overview of CMML Units

UNIT	**MODALITY Focus**	**Digital MEDIA Focus**	**Traditional Writing Skills/Constructs**	***Overlapping CMML Skills/Constructs***	**Digital Media Skills/Constructs**	**Culminating UNIT Assignments**
Education Exploration	Multimodal	Introduction to powerful pieces across media platforms	*Beginning exploration of differences in media types, uses for various messages, considerations of audience. Orientation as students in larger system & as potential agents of social change.*	"	"	Position Paper on education
Description	Still visual	Photography	- word choice & vivid imagery - details matching point, purpose, & audience - different methods of organization - avoiding fragments	- ***sensory detail*** - ***perspective*** - ***framing*** - ***symbolism*** - ***use of metaphor*** - ***creation of dominant impression***	photography: - basic camera operation - basic photo editing - light & shadow - line & shape - depth-of-field; focus - grouping photographs	Descriptive Essay Photography Series

Narration	Aural	Audio Production	-effective verb use, verb chains -effective use of dialogue -organization -making transitions -avoiding run-ons; subject-verb agreement	***- effective lead/hook*** ***- mood & tone*** ***- narrative arc & method of organization*** ***- showing v. telling*** ***- point-of-view*** ***- effective dialogue*** ***- pacing***	audio production: - use of Audacity - basic audio editing techniques - use of ambient & background sounds	Narrative Essay Audio Podcast
Persuasion & Argumentation PART I	Multimodal	Contemporary Advertising Industry – across all media platforms	(see below)	(see below)	(see below)	(see below)
Persuasion & Argumentation PART II	Moving visual	Video	- thesis development - effective use of topic sentences - note-taking from sources - use of direct quotations - using transitional phrases	***- using effective transitions*** ***- making points of comparison*** ***- use of pathos, logos, & ethos*** ***- identifying logical fallacies*** ***- consideration of audience***	video production: - use of free on-line video editing programs - basic video editing techniques - camera motion - jolts per second	Persuasive Essay PSA Video
Research & Presentation	Multimodal	Choice of media project: Original photo essay, video production, audio production, or multimedia presentation.	- summarizing, paraphrasing & quoting - using signal phrases - using in-text citations - organizing into sections, use of subheadings - creating a MLA works cited list	***- finding & evaluating multimedia sources*** ***- synthesizing information*** ***- sharing of work beyond school / potential for activism***	- combining media types effectively - editing for presentation length & quality - fielding Q & A	Research Paper Multimedia Presentation

For each CMML skill covered, the assignments were designed to weave back and forth between the writing focus and the corresponding modality focus, with each unit culminating in a polished writing and more formal digital media piece. As one example, during the descriptive writing unit, in order to practice the use of sensory details and specific word choices, students did various practice exercises such as writing detailed descriptions from photographs, and making sketches of photographs from detailed description. One assignment had each student choose a photograph and then describe it in writing in enough detail so that a partner who had never seen it could sketch it on paper. Another assignment meant to practice the concept of perspective asked students to photograph an object from three different vantage points, and then reproduce what they saw in writing. Our discussions centered around what happens when we look at

something from above, or below, or close up versus far away. What happens to it visually, and how does its meaning change? Thus, if I am trying to convey in writing my intimacy with an object as I describe it, what kinds of details might I include? If the place I am photographing evokes loneliness in me, from what vantage point should I photograph it? How might I convey that through the written word? These exercises asked students to consider the relationship between meaning made through words and meaning made through images, and in particular the medium of photography.

Similarly, in order to practice shifts in point-of-view in the narrative unit, students wrote about an event from three different people's perspectives, and then storyboarded what a video of each would contain. Why would the camera zoom in on one thing in the room if it were representing my mother's perspective, while my attention might go to something entirely different? How will I convey this in writing? The curriculum was designed to be cumulative, in that each construct explored could be further problematized with the study of a new writing and media form. For example, in the narrative/audio unit, we were already very practiced as a class at discussing changes in meaning around shifts in point of view, and we were able to consider how these ideas might translate to the medium of audio production.

For each unit we would also study examples of published writing and media pieces to analyze as well. By choosing powerful examples that students could relate to, each text became a study of what was done effectively and what was not. We read essays, studied photographs, listened to audio podcasts, and watched video productions, analyzing the use of and translation of the skills we were focusing on. Thus, the curriculum centered on both the consumption and production of media, and on becoming

both critical readers and producers of media. While also discussing the content and messages of these pieces – which were often thematically connected to important social issues – our main focus was always on how structure, design, and specific devices were used to augment meaning.

Students' written pieces were drafted multiple times, with each draft having been further informed by various multimodal exercises and activities. In much the same way that students naturally called upon one another's knowledge and skills during digital media production assignments, writing assignments were designed to position them as serious collaborators as well. Regular collaborative exercises, sharing, and peer editing activities gave students' sounding boards beyond me as the instructor for their work, and also increased their interest and buy-in into each others' literacy development.

Assessment

Assessment of students' progress took many forms in a CMML curriculum. As described above, for each type of writing studied, students engaged in numerous practice exercises that isolated a particular skill or construct. I began each unit by gathering a sample of students' writing in the particular rhetorical mode to be focused on, giving me a relative benchmark for the each student's understandings or abilities in a given area of writing. This was done both as a sound pedagogical practice as well as a methodology for researching each student's growth.

Students were graded by effort and the following of guidelines for most practice exercises, and were given specific feedback about their understanding and execution of each isolated skill or construct. A CMML curriculum and pedagogy emphasizes and weighs heavily these kinds of formative assessments, through which an instructor is able

to assess students' strengths and needs, and students are able to practice and improve; rather than focusing on the grade, students are encouraged to focus on the purpose, applicability, and particular qualities of various literacy skills. Final assignments in each unit included both a formal, polished essay that had gone through multiple drafts, as well as a final media piece that had been carefully edited; these were assessed through a rubric that separately scored students' ability to make deliberate choices to convey meaning through the individual concepts, skills or devices covered in the unit. Rubrics for the final multimedia projects can be seen in Appendix D.

As previously discussed, the role of peer feedback and collaboration played an especially important role in the CMML curriculum. Students often collaborated on assignments, and were in fact given credit for giving each other thorough feedback on works-in-progress. In addition, the CMML curriculum included multiple forms of self-assessment, and made reflection on and articulation of one's work a central part of what students were asked to do.

Conclusion

In summary, there were numerous aspects of the CMML curriculum and pedagogy that emerged as essential, defining characteristics. First and foremost, a CMML curriculum situated students within an authentic context of learning by focusing on their own lives and contemporary social issues of concern to them, and by utilizing forms of communication more familiar to them than print-based text alone. Within this context, literacy skills could develop authentically, and were often born out of interest and motivation to express ideas and create meaningful texts. The social issues to be explored were identified by students and suggested by the instructor, and much of the early work

in the course went into the generation of these topics. Following this, a CMML curriculum centered on both the consumption and production of writing and other mediums exploring these social issues. Both analytic and production skills were developed in the study of other texts in all mediums, and – as we all do – students were encouraged in CMML environments to learn by modeling other genres and devices used in others' texts.

Furthermore, a CMML curriculum was specifically designed so that devices and strategies made in one medium could be considered in transposition to other mediums as well. Thus, as can be seen in Table 6 above, each unit highlighted specific skills common to a particular genre of writing and another medium. In this way, concepts, skills, and strategies traditionally taught in isolation in writing courses – such as the creation or identification of mood or tone – were taught through multiple modes of communication, deepening students' understanding and sense of potential relevance.

Attention to form, structure, design, and aesthetics were fundamental to a CMML curriculum, so that students were able to understand and most powerfully utilize the affordances of various mediums. Particularly in their multimodal productions, assignments required of students a level of consciousness about how they were creating meaning through, for example, elements such as methods of organization, point-of-view and perspective, movement, sound, or color, depending on the medium being utilized. During each unit, we explored the particular affordances of a given medium, considering for what subject matter and purposes it might be most appropriate; connecting this to our larger underlying focus on social change, we were always asking hypothetically how to most powerfully make social change through various forms of communication. As part of

their final research projects, students were asked to make informed decisions about their choice of medium for their projects, as well as how they would structure and design their piece using that medium, and which aesthetic choices they would make. A CMML curriculum held as a central tenet that meaning cannot be fully understood or created without attention to form, structure, design, and aesthetic choices.

In regard to this, however, I did find that it was essential to carefully introduce the study of different digital mediums and multimodal skills each first in isolation, and then build cumulatively toward an understanding of and level of fluency with their integration. As will be discussed in more detail in the following chapter, particularly for students with language-based learning disabilities the study of another medium in tandem with writing sometimes became too much to keep track of; designing the course around the isolation of skills and concepts, each introduced and practiced individually, helped to keep the crossover between mediums from being overwhelming or confusing to students. Focus on the skills and concepts (as opposed to studying each medium in isolation, or studying various skills and concepts simultaneously) allowed for a smooth transitioning back and forth between writing and multimodal lessons, exercises, and activities.

Keeping this in mind, skills within a CMML curriculum emphasized most heavily the context in which students were learning, and the context of the sources they were examining and creating. Skills were developed within a context of higher-order, critical thinking in which students were engaging with real-world issues using analysis and evaluation, and were creating their own texts as part of a larger cultural dialogue. By identifying the larger social, cultural, historical, and political contexts of the works they

considered – and by situating themselves as serious actors within these contexts – literacy skills developed authentically as students grappled with meaningful, higher-order ideas.

This CMML course used a pedagogical approach rooted in a clear ideological orientation that holds that all knowledge is socially constructed and is inherently political. As such, it repositioned traditional notions of expert knowledge by breaking down student-teacher hierarchies, by encouraging collective learning, by giving students the tools to understand the context of what they are learning, and by encouraging real-world application and publication of their work. Multimedia is an especially effective tool with which to empower students to share their work given the growing availability of affordable digital tools and the current open state of the Internet. The overarching purpose of a CMML curriculum was to help students develop skills in order to make social change.

Chapter 5

IMPACT OF THE CMML CURRICULUM ON STUDENT LEARNING

In the previous chapter I examined the design of a CMML curriculum integrated into a traditional academic writing class. This chapter examines my second research question: How and in what ways did the CMML curriculum and pedagogy affect students' literacy development? Presented in this chapter are my findings concerning both growth in the traditional literacies targeted by the original writing curriculum, as well as growth of additional multimodal literacies, both of which were outlined in Table 5 (p.100). I attempt here to qualify here in what ways literacies developed as connected to the curriculum and pedagogical approach, as well as how this growth was promoted or enabled through the curriculum. More specifically, I describe the kinds of literacy practices adolescents engage in within a CMML curriculum, and describe how these practices lead to growth in particular literacy skills.

Through my research, I found that within the integrated CMML curriculum, both students' traditional academic writing literacies and their critical multimodal literacies grew in a number of areas. Below, after briefly reviewing the theories informing the question and findings in this chapter, I begin with a section on an overarching finding concerning the crucial role of engagement, motivation, and meaning-making for students in relation to their literacy growth, which I found to be a unifying thread throughout the study. I then present findings in the areas of topic choice and thesis development, in which I focus on examples from the descriptive and narrative units, as well as in the final research project. Following that, I analyze the literacy skills of development of ideas and deepening of analysis, including the skills of close reading and making textual references,

and the critical thinking skill of discernment. This is followed by sections illustrating findings in meaningful editing and revision; the development of discrete and technical skills; and trouble-shooting, problem solving, and collaboration.

These findings reflect areas in my study in which I have been able to identify specific links between a construct, lesson, or activity within the CMML curriculum and growth in a particular area of literacy. In addition,

Theoretical Framework

Sociocultural, Critical & Adolescent Literacy

The findings in this chapter are understood within the context of sociocultural theories of literacy and literacy development. Emphasizing the social aspects of learning, Vygotsky (1978) wrote that "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; the first, *between* people (*interpsychological*), and then *inside* the child (*intrapsychological*)" (p. 57, emphasis in original). Much of my analysis focuses on the ways in which social interactions led to individual growth in the CMML curriculum. Likewise, the role of mediation in learning - a central construct of a sociocultural understanding of literacy, particularly in the work of Vygotsky (1962; 1978), Bakhtin (1981; 1986), and James Wertsch (1991; 1998) – frames my findings in this chapter.

Vygotsky's notions of the ways in which people mediate learning for one another is especially relevant, as much of the CMML curriculum depended on the social interaction of students among themselves and with me as the instructor. Likewise, Bakhtin's theory of heteroglossia (1981), which understands expression through language as an amalgam of our own and other's voices, illuminates many of the examples used in

the findings in which students modeled their work after the multimedia pieces we studied in class. Wertsch's theory of mediated action (1991), which explores the tension between the actions of learners and the appropriation of cultural tools, also has direct bearing on the use of the digital technologies by students in this study.

The field of critical literacy further frames both the research question and findings in this chapter. Both the more explicitly political approach of the Freirean school, as well as the more text-based approach of theorists such as The New London Group – both detailed in Chapter Two – influence my understanding of students learning processes and literacy growth. Because all assignments, lessons, and activities in the CMML course were designed with the explicit underlying purpose of developing literacies to make social change, I was interested in the ways in which students' thinking about their own agency changed through the course. At the same time, I also wanted to explicate the specific ways in which more traditional, multimodal, and media literacy skills developed within this larger critical framework. The field of social semiotics helps inform my interpretation and assessment of students' texts, taking into account the ways in which the social, institutional, and cultural setting may have impacted students' literacies.

Finally, the study of adolescent literacy -- also distinctly sociocultural – informs my analysis here. While research and state-led interventions have long focused on early childhood literacy development, by contrast research on adolescent literacy development has struggled for funding and adequate attention (Moore, et. al., 1999). Moje, et. al. (2000) focus on the burgeoning field of adolescent literacy as distinct from the areas of "secondary" and "content" reading initiatives, both of which they argue presented limited views of the literacy practices and needs of adolescents. Unlike secondary literacy

instruction, which focuses on remediation, or content literacy instruction, which focuses on subject-area reading, the field of adolescent literacy represents a "broad generative view," according to Moje, et. al. (2000, p.402). This view includes recognition of multiple texts and literacies beyond those based solely in print, a recognition of the social identity aspects of literacy for adolescents, and the honoring of out-of-school literacies and experimentation (Moje, et. al., 2000).

Measuring Literacy Growth

I took several steps to establish a starting benchmark for each student's literacy skills as they began the semester, in order to measure the development of these skills as students progressed through the course. Within the larger orientation of understanding literacy development as inherently social, contextual, and ongoing, my goal was follow the development of specific literacy skills in relation to CMML assignments. Understanding as much of the whole person as possible of each of my students – including out-of-school literacies, home lives, special interests, daily routines, and health – was an essential component of understanding literacy growth. These factors may be even more important in understanding adolescent literacy learners than younger students, in that adolescents generally have more complex social lives, more out-of-school responsibilities, and more formed identities than younger children.

In addition to keeping observation fieldnotes on each day's class, I also kept individual files on each student which served both as a portfolio of their work and in which I recorded notes specific to each student. Through these fieldnotes, student files, and the assessment of assignments I found that almost all students who started with a lower level of traditional literacy skills at the start of the semester developed these skills

to a greater degree over the course of the semester. With several notable exceptions – which will be analyzed below -- this growth could frequently be linked to the multimodal assignments given throughout the semester. All assignments included specific rubrics that highlighted the essential skills and constructs we were studying in a given unit, so that both I and the students could keep track of their specific areas of strength and need.

Students themselves were often able to identify the ways in which the multimodal assignments influenced their learning and skill development, and I was able to identify the growth based by comparing work at various points during the semester. I began the semester by giving students a questionnaire (see Appendix B) about their experiences with school, in- and out-of-school literacies, interests and hobbies, and out-of-school lives. In addition, students were also asked to do in-depth reflections on many of their assignments in which they explained specific aspects of their processes of writing or media production (see Appendix B).

Critical Multimodal Media Literacies: Ushering in a New Age

Understanding Schooling: Engagement and Meaning as Motivation

A central finding of this chapter was that literacy growth was inextricably connected to the ways in which students were able to make meaning of the context of their work, which in turn heightened their levels of engagement and motivation. This will be discussed in greater detail in the sections below, but it is worth highlighting at the outset that for may students, interest, motivation, and a sense of purpose became key factors in literacy development. While this is likely true for most learners – of any culture, age, or disposition – it appeared to be particularly true for these students in ways

that were specifically connected to their perceptions of the educational system of which they are a part.

Our activities and discussions early on regarding the education system was one forum where many students articulated this, and it also was recorded multiple times in my field notes and came up in many individual student interviews. One student argued during a class discussion that school was where you learned about things "you won't ever use in the real world" (9th-grade male, February 11, 2013), a statement with which other students voiced agreement. Another student wrote the following in a pre-writing exercise leading up to her final educational philosophy paper: "Sometimes I feel like it's just memorizing a bunch of stuff for a test, and then you forget about it" (10th-grade female, February 13, 2013). As part of the same writing exercise, another student put it this way: "I don't really care about school…I just do what I have to do and then try to learn interesting things myself…" (9th-grade male, February 13, 2013). These kinds of sentiments were reflected in my fieldnotes multiple times as well. Several times I noted instances where it was precisely making a personal connection, or understanding a larger purpose for their work, that appeared to enable students to deepen their literacy skills. Several of these scenarios will be detailed in the sections below as they connect to specific literacy skills.

During our beginning unit on exploring the purpose of education, for example, many students articulated that they felt that school was something they had very little say in shaping – that while they had many ideas about how scheduling, teaching, course organization, facility layout, etc. could be done differently, they did not feel like their opinions had any impact. One student put it this way during a class discussion: "Why

does any of this matter anyway? Nothing is going to change… They tell us what to do and we do it or we don't graduate" (9th-grade male, Class Discussion, February 13, 2013). While I was disheartened by this student's resistance to exploring various possibilities around the educational system – as I was asking the class to do – I heard in his comment a truth that appeared to resonate with many other students, even if they were less direct about this belief. There was a sense that school was something being done "to" them, not "with" them, and that it was organized in a way that was not necessarily supporting them most effectively.

I found that students were particularly engaged and motivated when asked to examine their system of schooling. Students engaged in one activity during this unit where worked in groups to brainstorm changes they would make to the education system if they were able to. When reporting out, they had to choose the one they thought was most important and around which they had spent the most time brainstorming. One group had focused in on the topic of integrating creativity and arts into regular academic learning, as well as having the school offering more stand-alone art courses. Having connected with this topic around which they felt passion, two students in that group later made a very powerful, well-constructed and produced video PSA arguing for the further integration of arts into regular course curricula.

One of the two students who produced this PSA had a track record of being very disengaged in school and not completing work. In my fieldnotes, I recorded the following after meeting with his Guidance Counselor out of concern for missing work and lethargy early in the semester:

> …[his] Guidance Counselor told me today that he had failed three of his four classes the previous semester. He had been tested for learning disabilities, but

> none were found. He is being treated for depression and anxiety, and the medications might be making him tired during class. Both [the Guidance Counselor] and I agree that he shows strong interest and intelligence when you talk with him one-on-one, and I think his literacy skills are appropriate for his grade-level, but he just seems frozen when it comes to completing and handing in work (Student File Notes, March 27, 2013).

This trend continued for this student in the writing class through much of the first third of the semester, until we got to the unit on persuasive writing and video production. I found that engagement with the topic, having a sense of agency, and utilizing a modality other than written text allowed this student to bring his ideas to fruition in an assignment in a way he had not been able to previously.

While he still struggled to fully complete his persuasive essay, his PSA advocating for the integration of art into academic classes was one of the strongest in the class, developing meaning through narration, interesting camera movements, added music, and unique sequencing of shots. He was able to identify his deliberate choices around each of these elements in the post-assignment questionnaire. For example, when asked to explain at least three structural or aesthetic choices made in the piece, he wrote: "….we had the camera move in a circle around the student to show that he was confused…," as well as "we put the music in the beginning to show that he was bored…. and we used the second song because [when he made art] he woke up and felt excited" (Post-PSA Questionnaire, April 12, 2013). These students had also used an interesting sequence of shots toward the end of the PSA, cutting back and forth between shots of a student looking disengaged and then engaged, while narrating over the images. When I later praised him for his thoughtful work on this project and asked why he was able to complete this assignment so thoroughly and on time, he simply stated, "I liked the topic, and making the video is easier for me than writing" (Informal Interview, April 24, 2013).

Having connected his work to arguing for something in which he truly cared about – as well as using a medium with which he felt more comfortable – allowed this student to create a communicative piece with a high level of sophistication, signifying meaning through camera movement, background music, and the thoughtful sequencing of shots. Furthermore, having success with the PSA assignment also had a snowball effect with this student, in that once he had successfully produced an assignment in the course, he felt more confident moving forward. While he continued to struggle throughout the semester, I noted several times in my fieldnotes after that assignment times when he appeared more engaged and motivated. In his individual student file, I also recorded his successful completion of three out of four major assignments after that, both written and multimodal.

These early discussions and activities around schooling connected us to larger discussions of who might have designed the educational system they were a part of, and for what purposes. While there was not room in the curriculum to study a thorough history of this with only two weeks devoted to the topic at the start of the semester, the unit oriented students toward asking these kinds of critical questions with the topics we considered moving forward. Why are we doing what we're doing? Who decided it was important and for what purpose? Where do my own beliefs and aspirations fit in relation to this? This orientation was an essential critical component of the course, and, as is reflected in many of the examples below, often led to greater engagement, motivation, and skill growth. Further, the brief exploration of this topic served as an example early in the semester of an important social issue around which critical multimodal media literacy skills might affect change.

Specific Areas of Literacy Development

The development of literacy skills for students in the CMML course represented both critical thinking and analytical skills and more discrete literacy and technical skills. The curriculum was designed around the understanding that the development of discrete skills and critical thinking are inextricably intertwined, and as such they are considered together and in relation to one another here. During the process of coding the data gathered for this study, categories of specific skills arose frequently – such as the use of supporting evidence in writing – but more compelling were the practices encouraged by the curriculum that led to the development of these skills. Thus, in each section below my focus is as much on the processes that enabled or promoted growth around each literacy skill or construct as on the skills themselves, or conversely what got in the way of its development for certain students.

In some instances this appeared to be the result of a more simple direct correlation between interest and effort, by which I mean that students who had been unwilling to engage in in-class or out-of-class assignments were willing to do so once their attention had been peaked by interest in or personal connection to the subject matter. Once willing to engage in assigned work and activities, skills developed in these students. While this plays a role, the picture of critical literacy development is much more complex than this.

Growth in Topic Choice & Thesis Development

Choosing topics to explore and deciding what to say about them is a literacy skill that adolescent learners often struggle with. This has proved to be the case repeatedly in my twenty years in the classroom, and I found it to be true in the class examined for this study as well. An important finding of this study was improvement in the skills of topic

choice and thesis development throughout the CMML curriculum. The CMML curriculum integrated the critical component of working toward social change as a unifying, overarching topic; this took many forms and presented many opportunities that encouraged students to further develop the ability to choose strong topics and areas of focus for their writing and media productions.

In descriptive and narrative units. In the first two genre units – descriptive and narrative – topics for writing and media production had a less explicit focus on social change and came from students' own lives, namely describing things and telling stories from their experiences in the service of developing an idea. Much in the same way that many researchers of adolescent literacy have advocated for the merging of home and school literacies (Gee, 1996; Hull & Shultz, 2002), the CMML curriculum integrated students' personal experiences into the content of these units, allowing what they knew best to be the very subject matter they explored while developing the literacy skills associated with narrative and descriptive genres. Beginning with these units gave students an opportunity to construct meaning and purpose in their compositions around topics with which they were already expert. Even when being asked to write about their own lives, many students struggled to formulate rich topics and theses. In some instances, bringing the personal into the academic seemed to create more difficulty for students, in that many were unused to writing about personal topics in formal academic genres, and associated formulating theses with less personal topics.

In the questionnaires distributed at the start of the semester, five students of twenty-seven made specific reference to difficulty getting started with writing and being able to generate a topic or central focus in response to an open-ended question that asked

what areas of writing were most difficult for them (Start-Semester Questionnaires, February 2013). One student wrote: "I'm not good at starting [writing]. Once I have an idea I am ok but it is really hard at the begin[n]ing…" (10th-grade female, Start-Semester Questionnaire, Feb. 4, 2013). Another student responded to this question by writing, "Thesis statements are really hard for me. No one ever taught me how to write a good one" (9th-grade male, Start-Semester Questionnaire, Feb. 4, 2013). Yet another student wrote "Being able to come up with an argument when I write an essay is the most difficult…" (10th-grade male, Start-Semester Questionnaire, Feb. 4, 2013). Students I worked with one-on-one during and after class time also frequently found choosing a topic and focus to be an obstacle. In my field notes, I had recorded at least seventeen times during the semester references to having helped a student who was "stuck" getting started and finding a suitable focus for his or her writing.

In addition to reading and discussing sample descriptive and narrative essays in class – and considering their areas of focus – students did a number of exercises to help with the generation of topics and theses for their own writing. These included activities such as freewriting, brainstorming and clustering, discussing possible topics with others, and projected outlining. In addition, several CMML exercises were designed to help develop these skills. For example, during the descriptive unit, students took three different photographs of the same subject framed differently, and from three different perspectives, each time. In class, they wrote about how the framing and perspective changed the main focus and meaning of the image, and about what was left out of the frame of each. Likewise explored the use of symbolism in photography, the ways in

which objects, shapes, or light within an image – or in fact a whole image itself – could symbolize a larger idea or feeling.

Following these and other CMML exercises, students worked on developing, drafting, and revising their own descriptive and narrative essays. The overarching assignments for these essays were to establish a unifying thesis, and to develop an essay using the various devices we had practiced within each genre, such as using sensory detail in descriptive writing, or "showing rather than telling" in narrative writing (see Table 6, Ch.4 for specific devices). As recorded in my fieldnotes, at least five students who initially struggled with topic selection and thesis formation during these units were helped by the subsequent CMML exercises and examples.

One student, Kory, explicitly identified the exercises around framing in photography as having helped him to figure out a focus for his descriptive essay after he had initially struggled. In an informal interview where I asked him how he had come up with his area of focus in his essay, Kory explained that he had known he wanted to write about basketball, but at first he'd had trouble coming up with a thesis: "After we did that thing with symbols in the pictures… I decided to write about [basketball] practice, because it's the most important part…it's the thing I would take a picture of…" (Informal Interview, February 15, 2013). Kory's descriptive essay begins in the following way:

> I love playing basketball. It is my passion and it's what keeps me going in life. I specifically like basketball practice. That is where every basketball players starts and definitely where I started. Basketball practice is the place where all the great players are born. (Kory, Descriptive Essay, February, 2013)

The essay focuses on describing basketball practice in detail, and the ways in which different aspects of it help to develop a better, more rounded player. Kory had struggled a great deal to decide what about basketball he could *describe* that would support a

unifying thesis, and ultimately it was looking at and discussing photographs that represented ideas through single images that helped him to land on the idea of practice. By describing a practice session in detail, he was able to develop a fairly sophisticated thesis capturing the role of practice as the essential element behind every good player. This was the unifying theme that held his paper together and gave his descriptions purpose.

Another student whom I had observed struggle frequently at the start of writing assignments decided after these exercises that the food at the Thanksgiving table represented how different everyone in his family was, how each dish reflected the personality of each of his family members.

The idea of symbolism also carried over to the narrative unit, and helped some students with topic selection and thesis development there as well. As part of the practice exercises leading up to the final assignment, we read the Sandra Cisneros short story "Divine Providence," in which the narrator tells the story of a young girl's belief that she is to blame for her parents' marriage troubles after losing her mothers' ring, a symbol that the story is crafted around. Students then wrote descriptions of people, places, or objects they might use at the center of stories in their own writing.

When doing this conceptual exercise after having read together the Cisneros story, some students were able to access potential topics for their own writing right away, but many still struggled. We then looked at photographs that used symbols in a way that told a story, and then we wrote and had discussions about what the main focus of each was, analyzing what story the photographer might have been trying to tell through the image. After these exercises, I asked students to apply some of these same constructs to potential

writing topics for their final essays. One student who had identified topic selection as an area of difficulty for her, and who struggled after reading the Cisneros story, chose her grandmother's house as a central symbol around which she told stories about keeping cultural traditions. Another student wrote an excellent narrative essay telling stories that revolved around her ballet costumes, tying each experience she narrated to the outfit she had been wearing and how it represented her feelings. Developing the skill of choosing a central focus that represented a larger idea was made more concrete for several students after they had been able to practice it multimodally, in this case through writing and photography.

Also during the narrative unit as part of practice experiences leading to final essays and audio recordings, we considered the point and purpose of various stories, listening to audio podcasts from *Story Corps, The Moth,* and NPR's *Radio Diaries*. Here too, I asked students to listen for the ways in which stories were framed, what the narrator was trying to get across through the telling, whether and how the choice of story was most appropriate for its intended purpose. In addition to considering a number of component elements in the podcasts – ambient sounds, organization, pacing, etc. (to be discussed in following sections) – we discussed the choice of topic and area of focus for each. We considered how effectively stories held together, and what unified them or gave them purpose, as they would want in their own writing and recordings.

I met with multiple other students during this portion of the class to discuss their progress and assist them, and several made reference then to the CMML activities as a source of inspiration for the formation of their theses. Maria, a focal ELL student, claimed that having listened to the *Radio Diaries* podcasts had given her the idea of

writing about her Puerto Rican heritage for the narrative essay. When I asked her how it made her think of this topic, she said, "Before we listened to those things in class, I didn't know I could write about that, like the guy who talked about coming from Mexico…" (Maria, Informal Interview, March 12, 2013). Maria is referring to a *Radio Diaries* podcast we listened to and analyzed in class in which a young man tells the story of his family illegally crossing the border from Mexico to Texas and describes what his life is like there.

Another student, Shana, who almost always had trouble coming up with ideas and getting started on assignments, expressed having been helped to come up with her topic on having emotional intelligence after listening to an *Radio Diary* podcast made by a boy with social anxiety. "I liked the way he talked about that one part of his personality, and it made me think about how I have… a part of me too that not a lot of people know about… [emotional intelligence]" (Shana, Informal Interview, March 13, 2013). Both of these students were able to arrive at meaningful topics about aspects of their own identities that felt important to them, and about which they were being asked to think critically. The use of multimedia texts, in this case, provided both of them with a conceptual model around which to fashion their own narrative pieces.

As in the examples just cited, it was sometimes the content of the CMML pieces we explored in class that helped students to access formulating a strong topic and area of focus of their own, often through mimicking topics they found interesting. In addition, class discussions and activities where we worked together to identify the stated or implied thesis of each piece also helped many students in their thinking and eventual formulation of a thesis. In my field notes, for example, I had written the following entry

after a class session in which we had listened to and discussed a *Radio Diary* piece by a rural Tennessee high school football player:

> Students seemed very interested in the podcast we listened to today. Even [9th-grade male] seemed to be listening intently... I was struck by the range of answers from students about what the implied thesis of this piece was. They discussed this in small groups and then we came together as a class to try to reach consensus. When we were really able to break it down – to look at the role of the stories the narrator chose to share – we agreed that the focus on football was really about what the narrator wasn't getting at home, what he was missing from his parents…that if he had written a formal thesis it would have been about this (Fieldnotes, March 21, 2013).

Even notwithstanding these more explicit conversations about the literacy construct of formulating or identifying a thesis, the sheer exposure to examples in other mediums that were being taken seriously as texts in-and-of-itself went a long way in helping students grow in their ability to formulate topics and theses. Because they were often interested in the visual and audio examples we used in class – either because they had found or generated them, or, because they dealt with themes to which they could immediately relate – they were more open to considering the literacy skills behind them. Rather than simply teaching topic choice and thesis development in a straightforward way, and through written examples only, students were able to access the skill by taking in and deconstructing multimedia texts with which they often had more interest and connection, and then applying these ideas to their writing.

In final research projects. In the study I found that many students' abilities to choose topics and formulate strong theses had solidified by the research portion of the semester, helping many to come up with very interesting, sophisticated areas of focus. I had emphasized to students that their choice of and investment in their topics was particularly important during this unit, in that we would be spending over seven weeks –

over a third of the semester – on the research projects, and it would help them tremendously if they were genuinely interested and invested in their topics. The requirements for topic choices for the research project were considerably challenging – especially for students of this age -- in that I asked students to choose contemporary topics around which they could do both primary and secondary research. Thus, students had to include a local subject they could study firsthand, and connect it to a larger topic around which they did secondary research. Perhaps most importantly, in keeping with the critical orientation of the course, they were required to choose a topic around which they wanted to see social change. In addition to writing a formal research paper, they also were asked to create multimedia pieces using both their primary and secondary research.

I found that students took their topic choices and areas of focus very seriously, choosing rich, challenging topics and working hard to find a focus appropriate for the scope of the assignment. Following is a list of the topics chosen for research, with the larger topics with their local corollaries listed together, as well as the multimedia piece produced on the topic in addition to the research paper (those without the local connection listed represent students who were unable to fulfill this aspect of the requirement; the number also reflects four students who left the class mid-semester):

Table 6: Final Research Topic Choices

TOPIC / LOCAL CONNECTION / FINAL MEDIA PIECE	
gay marriage / locally married gay couples / photo-essay including portraits and interview excerpts	Alzheimer's Disease / students' own family experience with grandmother / audio podcast including family interviews and narration
hacker group Anonymous / PowerPoint presentation with embedded video, text, and links to other sites	immigration in the U.S. / Power Point presentation
SNAP food program / local farmer's markets / photo-essay with images from markets, portraits, and interviews exerpts	domestic animal abuse / local animal shelters / photo-essay including original and found images of cared-for and abused animals
cheating in school / student interviews / PowerPoint presentation	globalization / audio podcast with information from secondary sources
effects of climate change / local flora &	ADHD / student interviews / PowerPoint

environmental practices / photo-essay including original photographs of local flora, environmental practices, and text	presentation
local agriculture / local farms / photo-essay including portraits, interviews, and farm photographs	nuclear fission / Power Point presentation
nuclear power / PowerPoint presentation	effects of marijuana / school survey / PowerPoint presentation
immigration in the U.S. / family interviews / short video	modeling industry / photo-essay of self portraits
Bronies / on-line community / ---	steroid use in sports / school sports teams / photo-essay including original and found photos
nuclear fusion / Boston Science Museum exhibit / PowerPoint presentation	use of GMOs in farming / PowerPoint presentation
militarism in film / films / 15-minute video including film excerpts, text, and voiced narration	medical marijuana / uncle with cancer / PowerPoint presentation

While more details about these projects will be shared further on in relation to other specific literacy skills, these well-conceived topics – particularly in light of challenging, multifaceted guidelines and their cultivation into both writing and multimedia pieces -- represent the level to which students had developed the important literacy skill of topic choice by a third of a way through the CMML curriculum. Five of the students here were able to choose solid topics, but were unable to fulfill the local component of research; the remainder of students came up with sophisticated topics that allowed for both a local and larger component. My fieldnotes, as well as my notes in individual student files, indicated students' greater ease with and confidence in topic choice than in previous units.

Growth in Development of Ideas & Depth of Analysis

Perhaps the most important area of growth was students' ability to further develop their thinking and ability to articulate that thinking through writing and multimedia production. Extending and deepening the articulation of ideas in writing is also a skill with which secondary students commonly struggle. Over my twenty years of teaching English and writing, I have had literally hundreds of students express to me sentiments similar to those following, which students in this study reported:

> I can never make my writing long enough. Like I can write for a while and then I don't know what else to say and my writing is always really short, which is why I get bad grades (Start-Semester Questionnaire, Feb. 4, 2013).
>
> Writing essays is hardest for me because they are to[o] long (Start-Semester Questionnaire, Feb. 4, 2013).
>
> I like writing but I run out of things to say, or sometimes I want to say something but I don't know how (Start-Semester Questionnaire, Feb. 4, 2013).

The need for students at the high school to further develop these skills was a point of commonality amongst English Department members, and came up frequently in our department meetings and informal conversations together.

Over the course of the semester I noted over thirty-four instances in class and/or in students' written work where an idea needed further development or articulation (Fieldnotes, spring 2013). Realistically, the number of times that this was the case was likely many more than this, but this was the number of specific references I had in my fieldnotes. Most of these entries referenced students getting "stuck" in their thinking, and not being able to take an idea a step further. Many students got to the place in their writing where they were able to make a point, and perhaps back it up with a single example from a relevant text, but their analysis lacked extension or depth.

Close reading: analysis & textual reference. Deepening analysis often depends on being able to look closely at a text and understand its component parts, formulate an argument, and find and articulate relevant examples to support that argument. The CMML curriculum was designed to develop the skills of close reading and textual reference, and this proved to be an area in which students of varying levels showed growth. As described in relation to topic choice in the previous section, during the descriptive and narrative units, the integration of photography and audio allowed students

to practice the kinds of close reading required to deeply analyze texts. Often, this involved analysis of the form, structure, design, or aesthetic choices in multimedia and print texts. As will be discussed below, in contrast to the prescriptions of the Common Core State Standards, this kind of close reading was rarely divorced from an understanding of the context of the piece being analyzed. Rather, students were encouraged to read texts closely for the express purpose of further understanding their social, cultural, and historical relevance.

During the unit on persuasive writing, calling on the kinds of analysis required of students in the descriptive and narrative units – in which they practiced paying attention to aesthetic and structural choices – helped them tremendously when it came to expanding and deepening their analysis of advertisements. When reminded of these activities, and encouraged to use the kinds of analysis they had with photography and audio, one student's draft of an advertisement analysis changed in the following way:

> Draft #1: This ad uses pathos to try to sell the car. They say that if you want to keep your children safe you will buy this car, and that gets a lot of parents to want it.
>
> Draft #2: This ad uses pathos to try to sell the car. There is a professional sounding voice telling you that if you want to keep your children safe you will buy this car, and that gets a lot of parents to want it. First the ad shows the car driving on a dark, snowy road, and there is scary music in the background. Then you see the family safe in their driveway, with the camera close up on the mother's face looking relieved, and the narrators voice comes in… (9th-grade male, April 9, 2103).

Here the student has deepened his analysis of the advertisement by adding supporting details to his argument, by using sensory detail, and by showing the reader rather than simply telling the reader – all skills we had practiced during the descriptive and narrative units. Other students' writing deepened in similar ways during this assignment, adding

analysis of visual and aural components of advertisements, and better supporting the argument of their paper with textual evidence.

In addition, students' abilities to analytically consider form, structure and design of multimedia texts grew considerably over the course of the semester. The CMML activities during the descriptive and narrative units in particular helped students to expand their methods of organization, both in writing and in their media productions. During the descriptive unit, the class explored common methods of organization for descriptive writing – such as spatial, chronological, order of importance -- looking at sample essays using each. Our discussions of organization were greatly deepened when we looked at groups of photographs and photo-essays, where we were able to discuss the visual juxtaposition of images and ideas, and the ways that series of images can describe or tell a story. Later, students were also assigned to take a series of photographs that told a story. Also meant to develop analytic skills in this area, in order to consider the use of structure to create meaning students storyboarded scenes from the film "Triplets of Belleville," which tells a story almost exclusively without the use of dialogue or speech. During each of these activities I noted a much greater attention to the role of structure and design in making meaning, and I recorded in my Fieldnotes reactions to several class activities:

> Today was so interesting. Students worked together to make storyboards of scenes from the film. As I walked around the room I could hear them debating why the filmmaker had included a certain image, or why one part of a scene was put before another. They are really thinking about these ideas in ways I haven't seen them before, considering how meaning is made through structure (Fieldnotes, March 15, 2013).

During the narrative unit, several students experimented with using a non-linear structure in their essays, where events were not necessarily included chronologically, or flashbacks

were inserted. Likewise, their audio podcasts and later their PSA videos were creatively structured and used more than language alone to convey meaning.

Discernment: Context, overview & purpose. One way in which students' critical thinking and analysis deepened was in their interest in and understanding of the social, cultural, and historical context of texts; the purpose of texts and their connection to one another; and the purpose of their own analysis. This came into play in several assignments and in various ways, but perhaps most significantly during the research projects. I had made it a requirement of the research project that students choose a contemporary social issue or a topic with contemporary relevance, both in keeping with the theme of making social change and because I knew they would have other opportunities in school to research historical topics. During the research process, we spent a great deal of time on practicing evaluating sources, which was particularly important for sources students found on the Internet. Several activities asked students to dig behind web-based sources to identify the publisher, any potential social or political bent, and the validity of the information provided. I found that for almost all students in the class, these exercises were useful in getting them to pay closer attention as they did research, and to choose more reliable sources (Fieldnotes, 2013). Particularly for students researching socially and politically contested issues such as gay marriage or immigration, this kind of discernment was essential.

For the students with emergent literacies, I saw evidence through observing their research in class that these activities impacted their critical thinking and discernment. After working with her a great deal, one of the ELL students who was researching immigration, for example, started to be able to identify the political orientation of various

sources based on key phrases commonly used by both sides of the debate (for example, "alien," or "illegal," in anti-immigration sources, or "path to citizenship" in immigration rights sources). Another student studying globalization similarly began to be able to identify the orientation of his sources, which was essential to his understanding of the topic (Student File Notes based on in-class conversations, May 2013). Several students also rejected web-based sources due to a lack of identifiable information, and several decided that their library sources were too out of date (Fieldnotes, May 2013). While the critical thought and discernment cultivated by these activities did not necessarily translate directly into the analysis in their final writing – which I would not expect for students with emergent traditional literacies -- it made a big difference in the quality of their research and their culling of sources.

For students with more developed traditional literacies, this kind of discernment deepened both the quality of their research and of their writing and analysis in their final papers. This is seen, for example, in the following excerpt from Erin's paper, where she introduces her source with a clear overview:

> Scientists and historians learn a phenomenal amount of information by studying the past, allowing them to predict what may happen in the future. Tricia Andryszewski explains in significant detail the major destruction of the world's wildlife that has occurred in the past. Her book, "Mass Extinction," examines past events and their causes and effects, human influence versus "natural causes," and indicators of mass extinctions that could happen in the future (Erin, Research Paper Draft, May 13, 2013).

Here Erin is giving a bird's eye view of her source and placing it within the larger context of environmental scientific study.

I had worked with students to include this kind of overview of their sources in their writing, and several others very effectively integrated it into their writing. Another example follows:

> The article "Congress Reintroduces Bill to end LGBT Discrimination in Adoption and Foster Care," by Christopher Frost, discusses the possible bill that if passed will ban child welfare facilities from discriminating against LGBT Americans who want to become foster parents. According to Frost, there are currently 400,000 children in the foster care system who would greatly benefit if same sex couples were allowed to adopt them… (9th-grade female, Final Research Paper, June, 2013).

This kind of introduction to and overview of the source gives readers a sense of how this student-writer is constructing her own argument in the research paper. Furthermore, use of the phrase "according to…" signals for the reader that the writer is paraphrasing, and is expressing an opinion argued by the author of the source she is using. These writing devices reflect advanced skills for many writers at the 9th-grade level.

While many students learned skills that improved the quality of both their research and their writing by considering the context, overview, and purpose of outside sources, for others it was making a connection within the context of their own lives that made a difference. It is my argument that particularly for students who struggled with traditional academic literacies, these skills developed precisely *because* of the personal connections and contextual understandings made. While studying advertisements during the persuasive unit, for example, I observed several students come to life in a way they had not previously. This was the case with one of the focal students, Scott, who had done very little work all semester up until the unit on persuasive writing. I remember seeing in class when a light of interest went on in him, where I observed him paying attention in a way he had not before. After having spent a week doing activities in which we looked at

techniques used in persuasion, and advertising in particular, the class watched the Media Education Foundation film *Consuming Kids: The Commercialization of Childhood* (2008), which critically examines the industry behind advertising aimed at children and its growth since deregulation in the 1980s. Scott seemed to connect to the injustices uncovered in the film concerning the covert ways that advertisers often manipulate consumers. In a post-film written reflection, he wrote the following: "It isn't fair that companies can do whatever they want and sell [us] things when we don't even know… Like product placement or the people who follow kids around to learn what they like…" (Scott, In-class reflection, April 11, 2013).

The culminating persuasive essay for this unit was the first essay that Scott was able to complete and turn in that semester, which was a turning point for him in the class. The assignment was to write a persuasive essay arguing for or against the regulation of advertising to children, using the film we had watched, several articles we had read, and actual advertisements students had analyzed (see Appendix G for assignment overview). While Scott had done a few of the multimodal assignments earlier in the semester, he had not turned in almost no work at all up to that point, and had not written either his descriptive or narrative essays. I had spoken with his Guidance Counselor multiple times, had met with his mother, his court-assigned case worker, and with Scott himself, but up to that point he had not been able to be successful in writing class, and he remained unengaged and unresponsive to help. It was clear that having made a personal connection to the topic – which he was able to access through watching a film – sparked a new kind of motivation in him than he had had before. I sat with Scott several times during the drafting of this paper, and worked with him one-on-one around the skills we had

practiced as a class, as well as writing issues he specifically struggled with such as using run-ons and fragments. Not only had he found motivation to write – which he had not had before – but he became open to trying to improve his writing, doing several drafts of the paper before handing it in.

When I asked Scott after the assignment what he felt had accounted for his motivation and success, our conversation was as follows:

> S: I don't know… I didn't really care about the stuff we were doing before… I guess this was more interesting so I tried harder.
>
> KW: What about it was more interesting to you. Can you be more specific?
>
> S: I guess because it was about things in the real world…like things I've seen on TV and everywhere.
>
> KW: So you think this makes it important for all of us to learn about?
>
> S: Yeah.
>
> KW: Why?
>
> S: Because maybe then we won't be tricked or we can change the laws... (Scott, Informal Interview, April 24, 2013).

Scott was expressing both an interest in the immediate relevance of the subject matter to his life, as well as a connection to the idea of making social change. He went on to choose a challenging topic for his research project – the hacker group Anonymous – and although he did not fulfill all of the requirements for the assignment, he wrote a fairly strong research paper and created an interesting Power Point presentation. This turnaround was dramatic, after a very rough first half of the semester.

Multimedia production and study of the mass media system are particularly apt for cultivating this kind of interest and connection this given its ability to reach a wide and authentic audience, and to represent voices generally left out of the mainstream media. The study of the mass media system itself serves as an excellent vehicle for exploring larger social, political, and economic issues that teenagers are often hungry to learn about. Some of the most educationally powerful conversations in my class came during this unit on advertising aimed at children, and I observed other students engaging with a much higher level of interest and sophistication than they had previously. Much like Scott, another student who had been non-participatory in class and had struggled to produce work, seemed to engage during the unit in which we studied advertising. One day during class he complained, "…now I can't watch TV without thinking about who made the commercials and how shows are connected…" (9th grade male student, Fieldnotes, April 22, 2013). What both Scott and this student seem to be articulating is a sense that the media literacy unit on advertising opened for them a meaningful window into critical inquiry – they began to ask questions about who is behind the information they consume and to what ends. Class discussions in this unit were very sophisticated for students of this age, analyzing questions of parental, government, and corporate responsibilities; the most effective ways to make social change; and consumerism and the environment.

Growth in Meaningful Revision and Editing

Through both observations and interviews I gleaned numerous examples of students who became more motivated to revise and share their written work when multimodal assignments were integrated into instruction. Likewise, students' writing led

to stronger, more polished multimedia pieces, even for some students learning to use the technology for the first time. As described in the previous chapter, in most units practice writing and multimodal assignments were alternated, so that each medium would inform the other – in other words, a piece of writing would be revised after having done a multimodal assignment, or visa versa. The various practice assignments led to, at the end of each unit, the final production of a polished essay and a polished media piece. In addition to crafting their individual essays, students collaborated to help one another edit their writing, and to produce and edit their media pieces. I found that in each of these areas, students' level of interest in one another's work, as well as the seriousness with which they strove to help each other, grew over the course of the semester.

Both my fieldnotes and students' comments identified the weaving together of traditional writing and multimodal assignments as often leading to growth and improvement in both conceptual and technical aspects of their work. In an informal interview done after the narrative/audio unit, one student explained it this way: "At first I didn't like this [narrative essay], but after we did the recording the other day I went back to it and now I like it more." When I encouraged her to explain what it was she liked more about her writing, she gave a specific example: "I don't know…the whole thing sounds better….like where I put [wrote] in the sounds when we're in the house – it makes it sound more real, like you're really there…" (10^{th}-grade female, Informal Interview March 2, 2013). This student is referring to a passage in the third draft of her narrative essay, which she revised from the second draft in the following way:

> Draft #2
> That morning I lay in bed after everyone else had gotten up and I felt good for the first time since Dylan had gone away. Our family felt like it was whole again, and it was so good to have everyone together. (Narrative Essay, February 22, 2013).

> Draft #3
> That morning I lay in bed after everyone else had gotten up. The birds were singing outside, and I could hear the sound of the pans in the kitchen and smell the maple syrup while my mother made us pancakes. Moxi, our boxer, was barking at something outside, and I could feel a warm breeze coming through my window. I felt good for the first time since Dylan had gone away. (Narrative Essay, February 25, 2013).

The addition of details came after several lessons and practice exercises we had done in class on "showing" rather than simply "telling," as well as after a number of multimodal assignments meant to develop the use of sensory details. While the use of sensory detail had already been studied in our first unit on descriptive writing, in the narrative unit we were able to expand on this and, because we were coupling narrative writing and audio production, focus most keenly on the modality of sound. We read sample narrative pieces – "Beauty," by Alice Walker, and "Divine Providence," by Sandra Cisneros – and identified places where these authors had shown us something through the use of sensory details, and particularly sound, rather than telling us about it. We then watched segments of the film "The Triplets of Belleville" – a film with virtually no narration -- listening only to the ambient sounds to see how they contributed to our understanding of the story. Knowing that the final version of the narrative essays would be audio recorded, we listened to powerful podcasts from NPR's Radio Diaries, and Story Corps, and we analyzed how sounds other than the narrative voice were used to create meaning.

In the student's writing in the example above, her peer editor had identified the section from Draft #2 as someplace she might show more, rather than tell how she was feeling. She added these details to her writing, and then when she did her final recording of this section using Audacity, she also add these sounds into the recording behind her narrative voice. Other parts of her essay had been revised in similar ways, bringing to life

what had been a somewhat flat piece of writing, about which this student originally did not feel very inspired, and improving the quality of both the written and podcast final products. In the end-of-semester questionnaire she claimed that this was one of her favorite assignments, and that she felt proud of both her narrative essay and her podcast.

Many other students in the class also identified the exercises in the narrative/audio unit as being very useful for them as learners and writers. For example, many students identified the process of preparing for and recording the podcasts they made from their narrative essays as being useful in their written revisions. Henry, one of the focal students, put it this way in the questionnaire given at the end of the unit: "We [his recording team] found a section that I had missed in the editing when reading it out loud, when actually speaking the words, instead of reading them, we could pick up on when things sounded awkward" (Post-Unit Questionnaire, March 4, 2013). About the same process, another student, another student, wrote:

> When I went about recording my writing, I read it through into the microphone the first time. When I did, I did find some awkward parts that made the recording sound funny. This helped me to edit my writing for later on and to make parts more clearer. When I was recording, I was thinking about the different sounds, so I edited some parts in the paper so that sound effects could take place. I also saw parts that needed expansion so the listener wouldn't be confused with the gaps, so I edited those parts in too (Post-Unit Questionnaire, March 4, 2013).

Both my evaluation and students' peer evaluations of this student's final essay noted dramatic improvement in the details used and in the overall flow and organization of the paper.

While many of the students became aware of changes they wanted to make in their writing after going through the audio assignments, some also commented on the ways in which their writing informed their audio productions. Rosie, one of the focal

students, described this:

> Overall, I still thought that the piece was well written….However, while reading over the writing before recording I realized all the detail I could have added. While reading the piece aloud, I thought that it could make the audio much more interesting if I expanded on the description even more (Post-Unit Questionnaire, March 4, 2013).

Here, Rosie is referring to a decision she made to include more description in her audio piece than she had in her written essay, which both her peer editors and I agreed worked well in both pieces respectively. This is an example of discussions that took place regularly in the class about the differences in what was effective in various mediums, including writing. Students were encouraged to not necessarily make their audio pieces identical to their written pieces, and to be able to explain the choices they had made in each medium.

Growth in Discrete & Technical Skills

In line with the theoretical roots of this study – which holds a distinctly social, contextual view of literacy development – it is not possible to understand the development of discrete and technical skills separately from the kinds of critical thinking described above. However, for the purposes of being able to describe these skills in greater detail they are presented here in a separate section. While the traditional curriculum sought to develop discrete skills in writing – such as the effective use of commas, transitional phrases, or sentence structure – the CMML portions of the curriculum sought to develop skills with the hardware and software relative to each digital medium studied.

In order to develop in students the technical skills of layering at least two audio tracks together, I required of them that they add some kind of music (either background,

or interlude excerpts) to part of their final podcasts. Beyond this, I offered extra credit to students who added in other ambient sounds, or otherwise creatively and effectively complicated their audio recordings. Several students worked hard to learn how to integrate into their podcasts the sounds that they had written into their narrative essays. For many of them, this took learning new skills such as how to locate, download, and upload to Audacity free sound-effect files from the Internet. Others found ways to create sound effects themselves, and still others experimented with the pitch and pace change tools available on Audacity. Making the decisions about where to include these effects developed critical multimodal skills in students, and learning how to execute these decisions developed technical skills.

In their end-unit and end-semester questionnaires, many students commented on the value of having learned these skills. After the audio unit, Erin wrote the following about the program Audacity:

> I was not aware of this program or its applications; now I feel comfortable using it (for basic recordings). As a result of this introductory project to the program, I now know how to import sound clips and songs, change the volume, length, pitch, fading, etc., record my own voice and import recordings, and more. However, I would like to learn how to use it more effectively and apply what it offers (End-Unit Questionnaire, March 4, 2013).

Erin's final comment alludes to the limited time we had for each unit, and the frustration many students felt with not being able to delve further into each media type we studied. While this limitation will be discussed at length in the next chapter, for the purposes of addressing this research question, it is relevant here in that a the CMML curriculum was designed specifically to introduce students to production skills in each media type in the earlier parts of the course, and then to have them choose one (or some combination of more than one) to delve further for their final research projects.

Students also learned similar technical skills during the photography and video production portions of the curriculum, including the considerable challenges of navigating a number of different free online software programs. In addition, students learned specific editing skills such as cutting, splicing, adding sound effects, cross-fading, or inserting a voiceover. Many times the extent of these skills was limited by both time constraints and the limitations of free online software, but I found that most students gained the beginning discrete and technical skills in each medium that would allow them to further pursue their learning in each area in the future. One student explained this clearly in our interview, when I asked about her growth in technical skills:

> Student: I definitely learned how to do things I didn't know before. I wish we had more time, though, because it took so long sometimes to learn everything…like when did the video, the first two things [editing programs] I tried wouldn't let me add music, then I had to switch.
>
> KW: I know – that was really frustrating for a lot of students. Do you think you learned anything valuable while you were trying to figure all of that out?
>
> Student: Well…um…I guess I learned how to see what a program will let you do, and how to find another one if I have to (9^{th}-grade female, May 23, 2013).

An explicit goal of the CMML course was to develop literacy skills through the study of each medium, and to introduce production skills in each area, which students could later build on if they desired. I noted in my fieldnotes several other instances of students appearing engaged and interested in working with these multimedia tools, and working hard to develop the technical skills necessary to use them. In the end-semester questionnaires distributed to the class (see Appendix B), nine students replied that they had learned new skills such associated with using hardware and software. Also referenced in these responses and in my fieldnotes, students also learned important

technical camera skills such as stabilization, zooming and panning, 'jolts-per-second,' motion, and experimenting with focus.

I also found growth in the development of students' discrete and technical skills in writing as well, often in direct connection with the multimedia work being done. Scott, one of the focal students discussed above who had struggled greatly through the first half of the semester, identified having gotten "better with run-ons and fragments" (End-Semester Questionnaire, June 11, 2013) by the end of the semester. After he had had some success with his multimedia work in the course and we sat down to look at his writing, I believe he had developed both more confidence in himself and more trust in me, and he was motivated to learn how to address some of his grammar issues (Fieldnotes, April 9, 2013).

While I had been doing regular lessons with the whole class on grammar issues, and making corrections and comments on their individual drafts, many students like Scott had not been able to address these issues in their writing until they found an internal desire to pay attention to and practice them. In twelve students' individual files I noted improvements with grammar issues such as run-ons and fragments, subject-verb agreement, misplaced modifiers, spelling and random capitalizations. I also noted more generally in my fieldnotes that by the end of the semester more students seemed to be taking pride in the physical presentation of their written work, paying attention to details such as formatting, titles and headings, and errors in spelling (Fieldnotes, June 12, 2013). As discussed in greater length in the following chapter, I found that these technical skills developed within the context of assignments designed to foster higher-order, critical thinking around issues relevant to students' lives. When working on assignments they

cared about and felt personally connected to, students were more motivated to pay attention to the smaller technical elements that can make an enormous difference in the quality of both written and multimedia work.

Growth in Problem-Solving & Student-Centered Collaboration

One of the most prominent aspects that emerged in the CMML work being done was an ethos of knowledge being both student-generated and collaboratively shared amongst participants. Ironically, much of this collaboration came as a direct result of the technology difficulties described in other parts of this study, where students helped each other to troubleshoot issues as they arose. There were one or two students in particular who became the classroom 'experts,' who were called upon by classmates and myself as the instructor frequently. I observed in one of these students a real sense of pride and ownership of his role in this capacity. Henry, one of the focal students, struggled greatly with ADHD and had trouble staying focused during class. He generally got work done and turned it in on time, but most of it he did outside of class when he was on his own; he had trouble working on in-class activities without losing focus. Because of this, and because of his excellent computer and software skills, I encouraged Henry to work with other students in the class to troubleshoot problems and to help them learn new skills. At the end of the semester, he wrote to me: "Thank you for letting me help people in the class – I liked it and I think it helped me to do better" (Henry, End-Semester Questionnaire, June 11, 2013). Having this kind of leadership role gave Henry a sense of purpose and leadership in the class when he could not otherwise focus, and teaching others allowed him to better articulate what he knew.

Students also collaborated on many assignments together, and over the course of the semester grew to care about one another's progress and work. During peer editing and revision exercises, several students often stayed in the class late -- cutting into the 25-minutes they had for lunch – because they wanted to finish writing comments on a peer's paper (Fieldnotes). I was impressed by the seriousness with which students took helping each other, and I attribute it to the culture of student-centered work, a greater level of interest and motivation, and the regular exercise of collaborating. Whereas in past classes, I often had students express worry about getting individual credit for everything they did, in the CMML class there seemed to be a genuine concern for the progress of the group.

Not only did these kinds of collaboration help students to develop literacy skills, through teaching others, talking ideas through, and troubleshooting together, but it further gave students insight into each others' lives and learning processes in a way that I found to be extremely important. Fighting against a culture at the high school that leveled students through tracking, and even within mixed classes through differentiation, I found that multimodal and media work became a vehicle for students at disparate traditional skill levels to interact and gain insight from one another. I made note multiple times in my Fieldnotes of instances where a student with emergent traditional literacy skills was able to teach multimedia, computer, or software skills to a student with more developed traditional literacy skills, reversing the usual paradigm when only print-based text is privileged. Not only did this give more students a chance to be leaders, experts, and to model success, but it further led to social interactions and understandings that may not

have otherwise happened between students from different cultural and socioeconomic backgrounds.

Conclusion

Findings in this chapter illustrate growth in the areas of topic choice and thesis development; development of ideas and depth of analysis, including close reading and use of textual evidence; discernment; meaningful editing and revision; discrete and technical skills; and trouble-shooting, problem-solving, and student-centered, collaborative learning. I have demonstrated how students' weaving back and forth between written and multimodal assignments frequently led to greater engagement and motivation, and ultimately to growth in each of these realms of literacy.

There were instances where the alternation of written and multimodal lessons and activities in the class became confusing for students, particularly for some of the students with language-based learning disabilities, or those with organizational difficulties. However, for students who struggled with academic success largely due to lack of focus, interest, or motivation, the combining of multimodal and written material in the course helped tremendously to lead to greater engagement and ultimately greater achievement. For students who began the course with more developed traditional literacies, the additional of multimodal activities and assignments allowed for the development of new media-based skills, as well as a deepening of traditional literacies.

CHAPTER 6

CMML & THE POLITICS OF SCHOOL REFORM

This chapter answers my third research question: In what ways do community and institutional cultures, federal education policy, and the classroom practice of CMML converge with or diverge from one another? More specifically, I will address the ways in which the CMML curriculum was either supported or further complicated by specific values, goals, and practices of the school in which it was developed and enacted. The school and district practices, in turn, must be understood in relation to federal and state policy and reform efforts, as well as to the larger culture of the community. The development of the CMML curriculum and the kinds of literacy growth described in the previous chapter must be contextualized, taking into account these cultural, institutional, and policy-based factors.

Likewise, the neoliberal education reforms outlined in Chapter Two do not exist in a theoretical vacuum, but rather are shaped by the specifics of the communities, institutions, and classrooms in which they take place. At the same time that state and federal policy impacts schools tremendously – through choice initiatives, the lack of proper funding structures, mandates around high-stakes testing and teacher evaluations, as well as new curricular standards – the students, teachers, and administrators embodying actual schools also shape the impact of policies through various acts of compliance, resistance, innovation, creativity, and subversion. The role of these institutional and local specificities are what Brenner & Theordore (2002) have referred to as “actually existing neoliberalism,” signaling the variation in the ways in which neoliberal policies play out within specific settings.

The CMML studied here in-and-of-itself is an example of a curriculum and pedagogy that pushes back against the forces of reform; hence, the title "Speaking Back to Structure" not only refers to the development of critical, action-oriented literacies in students, but also to the subversive, counterhegemonic potential of the CMML model within the current model of reform. The CMML curriculum and pedagogy speak back to the convergence of several topics at the forefront of education reform efforts. First, the kind of use to which technology is being put in the CMML classroom stands in contrast to the discourses of technology use in official education reform. Whereas education reform focuses largely on top-down, macro uses of technology to overhaul the entire system of public education, and ostensibly to create social change – largely through massive amounts of data collection and analysis that is promised to close the achievement gap – CMML focuses on micro, classroom-based uses of technology to create educational and social change from the ground up. When the dominant reform discourse does prescribe classroom applications of technology, the focus is generally on efficiency, personalization, and workforce preparation. This discourse was considered at length in Chapter Two, where I traced the theoretical roots of three of the overarching constructs central to the NETP (2010) -- notions of productivity, personalized learning, and vocationalism and lifelong learning.

In this chapter, I present my findings around technology use within the CMML classroom as they relate to the larger context of institutional and policy cultures. Framing my findings within the social and material realities of technology use in the CMML course, I explore the role of my own experience as a seasoned teacher, the effects malfunctioning technology, the role of individual students' needs, the general culture of

distrust in technology amongst faculty, and the resources of money, time, and energy as they relate to technology use. Throughout the presentation of these findings, I consider the ways in which the framing of technology use through the CMML curriculum compares to that of education reform documents such as the NETP. Furthermore, I examine relevant information gleaned from an interview with the District Technology Director, bridging my experiences in the classroom and federal policy discourse with this institutional-level perspective.

In addition to offering an alternative framing of technology use, CMML represents an alternative paradigm of literacy to that being forwarded in current reforms. In this vein, I also devote a section of this chapter to examining the ways in which literacy is being reframed through the Common Core State Standards (CCSS), a keystone of the education reform movement. While containing many important, fundamental literacy skills, the CCSS prescribe literacy instruction in a way that understands texts as closed, self-referential systems separate from their social, cultural, and historical contexts. This paradigm stands in contrast to the socially situated framing of literacy within CMML already discussed at length. Within section on the CCSS, I consider the ways in which technology use within the CMML curriculum works symbiotically with a socially situated approach to literacy, and in particular as a model that strives to lead to greater equity.

Material & Social Realities of Technology Use

Keeping this larger rhetoric of technology in education reform in mind, I analyze my findings about the social and material realities of technology use in the CMML classroom in this section. As scholars such as Warschaur (2003), Monahan (2008), and

others have argued, the potentials of technology to promote learning, and greater social and educational equity, must be understood within their social and material contexts. As discussed in Chapter Two, just as literacy is inherently socially and culturally situated, technology use by students cannot be abstracted from the physical or social environments in which it takes place. Thus, in this section I discuss these contexts and their influence on teaching and learning both in the CMML portions of the curriculum, and as larger trends within the school.

An overall finding in this portion of the study was that the material and social realities of technology use in the school frequently inhibited the full implementation of the CMML curriculum, often disadvantaging those students with emergent traditional literacies to an even greater extent than others. At the same time, when technology was available, worked well, and there were the right supports in place, it allowed students with emergent traditional literacies to succeed in unprecedented ways. In addition, the social and material realities of technology made even more challenging the already complex job of being a classroom teacher, often leading to an unmanageable amount of extra work, and frequently leading to an avoidance of technology use by teachers. This reality must also be understood within the larger context of insufficient funding and the new mandates of education reforms, which together are making the work of teachers, administrators, and support staff in schools increasingly untenable.

Tools of the Trade: Only Experienced Need Apply

One way in which the material and social realities of technology use in the school inhibited full implementation of the CMML curriculum was in the lack of availability of the multimedia tools necessary for CMML work, particularly in production. An important

aspect of this finding was that it was my familiarity with the school's systems, staff, and protocols – as well as my many years as a teacher, adept at reorganizing lessons, planning activities, and attending to real-time issues in the classroom – that allowed me to navigate the considerable challenges to successfully implementing this curriculum. Many of the technological tools used during the CMML portions of the curriculum were difficult to procure and to keep in working order. As the instructor of the course, a great deal of my time was spent trying to track down the materials needed to enact the curriculum, such as headphone-microphone sets for the audio portions of the curriculum, digital cameras for the photography portion of the curriculum, and video cameras for the unit including video. In addition, items such as external flash drives were needed, as the hard drive space given to students at the school was not large enough to hold the bigger digital files produced by multimedia work, as well as many smaller items such as batteries. Many computers – like the one in my classroom and several in the Lab – had broken audio cards, so external speaker sets were a coveted item as well. While the school provided some of these materials on loan for my class – such as the headsets and several flip video cameras – it was only through my persistence and the personal trust I had established with school administrators that I was able to borrow these items. I include this information here because I believe that it would have been much more difficult for a newcomer to the school to have tried to implement the CMML curriculum. In my case, I knew to whom to go to ask for various items, which spanned a wide range of staff, including the Principal, the Principal's Assistant, the Vice Principal, the photography teacher, and various technology staff members. Not only did this take up a tremendous amount of time on my part, it also sometimes got in the way of my planned sequence of

lessons, or created situations where students often had to take turns using equipment, some of which did not function properly.

The lack of direct access to these materials for my class – even after the Principal had approved the curriculum – was directly connected to the ongoing underfunding of the school. That spring, as had happened for several years in a row, there had been the prospect of severe budget cuts to the schools and the potential loss of up to fifteen staff members in the district. During the very months that the CMML course was running, the community was embroiled in a heated debate about a city proposition to raise property taxes beyond the limits set by state law in order to make up for budget shortfalls. That June, voters passed an override that provided $985,000 to the local schools, but in the meantime all spending had been frozen in the district, barring the purchase of new materials or outside professional development activities. As a result, I, like teachers all over the country do (Bader, 2012), spent my own money to purchase many of the materials needed for the course. This too, it can be argued, might not have been possible for a newer teacher, who presumably would be lower on the districts' pay scale and less able to afford to buy the necessary materials.

Technology Malfunctions & Inequalities

Another finding was that more difficult than the challenges of procuring materials for the course were the malfunctions in technology dealt with almost on a daily basis in the school and in the CMML class in particular. Students regularly ran into technical issues where software or hardware was malfunctioning, and many specifically named this as a frustrating aspect of their experience with the curriculum. Adita, one of the focal students who had very advanced traditional literacy skills, had a particularly difficult time

during the audio podcast recording portion of the narrative unit when her computer kept malfunctioning while using Audacity. After working to record parts of her podcast and losing her work multiple times due to malfunctions, she eventually gave up on finishing the project. She wrote the following:

> Audacity…was very difficult to use and I couldn't access the files I had saved, which was unfortunate because I liked what I had done- …the program was extremely frustrating to use and I never want to have to use it ever again ever (Post-Unit Questionnaire, March 20, 2013).

Another student lost his work three times during the same project when his computer crashed without warning, and three students were unable to access the parts of the their podcast they had saved to their school-provided hard drive space (Fieldnotes). The video portion of the persuasive unit presented similar problems, with students having to rely on free software that did not allow them to make all the creative edits they had carefully planned, with unexpected computer crashes, and loss of files on hard drive space (Fieldnotes). There were many times when students would arrive to class very excited about diving into multimedia work and would leave class frustrated by technological malfunctions.

At the end of the first full unit on description, one student said the following in an end-unit questionnaire: "I loved the photography assignments that we did, but it was hard having to share the camera because I couldn't take the pictures I had planned when we brainstormed in class" (10^{th}-grade female, Post-Unit Questionnaire, March 4, 2013). Another student wrote, "I wish I had a better camera because the one you gave us had cracked glass in the back so you couldn't really see what your picture looked like" (9^{th}-grade male, Post-Unit Questionnaire, March 4, 2013). In my fieldnotes, almost every day that we worked in the Lab on multimedia-based assignments, I recorded multiple

instances of students having problems based around software or hardware. As discussed in the previous chapter, often these malfunctions would lead to important trouble shooting or problem solving skills in students, but as often as this happened the experiences simply led to unnecessary frustration and interruption of work.

Indicative of further widening already existing social and economic disparities amongst students in this particular class, I found that in response to continued malfunctioning of the schools' technology, students of higher socioeconomic status (SES) began to bring their personal laptops to class for any multimedia work we were doing. For both the final audio assignment and the final video assignment, multiple students in the class brought laptop computers with editing software better than what was available at the school, and were able to work without the interruptions of network crashes, and with the ease of working from multiple locations. Many of these same students also had other devices or equipment that they were able to use for multimedia production as well – several students had phones with video capability, and one student in the class had his own video camera. While this did not fall along the lines of socioeconomic status one-hundred percent of the time – there was one group of lower SES students who used a personal phone to make and edit a video -- it represented the general trend and in most cases it was students from higher SES who had access to these advantages.

Student Needs Transferring Across Settings

In addition to the advantage that students of higher SES had in the face of technology malfunctions, the kinds of difficulties described in the previous section were particularly hard for students who had come to the class with minimal technological

skills, as well as for some of the students with specific learning disabilities, and/or specific social-emotional or behavioral challenges. As detailed in Chapter Five, I found that students who struggled the most with traditional academics and literacies were often much more interested in and motivated by multimodal work than they were in the traditional writing portions of the curriculum, frequently leading to greater effort, self-confidence, and achievement. At the same time, I also found that these students needed the same kinds of instruction, guidance, and encouragement during multimodal and media working sessions that they did in non-technology based learning.

This was particularly clear with two of the focal students in the study with emergent traditional literacies, Scott and Carolos, both of whom were considered by the school to be "at risk" (meaning that they were failing most of their courses, had little structure at home, and had personal and family experiences of substance abuse). For both of these students, their ability to stay focused, understand concepts being taught, and follow assignment guidelines when using technology mirrored their experiences without technology. Carlos's experience during the narrative/audio unit was a good example of this. By this point in the semester, Carlos had produced very little work, and had very little success with classroom activities or assignments. I had been hoping that the audio unit would be different for him, because I knew he recorded rap songs on his own at home and had an interest in this area. Yet when working on the project, he was only able to get his ideas sketched out when he had one-on-one guidance for several days in a row; when trying to work alone he would lose focus and end up either listening to music, or being social and distracting with others. When I finally asked the ELL aide who came to the class two days per week to work exclusively with Carlos – at the expense of the other

students who also needed his help -- he was able to help him outline his ideas, and eventually he recorded a powerful audio piece about his father. Yet without that one-on-one scaffolding, he had been unable to follow the steps necessary to succeed in the project. With it, he was able to successfully complete the assignment, which was a small turning point for him in the class. I noted greater attention and self-confidence from him moving forward from that point, once he realized that he could be successful.

It is worth noting that in Carlos' case, his difficulties had not been the result of a language barrier, but inexperience in following guidelines, planning, and following through. Even with an assignment that led to audio production, a literacy he had developed on his own outside of school, Carlos was stymied by being asked to follow certain guidelines. Before getting him the one-on-one help he needed, I had also encouraged him to record freely rather than following the guidelines for the assignment (which asked students to record from their writing) and/or to record in Spanish, but he remained unable to move forward with the assignment. Having recently moved from Puerto Rico, where he had done his schooling up to that point, Carlos later told me, "I guess it's just really different…I'm not used to all these rules and stuff. Like, it's hard here….In Puerto Rico, no one cared if you were even in school – sometimes I just left [laughing]…" (Informal Interview, March 28, 2013). Later in the semester, after Carlos had been struggling greatly in all of his classes, his Guidance Counselor found out that he had been receiving Special Education services in Puerto Rico, but the paperwork had never been transferred. Ironically, although he had begun to make better progress in my class, he was transferred out of my section when his schedule was reshuffled to accommodate Special Education services.

Likewise, Scott, another focal student described in the previous chapter, required continual refocusing and scaffolding during our days in the computer lab. Because he had become so disenfranchised from school and had become used to a pattern of failure, often when left to his own devices during lab time he would use the technology as a distraction rather than a tool for working in the class. Yet, when he had one-on-one attention and scaffolding, he was often able to do strong work. In my file notes on Scott, for example, I had multiple entries where I described sitting one-on-one with him and seeing growth while we talked through concepts and skills. One entry read:

> I sat with Scott for over twenty minutes today, and we made some progress…I realized that he just doesn't hear what I've gone over in class, and he doesn't participate in the practice exercises, so when we get to the lab he has no idea what he's doing. It's frustrating that he is so conditioned to check out in a regular classroom setting. He seems to want to do the multimedia work, but he can't make the bridge unless I go over everything with him again one-on-one. (Student File Notes, May 17, 2013).

This was true of several other students in the class as well, and I was regularly trying to balance group and individual progress. In many of these cases, the technology-based portions of the curriculum did serve as vehicles for students with emergent traditional literacies to be successful and to show important literacy growth, yet most still needed the same kinds of support and scaffolding that they would in a non-technological learning environment.

Another finding related to this concerned several students in the class who did not necessarily need the kind of one-on-one scaffolding just described in order to proceed through the steps of an assignment – and who had varying levels of traditional academic literacies -- but who had less advanced computer and technical skills and required regular support and instruction around performing basic tasks in the lab, such as saving and

emailing files, selecting, cutting-and-pasting, and basic keyboarding skills. For these students, the CMML work done in the computer lab helped them to develop these important skills within an authentic context of assignments designed around higher order critical thinking. I found that students were motivated to learn these skills when they felt excited about their work and wanted to move forward with it, but that it often slowed them down and required the regular ability to ask questions of me and other more technologically experienced students in the class.

This has important implications not only in the classroom – in thinking about how to shape curriculum and pedagogy -- but also for the impending move to online high-stakes PARCC testing. It is reasonable to extrapolate that students who struggle with the traditional literacies measured through standardized testing, particularly if they are still developing technology skills, are the most likely to be hurt by the implementation of technology-based high-stakes testing. The Director of Technology also referred to this when we spoke:

> I have serious concerns about students being able to perform in online environments….The number of folks who take their classes to the computer lab are few. It's always the same classes that are in there. Another concern is keyboarding skills. If a student cannot complete an online essay, because of the lack of keyboarding skills, their score will suffer. It might seem that the child does not know the material, when in fact they do – they just cannot get it out fast enough (District Technology Director).

Based on the kinds of experiences described above, the Director of Technology is right to be concerned about this. The current model of reform assumes that students will come to the technology-based high-stakes testing with a level playing field. Yet classroom teachers understand that technology skills vary greatly between students, and can best qualify and address the ways in which these factors complicate teaching and learning.

Furthermore, the kinds of challenges described above – both technological problems and the difficulties of meeting all students' needs in the classroom -- often lead to teachers avoiding integrating technology into their curricula in ways that might allow students to develop both discrete and critical uses of technology. I address this topic in the next section.

Culture of Teachers' Distrust in Technology

The technological malfunctions described previously, as well as the challenge of addressing the varying levels of individual students needs and abilities, adds layers of complexity to teaching that may deter many teachers from deeply integrating technology into their courses. There were thirteen entries in my fieldnotes over the course of the semester when I recorded that the Internet was not working during the CMML class period (and this does not include the numerous times it stopped working at other times of the day, or on days when we did not happen to need to use it, or the many times that I neglected to record that it was down). Random Internet dropping was such a rampant problem in the school that many teachers, including myself, had become accustomed to planning a back-up lesson for every lesson that was planned involving the Internet. The tremendous amount of extra time and work put into this, as well as the frustration of having lessons interrupted part way through and the re-planning that had to happen when the curriculum got off track, made many teachers cut back on their integration of technology or give up on it altogether. While I did not collect specific data on this, it emerged as a theme in the coding of my fieldnotes, and is something I can speak to from the many years I have spent in schools.

In my fieldnotes, for example, I recorded the following recounting of a conversation I had with another teacher: "Jerry told me at lunch that he won't even bring his class to the computer lab anymore because he can't stand the uncertainty of not having things work. I think a lot of people are starting to feel this way…" (Fieldnotes, April 3, 2013). I had had similar conversations with several other teachers over the past year, and was aware of at least four teachers who had actively decided to avoid using technology in their classes out of frustration with the lack of working infrastructure. When I interviewed a colleague in the English Department about her experiences with technology that year, she gave an example from that very week when the Internet had gone down during a carefully planned Webquest she had designed:

> It was so frustrating after all of the work I had put in [to the lesson] – I spent four hours planning that this weekend, and I didn't have time to make two lesson plans…So I ended up deciding to forget it when the Internet went down. We were half way through the class period too, so it's not like I could have really done anything anyway. We're behind in the curriculum and MCAS is coming up, so I just had them do some practice test questions for that…It makes me not even want to use the [computer] lab, to be honest – it's ridiculous that they are telling us we have to use technology to be effective teachers, that this is a priority…" (Teacher Interview, March 5, 2013).

In this case, students not only lost out on being able to do the interesting lesson the teacher had planned using the Internet, but her confidence in the reliability of the school's technology was further weakened by the experience.

Nonrenewable Resources: Time, Energy, & Money

The meaningful integration of technology into classes is further complicated by issues of training not only for students, but teachers, as well as by the mandates of education reform. Ironically, the kinds of lagging infrastructure, hardware, and software described above are being addressed in many school districts as a direct result of

education reform. However, rather than being for the explicit purposes of improving teaching and learning, investments in technology are largely being made to facilitate the movement to on-line high-stakes testing, often diverting funds from other essential staffing, programming, and services. The Los Angeles Unified School District, for example, recently signed a $30 million dollar contract with Apple to provide all students with iPads - pre-loaded with test-practice materials from Pearson - in preparation for coming on-line testing (Jones, 2013). As Diane Ravitch explained in a recent speech given to the Modern Language Association, the money for this funding for this was "taken from a bond issue approved by voters for construction and repair of school facilities. Meanwhile, the district has cut teachers of the arts, class size has increased, and necessary repairs are deferred because the money will be spent on iPads" (Ravitch, 2014). These kinds of "one-to-one" initiatives where schools are investing in giving each child a computer have been implemented widely around the country over the past decade, with mixed results in academic improvements and at the expense of cutting teaching and other support staff positions (Silvernail & Gritter, 2007; Shapley et al., 2009; Rhor, 2014).

These investments do little to address the kinds of training that may be needed for both teachers and students to be able to use this technology in ways that will improve teaching and learning. Even if more money were allocated toward technology training, teachers, administrators, and staff in many schools are already overstretched due to years of insufficient funding and new policy mandates, which have lead to greater class sizes, increased data collection requirements, more administrative duties, and heightened student needs. This certainly was the case in the district in which this study took place, in

ways that noticeably increased with each new school year. In regard to technology training, this led to a lack of progress around technology use that was perceived differently by various constituents. Speaking about Professional Development (PD) workshops that several staff members had been paid to develop and offer after school to other teachers – thus keeping costs down by providing in-house training rather than hiring outside trainers - the District Technology Director said the following:

> We should consider spending more on professional development…. However, we need to mobilize all staff (through the administration) to take part in it. I have been disappointed with staff response to PD; moreover, we do not offer ongoing PD through our professional days… With the advent of teacher evaluation and other mandates, those items take up any time which could be dedicated to tech PD. (District Technology Director).

Here, the Director of Technology highlights the reality that teachers often do not sign up for after-school PD offerings, and the school's administration has not prioritized technology training on scheduled PD days when teachers must be there. He indicates that any time given to technology during PD days has been usurped by "teacher evaluation and other mandates."

While the Technology Director's frustration with the lack of faculty attendance at after school workshops is understandable, it is important to see this lack of attendance as also rooted in data-driven reforms. While state and national policy documents reference the need for training of both student and teachers, lacking in this vision is an understanding of the pressures faced in most schools to meet the rising demands of data-driven reform while understaffed and underfunded. Time that could used by teachers to develop curriculum and lessons fostering creativity, critical thinking, and meaningful teaching and learning is taken over by the increasing bureaucracy of data-driven

mandates. A classroom teacher described this in the following excerpt from our interview:

> The new regulations are so time consuming, and definitely take our attention away from curriculum development. With over fifteen years of classroom experience I can honestly say that I see a shift for both teachers and administrators in the amount of time and care that can give to the immediate work, which is our students. So much of my time is spent creating benchmarks, working on new district determined measures, and developing my teacher evaluation portfolio, that there is little time left for creating new lessons and attending to the diverse needs of my over 80 students…. It's not that benchmarks and evaluations aren't important, they are, it's just that the way they are being implemented now is crazy. It's just taking up way too much time, and we spend half of the time trying to figure out what the new buzzwords mean, and which format things have to be in…And then you feel like as soon as you have this system down there will be another one in a few years… (Classroom Teacher Interview, May 15, 2013).

This classroom teacher describes the kinds of factors that might inhibit her from being able to attend the after-school PD workshops, no matter how interesting or useful they might be to her. I recorded in my fieldnotes similar sentiments of feeling overwhelmed by new regulations, and the system into which requirements had to be fit, and I acknowledged in my fieldnotes the ubiquity of this feeling amongst faculty in general.

Not only are classroom teachers affected by the new requirements of data-driven reform, but administrators are as well. The same classroom teacher interviewed above also described this:

> The administrators in this building are so overworked – it seems like they have less and less time for day-to-day interactions with teachers and students. My evaluator did not even have time to observe me in any meaningful way this year, because he's also overstretched with meetings and paperwork. (Classroom Teacher Interview, May 15, 2013).

This reflects the ways in which reforms are being implemented without an understanding of the day-to-day realities of working in schools that have increasingly been underfunded and overstretched.

Further diverting scarce financial resources away from the kinds of staffing, preparations time, and meaningful professional development that might make a real impact on closing the achievement gap, much money is being spent to acquire new technology to implement teacher evaluation system mandates. In the school in which this study took place, administrators' time and energy is also being used to learn technology for the ways in which data-driven teacher evaluation is being systematized. Here, the Director of Technology describes the new system:

> OASYS will be our online software to use for the teacher assessments. Again, it seems to be more of a conduit and backdrop for the work, although indispensable for it to happen. With the advent of wireless, it will be easier for administrators to use this and other tools to gather and process observed data.

Ironically, in the day-to-day operation of a school, the focus on data takes away from time that could be focused on the actual people teaching, learning, and working together. The critical human aspects of community are stripped away by a data-driven focus.

When the Director of Technology noted, above, that "[t]he number of folks who take their classes to the computer lab are few," he may not fully understand the complexity of challenges faced by classroom teachers detailed in many of the examples included in this study. At the same time, classroom teachers likely do not have a full appreciation or understanding of the kinds of institutional-level mandates and budgetary restraints faced by those deploying technology to the school. In this way, policy documents tend to reflect ideals rather than addressing the actual complexities that only people on-the-ground working day-to-day in schools can fully understand. Time that could be used for meaningful communication and planning within buildings and districts around these issues is taken up by the mandates of top-down education reform. This is

precisely why it is so important for ground-up models such as CMML and others to be studied, and for policy to be crafted by educators rather than business people.

Interestingly, in the District Technology Plan for the school in which the study took place, a table indicating how actual technology use in the schools compare to the Massachusetts recommended levels (TSAT, 2010), providing sufficient technical support to keep hardware, operating systems, and the network running smoothly was one of only a few items marked at an "acceptable" level in the district. Other areas, such as staff development, patterns of teacher use, and leadership roles were marked as "underperforming," which matches many of the realities described above. The discrepancy in perception of working technology and sufficient support on the part of teachers and technology personnel points to the need for greater communication between these two groups, as well as further study of day-to-day practices within schools.

Framing Literacy & Technology Skills as Socially Situated

As detailed in the previous chapter, the CMML curriculum is one model of a course that integrates technology into a standing curriculum in a way that allows for the authentic development of both discrete and critical literacy skills. While on the surface this kind of orientation may not seem to be a radical departure from a traditional approach to writing instruction, upon closer examination we can see that in addition to offering a new model of technology use to close the achievement gap, it fundamentally changes both traditionally and newly prescribed writing and ELA instruction within the mainstream.

At the secondary level – evidenced in both state curriculum frameworks and state standardized testing -- traditional writing pedagogy to date has emphasized most heavily

the development of discrete skills or concepts and the development of ideas. While concern for design and structure have often prescribed, it has mostly been in the vein of in formulaic conventional writing patterns, such as for example teaching the 5-paragrpah essay or ways to order points of comparison and contrast. The notion of connecting structure and design to meaning has generally been considered the milieu of advanced literary analysis. Likewise, consideration of cultural and historical context has often been included in ELA standards in the study of literature in ways that are self-referential to the text, such as studying the culture of the 1920's when reading *The Great Gatsby*, or understanding the Salem witch trials when reading *The Crucible*. Deeper-level, critically-oriented contextual questions – particularly those that are related to students' processes of schooling, and those that use literature and writing as a vehicle to better understand and make change in our own lives – have less often been included: What caused the kind of economic boom seen in the 1920's, and how does this relate to our economic situation today? What is the literary canon and how does it come to be? Who else might have been writing during these time periods, and why haven't they become well known?

Newly published Common Core State Standards (CCSS), which are being adopted and implemented in states around the country, shift the landscape in regard to both consideration of form and design, as well as the importance of cultural and historical context, in relation to literacy pedagogy. As discussed in Chapter Four, the CCSS have been widely criticized already for seeking to even further de-emphasize cultural and historical context of texts, prescribing the teaching of analysis grounded in New Criticism, a mid-century form of literary criticism that emphasizes analysis of texts as self-referential pieces, separate from social, cultural, and historical contexts. This

approach is central to the design of ELA instruction in the CCSS, the lead designers of which have released sample lessons on close readings of The Gettysburg Address and Letter From Birmingham Jail (Student Achievement Partners, 2013; EngageNY, 2012). These sample lessons have been criticized for their omission of the kinds of essential, critical questions that position these texts within their highly political, specifically historical contexts (Strauss, 2012; Ravitch, 2014).

On the other hand, largely as a component of a formalist approach, the CCSS do emphasize form and structure much more than previously. In relation to a curriculum that foregrounds multimodal and media texts, which lend themselves to the study of structure, this could be seen as a positive development. Yet, as many scholars have recently pointed out (Beach, 2011; Beach, Heartling-Thein, & Webb, 2012), the fact that CCSS is rooted in a formalist approach that largely ignores the social and contextual nature of literacy, learning, and expression changes the orientation towards the teaching and learning of structural devices. In other words, the CCSS ask for structure and design to be understood and practiced by students in ways that can be readily identified through standardized testing, and again in ways that explicitly omit reference to cultural or historical context. As such, the focus on structure and design become discrete skills that can be easily measured – for example, by identifying a method of organization, or including the main points of focus in an essay within a thesis statement – rather than more complex, higher-order literacy skills that would seek to have students identify, analyze, and use different structural devices within authentic contexts. Through the eventual PARCC standardized testing that will measure students' knowledge of the CCSS, structural devices become objectified, limited to the realm of identification rather than real analysis and

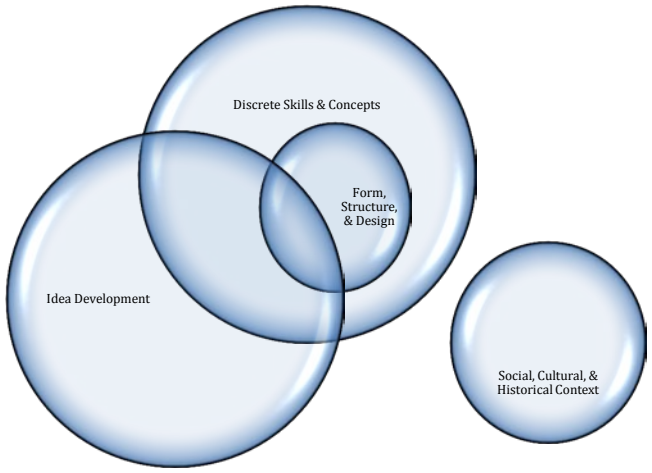
sophisticated use. Further, the model continues to be limited to print-based text alone, and measures reading and writing of texts through formulaic standards that can be measured on standardized tests.

Beach (2011) also discusses the ways in which a formalist approach differs from genre theories and practices that socially situate literacy development (Cope & Kalantzis, 2011; Gee, 1990; Street, 2003), and which teach disciplinary genres and conventions within "an authentic engaging rhetorical context involving addressing complex issues or problems" (Beach, 2011). Recognizing the value in attention to structure and design, Beach goes on to argue that a genre theory or socially-situated literacy approach "does not preclude instruction in the kinds of formalist aspects of literacy learning valued in the CCSS…[,]" but rather "serves to *complement* formalist instruction by focusing on creating events or contexts that actively engage students in uses of social genres/literacy practices" (2011). I would argue that a CMML curriculum even more specifically is best suited to address issues of structure and design by providing texts in multiple mediums and within authentic learning environments.

Issues of structure and design are foregrounded within a CMML framework, with an emphasis on the construction of meaning. Most importantly, they become *comparative*, deepening an understanding of their potential functions and meanings in various mediums and types of texts. As Carey Jewitt writes, "how knowledge is represented, as well as the mode and media chosen, is a crucial aspect of knowledge construction, making the form of representation integral to meaning and learning more generally" (2008). Furthermore, by situating all texts and learning within the larger framework of their social, cultural, and historical context, developing CMML by its very

nature is authentic work for students. Discrete skills – including familiarity with the conventions of various disciplines and mediums -- develop authentically through the study and production of written and multimedia texts that explore issues relevant to students' lives and in which they can locate themselves. The diagrams below represents this phenomenon first within the framework prescribed through the CCSS, and second through a CMML curriculum:

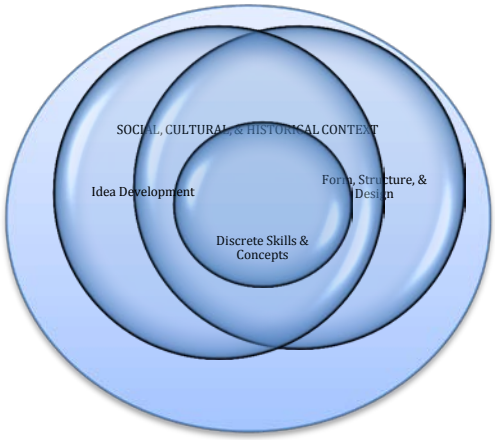
Figure 1: Literacy Development through Common Core State Standards



The diagram above illustrates the areas of concern in a traditional writing curriculum – and specifically that prescribed through the CCSS -- where analysis of structure, form or design become discrete concepts that can be measures through standardized testing. A CMML curriculum, by contrast, uses the multimodal platforms of the digital age to center critical, "meta"-oriented contextual questions in and about learning and society as a vehicle to engage and motivate students.

The context in which learning takes place, as well as the larger context of each writing and multimedia piece studied and produced, serves as the vehicle through which discrete and technical skills are developed and meaning is made, including close attention to form, design, and structure. The CMML curriculum looks more like the following:

Figure 2: Literacy Development through Critical Multimodal Media Literacy



The CMML focuses on applications of technology that develop critical thought, creativity, multliteracy, and social agency by emphasizing the context and relevance of learning.

Conclusion

Findings from this portion of the study point to a model in which students are encouraged to bring their individual, personal backgrounds, interests, and literacies to bear on working towards a collective goal of developing CMML for the purposes of making social change. This is a very different paradigm of individual and collective concerns than that laid out in the NETP (2010) and the CCSS (2010) described above, particularly in relation to the concept of personalization. I found that while technology use in the

CMML curriculum allowed for a considerable amount of important differentiation amongst students – where students were engaged in activities and projects in which they could reach different levels of conceptual understanding and skill, depending on their starting points and the pace of their learning – its emphasis throughout was on the shared context of larger social and cultural systems of which we all are a part. Identifying the different spaces and levels of agency each of us holds within these systems -- related to factors such as family history, gender, race, socioeconomic status, sexual orientation, ability, age, special interests, etc. – is part of the shared process encouraged by CMML and is part of what led to individual literacy growth.

The use of digital technologies in the class functioned more to deepen ties of commonality and shared experience than to "personalize learning" and "maximize productivity" in the ways described in the NETP (2010). While in many instances, technology presented many of the same learning challenges to students that non-technologically based learning did, it also served as a vehicle for emergent students to find interest and motivation necessary to succeed in the class.

The institutional and policy influences on the work of CMML proved to be complex and multi-layered. As I have laid out here, there is a clear disconnect between the stated ideals of technology in education reform as stated in the NETP (2010) and the reality of day-to-day operations in schools. A viable plan for implementing technology to lessen the achievement gap will need to focus less on testing and data gathering – which, as shown here, has ripple effects throughout the system – and more on the actual needs of the students and teachers doing the hard work of teaching and learning.

Further, the way in which literacy practices themselves are being positioned

through education reform will have large implications for the kinds of teaching and learning that happens in classrooms. The emphasis on a formalist approach to literacy in the CCSS runs the risk of cutting ties in students to the very contexts that make learning meaningful and literacy development desirable. The CMML approach is one of many other alternative paradigms that seek to develop literacies in students within authentic contexts that are meaningful to them.

CHAPTER 7

CONCLUSION

This research has demonstrated the significant potential of CMML curricula and pedagogy to develop in students both traditional and multimodal literacies essential for academic success and for making social change. By actively engaging students in contemporary social issues, encouraging them to locate themselves culturally and historically, and providing them tools to critically understand the larger systems of which they are a part, CMML represents an authentic context in which traditional and multimodal literacies develop. Further, the study has illustrated many of the social and material conditions in the day-to-day workings of actual schools that problematize both the implementation of this kind of programming, as well as the current model of education reform. In particular, many of the stated ideals of technology use in the rhetoric of official education reform are further complicated by factors such as the range of students' technical proficiencies; their access to technologies at home; the prevalence of students' special needs and accommodations; the level and availability of working infrastructure, hardware, and software in schools; and the reality of demands on teachers, administrators, and support staff.

As importantly, the CMML curriculum studied here also represents a model of resistance to the trends of current education reform, forwarding an alternative paradigm of and approach to literacy and technology use that was successfully implemented within the mainstream system. In this way, the study contributes a potential framework for intervention into current policy in public education, illustrating an example of the ways in which practitioners on-the-ground in public schools might still have agency in shaping

the system, despite the intensifying climate of top-down control. Further, by examining the progress of students using digital technologies for the development of critical literacy skills within a system that is bound to the mandates of federal and state reform, this research uncovers many of the ways in which current policy limits and restricts meaningful teaching and learning, as well as how students' processes of learning in the day-to-day classroom can be a central site of working towards greater educational and social equity. As such, the study also stands as a framework for the analysis of critical pedagogical practices and literacy development within the mainstream system.

Summary of Findings

The rhetoric concerning literacy and technology has been saturating the public educational landscape for the past several years – showing up in professional development trainings, as parts of standards, written into schools' mission statements, and as central components of policy documents. Yet, as discuss in both Chapters One and Two, there has been little consensus about exactly what is meant by literacy or technology, by whom and to what end they are being defined, nor where the resources to implement them will come from. The development of CMML curricula necessitates a clear and thorough identification of terms, and an informed understanding of the theoretical influences related to literacy, technology, and the purposes of education.

As I discuss in both Chapters One and Two, within the CMML framework, literacy in this study is defined as socially, culturally, and historically situated. Rooted largely in sociocultural learning theories (Vygotsky, 1962; Bakhtin 1981), socially situated literacy practices foreground the role of context in literacy development, understanding it as inextricably intertwined with social contexts, purposes, and larger

cultural and historical forces. More specifically, the multimodal component of CMML refers to literacy practices that extend beyond print-based text alone, to include modalities such as aural, visual, spatial, and kinesthetic. Multimodal literacy pedagogy can be traced to the fields of New Literacy Studies (Gee, 1990; Street 1996; Barton & Hamilton, 1998), which made early strides in uncovering the contextual, ideological nature of literacy development; the field of Multiliteracies (New London Group, 1996), which further theorized literacy development across modes and mediums; and the field of Social Semiotics (Hodge & Kress, 1988; Thibault, 1991; Jewitt, 2008), which provides a framework for understanding the specific signifying practices across modes.

Finally, and perhaps most importantly, CMML defines literacy as a critical tool of student empowerment and social change. Strongly tied to the tradition of critical pedagogy, most well-known in the work of Freire (1970) and later theorized by scholars such as Apple (1982), hooks (1983), and Giroux (1984), critical pedagogy seeks to empower students to make connections between their own lives and the larger social, cultural, historical, and political systems surrounding them. Both critical media literacy (Kellner & Share, 2007; Gainer, 2010; Goodman, 2003) and critical literacy are founded in theories of critical pedagogy, and play a central role in the development and enactment of the CMML course studied here.

Chapter Two of this study further presented an essential overview of the current system of education reform that represents the larger context in which the study must be understood. Current framing of both literacy and technology should be seen within the larger social and political climate of neoliberal policy, which over the past two decades has further cut funding to the public sector and has opened public education to

privatization and corporatization through multiple avenues. Trends in both choice and accountability in education can be traced to the larger project of neoliberal reforms, in which technology has been both a central tool of and rationale for changes in public education. Technology has been implicated in reforming education to become increasingly vocational and to feed the current economic system and the fractured, globalized workforce. In this chapter, I also analyzed the ideological underpinnings of notions of efficiency, personalization, and lifelong learning as they are framed in the National Education Technology Plan (2010), exposing the ways in which these constructs run counter to a truly democratic educational system.

Chapter Three outlines the methodological approach used in the study, which relied on qualitative research and ethnographic sources of data, including detailed observations of students and student interactions, one-on-one interviews with students, student-produced artifacts, student questionnaires, and interviews with a district administrator and teacher. I chose to use ethnographic methods because of my keen interest in uncovering the day-to-day practices and experiences of actual students and teachers. Thus, in addition to the micro-level analysis of students' learning processes, institutional-level factors such as the perceptions and realities of technology use; the workload of teachers and administrators; and programming and scheduling in relation to students also became important to understand. My understanding of these factors is rooted in facets of institutional ethnography (Smith, 2005) and interpretive policy analysis (Yannow, 2000), both of which foreground the interconnectedness of micro-level practices, institutional specificities, and larger political and historical contexts.

Chapter Four addressed what constitutes the critical multimodal and media literacy (CMML) curriculum and pedagogy examined in this study. Because the class was newly designed in its current iteration, and because it had only been taught as such once before the time of the study, the curriculum and pedagogical approach themselves became data to be examined, analyzed and refined. Located within the theoretical traditions of critical curriculum theory; multicultural, culturally-responsive, and social justice curriculum theory; as well as critical media literacy theory, the CMML course represented an amalgam of fields integrated into an already standing writing curriculum.

In reflecting on the curriculum in Chapter Four, I found that all lessons, activities and assignments were grounded in one or more of seven core critical constructs framing my pedagogical approach. In addition, a focus on social change had been woven into the curriculum in multiple ways, including topically, as an end-goal of production, and through students' final research projects. Further, the required focus on contemporary social issues of concern to students created authentic topic matter to which students made meaningful personal and social connections. I found that the CMML curriculum relied on both the study of multiple modes and mediums as well as production in multiple modes and mediums in order to develop in students' both analytic and production skills. Literacy skills were developed *across* modes and mediums, and took on more meaning cumulatively as each new mode and medium was added. Attention to form, structure, and design took on central importance in the CMML curriculum, often deepening students level of analysis of other texts and making their own production more sophisticated.

Chapter Five answered my second research question, breaking down the specific areas in which students showed traditional and multimodal literacy growth, and

qualifying how and in what ways this growth took place. This portion of the study described the micro processes of teaching and learning within the classroom. As a global finding, I identified the essential role of engagement and meaning-making in student motivation, and in specific areas of literacy development. For many students, it was being hooked by subject matter that had meaning to them, or to which they could see application in their own lives, that made the initial difference in attention and motivation, which eventually led to skill growth. Further, specific excerpts from students' work, interviews, and my own observation logs analyzed in this chapter illustrate significant growth in the areas of topic choice and thesis development; development of ideas and depth of analysis, including close reading and use of textual evidence; discernment; meaningful editing and revision; discrete and technical skills; and trouble-shooting, problem-solving, and student-centered, collaborative learning.

Chapter Six considered CMML classroom practices within the larger context of institutional norms and policy mandates. I included relevant excerpts from interviews with members the school's staff and administration on topics concerning technology use, programming choices, and the allocation of resources. Topics covered were the material and social realities of technology use within the school, as well as a consideration of the ways in which resources of time, energy, and money were being allocated. My findings indicated that many teachers within the school struggled to use technology effectively in their classes largely due to lack of working infrastructure, hardware, and software, as well as lack of time for planning and training. While there was a clear technology plan in place for the school, much of it included stipulations that were not being realized due to time constraints, lack of proper resources, and both human and financial resources being

put towards fulfillment of new policy demands. Furthermore, students expressed a great level of frustration at the lack of working technology in the school, and I found multiple instances of students giving up on their work or losing interest due to technological failures beyond their control.

In addition, several of my findings in this chapter pertain to issues of equity. I found that students if higher socioeconomic status (SES) were often able to circumvent problems with the school's technology by bringing their own technological tools from home, which was not an option for many other students in the class. Another interesting finding concerned the translation of special learning needs to technology-based portions of the curriculum, whereby I found that students with special academic or social needs almost always needed the same level of support with technology-based assignments as they did in the regular classroom. This finding speaks in opposition to the promise of personalization through technology forwarded by education reformers as a solution to inequities in schooling, and in fact reflects the need for the kind of personalization that only comes through human relationships developed over time.

Limitations of Study

The integration of CMML into a standing, traditional writing curriculum can be seen both as an asset and a limitation in this study. Because it is unlikely that traditional writing instruction will be wholly replaced any time soon – nor should it be entirely, as it has much to offer – the kind of curriculum and pedagogy reflected in the CMML course will be most likely to be adopted piecemeal, and in relation to standard writing practices. In addition, as theorists such as Delpit (2001) have argued, it is a disservice to students to

not teach them the dominant literacies and discourses of schooling while also teaching them the critical tools to move beyond them.

Yet, the integration of CMML into a standard writing curriculum did in fact significantly limit the possibilities of both its potential scope and reach. In particular, the focus of the study was more heavily skewed toward the ways in which traditional literacies were enhanced by the addition of CMML components, with less emphasis on the kinds of distinctly new literacies that also emerged. Further study in this area might elaborate the nuances of strictly multimodal skills in-and-of-themselves, rather than in relation to traditional literacies. In addition, because of time constraints, the media literacy portion of the curriculum was curtailed to one unit only, whereas in a stand-alone CMML course this could have been integrated throughout the curriculum. I found the unit on advertising aimed at children to be the portion of the curriculum to which students most positively responded – particularly some of the more disenfranchised students – and believe that the course would be stronger with more study of the mass communication system, popular media content, and media industries.

I also believe that my third research question would have been better informed by further interviews with school staff and administration. Much of the interview material I did gather did not end up being relevant to the themes that had emerged in the coding of other sets of data in the study, and because of everyone's business with end-of-the-year work and obligations I was unable to schedule follow-up interviews with some of the people I had spoken with, or to schedule new interviews with others. Specifically, I had hoped to hear more from administrators themselves about the amount of time, energy, and money going towards policy mandates, which anecdotally I knew to be significant,

but I was unable to capture through interviews. Further research of this type would benefit from myriad voices on-the-ground in schools at classroom, building, and district levels.

Finally, as I acknowledged in Chapter Three, my positionality as both instructor and researcher presented advantages and disadvantages to this research process. Being in the classroom every day, getting to know my students well, analyzing and assessing their work on an ongoing basis, and being a long-standing part of the larger institution and community all gave me insights I never could have had as an outside observer. I truly believe that for these very reasons classroom teachers have something unique and essential to offer in larger discussions of education policy, and that their voices are far too often marginalized. At the same time, the realities of being a classroom teacher are so demanding, time-consuming, and complex, that it often leaves little time for meaningful involvement at the institution and policy levels. I was lucky to have taken on these dual roles at a time in my development and career where I was able to balance both, but the enormity of the task likely at times diminished the possibilities of both my teaching and my research.

For example, as a teacher, one area I would have developed more thoroughly had I been able would have been the critically important dissemination of students' final projects beyond the classroom. I did invite the school Principal and other faculty to watch students' final presentations, and I encouraged several students to follow up on having their photo-essays exhibited locally, and others to publish their video and audio pieces to the Web, but I did not formally build this into the curriculum and there was not enough time to truly facilitate it happening. This is perhaps my biggest misgiving about a course

that emphasized so heavily use of CMML for social change, in that I wanted students to see their work have an impact outside of school walls. I believe that most students left the course with the sense of this possibility, but to my knowledge none of them presented their work in forums outside of school.

Implications for Further Research, Practice, & Systemic Reform

My findings point to the need for more research in the area of classroom uses of technology within larger institutional and policy contexts. Further, CMML is only one of a number of models specifically designed to use technology in ground-up ways to promote critical literacy in students, and other models must continue to be developed, implemented, and studied. This model is unique in its grounding of alternative approaches such as critical pedagogy and multimodality within a core, required course. Rather than being offered as a stand-alone elective, or more commonly as an extracurricular program outside of school altogether, it provides a framework for transformative educational practices within the heart of the mainstream system. This model should prove useful to classroom practitioners looking for a model of integrating critical or multimodal literacies into their courses, across both core and elective secondary disciplines.

This study and others like it should also be informative to policy-makers regarding the on-the-ground, day-to-day challenges and concerns faced by classroom teachers, school support staff, and administrators. Policy does not exist in a vacuum, and plays out in complex ways when enacted through people with individual and community concerns. I clearly argue here that the current reforms – particularly as they frame technology use and literacy – are likely to continue to lead to practices that will further

alienate students from meaningful learning in school, and will widen rather than closing gaps in achievement. Particularly for students with emergent traditional literacies, and those who do not come to school with the capital of the dominant culture, CMML represents an alternative paradigm to achievement than the culture of competition, choice, and accountability cultivated by current education policy.

By encouraging students to understand the larger social, political, and economic systems governing their lives; by privileging multiple modes and mediums beyond print-based texts alone; by highlighting the democratic potentials of digital technologies in the Internet Age and the ways they can be used from the ground up to make social change; and by keeping human relationships at the center of the educational experience, the CMML course empowers students through critical literacy development and authentic, meaningful engagement with education and community.

If we are serious about reforming education in ways that will address the social and economic inequities that exist so clearly along lines of social class and race in our society, then pedagogical practices and curricula that employ the use of digital technologies to critical, democratic ends must be further examined. Particularly for students who struggle in school or those with emergent traditional literacies, CMML provides an avenue for educational engagement, literacy growth, and academic achievement. Moreover, CMML represents a form of both democratic education – like the progressive model championed by Dewey (1916/1997) – and critical education, like that championed by Freire (1970), in which students are given the tools to become actively engaged citizens, and to question the structures and power-relations that create and perpetuate many of our most pressing contemporary social issues. The ability of

educators to continue to create and maintain curricula and pedagogical approaches that adhere to these ideals may mean the difference not only between salvaging public education from the agenda of corporate reformers, but cultivating future generations of citizens capable of creating a more socially just, environmentally healthy, and peaceful world.

APPENDIX A

INTRODUCTORY LETTERS & ASSENT/CONSENT FORMS

Dear Students,

I am writing to inform you about the portion of my dissertation study that I am conducting in the Writing course in which you are currently enrolled at….. This study is part of my work as an Ed.D. student at the University of Massachusetts, Amherst.

At the start of the semester, I sent home a letter explaining a portion of my dissertation research that I had hoped to do in the section of Writing in which you are enrolled this spring. The study focuses on practices of multimodal and media literacy, or how literacy translates between different modes and mediums. I am particularly interested in better understanding how multimodal and media literacy practices affect your engagement with and achievement in a traditional writing curriculum, and how they impact your sense of your own growth and learning.

This letter is to let you know that while I am still conducting the study, I have simplified it from the parameters set out in the original letter I gave you, and I am asking for you to sign a new form if you would like to participate in the study (please see attached Assent Form). There are now only two basic ways that you can opt to participate in the study: 1) As a general participant, who will consent to have me include anonymous examples of your written and multimedia work, and questionnaire responses, in my dissertation and in future conference presentations, or 2) As a core participant, who will consent to have me include anonymous examples of your written and multimedia work, and questionnaire responses, in my dissertation and in future conference presentations, and who will also engage in more in-depth interviews outside of class about your work and will allow me to use anonymous excerpts from these interviews.

Please read over the attached Assent Form and check, sign, and check the appropriate box. If you have any further questions about the course or the project, please do not hesitate to contact me at …….., or (413) 587-1343, Ex.305. My dissertation advisor at the University of Massachusetts is Dr. Nat Turner, who can also be reached at (413) 577-0497 with any questions.

Sincerely,

Assent Form for Participation in a Research Study
University of Massachusetts Amherst

Researcher(s): Kate Way, Ed.D. candidate
Study Title: "Speaking Back to Structure: Multimodal Media Literacy and the Politics of School Reform"

Student Assent Form

This form is called an Assent Form. It will give you information about the study so you can make an informed decision about whether or not you want to participate in this research study.

This portion of the study will take place in the spring semester Writing course taught by Kate Way at ……, and will continue throughout the semester. Anyone enrolled in this section of the course is eligible to participate in the study.

The purpose of the study is to better understand how multimodal and media literacy practices affect student engagement and performance in the Writing course, as well as how they impact students' sense of their own literacy, learning, and ability to affect social change. The results of the data collected in this portion of the study will later be analyzed within the context of state-mandated literacy practices and current trends in education reform.

There are two basic ways that you can agree to participate in the study: 1) As a general participant, who will consent to have me include anonymous examples of your written and multimedia work, and questionnaire responses, in my dissertation and in future conference presentations, or 2) As a core participant, who will consent to have me include anonymous examples of your written and multimedia work, and questionnaire responses, in my dissertation and in future conference presentations, and will also engage in more in-depth interviews outside of class about your work and will allow me to use anonymous excerpts from these interviews

If you agree to be a core participant in this study, you will be asked to meet for individual interviews to discuss your perceptions of multimodal media literacy practices, and your own learning and education, 2-3 times over the course of the semester. These interviews may be audio recorded for later transcription.

You do not have to be in this study. If you do agree to participate the study, but later change your mind, you may withdraw at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate. If you do opt to participate, you will not be advantaged over others within the class in any way, but will be contributing to much-needed research in the fields of multimodal and media literacy. We believe there

are no known risks associated with this research study; however, a possible inconvenience may be the time it takes to complete the interviews outside of class.

The following procedures will be used to protect the confidentiality of your work and the recordings of interviews: I will keep all study records, including any codes to your data, in a secure location in a locked file cabinet. Research records will be labeled with a code. All electronic/digital files containing identifiable information – including your writing, multimedia work, and audio files of your interviews -- will be password protected, and any computer hosting such files will also have password protection to prevent access by unauthorized users. At the conclusion of this study, I may publish my findings and/or present on them at conferences – your name will always be changed and your identity will be kept anonymous in all publications and presentations.

You may take as long as you like before you decide whether or not you want to participate in this study. I will be happy to answer any question you have. If you have further questions about this project, or if you have a research-related problem, you may contact me at, or …., Ex.305. My dissertation advisor at the University of Massachusetts is Dr. Nat Turner, who can also be reached at (413) 577-0497 with any questions. If you have any questions concerning your rights as a research subject, you may contact the University of Massachusetts Amherst Human Research Protection Office (HRPO) at (413) 545-3428 or humansubjects@ora.umass.edu.

When signing this form I, _____, am voluntarily agreeing to enter this study. I have had a chance to read this assent form, and it was presented to me in a language that I use and understand. I have had the opportunity to ask questions and have received satisfactory answers. I understand that I can withdraw at any time.

_____	_____	_____
Student Signature:	Print Name:	Date:

- ❑ Core Participant: I agree to participate as a core participant in the study, allowing anonymous excerpts from my written and multimedia work, questionnaire responses, and in-depth interviews conducted outside of class in this dissertation and in future conference presentations.
- ❑ General Participant: I agree to participate as a general participant in the study, allowing anonymous examples of my written and multimedia work, and questionnaire responses, in this dissertation and in future conference presentations.
- ❑ I do not agree to participate in this study in any way.

Dear Parents and Guardians,

I am writing because your child is a student in my Writing class this spring at …. In addition to teaching at…., I am also an Ed.D. candidate in the *Language, Literacy, and Culture* program at the University of Massachusetts, Amherst.

At the start of the semester, I sent home a letter explaining a portion of my dissertation research that I had hoped to do in the section of Writing in which your child is enrolled this spring. The study focuses on practices of multimodal and media literacy, or how literacy translates between different modes and mediums. In connection with the more traditional forms of writing students have been practicing in this course, they have also been exploring literacy through the analysis and production of photography, video, and audio. In my study, I am considering how this approach compares to the model of literacy promoted by recent trends in both federal and state education policy. I am particularly interested in better understanding how multimodal and media literacy practices affect student engagement with and achievement in a traditional writing curriculum, and how they impact students' sense of their own growth and learning.

This letter is to let you know that while I am still conducting the study, I have simplified it from the parameters set out in the original letter sent home, and am asking for a new consent form to be signed by both you and your child (please see attached). There are now only two basic ways that you and your child can consent to his/her participation in the study: 1) As a general participant, who will consent to have me include anonymous examples of his/her written and multimedia work, and questionnaire responses, in my dissertation and in future conference presentations, or 2) As a core participant, who will consent to have me include anonymous examples of his/her written and multimedia work, and questionnaire responses, in my dissertation and in future conference presentations, and will also engage in more in-depth interviews outside of class about his/her work and will allow me to use anonymous excerpts from these interviews.

Please read over the attached Consent Form and check, sign, and check the appropriate box. If you have any further questions about the course or the project, please do not hesitate to contact me at …….., or ….., Ex.305. My dissertation advisor at the University of Massachusetts is Dr. Nat Turner, who can also be reached at (413) 577-0497 with any questions.

Sincerely,

Kate L. Way

Consent Form for Participation in a Research Study
University of Massachusetts Amherst

Researcher(s): Kate Way, Ed.D. candidate
Study Title: "Speaking Back to Structure: Multimodal Media Literacy and the Politics of School Reform"

Parent / Guardian Permission Form

This form is called a Consent Form. It will give you information about the study so you can make an informed decision about allowing your child to participate in this research study.

This portion of the study will take place in the spring semester Writing course taught by Kate Way at …., and will continue throughout the semester. Anyone enrolled in this section of the course is eligible to participate in the study.

The purpose of the study is to better understand how multimodal and media literacy practices affect student engagement and performance in the Writing course, as well as how they impact students' sense of their own literacy, learning, and ability to affect social change. The results of the data collected in this portion of the study will later be analyzed within the context of state-mandated literacy practices and current trends in education reform.

If you agree to allow your child to take part in this study, he/she will be asked to meet for individual interviews to discuss his/her perceptions of multimodal media literacy practices, and his/her own learning and education, 2-3 times over the course of the semester. These interviews may be audio recorded for later transcription. In addition, if you give permission for your child to participate, you will be agreeing to allow me to include samples of his/her written and/or multimedia work in public presentations and publications connected to this study.

Your child does not have to be in this study. If you agree to allow him/her to be in the study, but later change your mind, you may withdraw his/her participation at any time. There are no penalties or consequences of any kind if you decide that you do not want your child to participate. If you do opt to participate your child will not be advantaged over others within the class in any way, but will be contributing to much-needed research in the fields of multimodal and media literacy. We believe there are no known risks associated with this research study; however, a possible inconvenience may be the time it takes to complete the interviews outside of class.

The following procedures will be used to protect the confidentiality of your child's work and the recordings of his/her interviews: I will keep all study records, including any codes to your data, in a secure location in a locked file cabinet. Research records will be labeled with a code. All electronic/digital files containing identifiable information – including your writing, multimedia work, and audio files of your interviews -- will be password protected, and any computer hosting such files will also have password protection to prevent access by unauthorized users. At the conclusion of this study, I may publish my findings and/or present on them at conferences – your child's name will always be changed and his/her identity will be kept anonymous in all publications and presentations.

You may take as long as you like before you decide whether or not to allow your child to participate in this study. I will be happy to answer any question you have. If you have further questions about this project, or if you have a research-related problem, you may contact me at …..., or (413) 587-1343, Ex.305. My dissertation advisor at the University of Massachusetts is Dr. Nat Turner, who can also be reached at (413) 577-0497 with any questions. If you have any questions concerning your rights as a research subject, you may contact the University of Massachusetts Amherst Human Research Protection Office (HRPO) at (413) 545-3428 or humansubjects@ora.umass.edu.

When signing this form I am voluntarily agreeing to allow my child, _____, to enter this study. I have had a chance to read this consent form, and it was presented to me in a language that I use and understand. I have had the opportunity to ask questions and have received satisfactory answers. I understand that I can withdraw at any time.

_____	_____	_____
Parent / Guardian Signature:	Print Name:	Date:

APPENDIX B

STUDENT QUESTIONNAIRES

Start-Semester Questionnaire

Where have you gone to school before this?

Where do you live (what town)? Who do you live with?

Do you generally set aside time in the afternoon or evening to do your homework? Do you have a quiet place to do school work at home?

Who would you most like me to be in contact with about your progress in this course?

Tell me about your experiences with school for the past 2-3 years. What parts have you liked? What have you not liked? Why?

What is your relationship with writing like? Do you find it easy or difficult? What would you say you struggle most with in writing done for school?

What about reading? Do you like to read? Is it usually easy or difficult for you?

What are some of your interests, hobbies, or activities?

Is there anything else you'd like me to know about you?

Do you have any questions about this course?

Do you have:

yes / no: …a computer at home?

yes / no: …internet access at home?

yes / no: …a digital camera?

yes / no: …a cell phone with a camera?

yes / no: …the ability to upload your pictures to a computer?

yes / no: …a video camera?

yes / no: …a cell phone that takes video?

Audio Unit Questionnaire

1. How did you change your writing to make it translate smoothly to the audio version? *Please be specific about any changes that you made and why you made them!*

2. a) Describe any music and other sound effects that you included in your audio piece.

b) Why did you choose the music & sounds that you did?

c) Where did you place them in the audio piece, and why there?

3. Did doing the audio piece make you think about your writing differently? After going through your writing to prepare it for the recording, did it make you want to make any changes in the final written version? Did you catch any errors or awkward parts in your writing by going through it for recording? Did it make you see any parts that need expansion or editing? *Please explain in detail.*

4. What do you see as the most important differences between the way we experience a story 'on the page' (reading text), versus 'hearing' (in an audio piece)? *Please be as specific as you can!*

5. What are some *skills* you think you gained by doing the audio production of your writing? Is there anything you now know how to do that you did not before this assignment? *Please be as specific as possible, and name as many things as you can (big or small).*

6. Is audio production something you are interested in learning more about? Can you imagine using it in the future? *Explain.*

Persuasive Unit Questionnaire

Explain 2-3 concepts connected to advertising that you learned (and had not known much about before) during our unit on persuasive writing.

Since doing the unit on persuasion, do you feel more aware of the possible techniques being used in advertisements when you see them yourself now? Please explain and give examples.

Do you believe that YOU as an individual have any ability to help change/impact the current state of advertising in our country? If so, explain. What are some actions you could take that might make a difference?

One of the ideas we focused on was questioning who is ultimately responsible for unethical tactics used by marketers and the potential negative effects of advertising (namely: the government, parents, corporations & marketing firms, all citizens). What other important issues might you apply this same question to?

How do you feel about the persuasive essay that you wrote on advertising and children? Did you find this essay easier to write than others? Harder? More or less interesting than others? How persuasive do you feel you were able to be on this topic? Explain!

Mid-Term Questionnaire

1. What have been your TOP 3 favorite assignments or activities so far this semester? Why? Please *explain in detail* for each one (and write in full sentences!). In addition to the things listed above, also consider small group and whole class discussions, and/or work you've done in pairs.

2. What have been your TOP 3 LEAST FAVORITE assignments or activities so far this semester? Why? Please *explain in detail* for each one (and write in full sentences!). In addition to the things listed above, also consider small group and whole class discussions, and/or work you've done in pairs.

3. Choose ONE assignment, activity, or exchange that you feel you've learned something important from in this class, or that made you grow as a thinker/writer/student/person somehow. Explain in as much detail what you learned and why you think it is important.

4. a) Overall, how do you feel about the writing you've been asked to do for this course so far? Has it helped you to grow as a writer? Pushed you in any new directions? Frustrated you in any way? Etc… (any response you've had!).

b) What is the piece of writing you've done for this class so far that you feel most proud of / best about? Why? Explain in detail!

c) What is the piece of writing you've done for this class so far that you feel least proud of / worst about? Why? Explain in detail!

d) What things do you most want to work on in your own writing as the semester continues? Explain in detail!

5. Tell me about the level of effort you've been putting into this class and why. How would you describe your effort, contributions, and focus during class time? On work done outside of class?

6. What is something I could do to better support your growth as a writer/thinker/student/person in this class? Explain in detail!

End-Semester Questionnaire

Please answer the following questions in as much detail as possible!
1. Do you feel you've grown this semester as a writer? If so, in what ways?

What parts of writing are most challenging for you? Why? In what ways? *Please give as much detail as possible!!*

2. In this writing class, we've explored the mediums of photography, video, and audio production. Please answer the following questions about these:

- Do you feel that literacy with the digital mediums we've been exploring are important for you as a student / person? How/why?

- Has the curriculum in this class expanded your knowledge of / skill with any of these mediums? *Please explain what you've learned or thought about differently*.

- Has using these other mediums changed the way you view your writing in any way? *Please explain*.

- Has using these other mediums changed your view of communication, and ways to get meaning and messages across? *Please explain*.

- Do you think you will continue using any of the digital mediums we've studied in the future? If so, in what ways? Are there any that you would like to learn more about, either on your own or in another class?

5. What did you think about the advertising and children (persuasion) unit? Did you learn anything valuable? Was your thinking changed in any way? Did you enjoy writing the essay on this topic? *Please explain all*.

6. Is there anything else you'd like to share?

APPENDIX C

STUDENT INTERVIEW PROTOCOL

In this curriculum, I've tried to include mediums other than reading and writing printed text in the way we define and expand literacy.

- Do you feel that literacy with the digital mediums we've been exploring are important for you as a student / person? How/why?

- Has the curriculum (so far) expanded your knowledge of / skill with any of these mediums? Please explain.

- Has using these other mediums changed the way you view your writing in any way? Please explain.

- Has it changed your view of communication, and ways to get meaning and messages across? Please explain.

- Can you imagine using the skills you've learned in these various mediums in the future? If so, in what ways? If not, why not?

Do you feel your work in any of these mediums (writing, photography, audio production, video) has the power to affect social change? If so, how? If not, why not?

In this class, have there been any moment(s) yet this semester (big or small) where you've understood something differently than you did before, or thought about something in a new way that you found interesting (an 'aha' moment)? Explain.

Is there anything else about the work you've been doing in this class so far that you would like to share?

APPENDIX D

FINAL MULTIMEDIA RUBRICS

Photo Essay Rubric

	Perfect Score – 25pts
Knowledge & interest gained by viewers	The media piece teaches viewers important information about the topic and makes them interested to learn more.
Quality of photographs – individual & as group	Each photo has been well planned and executed. Attention has been paid to the 'grammar' of photography & photo essay: composition; lighting; perspective; focus; color; line; order of photos.
Text and/or Narration	Added text or voice narration is well planned, placed, and paced. The text &/or voice serves to tell the story, heightening the information we get from the images and any other sounds. The text &/or voice has been well-written ahead of time, appropriately edited, and practiced so as to flow flawlessly.
Editing	Each individual photo has been well chosen, cropped, and/or adjusted as necessary. The project shows attention to the order of the photos & the way they work together. The text is clear, well-written, and free of errors.
Sources	All sources used – primary and secondary - are acknowledged at the end of the piece (if different from Research Paper).

Video & Audio Production Rubric

	Perfect Score – 25pts
Knowledge & interest gained by viewers	The media piece teaches viewers important information about the topic and makes them interested to learn more.
Camera techniques and/or splicing of found clips	Camera work and/or found clips represent varying use of perspective & duration. Attention has been paid to movement,

	lighting, focus, and pacing. The camera work serves to support the meanings being conveyed and is smooth and easy to watch.
Text and/or Narration	Any added text or voice narration is well planned, placed, and paced. The text &/or voice serves to tell the story, heightening the information we get from images or other sounds. The text &/or voice has been well-written ahead of time, appropriately edited, and practiced so as to flow flawlessly.
Audio/Sound	The audio balances narrative voice/sound, music and ambient noise. Every precaution was taken to collect ideal sound, and the audio is smooth and easy to listen to.
Editing	The project flows exceptionally well. Transitions are smooth, congruent clips exhibit similar qualities, extraneous images and sounds have been edited out. The piece flows well, is well-paced, holds together as a whole & is free of errors.
Sources	All sources used – primary and secondary - are acknowledged at the end of the piece (if different from Research Paper).

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