Composing Across Modes: Urban Adolescents' Processes Responding to and Analyzing Literature

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Blaine E. Smith

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CHAPTER ONE

INTRODUCTION

The shift from page to screen has dramatically redefined our concept of writing. As described by Kress (2003), "Writing now plays one part in communicational ensembles, and no longer *the* part" (p. 21, original emphasis). Digital composition today is often multimodal, nonlinear, and interactive—involving new relationships with a wider audience and ways of communicating that "transcends the linear, bounded, and fixed qualities of written text" (Landow & Delaney, 1991, p. 3).

Today's adolescents are pioneers of this new digital terrain. Most lead technologically saturated and networked (Leander, Phillips, & Taylor, 2010) lives where digital multimodal communication is vital for expressing themselves and connecting with others (Buckingham, 2008; Jewitt, 2008; Kafai & Peppler, 2011; Sefton-Green, 2006). Taking advantage of the relatively low cost of production and distribution, youth share their multimodal creations in a global online participation culture of new media consumption and production (Ito, et al., 2010; Jenkins, 2008). Incorporating a variety of modes—including image, sound, movement, text, and gesture—a growing majority (64%) of adolescents use the Internet to create and share multimodal content (Lenhart, Madden, Macgill, & Smith, 2007)—ranging from original artistic creations to remixes of online content. These multimodal creations take a variety of shapes, with the most common including videos, webpages, blogs, social networking pages, podcasts, fanfiction, and video games (Smith, 2014).

Despite adolescents' multimodally rich lives, there exists a dramatic disconnect between the types of compositional practices in and out of school. Emphasis in today's high-pressure and

assessment-focused schools is placed on traditional print-based writing assignments. "Boredom is a disease of epidemic proportion" in learning contexts where the digital skills students bring to the classroom are largely ignored (Intrator & Kunzman, 2009, p.37). Many adolescents who begrudgingly write structured essays on assigned topics for their teachers go home and devote hours to creating multimodally rich products that are shared online with a receptive and global audience.

In addition, print-centric learning environments offered in schools often do not match students' new learning needs or shifts in mindsets (Lankshear & Knobel, 2003). Consuming and creating multimodal texts in digital environments involves different ways of thinking (Dalton & Proctor, 2008; Mayer, 2008), including the task of making meaning between the interactions of multiple media and modes. Luke (2003) explained that interpreting and composing with multiple modes requires a cognitive orientation described as *lateral thinking*:

[I]nstead of learning and thinking "vertically"—deductively or inductively—within the route structures of disciplinary boxes, connectivity and hypertext environments demand horizontal or lateral cognitive mobility across disciplines, genres, modalities and, indeed, cultural zones. (p. 401)

An equally important argument for the integration of multimodal composition in the classroom is the promise (Siegel, 2012) it provides at-risk students (Goodman, 2003; Vasudevan, 2009), including low-achieving (O'Brien, Beach, & Scharber, 2007; Smythe & Neufeld, 2010), reluctant students (Dalton & Jocius, 2013; Kinloch, 2009), and English-language learners (Black, 2009; Lam 2006). Multimodal projects often open up opportunities for students to draw upon their cultural lifeworlds and out-of-school interests and provide an "inversion in semiotic power" (Kress, 2003, p. 9) that allows for students to express themselves in empowering ways not typically afforded with written texts.

In an effort to catch up to the out-of-school multimodal practices of today's adolescents,

educators and policy makers have started to see the value in these compositional practices and slowly begun to incorporate multimodal literacies into the curriculum for a variety of reasons—including to make schooling relevant, improve equity, prepare students to be critical and global citizens, and meet the needs of today's adolescents.

Nationally, shifts in pedagogy and standards towards an expanded view of literacy have also begun to take place. The International Reading Association/National Council of Teachers of English standards (2008) and the Common Core State Standards (2010) share a view of the learner as someone who is both a critical consumer and a skillful producer of digital multimodal texts (Dalton, 2012/2013). The standards emphasize that students should be knowledgeable of the affordances and constraints of various technological tools and able to "select and use those best suited to their communication goals" and to "produce and publish writing and to collaborate with others" online (CCSS for English Language Arts, 2010, p.4).

The past decade has also experienced increased researcher attention to the digital literacy practices of adolescents. Much of this work descriptively illuminates youth's rich multimodal practices outside of school, especially focusing on how digital projects served as a conduit for exploring identities (Guzzetti & Gamboa, 2005; Ito, et al., 2010; Leander & Lovvorn, 2006), building social relations (Black, 2009; Chandler-Olcott & Mahar, 2003; Lewis & Fabos, 2003), and fostering social justice (Chavez & Soep, 2005; Walsh, 2009). Researchers have sought to understand what happens when multimodal composition is integrated into the traditional writing environment of schools: portraying it as an engaging (Bruce 2009a; Callahan, 2002; Ranker, 2008a) and collaborative (Bruce, 2008; Gilje, 2011; Goodman, 2003) process for adolescents. The majority of this work has been descriptive in reporting findings for a single case, or group of students, and with a particular genre of digital production (e.g., digital stories).

Although important strides have been made, research has only scratched the surface in understanding how adolescents use multiple modes in their digital communication and expression. We need to move beyond descriptions of student engagement and identity exploration, to gain an in-depth understanding of adolescents' complex compositional processes across a wide variety of tools and multimodal genres. More needs to be learned about the nuances of students' collaborative processes and their perspectives on modal designs. Lastly, research examining multimodal composition for academic purposes (Dalton & Smith, 2012; Dalton, Smith, & Alvey, 2010) is needed that connects how students orchestrate modes in relation to subject-matter content. Very little research (Jocius, 2013) has examined multimodal composition within the instructional context of analyzing and responding to literature.

Given the relative newness of the multimodal composition field, it is not surprising that theoretical models and instructional practices are greatly under-developed, and especially for students in urban settings. There are several significant areas for growth in our inquiry on adolescents and multimodal composition that I endeavored to address in this study. The purpose was to gain a detailed and nuanced understanding of urban 12th grade students' multimodal composing processes as they engaged in literature analysis and response. The guiding research question and sub-questions for this study were the following:

- How do urban 12th grade students compose multimodally in response to literature?
 - How do students collaborate with peers as they compose?
 - How do students move amongst and between modalities as they compose?
 - What are students' perspectives on their composing goals and modal designs?

Through comparative case methods (Stake, 2006), this study sheds new light on the complexity and variation of adolescents' composing processes across composers, tools, and

modes. This study also contributes to the development of scaffolded instructional strategies to support the integration of multimodal composition in the classroom, and the use of multimodal methodological tools to analyze and represent findings.

Overview of the Dissertation

In the next chapter, I discuss the relevant literature that guided this study and the theoretical framework that shaped its design. First, I describe the integrated theoretical framework developed to elucidate urban adolescents' processes of multimodal composition at different interacting levels and intensities. Then, I describe the relevant research literature on adolescents and multimodal composition—concluding with a discussion of how this study is designed to provide new and needed insights. In chapter three, I present the design of the study, which includes details about the site, participants, multimodal literature response unit, and data analysis. I also describe my positionality as the researcher, issues of trustworthiness, and limitations.

The findings from this study are divided into two chapters. In chapter four, I present three in-depth case studies depicting pairs of students' multimodal composing processes *across three projects* (informational webpage, hypertext literary analysis, and audio letter) in the literature unit. Main themes for each case are organized by the three guiding sub-questions focusing on collaboration, movement amongst and between modalities, and student perspectives on composing goals and modal designs. Chapter five provides a comparative case analysis (Stake, 2006) examining the multimodal composing processes *across the three pairs of students*; this section is also organized around the three guiding sub-questions. Finally, in chapter six I discuss the study's contributions for understanding processes of multimodal composition based on these

findings. I conclude with some thoughts about how this study can inform classroom instruction and discuss directions for future research.

CHAPTER II

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

In this section, I describe the three perspectives that guided this study—sociocultural theories of literacy (Gee, 1996; Heath, 1983; Kress, 1993; Lankshear & Knobel, 2003; Street, 1984), multiliteracies (Cope & Kalantzis, 2000; New London Group, 1996), and multimodality (Kress, 2003, 2010; Kress & Jewitt, 2003; Kress & van Leeuwen, 2001), and how these perspectives were integrated to shape my inquiry. In the final section, I review the research on adolescents and multimodal composition and discuss how the guiding research questions and sub-questions emerged from a synthesis of the literature.

Theoretical Framework

For this study, I integrated three theoretical perspectives in order to understand multimodal composition at different interacting levels and intensities—the sociocultural context wherein composing takes place, the student as designer, and their orchestration of specific modes. Together, these perspectives provided multidimensional and interconnected insights into the complex and dynamic processes of multimodal composition as socially constructed and situated within a particular English classroom. In the following section, I describe each perspective and then discuss how they were incorporated to guide my inquiry.

Sociocultural Theory of Composition

This study is broadly grounded in sociocultural theories of literacy, particularly New Literacy Studies, which recognize that reading and writing are always positioned within specific social contexts, and that it is these contexts that give meaning to literacy practices (Barton &

Hamilton, 1998; Gee, 1996; Kress, 1993; Lankshear & Knobel, 2003; Street, 1998). Moving away from "autonomous" models (Street, 1984) that view literacy purely as a cognitive activity, emphasis is placed on literacy within a context, which reflects particular worldviews and accepted practices (Heath, 1983; Scollon & Scollon, 1981).

A sociocultural theory views composition as a dialogic where composers—even in isolation—draw from a variety of sociohistorically provided resources (e.g., technology, modes, languages, genres) that extend beyond the moment of creation (Prior, 2006). As described by Prior (2006),

[T]exts and moments of inscription are no more autonomous than the spray thrown up by the white water in a river...Seeing writing as distributed and mediated means recognizing that all writing is collaborative, involving divisions of labor and forms of coauthorship. (p. 58)

This sociocultural view (Vygotsky, 1978, 1986) of meaning-making as mediated action (Wertsch, 1991, 1998) between agents and their cultural tools is particularly salient when examining multimodal practices. As described by Wertsch (1998), there is an "irreducible tension" and dialogical relationship between the two (p. 4). Each tool is imbued with certain constraints and affordances that shape students' composing processes and use of modes.

Integrating a sociocultural stance with a fine-grained analysis of modal usage involves an understanding of the richness of multimodal composition as a literacy practice. Students not only communicate with multiple modes, but simultaneously form identities and relationships (Lewis & Fabos, 2003), appropriate cultural tools, and participate in social action (Prior, 2006). Adolescents' identities are sedimented (Rowsell & Pahl, 2007) through their layering of modes—representing personal goals, interests, and self-presentation techniques.

A common critique of multimodal research is that the researcher's gaze is too tightly focused on the function and relationships of modes without taking into account important

sociocultural factors that influence modal use (Jewitt, 2009). By situating multimodal composition in a specific 12th grade English classroom, we can gain a fuller understanding of how students' modal usage is shaped and shapes the surrounding context. In particular, this perspective allows us to explore the following questions when examining multimodal composition:

- What contextual factors contribute to the multimodal composing process?
- How do different assignments and tools mediate the composing process?
- How do students collaborate and divide labor while composing?
- How are identities expressed and relationships formed through the composing process?

Multiliteracies

Focusing on the student as multimodal composer, the multiliteracies framework (Cope & Kalantzis, 2000; New London Group, 1996) guides much of the research on multimodal composition thus far. In their "manifesto" on literacy for new times, a collaboration of ten prominent education scholars outlined an agenda for a pedagogy of multiliteracies based on two key arguments—"the multiplicity of communication channels and media, and the increasing saliency of cultural and linguistic diversity" (New London Group, 1996, p. 63). In laying out this framework addressing communication for multiple modes and multiple contexts, they asked two fundamental questions: One related to *what* students need to learn and the other related to *how* a multiliteracies pedagogy can support this learning.

Vital to the multiliteracies framework is the understanding that all meaning-making is multimodal, including linguistic, visual, audio, gestural, and spatial elements. These elements are in dynamic interaction with each other during communication. Within the multiliteracies

pedagogy, *design* is central for answering what students need to know for composing in new times, particularly the cyclical relationship among Available Designs, Designing, and The Redesigned. According to the New London Group (1996), multimodal communication is hybrid and intertextual and calls upon Available Designs, grammars that encompass a wide variety of elements, including discourses, styles, genres, dialects, and voices. While Designing, composers make new uses of old materials (Available Designs) to create The Redesigned, a new set of meaning. During this stage:

Designing transforms knowledge by producing new constructions and representations of reality. Through their coengagement in Designing, people transform their relations with each other, and so transform themselves. These are not independent processes. Configurations of subjects, social relations, and knowledge are worked upon and transformed (becoming The Redesigned) in the process of Designing...Transformation is always a new use of old materials, a rearticulation and recombination of the given resources of Available Designs. (New London Group, 1996, p. 76)

To be cognizant and effective as designers, the New London Group posits that students need to learn a *metalanguage*, an open and flexible grammar for talking about language, images, text, and other types of communication. Although described as grammars, these metalanguages are not intended to impose rules or a standard of correctness. Instead, the main purpose, the New London Group argued, is to offer flexible ways for composers to "identify and explain differences between texts, and relate these to the contexts of culture and situation in which they seem to work" (1996, p. 77).

In high-tech, globalized, and culturally diverse workplaces, the New London Group maintained that a multiliteracies approach would ensure that students were able to deal with modern literacy demands and achieve two literacy learning goals: "creating access to the evolving language of work, power, and community, and fostering the critical engagement necessary for them to design their social futures and achieve success through fulfilling

employment" (New London Group, 1996, p. 60). This emphasis on the saliency of cultural and linguistic diversity involves providing opportunities for composers to connect to their unique lifeworlds—finding their own voices and leverage their cultural knowledge and experiences.

When specifically examining the multimodal composing processes of students, the multiliteracies notion of design is a means for understanding how students in this study created with multiple modes during workshop sessions and then how they talked about their modal usage while collaborating and afterwards in written reflections, presentations, and interviews. In particular, this framework provides a lens for asking the following questions:

- What are students' personal composing goals and how do they view them being achieved in their modal designs?
- What Available Designs do students work with when composing multimodally?
- How do urban students connect to their lifeworlds through the use of multiple modes?
- What metalanguages do students use when collaboratively composing or reflecting upon their process?

Multimodality

Drawing primarily on the work of Kress and colleagues (Kress, 2003, 2010; Kress & Jewitt, 2003; Kress & van Leeuwen, 2001), the multimodality framework is rooted in social semiotics theory (Halliday, 1978; Hodge & Kress, 1988) and based on the assumption that various modes are integral in meaning-making. Within these frameworks, language is no longer privileged or viewed as the starting point for analysis (Jewitt, 2009). *Multimodality* is defined as the "use of several semiotic modes in the design of a semiotic product or event" (Kress & van Leeuwen, 2001, p. 20). *Modes* are socially shaped and culturally given resources for making

meaning—encompassing a variety of elements, including but not limited to print, speech, visuals, animation, gesture, gaze, and sound (Kress, 2010).

Multimodal theory in education reframes instructional practices and writing and acknowledges "modes work in different ways with different effects, to create multilayered, communication ensembles" (Stein, 2009, p. 871). Within these ensembles, the interaction between modes is significant for meaning-making and the unique combination of different modes communicates messages that no single mode communicates on its own. Composers "orchestrate meaning through their selection and configuration of modes… The meanings in any mode are always interwoven with the meanings made with those of all other modes co-present and co-operating in the communication event" (Jewitt, 2009, p. 15). Within multimodal research, these intersemiotic relationships between modes are a main focus of inquiry, which includes analyzing how co-occurring modes align to emphasize a complementary message or diverge to create dissonance and convey different messages simultaneously (Unsworth, 2006, 2008).

A multimodality framework also acknowledges that modes are shaped by social, cultural, and historical factors, which influences how they are employed in communication. A mode carries with it specific *semiotic resources*, histories, and possibilities for constructing meaning, which also interact and contribute to the constructed multimodal message:

Semiotic resources have a meaning potential, based on their past uses, and a set of affordances based on their possible uses, and these will be actualized in concrete social contexts where their use is subject to some form of semiotic regime. (van Leeuwen, 2005, p. 285)

These *affordances* of a mode, based on its history and material nature, offer potentials that make it superior for certain communicative tasks than other modes. For example, an adolescent might be able to express complex and personal emotions visually in a way that is not

possible for her in writing. Furthermore, layering sounds in a podcast offers different possibilities for the expression and representation of meaning than combining images in a collage (Jewitt, 2009).

A multimodality framework provides a necessary lens for conducting a fine-grained analysis of students' modal usage for three different products. In particular, this perspective helps to understand the following questions about multimodal composition:

- How do students use multiple modes when composing? Are there patterns or key differences in composing processes across pairs and projects?
- How do modes interact to make meaning in student projects?
- How do students use modes to connect to content in a literature unit?
- Do certain modes have certain affordances when composing in response to literature?

Towards an Integrated Framework of Multimodal Composition

Each lens—with its unique affordances and constraints—provides a distinctive look that when integrated allows us to better understand students' complex and fine-grained modal usage as situated within the broader context. At the tightest focus on inquiry, multimodality is an approach into seeing how specific modes are assembled to create meaning; zooming out with a wider lens, multiliteracies offers a way for understanding multimodal composers as designers, and widening the focus of inquiry even more, a sociocultural lens examines how composing is situated and mediated (Kress & Street, 2006). Street, Pahl and Rowsell (2009) explained the importance of a more comprehensive view of multimodality such as the integrated framework presented here: "Just as it is impossible to separate the local from the global (Brandt and Clinton, 2002), so too is it impossible to separate semiotic representation from social practices and contexts in which texts are made" (p. 200).

These three theoretical perspectives were integrated in various ways to address the specific sub-questions of the overarching research question: *How do urban 12th grade students compose multimodally in response to literature?*

First, to understand how students collaborated with peers as they composed, I broadly examined the division of labor across projects and pairs of students. This sociocultural perspective included attention to collaborative pair's social histories, the control of tools, and how power relationships were established. Combined with a multiliteracies perspective, I gained insights into how students viewed themselves as Designers within their collaborative partnerships. No doubt, these relationships and personal views of design trickled down into how specific modes were employed—including who's ideas and artistic visions had the opportunity to be expressed in each project.

Second, the integrated framework offered a means for understanding how students' intricate movement between and amongst modalities was a situated, mediated, and individualized process. Particular attention was given to how modal movement was affected by three different assignment genres and composing tools and if there were designing patterns across the unit and pairs of composers.

Lastly, the integrated framework provided the local to global understanding of how students used multiple modes to connect to content in a literature unit. Particularly, students' perspectives on their composing goals and how they orchestrated modes to meet them. This framework allowed for me to pursue the following questions in my inquiry: Did certain modes carry affordances for conveying certain information? What modes were foregrounded and

backgrounded in student projects? This fine-grained analysis of modes was combined with multiliteracies and sociocultural perspectives to connect how students expressed their identities, leveraged their lifeworlds, and formed relationships all while responding to literature.

This integrated framework requires the researcher to continually adjust her focus between interacting factors in order to glean a nuanced understanding of the composing processes at differing angles and levels of detail. Modes, composers, and tools interacted, along with composer's embedded social and cultural histories, within the rich context of the classroom workshop. These elements were also affected by countless contextual factors, including the design of each assignment, time constraints, available tools, and instructional supports. An integrated framework provides a multifaceted lens for understanding how many of these elements interacted to ultimately produce multimodal products in a deeply situated, specific, and dynamic context.

It is important to point out that research drawing from multimodality and multiliteracies frameworks often positions the student designer as an intentional composer who deliberately "chooses," "configures," and "orchestrates" modes based on the semiotic resources and Available Designs at their disposal. Some (Leander & Boldt, 2013; Leander & Frank, 2006) have criticized the multiliteracies perspective for positioning composers as being overly intentional in every aspect of their modal use without taking into account innate affective and aesthetic responses.

Although rarely made explicit or sufficiently developed, Kress and van Leeuwen explained that affect and communication "cannot be separated," (2001, p. 71) and the New London Group also emphasized the need to "crucially consider the affective" needs of composers (1996, p. 85). With this integrated framework, design is viewed as an integrated

cognitive and affective process, with different aspects carrying more weight at different points in the process, and often in ways that are not recognized or subsequently articulated by the composer. Cognitive, affective, and aesthetic dimensions have been considered when examining the composing process as they are revealed in students' collaborative work and products.

Review of Literature

As the design and analysis of this study were guided by an integrated theoretical framework, they were also shaped by findings from relevant research on multimodal composition. The following literature review (Smith, 2014) synthesizes main empirical findings focused on adolescents creating digital multimodal products across various contexts (in school, after school programs, and out-of-school). For this review, *adolescents* are defined as the age period between 11 and 19 (Christenbury, Bomer & Smagorinsky, 2009), thus studies focusing on students in middle school to high school (grades 5 to 12) were included. The findings from this review had direct implications for this study, which I will discuss after reporting the research.

Characteristics of Research on Multimodal Composition

A total of 76 empirical studies were included in this review, representing 64 unique studies between a timespan of 1999 to 2012, with most (72.4%) published in the past 5 years (Table 1). The majority (78.9%) of research studies on multimodal composition and adolescents were presented as case studies, usually focusing on a small group of two or three composers. Studies that were qualitative and descriptive (15.8%) were the second most prevalent type of design, followed by mixed method studies (2.6%). Quasi-experimental and qualitative design studies were used for one study each.

Studies were nearly even in their focus on fifth to eighth graders (47.4%) or ninth to

twelfth graders (43.4%), with a few (9.2%) describing the multimodal composition of

adolescents across both age groups.

Table 1.

Summary of research s	studies on adolescents	and multimodal	<i>composition (n=76)</i>
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Study Characteristics	n	%
Publication Year		
1999 - 2002	5	6.6
2003 - 2007	16	21.0
2008 - 2012	55	72.4
Design		
Qualitative		
Case study	60	78.9
Descriptive	12	15.8
Design	1	1.3
Mixed methods	2	2.6
Quasi-experimental	1	1.3
Age of participants		
Grades 5-8	36	47.4
Grades 9-12	33	43.4
Range across grades 5-12	7	9.2
Context		
In-school	38	50.0
Out-of-school	18	23.7
Afterschool program	16	21.1
In and out of school	1	1.3
Neither (online content analysis)	3	3.9
In-School Content Area		
English/Reading Language Arts	25	65.7
Elective media course	9	23.7
Mixture (English, History, and/or Science)	3	7.9
Physics	1	2.6

Most (50.0%) of the included took place in school rather than in structured afterschool programs (21.1%) or outside of school (23.7%). Out of the 38 studies that occurred in-schools, a

majority (65.7%) were situated in an English or Reading Language Arts class. Some (23.7%) occurred in elective courses focused on technology, communication, or media. Three studies (7.9%) took place in more than one classroom (English, history, and/or science), and one study was located in a physics classroom.

Table 2.

Multimodal product	n*	%
Digital Video	37	48.7
Video game/virtual world	9	11.8
PowerPoint	8	13.1
Website	6	7.9
Online Fanfiction	6	7.9
Blog/online journal	5	6.6
E-comic	4	5.3
Podcast/radio show	4	4.3
Claymation video	3	3.9
Photo collage	3	3.9
Hypermedia	3	3.9
Social Networking	3	3.9
3D animation	1	1.3
Digital book	1	1.3

Types of multimodal products students created across research studies (n=76)

*Some studies included more than one product, which were double coded

Adolescents created a wide variety of multimodal projects across contexts (Table 2). With all studies describing at least one multimodal product created by adolescents, the most common were digital videos (48.7%), including documentaries, public service announcements, and original short films. Digital stories—a type of video where students interweave photographs, music, and voiceover through a computer program (e.g., MovieMaker, Photostory, iMovie) were also included in this category. The second most common type of multimodal products was video games or virtual worlds (e.g., a virtual museum) (11.8%), followed by multimodal PowerPoint presentations (13.1%). The remaining products were dispersed across 11 categories.

The following section is organized by main research findings on adolescents and multimodal composition. Each section includes discussion of how this study builds upon and extends what has been found thus far.

Multimodal Composition and Engagement

The strongest theme throughout the research on adolescents and multimodal composition was a reported high level of engagement. With the exception of one study out of seventy-six reviewed (Mills, 2008), researchers either explicitly stated or implicitly portrayed composers as motivated to create with multiple modes and technology. Adolescents devoted extensive amounts of time and energy in order to achieve their creative vision (Bruce, 2009a; Ranker, 2008a). The observed level of engagement was attributed to various factors; however, choice of topic, authenticity in audience and purpose, and the personal and agentive nature of multimodal products were posited to be main motivational forces.

Choice. A majority (77%) of studies examining multimodal composition in schools or afterschool programs depicted how students were allowed topical choice. As a result, adolescents often created products that connected to popular culture (Bailey, 2009; Ehret, 2010; Mills, 2010a; Turner, 2011; Vasudevan, 2006)—particularly favorite music (Brass, 2008; Bruce, 2008; Hughes et al., 2010; Hull & Katz, 2006; Lam, 2000; Leander & Frank, 2006; Peppler & Kafai, 2007), manga or anime (Black, 2006, 2008, 2009; Chandler-Olcott & Mahar, 2003; Lam, 2006; Thomas, 2007), and video games (Brass, 2008; Leander & Lovvorn, 2006; O'Brien, Beach & Scharber, 2007). Naturally, students who composed on their own and outside of school had

choice of topic and medium of expression, also making this type of composition highly engaging for adolescents (Black, 2006, 2008, 2009; Chandler-Olcott & Mahar, 2003; Ehret, 2010; Guzzetti & Gamboa, 2005; Kelleher, 2008; Lam, 2000, 2006)

In-school and afterschool studies illustrated how students were more invested in their work when able to bring in their out-of-school interests into the classroom (Black, 2009; Hull & Katz, 2006; Tan & Guo, 2010). Hull and Katz (2006) described how a 13-year-old who was characterized as "unmotivated and lazy" by her teacher, was a driven leader in her afterschool program. She created digital stories based on her favorite television show (Sailor Moon) and singer (Selena). Black (2009) also detailed how two teenage girls who created fanfictions outside of school made transmedia connections. One teenage girl created songficitions that merged the popular anime series Cardcaptor Sakura (CCS) and lyrics from songs ranging from the CCS movie soundtrack to Barbara Streisand; while another teen created fanfictions that fused the characters from the CCS anime series with various movie plots (Black, 2009).

Adolescents also chose topics for their multimodal projects that delved into personal issues (Bailey, 2009; Gilje, 2010; Goodman, 2003; Guzetti & Gamboa, 2005; Hughes et al., 2011; Hull & Katz, 2006; Nelson, Hull, & Roche-Smith, 2008; Vasudevan, 2006). High school students in Callahan's (2002) study of an English elective class created documentary podcasts reminiscent of National Public Radio's "This American Life," which they presented to the local school board. Callahan (2002) described the effect one student's radio documentary about her father's death two years prior had on her and her listeners. As described in her written reflection: "Not only did *it* touch people but also *I* touched people. I let people into my life, shared my thoughts with complete strangers, and they didn't laugh but they *cried*" (Callahan, 2002, p. 56, original emphasis). Similarly, other adolescents were portrayed as wanting to multimodally tell

their personal, and sometimes difficult stories, including the experience of being a Muslim American teen (Halverson & Gibbons, 2010), gentrification in their neighborhood (Kinloch, 2009), domestic abuse (Nixon, 2009), teen sex (Chavez & Soep, 2005), and dealing with the emotions of being an adopted child (Callahan, 2002).

In addition to having topical choice, some students were also given the option to select the medium or lead mode for their projects (Jocius, 2013; Vasudevan et al., 2010). Vasudevan, Shultz, and Bateman (2010) explained that for a culminating digital video project in a fifth grade classroom, students were given the option of how they modally entered the project—some students began with written text, while others began with music or visuals to anchor their product. In addition, in a senior high school class, Jocius (2013) described how students had numerous choices in genre and medium for a project on the contemporary novel, *The Kite Runner*. Students chose between creating a timeline, literary analysis, or a retelling based on the novel in either digital video or PowerPoint form.

Authentic purposes and audiences. Multimodal products across contexts were frequently made public, distributed widely, and designed for authentic purposes. Many teachers developed assignments that travelled beyond their desk—intended to be shared with broader audiences, including presentations to peers and parents (Bailey, 2009; Eagleton, 1999; Matthewman, Blight, & Davies, 2004; Mills, 2008; Smythe & Neufeld, 2010), national contests (Gilje, 2010; Kervin, 2009), and the local community (Callahan, 2002; Goodman, 2003; Mills, 2010a, 2010b; Olkaker, 2010). In schools, adolescents' perceived authenticity of the multimodal tasks made them view the projects as "more real" and having relevance in their lives (Bailey, 2009). Rogers et al. (2010) depicted how two girls in an alternative high school created a documentary film on peer pressure because they viewed it as a universal problem that all teens

experience and they wanted to "create something that could help people" (p. 304). Their video combined images of adolescents partying, sentimental music, and voice-over narration to convey the overarching message of being true to oneself.

Smythe and Neufeld (2010) described how junior high students who created online multimodal books with illustrations and embedded audio that they uploaded for "buddies" in a lower grade developed a sense of audience awareness. One student explained that she rerecorded her audio narrative "*over* and *over* and *over* and *over* and *over* again" until she finally got it because others would read it and she did not want to "make a mistake" or be "embarrassed" (Smythe & Neufeld, 2010, p. 495, original emphasis). In another study where students composed hypermedia with multiple modes, Eagleton (1999) also found that adolescent students had a strong sense of their audience's preferences: "you've gotta make it fun to read so you gotta learn language skills to use the right words to attract people to your webpage" (p. 19).

Outside of school walls, adolescents created public websites and blogs, (Guzetti & Gamboa, 2005; Ito et al., 2010; Lam, 2000; Leander & Frank, 2006; Peppler & Kafai, 2007) posted fanfiction online that was read by a wide global audience (Black, 2006, 2008, 2009; Chandler-Olcott & Mahar, 2003; Thomas, 2007), and entered videos into national contests (Phillips & Smith, 2013; Smith, 2010). Black (2009) described how fanfiction composers received immediate feedback from an expansive international audience. In Yi's (2010) study of a high school Korean-American student, she found that having an active audience was very important to the composer and she was "motivated by a strong desire to connect herself to different social or peer groups" through her various public multimodal weblogs (p. 105).

Implications for current study. Although important, most research thus far examines what adolescents can achieve *through* their use of multiple modes (e.g., engagement, agency,

identity development) rather than *with* or *how*. In other words, more needs to be learned about how specific modes are employed and assembled for specific rhetorical effects, whether intentionally or not. As described by Hull and Nelson, (2005), "multimodalty can afford not just a new way to make meaning, but a different kind of meaning" (p. 225). More research needs to examine both the new ways and kinds of meaning students construct. Even though a majority of studies (65.7%) were situated in an English or Reading Language Arts class, only a few (Dalton & Smith, 2012; Jocious, 2013; Oldaker, 2010) have connected modal usage to academic content. Building off this work, this study was designed to understand students' composing process and use of modes in response to literature.

Multimodal Composition, Identity Expression, and Empowerment

Research on multimodal composition revealed how the layering of modes allowed for students to express their identities in ways not typically afforded by written texts (Chandler-Olcott & Mahar, 2003; Kinloch, 2009; Vasudevan, 2006). Comprising almost half (46%) of the studies reviewed, this finding was particularly prevalent for ELL and ESL students (Black, 2006, 2008, 2009; Halverson, 2010; Ho et al., 2010; Kelly, 2012; Lam, 2000, 2006; Mills, 2008, 2010a, 2010b; Nixon, 2009; Skinner & Hagood, 2008; Thomas, 2007; Ware, 2008; Wilson, Chavez & Anders, 2012; Yi, 2010), "struggling" students (Brass, 2008; Hughes et al., 2011; Kinloch, 2009; Matthewman et al., 2004; O'Brien et al., 2007; Ranker, 2007, 2008a, 2008b; Rogers et al., 2010; Turner, 2011), and at-risk adolescents (Bruce, 2008, 2009; Goodman, 2003; Vasudevan, 2009). According to research, these adolescents were able to leverage their unique background and cultural knowledge, which promoted self-efficacy (Bailey, 2009; Bruce, 2008, 2009b; Hughes et al., 2011; O'Brien et al., 2011; Zammit, 2011) and agency (Hull & Katz, 2006; Kelly, 2012; Kinloch, 2009; McGinnis, Goodstein-Stolzenberg & Saliani, 2007).

Jewitt (2005) explained that multimodal projects offered adolescents "different points of entry into a text" (p. 329) based on the cultural and social capital resources he or she brings to the composing process (Bailey, 2009; Bruce, 2008; Walsh, 2009; Smythe & Neufeld, 2010). In an ethnographic study (Smythe & Neufeld, 2010) of sixth and seventh grade English-language learners from a range of countries, including India, China, Afghanistan, and the Sudan, students created podcasts where they told original stories with incorporated sound effects and music. Smythe & Neufeld (2010) explained that students drew from multiple semiotic resources, and that their unique background experiences and skills were an asset during composition: "students usually known as struggling readers and writers were repositioned as historical and cultural subjects, knowledgeable and skilled in practices embedded in their transnational identities" (p. 492).

Students were also able to use their multimodal projects to reflect on their own social and cultural experiences and critique society and the discursive practices that marginalize them (Kinloch, 2009; Vasudevan, 2006; Walsh, 2009). For example, in a study that examined a class of sixth and seventh grade Chinese immigrants, Walsh (2009) reported that ESL students were able to use multimodal writing to disrupt exclusionary discourses. Students researched how Chinese immigration was taught in schools and created a multimodal website called "beyond" ([b]etrayal, [e]xotic, [y]ellow, [o]pression, and [n]eglect) that incorporated photos, images, and print texts aimed at chronicling the discrimination and hardship that Chinese immigrants have faced—with the ultimate goal of "rewriting" the story of their ancestors. Similarly, Vasudevan (2006) described how one African American adolescent male engaged in multimodal

composition outside of school in order to "(re)make and (re)present" himself in ways he could not in school (p. 207). Vasudevan explained, "digital and visual modalities make it possible to perform and author new selves that are not only resistant to dominant images but that offer new sites of inquiry and exploration." (2006, p. 214).

Implications for current study. Research on multimodal composition illustrates how urban students are enabled by the "inversion of semiotic power" (Kress, 2003, p. 9) made possible through multimodal projects. This study builds upon findings describing how allowing for different points of entry into a project facilitates students' ability to leverage their cultural lifeworlds and gain agency. The vast majority of these findings are connected to projects in and out of school where students have free-reign in their choice of topic. More needs to be learned if students are still empowered and able to leverage their lifeworlds when responding through multiple modes to academic content such as literature read in an English class. Furthermore, when provided multiple entry points, are there patterns in students' compositional processes across multimodal projects? Do some modes provide more space for personal expression than others?

Multimodal Composition and Collaboration

Across contexts, the process of multimodal composition was portrayed as a social and collaborative endeavor. In schools, 74% of classrooms involved students working in pairs or small groups—dividing labor, discussing modal decisions, and providing feedback (Bailey & Carroll, 2010; Brass, 2008; Bruce, 2009b; Eagleton, 1999; Gilje, 2010, 2011; Ho, Nelson & Mueller-Wittig, 2011; Kervin, 2009; Matthewman, 2004; Mills, 2008, 2010b; O'Brien et al., 2007; Ranker, 2007, 2008a, 2008b; Rish & Caton, 2011; Rogers et al., 2010; Walsh, 2009). At

home, adolescents were more likely to physically create their multimodal projects alone; however, online collaboration with peers was found to be extremely important for gaining feedback (Black, 2006, 2008, 2009; Chandler-Olcott & Mahar, 2003; Thomas, 2007) and learning new technical and artistic skills (Black, 2006; Yi, 2010).

When composing at home, adolescents were involved in *participatory cultures* (Jenkins, 2008) online and became a part of affinity groups (Gee, 2003), where their work was shared while relationships with others also developed (Ito et al., 2010). Research on multimodal composition in middle and high schools also revealed its collaborative nature. Along with working with the teacher or parents (Ito et al., 2010), peer collaboration was essential in schools-students built off each other's strengths, challenged one another, discussed their use of modes, and made visible the recursive process of multimodal composition. In these studies, students worked together on a wide range of projects and at all stages of the composition process-from brainstorming ideas, composing with technology, editing, and presenting their final products. Many times, each student took on a different piece of the project as her or his own and then came back to the group and work on integrating their contribution with the overall composition. In a seventh grade classroom where students were creating video games based on A Wrinkle in Time, Oldaker (2010) described how two male students emerged as the most proficient with the technology and built game levels at a much faster pace than their peers. While continuing to work on their games, they also helped others with technical aspects during homeroom and study hall.

Similarly, Goodman (2003) depicted how the collaborative nature of the video project enabled students to work as interdependent learners, at various times collaborating, teaching, and learning from each other. In his case study of teens creating a video documentary, each of the

sixteen 10th and 11th graders interviewed family members, peers, and community members to contribute to the collective video documentary about gun violence. Goodman (2003) explained that the collaborative nature of this multimodal project created a "web of relationships" between the composers, teachers, and community members (p. 110).

Collaboration also allowed for students to question their peers' rhetorical moves and make their semiotic decisions transparent through interaction. Smythe and Neufeld (2010) described how students gave each other suggestions for improving their podcasts: "You are reading a bit too softly. Isn't the guy supposed to be scared?" (p. 491). Bruce (2008) explained that peers worked together to agree upon and refine minute details of their projects. Each group spent a tremendous amount of time on a single sequence. Bailey (2009) found that a junior high teacher took advantage of the dialogic, collaborative community in her classroom by having her students reverse roles: Students formally presented multimodal PowerPoint poems to panels of their peers, where they discussed and questioned each other's design decisions.

In afterschool programs, collaboration with adult mentors was found to be both beneficial and sometimes stifling for adolescent composers. In a radio-broadcasting program for high school students, Chavez and Soep (2005) explained that a *pedagogy of collegiality* existed where young people and adults "mutually depended on one another's skills, perspective, and collaborative efforts to generate original, multitextual, professional-quality work for outside audiences" (p. 411). The adolescents identified topics, found community members to interview, and "experiment[ed] with novel modes of expression and ways of using words, scene, and sound" (Chavez & Soep, 2005, p. 419), while the adults provided resources and years of experiences as media professionals. However, Nelson, Hull and Roche-Smith (2008) described how in an afterschool program the adolescent composer struggled with an adult volunteer for

authorial control of his digital story—ultimately creating a much more positive story than the original one he wanted to tell about his struggles from infancy due to his mother's drug usage during pregnancy.

Implications for current study. These studies depict how multimodal composition is a highly social and collaborative process for adolescents. Through interactions, adolescents question one another, provide feedback, and discuss their design decisions. These finding also emphasize the importance of dialogue during the multimodal compositional process—as a mediational tool for adolescents while composing, as well as a valuable method for researchers to uncover students' cognitive processes and reasoning behind their modal designs. However, little is known about how or why collaborative partnerships might differ across composers and tools. For example, are there differences in ways students divide labor? What contextual factors affect different types of collaboration? How do students view their own collaborations and what do they believe makes them productive?

Multimodal Composition and Instruction

When incorporating multimodal projects in the classroom, teachers relied on overt instruction to develop students' necessary technical skills and metalanguages. In addition, teachers guided students by multiple viewings of a multimodal text or questioning in order to help them understand the meaning made by specific modes and within modal orchestrations. Teachers often relied on traditional literacies to support multimodal composition by having students brainstorm ideas, organize thoughts, and plan their multimodal projects through written activities (Bailey & Carroll, 2010; Eagleton, 1999; Gilje, 2010; Kervin, 2009; Mills, 2008, 2010a; Ranker, 2007, 2008a; Smythe & Neufeld, 2010). Lastly, some teachers designed a

curriculum sequence that transitioned students from familiar written assignments to composing with increasingly more modes and media (Mills, 2010b; Tan & Guo, 2010, Kervin, 2009; Lawrence et al., 2009; Rogers, 2010; Vasudevan et al., 2010).

Overt instruction. One of the four components of a multiliteracies pedagogy (Cope & Kalantzis, 2000; New London Group, 1996), overt instruction, was evident in several of the classrooms examined in multimodal composition research (Bailey, 2009; Bailey & Carroll, 2010; Bruce, 2008; Dalton & Smith, 2010, 2012; Spires, et al., 2012; Mills, 2010a, 2010b; Tan & Guo, 2010; Walsh, 2009). Teachers' emphasis on explicitness ranged from the technical skills needed to use equipment (Bruce, 2008; Lawrence et al., 2006; Mills, 2010; Oldaker, 2010) to helping students develop and understand technical metalanguages for reading and composing multimodal texts. Overt instruction in these examples usually occurred at the beginning of the multimodal unit or just-in-time by the teacher for individuals during their compositional process. Outside of school, adolescents also gave and solicited overt instruction from online resources and peers (Black, 2006, 2008, 2009; Chandler-Olcott & Mahar, 2003; Guzzetti & Gamboa, 2005; Leander & Frank, 2006; Thomas, 2007).

In order for students to be able to see, discuss, and employ a purposeful and sophisticated use of modes, many teachers found it necessary to teach *metalanguages* (New London Group, 1996) and have students practice reading and analyzing multimodal products before producing them on their own (Bailey, 2009; Bailey & Carroll, 2009; Hughes et al., 2011; Kervin, 2009; Turner, 2011). Jewitt (2008) explained that overt instruction of metalanguages involved the "systematic and explicit teaching of an analytical vocabulary for understanding the design process and decisions entailed in systems and structures of meaning" (p. 248). Bailey's work (Bailey, 2009: Bailey & Carroll, 2010) portrayed how a ninth-grade teacher sought to teach a

metalanguage early on in the year before students created their own video and PowerPoint projects. To do so, the teacher identified key ideas from Kress' (2003) foundational text on multimodality so that students would possess the necessary language to discuss elements of design. The teacher taught metalanguages of design by showing examples of videos in class and involving students in a discussion of the affordances of certain modes in composition (Bailey, 2009). For example, the teacher showed a video numerous times to the entire class and gave them specific directions for each viewing. They began their viewings by writing their initial reactions to the video and then moved on to only focusing on the role of the visual images in creating mood and communicating ideas. Then, they were asked to focus on the aural aspects of the video in another viewing. Lastly, the teacher asked students to free-write and discuss how each semiotic element contributed to the overall metaphorical meaning of the video. According to Bailey (2009), these focused viewings were aimed at peeling back the semiotic layers of a multimodal composition in order to understand how each mode contributed to the overall meaning. Similarly, Bruce (2008) described classroom deconstruction activities where students examined the semiotic orchestrations in music videos along with critically reading the cultural norms embedded.

Teachers also lead students in thinking about the multimodal grammar undergirding their multimodal products through individual and specific questioning. Bailey (2009) described how the teacher asked specific questions when working one-on-one with students and looking at their drafts of PowerPoint poems, which used text, color, font, and images to convey meaning. She asked questions like "What color is confusion?" and "What color makes you think of…being alone?" to have students consider their use of color accompanying their poems. Bailey (2009)

explained that these examples of questioning pushed students to think semiotically and to use colors and visuals intentionally to add an additional layer of meaning to their multimodal poetry.

Scaffolding multimodal composition. Research in and out of the classroom revealed adolescent composers transitioned into multimodal composition in a variety of ways. Outside of school, composers read, viewed, and listened to others' multimodal creations before deciding to tinker on their own (Ito et al., 2010; Vasudevan, 2009). In schools, teachers sometimes relied on traditional literacies to support multimodal composition by having students brainstorm ideas, organize thoughts, and plan their projects through written activities (Bailey & Carroll, 2010; Bedard & Fuhrken, 2011; Curwood & Cowell, 2011; Eagleton, 1999; Gilje, 2010; Kervin, 2009; Mills, 2008, 2010a; Ranker, 2007, 2008a; Smythe & Neufeld, 2010). Students often viewed and analyzed examples of multimodal products similar to the ones they were creating before initiating their own (Callahan, 2002; Kervin, 2009; Lawrence, McNeal & Yildiz, 2009; Matthewman, 2004; Ranker, 2007; Turner, 2011; Walsh, 2009). Some teachers designed a curriculum sequence that transitioned students from familiar written assignments to composing with increasingly more modes and media (Mills, 2010b; Tan & Guo, 2010, Kervin, 2009; Lawrence et al., 2009; Rogers, 2010; Vasudevan et al., 2010; Wilson, Chavez & Anders, 2012).

Print writing to scaffold multimodal composition. Traditional writing was often still present during multimodal composition in schools. Eagleton (1999) explained that when sixth and seventh grade students created websites with hypermedia, they were asked to produce various traditional print-based literacy activities along the way, including taking notes, writing reflections, and outlining and the text for the website. In a study of sixth graders composing informational videos, Ranker (2008a) detailed how print-based reading and writing skills were integral throughout the composition process. The two highlighted students in his case study

maintained a research notebook where they brainstormed possible subtopics, formulated research questions, and took notes during their process. They spent extended periods of time reading the research articles they located on the Internet and created written narratives to accompany the music and images in their videos. Ranker found that there existed a dialogic relationship between image and text during the video production process where "their work with texts created the need for further work with images and vice versa" (2008, p. 418). In addition, many teachers had their students create storyboards before filming (Gilje, 2010; Lawrence et al., 2009; Mills, 2008) or asked them to write out their narrative before audio or video recording (Kervin, 2009; Ranker, 2007).

Incremental modal integration. Along with "reading" multimodal texts first in order to understand metalanguages and multimodal genres, some teachers also transitioned students into creating modally rich projects by sequencing them in a way that increased modal use and media (Tan & Guo, 2010; Dalton & Smith, 2012; Vasudeven et al., 2010). For example, in a study of English language classrooms in Singapore, Tan and Guo (2010) described a common curriculum where students experience a sequence of assignments moving from print-based products (e.g., brochure) to multimodal and multimedia products (e.g., videos, 3D animated short films). Vasudevan et al. (2010) portrayed a fifth grade class that created products that gradually layered on modes throughout the year. The class began by writing "Where I Am From" poems that reflected important aspects of their out-of-school lives and heritage. Later in the semester, students conducted a "Buildings Speak" project where they wrote stories based on a picture of a personally significant building. Vasudevan et al. explained that the incorporation of the visual as a leading mode in the picture allowed for students to tell a more meaningful story that "transcends words or images alone" (2010, p. 458). For the culminating project, students

composed digital videos that interwove personal photographs, images, text, animation, voiceover, and music to tell a personal story.

Although scaffolding the multimodal composition process with traditional forms of writing helped students ease into multimodal production in some studies, Gilje (2010) argued that print scaffolds were actually stifling for students. His interaction analysis of three Norwegian high school students in an elective media course demonstrated how the teacher's required written narrative and storyboard proved not to be as helpful in video composition as intended. Students were challenged in their work of translating their narrative from the mode of written text to the mode of moving images in in their movie. Gilje (2010) explained that students used the materials as expected by the teacher, but did not deploy these tools to further their narrative or enhance the visuals aspects of their films. Further, Gilje asserted that "semiosis is brought to a standstill in texts" and students had difficulty knowing how to translate ideas and representation from one mode to another: "learners only 'move the problem' from one mode to another" (2010, p. 516).

Implications for current study. Research in secondary classrooms reveals that adolescents are scaffolded into multimodal composition in a few different ways—through overt instruction, by reading and deconstructing multimodal texts first, and by incremental modal integration. In an environment where print writing is valued, it is clear that teachers want to strengthen and leverage these foundational skills while also helping students to learn to compose multimodally. However, more still needs to be learned about how multimodal assignments should be scaffolded. For example, what happens when students' processes are unrestricted and they have freedom in how they enter and create their projects?

Processes of Multimodal Composition

While research on multimodal composition has primarily focused on the benefits of such projects for fostering student engagement, self-efficacy, and agency—particularly with "marginalized" groups—only a handful of studies (Bruce, 2008, 2009b; Dalton & Smith, 2012; Gilje, 2010, 2011; Goodman, 2003; Ranker, 2008a) closely examined the actual processes of composing with multiple modes—each describing how multimodal composition, like print composition (Hayes & Flowers, 1980) was a complex and recursive process.

In a yearlong ethnography of a high school media literacy class, Bruce (2009b) found common stages to the process of creative digital videos (brainstorming, videotaping, and editing) and that students composed in a non-linear and iterative fashion. Not one of the small groups examined sequentially videotaped or edited their video footage as it appeared in the final version. In addition, each group overlapped the videotaping and editing processes; they began to edit while still filming other parts of their music video. Based on his findings, and drawing from Hayes and Flowers' (1980), Cognitive Process Model for writing Bruce developed a video composition process model. Conceptualized as a continuum, Bruce explained:

Students tended to begin with *Visual Conceptualization*, where they envisioned what their video might look like. As they began the physical work of creating the video, students moved to *Visual Production*, which included their camerawork and editing. Both of these elements were balanced on a fulcrum, *Evaluation*, where students considered both what they wanted to say, *Project Vision*, as well as how they would go about doing their work, *Logistics*. (2009b, p. 439, emphasis added)

Bruce (2009b) described that during the Visual Conception stage, students were "mentally composing and/or imagining visual images and visual sequences...this process entailed drawing on prior knowledge of visual images such as those in advertisements, television shows, music videos, and films, as well as from real-life or printed text" (Bruce, 2009b, p. 439). Students brainstormed collaboratively what the music video would look like and physically enacted some

of those visuals. Bruce posited that students recursively moved between ideas they wanted to videotape (Visual Conceptualization) and how they would go about creating those ideas (Evaluation).

Students spent considerable time at each stage of multimodal composition. Bruce (2009b) explained that one of the groups spent the 26 minutes and 30 seconds of devoted class time to the project making small adjustments to their music video by trimming down their footage, adding special effects, and transitions to a sequence of 8 seconds of final footage. They watched different versions of the same sequence 22 times and moved recursively between the compositional stages (Video Production and Evaluation) until they were pleased with the final product. Moving along the "continuum" of video composition, students were continually evaluating their work—considering the aesthetics of their composition, their audience, and how their vision could be realized.

Dalton and Smith (2012) described the multimodal composing process as both recursive and layered for two adolescent males who collaborated to create a video folktale retelling in a summer digital workshop. Using Photostory3, the pair layered modes across scenes of their retelling, beginning with image, followed by audio narration and then music, and ending with opening title and credits. However, there was recursion within and across scenes of their folktale and modes. For example, they jumped around in the story, usually working in two-scene chunks. While the pair did not compose in a liner fashion through the scenes, they used the preview function of the tool repeatedly to start each session and to see where they during the session. The preview played the scenes in sequence, providing a linear coherence to their developing story.

Along with depicting the recursive nature of multimodal composition, a few studies also described how the tools available to adolescents mediated the process. When composing a video

on the Dominican Republic, fifth graders used the tool bar function in Video Studio Editor, which displays layers of each semiotic element including sound, voiceover, and images, to help them organize and see the semiotic relationship between modes in their video (Ranker, 2008a). Many times, adolescent composers were restricted by the technology at hand to create their visions (Gilje, 2011; Leander & Lovvorn, 2006). Gilje's (2011) analysis was informed by a sociocultural perspective on mediational tools (Wertsch 1991, 1998) described how three high school students interacted with the editing tool while creating a short fiction film about heartbreak. At two different stages in the editing process, when trying to blur an image and alter a sound, the group could not achieve the effects they "actually wanted" (Gilje, 2011, p. 52), thus becoming frustrated and giving up on achieving their specific idea.

Implications for current study. Although only a handful of studies have closely examined multimodal composing processes, we have learned that it is a recursive process that involves the lamination of modes and is mediated by the composing tools (Dalton & Smith, 2012; Gilje, 2011). Only one model has been put forth (Bruce, 2009b), which was based on a traditional writing model (Hayes & Flowers, 1980).

As evident in the literature, more needs to be learned about the processes of multimodal composition, particularly at a finer grain of detail. This study is designed to support our limited understanding of processes of multimodal composition in several ways. We need to learn more about the complexity and variation of composing processes across composers, tools, and multimodal projects. The few studies that have focused in this area have only described the process for one in-depth case of composers creating one type of multimodal project (videos or digital story). In this study, processes are compared across three pairs of students and three

unique multimodal projects. In addition, this study is designed to uncover the multiple interacting contextual factors that affect the composing process.

Research Questions

The following overarching research question and sub-questions guided this study:

- How do urban 12th grade students compose multimodally in response to literature?
 - How do students collaborate with peers as they compose?
 - How do students move amongst and between modes as they compose?
 - What are students' perspectives on their composing goals and modal designs?

Findings for each case and the comparative analysis were organized around these three sub-questions for a few reasons. First, when analyzing students' multimodal composing processes, key themes emerged that were unique for pairs of students and consistent across cases. These themes naturally fell into three main compositional categories (collaboration, modal movement, and perspectives on goals and modal designs). Second, these three aspects were interrelated and together provided a more robust understanding of adolescents' multimodal composing processes. For example, collaboration between composers was integral for understanding their use of modes and how they were connecting them to the novel, *The Things They Carried*. In addition, students did not create multimodal projects in a vacuum or for their own purposes, but in response to specific instructional and personal goals and a specific piece of literature. Their response to literature affected their use of modes and vice versa. Lastly, by organizing findings by these three main aspects, it illuminates similarities and differences between composers and across projects for the comparative analysis.

CHAPTER III

RESEARCH DESIGN

The following research question and sub-questions guided this study:

- How do urban 12th grade students compose multimodally in response to literature?
 - How do students collaborate with peers as they compose?
 - How do students move amongst and between modalities as they compose?
 - What are students' perspectives on their composing goals and modal designs?

To address these research questions, I conducted a qualitative study of one 12th grade Advanced Placement (AP) Literature and Composition class in an urban high school located in the mid-south region. Over the span of seven weeks, I closely followed students as they collaborated to complete three different multimodal projects (informational webpage, hypertext literary analysis, and audio letter) that connected to an anchoring piece of literature, a collection of short stories about American soldiers in Vietnam entitled *The Things They Carried* (O'Brien, 1990). I collected a variety of data from different sources and perspectives in order to assemble a mosaic of urban students' experiences with multimodal composition in a literature unit.

In the following section, I detail the design of this study, including the participants and site, the literature unit and multimodal products, data collection and analysis, as well as researcher positionality, issues of trustworthiness, and limitations.

Design of the Study

The purpose of this qualitative study was to closely examine how urban 12th grade students enrolled in an AP English class composed with multiple modes within a classroom context of reading and responding to literature.

There are several reasons why qualitative methods, particularly case studies and comparative case analysis (Stake, 2006; Yin, 2003), best suit the nature of this inquiry. First, these methods are most appropriate for answering questions that ask *how* and research attempting to understand the nature of experience—what people are doing and thinking (Strauss & Corbin, 1998). Second, as demonstrated in the review of literature, very little is known about the processes of multimodal composition and qualitative methods that explore the phenomena from various angles and perspectives are needed at this stage of our understanding. Third, Strauss and Corbin (1998) explained that qualitative methods work well to "obtain the intricate details about phenomena" (p.11), which is the focus of this study—to gain a detailed and nuanced understanding of the processes involved in various types of multimodal composition.

According to Yin (2003), case studies investigate "a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident." The design of this study—closely examining three collaborative pairs' processes within the classroom context and utilizing multiple sources of evidence—lends itself well to the development of case studies (Barone, 2011; Yin, 2003). In addition, a comparative case design is "often considered more compelling" and "regarded as being more robust" than single-case designs (Yin, 2003, p. 53).

The Site

This study was conducted in one 12th grade AP Literature and Composition class at an urban magnet school in a major mid-south city. Serving grades 5-12, the public school was separated into two buildings—a high school and a middle school. Any student who lived in the county could apply to attend the school through a lottery; however, the school had a geographic priority zone allocating 30% of available seats to students residing in the surrounding urban area. The enrollment for the school year the study was conducted (2011-2012) was 1,206 students, with a school population composed of 76% Black, 18% White, 5% Hispanic, and 1% Asian. A majority of students (67%) participate in the free/reduced price lunch program and less than 1% of total students were ESL or had limited English proficiency.

The school followed the Paideia philosophy, based on the assumption that "all human beings are by definition activist learners, capable of a fully humanistic life defined by intellectual growth." As a Paideia school, the curriculum was modeled on the "three columns of instruction," including "1) didactic instruction of factual information (10-15% of instructional time), 2) intellectual coaching of skills (70% of instructional time), and 3) seminar discussion of ideas, concepts, and values (15-20% of instructional time)" (http://www.paideia.org).

Participants

Focal Classroom and Teacher

The AP Literature and Composition class was taught by Mrs. Buchanan, a 27-year-old, White, second-year teacher (all names are pseudonyms unless the participant requested their real name be used), who had some experience integrating technology into her instruction and recently graduated with a Master's degree in English Education that reflected a digital literacies and New

Media perspective. She completed a Teaching Writing and Multimedia Composition course in her Master's program, creating multiple forms of multimodal composition, including hypertext poetry and digital videos. Mrs. Buchanan was by all accounts an exemplary student in her graduate program.

The study occurred during Mrs. Buchanan's second year of teaching at the school and first semester teaching the AP Literature and Composition class. She was selected to teach the class when a vacancy arose mid-year because of her principal and colleagues' evaluation of her as a highly effective teacher.

The AP Literature and Composition class met on alternating days for 85-minute periods, so in the span of two weeks class met five times. Enrollment for the class was open to all 12th graders; the only requirement was for students to have a letter of recommendation provided by their current English teacher. The general curriculum for the class was based on a "wide and deep" reading of literature from various genres and periods—"concentrating on works of recognized literary merit." The role of writing in this curriculum was focused on the critical analysis of literature, including expository, analytical, and argumentative essays, as well as "well-constructed creative writing assignments [that] help students see from the inside how literature is written" (The College Board, 2010).

The year before this study was conducted, Mrs. Buchanan was part of a team that was awarded a \$160,000 technology grant from her school district. Her portion of the grant focused on utilizing technology to incorporate multimodal composition in English classrooms, which also aligned with the school's improvement plan. As a result, an assortment of technology was available to students, including a class set of netbooks with a variety of programs (e.g., MovieMaker, Weebly, PowerPoint, Audacity). The school also had a new "multimedia

presentation room," containing multiple monitors for students to share their work, which the class used during the culminating presentation to administrators and community members.

There were a total of 19 students in the AP class, which was comprised of 12 females and 7 males; 84% were Black and 16% were White. Two students were identified as NELB (Non-English Language Background); both of whom were "exited" from the ELL system—meaning that they were once active ELL students but tested out as "proficient."

Focal Students

All of the students in Mrs. Buchanan's class were invited to participate in the study. Following consenting procedures as indicated in the application to the Institutional Review Board for both the school district and Vanderbilt University, parental consent and student assent was obtained for the participation of all 19 students. Although artifacts were collected from all students in the class (e.g., final multimodal products and written reflections), more in-depth data was collected for the focal students and his/her partner (e.g., Camtasia screen capture of workshop sessions and design interviews), which will be described in subsequent sections.

Through purposeful sampling (Patton, 1990; Strauss & Corbin, 1998), three focal students were selected for in-depth analysis of their multimodal compositional processes as situated in the classroom context. A few strategies were used to select focal students. First, with the help of Mrs. Buchanan, possible focal students representing variation (Patton, 1990) in literacy abilities, technology experience, interests, and class engagement were identified. The goal of sampling was to follow the multimodal composing processes of three students who varied on one or more of these factors. The semester before this study, Mrs. Buchanan assigned a multimodal project (e.g., webpage on poetic elements) to her class, so I relied on her

knowledge of students' technical skills and experiences with this project when selecting focal students. Second, I visited Mrs. Buchanan's class before data collection to observe students taking notes on their engagement and perspectives when participating in a whole class discussion related to literature. Third, all students completed an interest survey (Appendix A) prior to the study, which asked questions about their creative interests, views on writing, collaboration styles, and experience with technology. Through each of these methods, three focal students who varied in literacy abilities, technology experience, out-of-school interests, and class engagement were identified before data collection. (See Table 2 for a summary of how focal students varied).

Table 3.

Focal Student	Arianna	Vivian	DeShawn
Literacy Abilities	 Advanced reading skills Creative writing skills were advanced and academic writing skills were proficient "Consistently scored in the 6 -7 range on practice AP Literature essays" 	 Proficient/Advanced reading and writing skills Excelled in academic writing "Somewhat limited by ELL status" Senior class Valedictorian "Consistently scored in the 7-8 range on practice AP Literature essays" 	 Emergent/Proficient in reading and writing skills "Middle of the road" in literary analysis and academic writing skills "Consistently scored in the 4-5 range on practice AP Literature essays, learning more towards 4"
Technology Experience	Advanced technology experience (e.g., photo- shop, video mash-ups, coding)	Limited technology experience (e.g., Word Processing)	Some technology experience (e.g., video games, mobile devices, Word processing)
Interests	Drawing, writing (including creative writing & fanfiction), science, computers	Athletics (track and soccer), science, social studies, National Honors Society	Sports (basketball & football) and video games

Description of focal student attributes for purposeful sampling*

Class Engagement	"Very high and very intrinsic"	"Medium with spikes in particular contexts (e.g., during assessments or anything competitive)"	"On the low end"
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* All quotes are from the teacher, Mrs. Buchanan

Students had the option to work with a partner of their choosing or alone for each project; they could also switch partners for each project if they desired. Even with this collaborative freedom, all three decided to work with the same partners for each of the multimodal projects. (However, one student had to work by herself for the final project because her partner was out of town for the in-class workshops). Since the focal students worked with the same partner throughout the unit, my focus shifted to the processes and perspectives of each member of the collaborative pair in my analysis (which will be referred to as focal pairs). Table 3 provides self-identified demographics for each student participant, including gender, age, and race. A more detailed description of students will be provided at the beginning of each case in chapter four.

Table 4.

	Focal Pair 1		Focal Pair 2		Focal Pair 3	
Name	Arianna	Keira	Vivian	Caitlyn	DeShawn	Calvin
Age	17	17	17	18	17	18
Gender	Female	Female	Female	Female	Male	Male
Race	African American & Caucasian	Caucasian	Immigrant from Kenya (ELL)	Immigrant from Nigeria (ELL)	African American	African American

Self-identified demographics of focal students and their partners*

* Shading indicates focal student

Researcher's Participant Observer Role

I became acquainted with Mrs. Buchanan while serving as a Teaching Assistant in two of the Master's English Education courses she took prior to the study. From reading her work and our in-class interactions, I understood Mrs. Buchanan to be an exemplar pre-service teacher—a creative and critical thinker who was reflective on her own practice and committed to the success of her students. I was also aware that Mrs. Buchanan was enthusiastic about incorporating more multimodal projects connected to literature in her curriculum, which initially drew me to approaching her about conducting a study in her classroom.

My role during this study was that of participant observer (Spradley, 1980), allowing for first-hand involvement in and knowledge of the unique social world of the examined classroom. However, my degree of participation was greater outside of official class time than within. In the weeks prior to and throughout the study, I introduced Mrs. Buchanan to a scaffolded digital workshop model previously developed for middle school students (Dalton & Smith, 2012) and we collaborated to apply the model to align with her unit goals. I also worked with Mrs. Buchanan to develop the multimodal assignments, rubrics, and metanarrative reflections.

My primary role in the physical classroom was that of observer—with the main focus on collecting data. On a few occasions I presented an example assignment to the class and contributed my knowledge of certain technical skills when assignments were introduced. I observed focal students and their partners during workshop sessions by circulating between their workstations and sometimes provided technical assistance if they had questions or were experiencing difficulties.

I was the Principal Investigator in this study. A few times, I was fortunate to have the help of university colleagues (graduate students and/or a professor) in conducing design

interviews (approx. one-third of the total interviews) using the protocol I developed, and with carrying and setting-up equipment. As a doctoral student, I have experience with data collection and analysis techniques through university course work and participating in other studies using similar methods. I completed all transcription of video and audio data.

Literature and Multimodal Response Unit: The Things They Carried

Three central multimodal projects were connected to the anchor text, *The Things They Carried* (O'Brien, 1990), for the seven-week unit. A collection of related short stories, O'Brien's acclaimed work presents different perspectives from a platoon of American soldiers in the Vietnam War. Although referred to by the author as "a work of fiction," it is believed that the stories are based on experiences that O'Brien encountered while he served in Vietnam. O'Brien's work is described as a *metafiction*, "a term given to fictional writing which self-consciously and systematically draws attention to its status as an artifact in posing questions about the relationship between fiction and reality" (Waugh, 1984). Major themes in this text include physical and emotional burdens and truth and fiction in storytelling. Having experienced *The Things They Carried* as a student herself, Mrs. Buchanan chose this text for her class and was enthusiastic about her students reading it. This was the last unit in the school year.

According to Mrs. Buchanan, the overarching goals of this unit were threefold: 1) For students to analyze a "complex literary text deeply and thoroughly, with an eye toward understanding O'Brien's narrative and creative choices"; 2) to "expand students' ability to compose in multiple modes/media"; and 3) for students to "clearly articulate the reason and intent behind their own narrative and creative choices" (qtd. From Mrs. Buchanan's Paideia project proposal). Mrs. Buchanan supplemented *The Things They Carried* with literature and

films that were thematically connected, including other short stories by O'Brien, as well as related multimodal texts that were read, viewed, and listened to in class, such as the movie *Apocalypse Now* (Coppola, 1979) and authentic audio recordings from Vietnam soldiers in battle.

Scaffolded Digital Writer's Workshop

The work of Dalton & Smith (Dalton, 2012; Dalton & Smith, 2012) with urban middle school students in a Digital Writer's Workshop provided the foundation for our instructional model. The purpose of the Scaffolded Digital Writer's Workshop was to support students in seeing themselves as "designers" and understanding how multiple modes can be used for expression and communication, as well as developing a supportive class community where students shared their work and relied on one another as resources.

For this study, Mrs. Buchanan and I designed the unit in accordance with her instructional goals and in response to students' academic and technical needs. The adapted Digital Writer's Workshop followed a scaffolded approach to multimodal design (Dalton, 2012; Dalton & Smith, 2012), DCSrr (Demonstrate, Create, Share [reflect, respond). Each of the three multimodal projects followed a sequence of introduction and demonstration of one or more examples with the design decisions made explicit and processes modeled (How do I do it?) and student work and reflection sessions (I/We do it; Who am I as a designer?). The process was similar to the typical writers' workshop model (Atwell, 1987), however focused on composition as *design* and the integration of technology and media.

First, when introducing a project, Mrs. Buchanan demonstrated *why* and *how* a multimodal project was created—providing examples that made clear the various design

decisions a composer could make. These demonstrations explained both the technical and creative considerations, including questions to prompt student thinking before composing. Examples were generated by Mrs. Buchanan and myself, so that we could provide first-hand insights into the process and our design decisions, as well as authentic (e.g., professional websites, commercials, Vietnam letter and audio recordings) and student examples. These demonstrations were not meant to unduly constrain students in their creative processes, or to appear as a script for composition. Thus, the message throughout was that each person (or pair) has something to say, and their way of saying it to communicate effectively with their audience.

Second, students had the choice to work individually or collaborate with others during workshop time. Although the teacher circulated to assist, students were encouraged to share strategies and resources while composing. For example, one student (Arianna) possessed knowledge of how to change font color and style using html coding within the webpage tool (weebly) the class used; she provided a quick tutorial to the class and assisted students with technical difficulties throughout the unit. Throughout each workshop, Mrs. Buchanan gauged what technical skills the class was struggling with and provided just-in-time technical mini-lessons (either by her or an expert student).

Third, students shared their work both in the classroom and with a wider audience. In class, students participated in whole-class presentations, gallery walks, and peer workshops. At the end of the unit, which was the last day of the school year, students partook in a culminating presentation for the principal, administrators, Vanderbilt faculty and graduate students, and 11th grade friends. Positioned as a celebratory event, these presentations took place in the school's multimedia room and student brought food and beverages to share. For both the informal and formal presentations, students showed their work and explained their compositional choices to

their audience, as well as responded to questions and feedback. Students' informational webpages and audio letters were also posted on the class website, which was available to the public online.

Lastly, students submitted typed metanarrative reflections with each of their final projects to Mrs. Buchanan (Appendices N-P). In these, students addressed specific questions aimed at uncovering their process, collaborations, and design decisions (e.g., What were your successes and struggles while creating this project? How did you work with others to create your project? How was the process of creating this assignment different than other projects you've created?). Table 4 provides a detailed schedule of the in-class multimodal workshops based on Dalton and Smith's Digital Writers' Workshop model (Dalton, 2012/13; Dalton & Smith, 2012).

Table 5.

Informational Webpage Workshop			
Day 1	Introduction & Demonstration:		
(3/28/12)	Lecture and discussion about multimodal composition		
	• Smith presents an example of Vietnam-Era weebly she created with explanation		
	of process and design decisions		
	Mrs. Buchanan demonstrates different features of weebly tool		
	Create:		
	 Students choose webpage topics and partners 		
	Begin creating informational webpages		
Day 2	Demonstration:		
(3/30/12)	• Teacher mini-lesson: Importing and editing images and video in weebly		
	• Student mini-lesson: Arianna demonstrates on how to change font style and		
	color in weebly by using html code		
	Create: Students work on webpage		
Day 3	Share:		
(4/11/12; after	• Peer workshop of in-process work at the beginning of class		
Spring Break)	• Pairs who had completed their webpage present at the end of class (the rest		
	present on the following day)		
	Create: Students work to complete webpage		
	<i>Reflect:</i> Students are assigned metanarrative reflection to submit with final product		

Schedule of in-class multimodal workshops (Class meets alternating days for 85 min. periods)*

	Hypertext Literary Analysis Workshop	
Day 1	Introduction and Demonstration:	
(4/17/12)	• Smith presents an example of a hypertext literary analysis she created with	
	explanation of process and design decisions	
	Mrs. Buchanan presents other student examples	
	• Teacher mini-lesson: Hyperlinking in PowerPoint	
	Create:	
	• Students choose partners and chapter from <i>The Things They Carried</i> to analyze	
	Begin creating hypertext literary analysis	
Day 2	Demonstrate: Mrs. Buchanan shows the hypertext analysis she created for a chapter	
(4/19/12)	from <i>The Things They Carried</i> . She describes her process and design decisions.	
(11)(12)	<i>Create:</i> Students work on hypertext analysis	
Day 3	<i>Create:</i> Students work on hypertext analysis	
(4/23/12)		
Day 4	Demonstrate: Mrs. Buchanan demonstrates how to create a multimodal synthesis slide	
(4/25/12)	with the class.	
(")	Share:	
	• Students discuss their ideas for their multimodal synthesis slide with the class at	
	the beginning of the period	
	 Gallery walk of students' in-process work at the end of class 	
	<i>Create:</i> Students work on hypertext analysis	
Day 5	Demonstrate: Mrs. Buchanan gives a mini-lesson on the technical skills students	
(4/27/12)	identified as wanting to learn in the prior session (e.g., collaging and editing images,	
	recording voice narration in PowerPoint, and creating a wordle)	
	<i>Create:</i> Students work on hypertext analysis	
	<i>Reflect:</i> Students are assigned metanarrative reflection to submit with final product	
	Audio Letter Workshop	
Day 1	Introduction and Demonstration:	
(5/3/12)	• Listen to authentic audio and written letters from Vietnam soldiers	
	• Watch/listen to radio and TV commercials and discuss how sound is used in	
	storytelling	
	• Mrs. Buchanan demonstrates how to use audacity	
	Create: Students choose partners and begin to work on audio letter	
Day 2	Demonstrate: Student (Paul) gives a mini-lesson on how to mix multiple audio tracks	
(5/7/12)	<i>Create:</i> Students work on audio letter	
` '	<i>Reflect:</i> Students are assigned metanarrative reflection to submit with final product	
Final	Share, reflect & respond:	
Presentation	• Students show their work and explain their compositional choices to the class,	
(5/11/12)	Principal, administrators, Vanderbilt faculty and graduate students, and 11 th	
	grade friends	
	 Respond to questions and feedback 	
*Schedule does	s not include instruction that occurred on non-workshop days (e.g., discussions, practice	

*Schedule does not include instruction that occurred on non-workshop days (e.g., discussions, practice writing exams, lectures, etc.)

Multimodal Projects

As part of a literature-based unit on *The Things They Carried*, students completed three major projects during class time (85 min. in length), which are described in the order they were completed. Mrs. Buchanan set aside ample class time for students to work on their projects across the seven-week unit (18 total class sessions, 10 of which involved in-class composing workshops): three days for informational webpage, five days for hypertext literary analysis, and two days for the audio letter.

Multimodal Project #1: Informational webpage. Before reading the novel, students designed an informational webpage on a specific topic related to the Vietnam War or American culture during that time period (See Appendices B & C for the assignment sheet and grading rubric). They were asked to use multiple modes "to engage as many senses as possible and to recreate the experience" of their topic for the website viewer (webpage assignment sheet). The assignment required students to choose a topic from a class list or nominate their own topic and combine artifacts of research (images, videos, songs, primary documents) with the written synthesis of multiple sources to explore and explain complex historical phenomena.

Students used weebly, an online tool that allows users to easily create websites by dragging and dropping page elements and filling in content (<u>www.weebly.com</u>). Each webpage linked to an overarching class site on the unit and were made public for other people to use on the Internet. Some features that were available with the weebly tool include photo galleries and slideshows with captions, embedded video and sound (e.g., music or podcasts), poll questions, and a comment function for viewers to use to respond.

Mrs. Buchanan's goal for this informational webpage project was for students to provide background information and context for understanding *The Things They Carried*, to develop

research skills, and to begin to develop their multimodal composing skills. Students were familiar with the tool because Mrs. Buchanan assigned a weebly on poetry in the prior semester; however, she did not emphasize the purposeful use of multiple modes to the same extent as she did for this assignment.

Multimodal Project #2: Hypertext literary analysis. For the second multimodal project, students created a hyperlinked PowerPoint "that explore[d] the multiple layers of meaning" in a passage from *The Things They Carried* (See Appendices D - E for the assignment sheet and grading rubric). As described in the assignment sheet, students were asked to "use analytical skills like those [they] have developed with traditional written assignments," but in a digital, multimodal format to provide "more freedom and creativity" in their response. Each pair selected a chapter from the novel and included key passages on PowerPoint slides. Specific words and phrases were hyperlinked from these passages to other slides where students explored key words and phrases, literary devices, intertextual connections, questions, and personal reactions. The hypertext literary analysis, which needed to be a minimum of 12 total slides, also included a culminating synthesis slide—what Mrs. Buchanan referred to as a "multimodal theme statement." Here students represented their understanding of the theme of their chapter on one slide with a summary statement and a connected visual(s), and sometimes audio.

Along with emphasizing that students would need to complete a "close reading" and perform the same analytical thinking required of a traditional essay, Mrs. Buchanan stressed the importance of students considering multiple modes and "how all of these elements work together to organize information and provide an additional means" for analyzing each passage (hypertext literary analysis assignment sheet). Students were encouraged to create original works and stretch the limits of their creativity.

Multimodal Project #3: Audio letter. Evoking a classic epistolary practice of Vietnam solders, but updating it in a digital and multimodal manner, the final product was an audio letter to or from a character in *The Things They Carried* (see Appendices F - G for the assignment sheet and grading rubric). As described in the assignment sheet,

You will use only the means of communication available to the soldiers: recorded voice, still images, and background sounds or music. However, you will put these together in a thoroughly modern way, using audio editing software, and you will publish your final product online. (audio letter assignment sheet)

Using the audio software, Audacity, students recorded "soundscapes" that layered voice narration, music, and sound effects. These audio files, along with a connected image, were posted on the class' weebly page. Students were given the freedom to create an audio letter from the perspective of a main character or to develop the story of a minor or new character writing to a main character. Whatever the perspective, students needed to "express what the character experienced during the war and how he/she felt about it" and to "tell the story in a way that seems true to the character." This assignment required that students utilize their knowledge of the novel and characters "to speak convincingly in the character's voice." For example, questions Mrs. Buchanan asked students to consider included:

Would your character use all concrete detail and vivid description, or would he [sic] talk more about his thoughts and feelings? Would he say exactly what he felt, or would he only imply it? Would he miss life back home, or would he love the thrill of war? Would his language be literary or simple? (audio letter assignment sheet)

Students were limited to 60 seconds for their audio letter, but it could be organized in a variety of ways including "one letter in its entirety, an excerpt from a longer letter, several short excerpts from a series of letters over time, [or] an exchange of letters between a character and someone else" (audio letter assignment sheet).

For the purposes of this study to examine multimodal composing processes, it is important to note that the informational webpage and audio letter assignments were introduced on the same day that students began working on them in class. However, students completed a brainstorming graphic organizer (Appendix I) before creating their hypertext literary analysis in PowerPoint. This scaffold served as a way to help students initiate thinking and consider how they would use multiple modes in their hypertext; it did not require students to write sections of their analysis before class, which none of the focal pairs did before composing on the first workshop. In addition, some students worked on various pieces of their projects outside of workshop time, which is accounted for in each case.

Data Collection

A variety of data from multiple perspectives were collected in order to construct a multidimensional understanding of students' multimodal composition processes. These data sources included whole class and focused observations, computer screen recordings of workshop sessions, student design interviews, teacher interviews, and artifacts related to the teaching and production of the multimodal projects. In the following, I organize data collection based on different aspects of investigation—the teacher, whole class, and focal pairs. Table 4 provides an overview of how data collection methods aligned with the overarching research question along with providing a sense of the classroom context.

Teacher

While the teacher was not the primary focus of this study, it was essential to situate the students' experience within the specific context of Mrs. Buchanan's classroom. I collected data

from Mrs. Buchanan to gain a snapshot of the classroom community, multimodal instruction and scaffolding, as well as how she viewed students' multimodal processes and collaborations. Considering that these multimodal projects were created within a particular classroom context, these data were important because her plans, instruction, and interactions shaped the context for students' compositions. Furthermore, Mrs. Buchanan's perspective provided an additional source for triangulation (Erlandson et al., 1993).

Teacher's Instructional materials and artifacts. All instructional materials pertaining to the unit were collected or copied, including lesson plans, handouts, assignment sheets, rubrics, and PowerPoint presentations.

Teacher planning meetings. In addition to two or three initial planning meetings to develop the unit, Mrs. Buchanan and I met regularly to plan for the upcoming week and reflect on the progress and her feelings about the unit (e.g., what was working and what needed to be changed or adapted). Audio recordings of these weekly planning and reflection meetings allowed me to obtain her perspective on the unit and understand any changes she made along the way.

Teacher Interviews. Mrs. Buchanan participated in three semi-structured interviews over the course of the unit (approx. 60 minutes each; see Appendix J for the teacher interview questions). Each interview was audio-recorded and saved. Interviews occurred after each of the three central multimodal projects were presented and submitted by students. During these interviews, Mrs. Buchanan reflected on the success of the assignment, any adaptations she made, and changes she would make if she were to assign the same multimodal project in the future. She was shown the final products of the focal pairs during each interview and asked to comment on how successful she thought students were in completing the assignment, connections she saw they made to the novel, and the quality of their work. Mrs. Buchanan also shared insights about

the student's processes and her interactions with them during in-class workshops. Camtasia screen recording ran on the computer used to show student work during this time in order to synchronize her reactions to specific elements in the multimodal products. I also made copies of the work Mrs. Buchanan returned to the focal students and their partners in terms of grades and feedback for each projects.

Whole Class (includes all permissioned students and teacher)

Observations. Whole class observations were conducted throughout the instructional unit (18 total 85-minute sessions over a span of 7 weeks). A stationary video camera was placed in a corner of the classroom in order to capture all instruction, activities, discussions, and workshop time. In addition, video recorded informal and formal presentations of work, including the culminating presentation at the end of the unit. Field notes were also taken during these whole class observations, with particular attention given to instruction and interactions related to the multimodal projects, as well as making methodological and theoretical notes (Strauss & Corbin, 1998).

Artifacts. Referential adequacy materials (Erlandson et al., 1993) related to the classroom context were collected, copied, or photographed as a means to provide a holistic view of the context in which multimodal composition took place, including photographs and artifacts of the physical space (e.g., posters on the walls, seating layout, etc.).

Case Study Students (3 focal collaborative pairs of students)

The compositional processes of three focal students and the partners were closely examined. Data from a variety of sources were collected, including computer screen recordings,

focused observations, design interviews, workshop debriefings, and artifacts (e.g., interest survey, process work, metanarrative reflections, and multimodal projects).

Computer screen recordings. During in-class workshops, the three focal pairs used research laptops with Camtasia software to record their screens and connected conversation. This type of screen recording software tracked the movements of students' mice, websites visited, and all media used and edited. The screen recordings also captured accompanying audio during the compositional process, which gave insights into any self-talk or verbal interactions during workshop time. These data were critical for understanding pairs' unique and complex compositional journeys, which would have been impossible to record by hand, for composers to remember, or to capture in such detail. Camtasia files were saved after each session and then backed-up on the researcher's hard drive.

Observations. Close observations (Patton, 1990) of the three focal pairs of students were conducted by videotaping and taking field notes. Since Camtasia recorded their screen activity and related audio during workshops, video cameras for each focal pair were placed toward the student so that their faces, bodies, and interactions were recorded. Video footage was also taken when some students moved to a nearby "sound room," a large closet adjacent to the library that stored books, to record voice narration for the audio letter. Video was saved after each session and then backed-up on the researcher's hard drive.

While writing field notes, I attuned to any key events or patterns concerning process, collaboration with others (peers or the teacher), use of resources and tools, interactions while composing, and any other pertinent events that emerged. This observational data collected during workshop time also provided perspective into affective reactions or other in-the-moment elements that might not be apparent by computer screen recordings.

Design interviews. The three focus students and their partners participated in semistructured design interviews (Dalton et al., 2011; See Appendices K-M for design interview protocols for each project) after each of their three central multimodal products were presented and turned in to Mrs. Buchanan and at the end of the project. These interviews (approx. 30 minutes in length) occurred during class time, lunch, or students' Advisory period—daily, unstructured time to work or socialize. The purpose of these interviews was to learn more about students' prior and current experiences with technology and perspectives on their compositional processes. In an attempt to uncover specific design decisions, the final multimodal product for each of the three interviews were shown to first elicit general comments and then for students to reflect on specific modal usage (e.g., image, sound, animation, etc.). With Camtasia running in the background of the computer during these interviews, students showed me important and favorite parts of their projects, and explained connections they made to the novel. I also asked students about their collaborations and what work, if any, was completed outside of class.

Workshop debriefings. At the end of each workshop, I asked students to recap their process for the day and next steps. These 5-10 minute debriefings served as a means to understand students' progress and reasoning behind their process while they were still immersed in creating their projects. Camtasia screen capture ran during these debriefings and recorded their voices and screens.

Student artifacts and materials. Along with their final multimodal projects (3 for each focal student pair), I collected artifacts related to their multimodal projects (e.g., graphic organizers and notes) and the interest surveys students completed at the beginning of the study. I also collected students' metanarrative reflections, which they completed when they submitted each of their final projects. The metanarrative reflection assignment asked students to type a 2-

page response to specific prompts about their process, collaborations, and design decisions (see

Appendices N-P for the metanarrative reflection questions for each product).

Table 6.

Relationship between data collection and overarching research question

Data collection	Classroom context	RQ: How do urban 12 th grade students compose multimodally in response to literature?
For all students:		
Whole class video observation and field notes	•	•
Student presentations of multimodal products	•	•
Artifacts from classroom	•	•
For three focal collaborative pairs:		
Interest survey	•	
Multimodal products (3 per pair, 9 total)		•
Student written reflections (3 per student, 18 total)	•	•
Video of composing sessions	•	•
Camtasia screen capture from workshops (27 total)	•	•
Student design interview (3 per student, 18 total)	•	•
Workshop debriefings		•
All process work for multimodal products	•	•
For teacher:		
Video and notes of weekly planning/reflection meetings	•	•
Lesson materials and artifacts	•	
Interview for each multimodal product	•	•
Grades and comments for multimodal assignments	•	•

Data Analysis

In the following, I describe how data was prepared for analysis, provide a brief

description of my broad analytic approaches, and then explain specific methods used to address

my guiding research questions.

Audio and Multimodal Transcripts

As Ochs (1979) posited, "transcript is theory: The mode of data presentation not only reflects subjectively established research aims, but also inevitably directs research findings" (qtd. in Flewitt, Hampel, Hauck & Lancaster, 2009, p. 45). Acknowledging their importance, transcripts were prepared for data analysis in an attempt to do justice to the multimodal data collected. I created transcripts from the teacher interviews and student design interviews and moments of interest from the Camtasia screen recordings were also transcribed. Lastly, multimodal transcripts (Flewitt et al., 2009; Phillips & Smith, 2012) for the audio letters were prepared (see Appendices W-Y) in order to understand how sounds were layered and as a means to present these aurally-rich projects in a textual form for readers.

Multimodal Composing Timescapes

In order to understand how modes were orchestrated and layered, I developed *multimodal composing timescapes* as an analytic tool and visual display for each pair's composing process across class workshops. This process involved coding all 27-screen capture videos for on-screen activity (e.g., searching for images online, reading informational websites, editing text, hyperlinking, importing music etc.) and indicating the predominant mode composers worked with on their computer and the duration of time. Next, timescapes were created that represented the sequence and proportion of time connected with each mode, which were then color-coded to easily display the process and compositional patterns. Figure 1 provides an example of a multimodal composing timescape. A timescape will be presented for each multimodal project in chapters four and five.

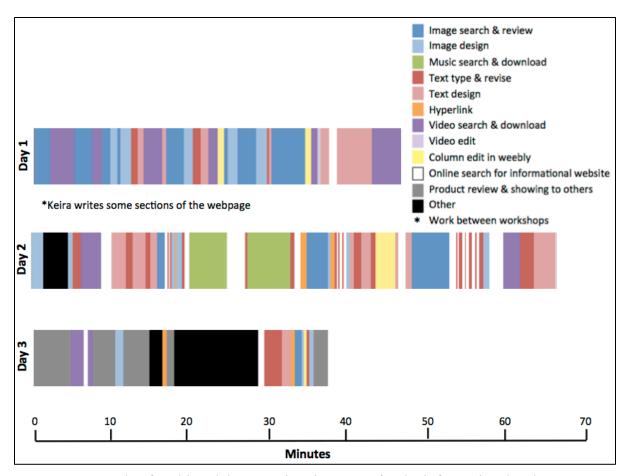


Figure 1. Example of multimodal composing timescape for the informational webpage assignment.

It is important to point out that although these multimodal composing timescapes provide new and detailed insights into the multimodal composing process, they only represent what happened on one computer and do not capture what a partner could have been doing if he or she was working away from the research computer in class (e.g., writing notes or using a mobile device) or at home. Although not included in the timescapes, I attempted to account for these offline activities by watching videotape observations and asking students about what elements of their projects they completed at home, which will be described for each case.

Development of Cases

As suggested by Stake (2006), a researcher must first understand individual cases indepth before conducing a comparative case analysis. Based on Grounded Theory (Glaser & Strauss, 1967), I employed the constant comparative method (Strauss & Corbin, 1998) to code interviews, written reflections, video observations, and screen capture data. This process of disassembling and reassembling the data (Charmaz, 2000) involved several iterations of open coding to establish categories and subcategories for individual cases.

I first focused analysis on one pair of composers at a time by creating time-stamped video logs for each of their screen-capture videos. Moving sequentially through the workshops for each multimodal project, I recorded their compositional actions, particularly rich instances of interaction, and notes to myself of emerging themes (e.g., students beginning each project in a similar way, patterns of collaboration, statements connected to modal designs). I moved between watching screen capture and videotape data focused on students' faces and bodies-sometimes side-by-side—which provided insights about who was in control of the technology, activities away from the computer, and students' affective reactions while composing. Next, I openlycoded student interviews and written reflections connected to the process of the screen capture and video previously analyzed, also looking for connections to their actions and new insights provided by their perspective. During this time, I also used *a priori* codes in order to identify elements related to my research questions. For example, I coded instances where students talked about collaborating or their process in interviews or their metanarrative reflections. This opencoding process involved several iterations of watching screen capture and video data and analyzing their reflections and interviews.

After open coding, I "reassembled" the data to refine and make links between categories and codes developed in the axial coding phase. This process involved returning to the data to find compositional themes for each pair of composers across each of the projects. New data was compared to exiting data and categories and disconfirming cases were examined in order to further refine my findings (Charmaz, 2000). I created case studies for each collaborative pair, focusing on the details of their unique process and themes within and across products developed during the axial-coding phase.

Comparative Case Analysis

Comparative case analysis (Stake, 2006) involved analyzing the individual themes for each case and then employing axial coding (Strauss & Corbin, 1998) once again to generate overall themes for the multimodal composing processes across all three collaborative pairs. This process required not only looking for similarities, but also noting unique compositional differences among pairs and for each multimodal project.

Trustworthiness

In order to develop the rigor and overall quality of the study's design and findings, I followed the widely regarded set of standards for establishing trustworthiness in qualitative research (Erlandson et al., 1993; Lincoln & Guba, 1985). These criteria include credibility, transferability, dependability, and confirmability and are described in more detail in the following sections.

Credibility

Erlandson, Harris, Skipper, and Allen (1993) explained that individuals "represent different constructed realities" and that "attention must be directed to gaining a comprehensive intensive interpretation of these realities that will be affirmed by the people in the context" (p. 30). To elicit these various and divergent constructions of reality, a "mosaic" was assembled from triangulating different sources and methods (Erlandson et al., 1993). In the retrospective design interviews, each member of the composing pair was asked similar questions regarding their process, which were compared along with the written reflections each student completed upon submitting their final project. I compared students' explanations of their process to their actions *while* composing, including screen capture data, video observations, and my field notes. I also relied on Mrs. Buchanan's observations of each pair's process and final product to triangulate perspectives.

In addition to triangulating sources and methods, credibility was strengthened by completing informal and formal member checks (Erlandson et al, 1993) with each student. Throughout interviews, I summarized students' responses and asked clarification questions in order to ensure I understood their responses accurately. In the final weeks of this study, when composing themes began to emerge, I informally asked students if they agreed with my interpretations. For example, I noticed that students were often inclined to begin projects in a similar manner, so I asked some about this emergent finding in the final design interview. I also conducted formal member checks by emailing each student a summary of their case, asking them to confirm my interpretations and clarify any misinterpretations.

Prolonged engagement is another key component for building credibility. I was only in the classroom for each class period for a total of nine weeks; however, I believe that was

"sufficient time" to understand the classroom culture and build trust with students. Particularly considering the fine-grained nature of this study's research focus, my persistent observation (Erlandson et al, 1993) provided the necessary depth to "identify those characteristics and elements in the situation that are most relevant to the problem or issue being pursued and focusing on them in detail" (p. 304). Lastly, I occasionally debriefed with my co-advisor, Bridget Dalton, throughout all stages of this study in order to review my perceptions and findings with a fresh perspective and to receive feedback

Transferability

Transferability, which involves demonstrating that findings have applicability in other contexts, was strengthened through thick description (Lincoln & Guba, 1985). By thoroughly describing the participants, context, and multimodal composing processes for each in-class workshop, I provide a means of comparison between the different multimodal projects, allowing reader to make decisions regarding the transferability of findings.

Dependability

Dependability is an assessment of the quality of data collection and analysis, thus providing evidence that would allow the findings to be replicated if the study were repeated using the same (or similar) participants and contexts. To ensure the dependability of the findings, I provided a detailed and accurate natural history of the research methodology. Along with saving all data (e.g., videos, student interviews, student products, etc.), I also kept field notes of observational, theoretical, methodological, and personal notes throughout the course of the study.

Confirmability

Finally, confirmability is the degree of neutrality or extent to which the findings of a study are shaped by the respondents and not researcher bias, motivation, or interest (Lincoln & Guba, 1985). In addition to triangulating methods and sources to strengthen confirmability, I maintained an audit trail of my methods, as well as thinking in the field notebook previously described.

As a participant observer, reflexive awareness of my own biases and positionality was crucial for strengthening confirmability (Chiseri-Strater, 1996). As described by Denzin and Lincoln (2003): "Any gaze is always filtered through the lenses of language, gender, social class, race, and ethnicity. There are no objective observations, only observations socially situated in the worlds of—and between—the observer and the observed" (p. 31). I came to this study with my lived experience of being a white female from a middle class upbringing in the Rocky Mountain region of the United States-a different experience than all of the students I observed. Furthermore, as a doctoral student studying digital literacies, I bring with me certain views, biases, and enthusiasms about multimodal composition that could potentially influence my gaze as a researcher. The nature of my research questions and the design of this study indicate that I have a positive disposition towards the value of multimodal composition, particularly in urban contexts. In addition, I have biases towards using multimodal methods of analysis and display instead of relying on verbal language and print-based practices, especially for understanding and communicating multimodal processes. No doubt, my views towards multimodal composition and multimodal methods influenced my analysis and interpretation of data. My gaze as a researcher was focused on modal use and progressions. As a result, I did not focus on other important factors, including student achievement and transfer to written composition.

Along with being aware of my positionality and looking for disconfirming evidence, I attempted to strengthen the confirmability by listening closely, representing accurately, and "giving voice" to those who were studied (Strauss & Corbin, 1998). This study includes a variety of examples from the data, including students' work, written reflections, and verbatim transcripts from workshops and interviews.

Limitations

There are limitations to this study based on its scope and design, as well as the nature of multimodal research. Jewitt (2009) explained that multimodal research can seem "impressionistic" at times and is "problematic if it offers endless detailed descriptions and fails to make clear the broad questions it seeks to answer" (p. 26). Furthermore, researchers are constrained in conveying the richness of multimodality by the predominantly unimodal and static means for sharing research. By integrating theories and relying on a variety of sources and perspectives, I endeavored to reach a thorough and data-driven understanding of multimodal composition. In addition to developing multimodal ways to analyze data, I also worked on new ways of reporting data to do justice to students' complex multimodal processes and products.

It is important to note that even though students composed their multimodal projects in the classroom, it is not an "isolated container, but positioned in a *nexus of relations* to other such locales" (Leander, Phillips & Taylor, 2010, p. 336, original emphasis). Therefore, there were no doubt interactions and events that occurred outside of class that affected students' multimodal processes and products. Although these influences are outside of the scope of this study, I have attempted to uncover them in the student design interviews.

It is possible that students were unaware or unintentional in some of their modal usage. And although the student design interviews occurred shortly after presenting their final projects, they might have forgotten certain ideas or events that occurred during workshops or could have attributed intentionality afterwards when it was not present during the compositional process. As described by Denzin and Lincoln (2005), "Subjects, or individuals are seldom able to give full explanations of their actions or intentions; all they can offer are accounts, or stories, about what they have done and why" (p. 21). As described earlier, I have worked to mitigate this possibility through triangulation and assembling a "mosaic" in viewpoints, sources, and perspectives.

Lastly, it is important to remember that these findings are deeply situated within a specific composing context and are not intended to be overly generalized. As explained by Gee (2008), "Literacy has no effects—indeed, no meaning—apart from particular cultural contexts in which it is used, and it has different effects in different contexts" (p. 82).

CHAPTER IV

CASE STUDIES

This chapter presents a detailed case for each collaborative pair of students to illuminate their multimodal composing processes and perspectives within and across their three projects. These cases lay the foundation for the cross-case comparison presented in chapter five. Overarching themes for each case are organized into sections that align with the three research sub-questions—collaboration, movement amongst and between modes, and students' perspectives on their composing goals and modal designs. Although findings are organized into three subsections, there are overlaps and connections amid them. The cases conclude with a discussion of the multimodal composing processes for each collaborative pair.

Arianna and Keira: The Designer and her Assistant



Figure 2. Keira (left) and Arianna (right) collaborating during an in-class workshop.

Arianna and Keira loved to read and write and were highly engaged in the AP Literature and Composition class. Described as "alternative" students by Mrs. Buchanan, they were friends with a close-knit group of peers who were not considered conventionally popular and prided themselves on their individuality. The more reserved of the two students, Keira (White, 17), was described by Mrs. Buchanan as a "deep thinker" who was concerned with social justice and considered multiple perspectives in class discussions (teacher interview #1). Arianna (African American & White, 17) was an out-spoken and confident student, who possessed deep interest in and experience with technology. Defining herself as a "creative genius," Arianna loved to "express feelings" through writing and artwork (student interest survey) and also demonstrated her originality through unique hair colors and outfits. Arianna created and shared her digital artwork outside of school and managed a personal YouTube channel where she posted her various mash-up videos of her favorite anime and Asian pop artists.

Both teens expressed excitement about being able to creatively respond to literature through multimodal projects, and they described *The Things They Carried* unit as their favorite of the year. Over the course of seven weeks, Arianna and Keira worked together to create three multimodal projects for the literature unit, including a website describing music from the Vietnam Era (Appendix Q), a literary analysis hypertext focusing on the chapter, "Notes" (Appendix T), and an audio letter featuring a series of letter "snippets" from the fictional wife of one of the main characters from the novel (Appendix W).

Arianna and Keira's multimodal composing processes for the *Things They Carried* unit involved the use of images, music, and videos to connect with the emotions of characters, their audience, and themselves. By collaging modes and using advanced image-editing techniques, the pair created multidimensional and thoughtful projects that impressed their peers and Mrs. Buchanan, who thought their projects exhibited creativity and innovation while also demonstrating a deep understanding of the historical context, characters, and literary themes.

As depicted in the following case, there were overarching compositional patterns that emerged from their work across the three multimodal projects. First, Arianna and Keira adopted distinctive roles as they collaborated throughout the unit—Arianna was the technical and creative designer and Keira played a supportive role by gathering information and media. However, these distinct roles slightly blurred over time and Keira was able to contribute more to the final audio letter. Second, there were similarities in their processes for the first two multimodal projects (informational webpage and hypertext analysis), which involved entering the process with visual

elements, an image-driven modal progression, and increased cross-modal traversal over time. However, a different process was followed for their final multimodal project (audio letter). Lastly, Arianna and Keira orchestrated modes to create rich and cohesive thematic mosaics to represent the emotions of characters and move their audience. Arianna also used the multimodal projects as a platform to showcase her technical skill and creativity. These compositional patterns, along with illustrative examples, will be described in the following section. This case concludes with a discussion of their multimodal composing processes throughout the literature unit.

Designer and Assistant Collaboration

Arianna's primary role was that of lead designer—creative visionary who physically constructed each project—while Keira assumed an assistive role—researching, preparing text, and collecting materials outside of class for Arianna's choosing. Arianna's experience and interest with technology, strong artistic identity, and ease in being the leader, combined with Keira's lack of comfort using technology, resulted in Arianna taking the lead with each project. Arianna's control—physically of the technology and creatively with the design—often resulted in limited interaction about design elements while the pair worked; however, their interactions around non-technical aspects of projects increased over time.

In her role as the assistant, Keira worked outside of class to research and prepare materials for Arianna. Her out-of-school assistance occurred primarily between the first and second in-class workshops for the first two projects (informational webpage and hypertext analysis). For the informational webpage, she researched their topic (music during the 60s and 70s) and typed sections of their copy at home, which Arianna edited to "fix any errors" and "put

on the website" the next day during class (Keira, webpage interview; Figure 3). For the hypertext literary analysis, Keira aided by gathering images and music outside of class for Arianna. At the end of the first hypertext literary analysis workshop, Keira asked Arianna what types of pictures she should gather before the next session. She brought in an external drive the following workshop with numerous images that fit the "depressing and dark" images Arianna asked for, as well as several songs she thought connected to the emotions of characters in their chapter.



Figure 3. Keira holds up text she prepared at home for Arianna to enter in their informational webpage.

Both students identified and accepted their roles in the designer and assistant

collaboration. When describing their partnership, Arianna explained that the pair performed tasks

that "played to their strengths":

Well she's [Keira] more adept on the music of that time because that's pretty much all she listens to, so she did all of the most of the research for [the informational webpage] and then I did most of the design for it because I'm better at that stuff than she is. (Arianna, webpage written reflection)

Keira shared that she was "really nervous" working with new technology and was glad to be working with someone who knew the tool: "If I didn't have Arianna it would have been bad" (webpage interview). Like Arianna, Keira also viewed their different compositional roles as an advantage:

I think that anybody working on a website should definitely have a partner, and I think they should not be able to do the same things. They should be able to bring in different things to the table and that way it's not just one way and it's not confusing. I know a lot of people struggled because they picked people who were just like them, and me and Arianna *we are very different, but we are the same*. (webpage interview)

Although they respected each other's roles and strengths when composing, Arianna's skill with technology granted her physical and artistic control over each project. During workshops, particularly at the beginning of the unit, there was minimal interaction between the Arianna and Keira about their designs as they composed. Arianna often worked in silence while Keira learned over the laptop to watch her—infrequently commenting on Arianna's work (e.g., "That looks so cool!") or making connections between her designs and the content (e.g., "The strawberries in this video kinda of connect to the loss of innocence from the war").

Arianna also acknowledged their differences and limited interaction while composing in the written reflection she submitted with their final webpage:

My partner and I were different set of people. We didn't really talk about the project more than an occasional "how does this look?" or "this video or this one?" We more so talked about what we were doing in other classes and how this person or that person was making us angry. We also talked about cats…we're friends and sort of just trusted each other to do what we thought was best. (Arianna, webpage written reflection)

Arianna believed their close friendship and *shared composing "mindset"* allowed for the pair to understand each other without always interacting: "Sometimes we don't have to say our ideas, we just sort of know" (webpage interview). Although unbalanced at times, Keira seem satisfied

with their collaborative arrangement and expressed that "it was amazing" watching Arianna's skill as a designer (hypertext interview).

There was a noticeable increase in collaboration over time across the three multimodal projects—from both a researcher's perspective and by the composers themselves. When working on the final audio letter, a new tool and genre for both students, Keira's voice became integral during the non-technical parts of composing, including brainstorming their concept, helping to write the script, and searching for music. Arianna was more open to asking Keira her opinion (e.g., "Do we want this song or this song?") and following her suggestions. During their voice recordings for the audio letter, Arianna conferred with Keira when she realized their written script for the audio narration was too long and needed to be condensed. The pair worked together to omit text while still maintaining the narrative coherence of their story. Arianna still assumed the role of leader throughout the audio letter process because of her technical skill and artistic vision for the final piece; however, she relied on Keira for ideas and feedback much more than with the first two projects.

Movement Amongst and Between Modes

Arianna and Keira described their multimodal composing process as "chaotic," "sporadic," and "unplanned," yet there were distinct patterns that emerged. The pair created a *visual modal foundation* for the first two projects, followed by an *image-driven modal progression* when building new content. Arianna, who was always in control of the mouse, quickly and dexterously traversed modes and resources while composing, with *increased crossmodal traversals* that crescendoed across workshop sessions. However, there was a new tool and

process for their final audio letter project, which progressed from text to audio recording to image.

Visual entrance and modal foundation. The process for the first two projects was visually-driven and involved an initial stage of *visual brainstorming* through gathering a variety of images online and laying a modal foundation of intensively edited images. The pair began their process for both projects by searching online for images with abstract keywords (e.g., "death," "emotions"), their overarching topic ("Vietnam war"), or specific images they had in mind (e.g., "blood splatter"). Arianna, who took the lead while composing, imported a variety of images from online searches or used pictures Keira gathered outside of class and quickly *visually sampled* all of the effects possible with the composing tool until she achieved her creative vision.

For the informational webpage, Arianna and Keira first focused their attention on the visual design, including the banner, title font, and color of the subheading during the first workshop (Figure 4). They entered the project by visually brainstorming for potential images within the weebly search engine and online (Google images and Flickr) by using the search terms "Woodstock," "Vietnam War," and "Imagine." During this period of formulating the overarching theme for their website, Arianna clicked back and forth between searching for images and watching short segments of a YouTube video they eventually added to their webpage.

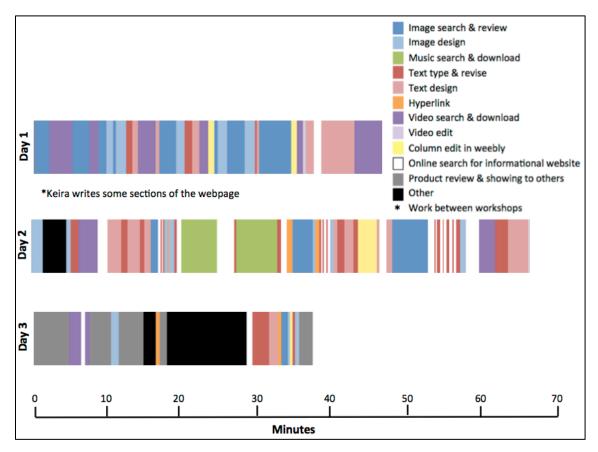


Figure 4. Multimodal composing timescape of Keira and Arianna's in-class process for their informational website. This figure represents their visual entrance into the composing process and increased cross-modal traversals.

Arianna and Keira wanted to "let the pictures and videos speak for themselves" for their informational webpage because they thought "too much [textual] information puts people to sleep" (Arianna, webpage interview). The process of perfecting the look of the webpage banner (Figure 5) consumed nearly half of the time of the first workshop session (24 out of 49 minutes). After images were imported, Arianna sampled every visual editing option available in weebly before achieving her artistic vision while Keira watched on silently. For example, Arianna imported an image with the word 'imagine'—a mosaic memorial to John Lennon located in the Strawberry Fields section of Central Park. She dragged the corner of the picture to reduce the

size so that it encompassed one third of the banner shape. Next, Arianna used the fade effect sliding bar—quickly gliding her mouse back and forth to create various fading intensities. She also placed the effect in different positions on the image (e.g., the right or left upper corner) before settling on a look where the right side of the image faded towards the middle of the banner space. Arianna moved on to searching for "Vietnam war" and imported an image of a battle scene and placed it on the right side of the banner. Employing an identical editing pattern, she re-sized and faded the image, giving the banner a feel of symmetry with a bright fade coming from the middle. She then moved back to the first imagine image and clicked on all of the coloring effects offered by the tool, including 'black and white' and 'polaroid', but ultimately chose the 'antique' effect with 'burnt edges', making the sides of the image look tattered. Arianna followed the same visual sampling pattern with the battle image until ultimately choosing the identical antique effect evocative of the "ancient" time period (Arianna, webpage interview).



Figure 5. The banner image from Arianna and Keira's informational webpage on Vietnam-era music.

After constructing this thematic tension between peace and war, which they viewed as symbolic of music during the Vietnam time period, Arianna tried out several titles before deciding on "Vietnam: A War on Music." Following the similar sequence of visually sampling all of the effects available within weebly, she played with different shadow effects, colors, and glow effects for the title.

The initiation of their process for the hypertext literary analysis followed the same pattern of visually brainstorming through image searches and visually sampling editing effects to create a modal foundation of images. Arianna explained, "at the beginning we were more focused on how it looked because this was a very creative project and so we wanted it to be creative and expressive" (written hypertext reflection).

Image-driven modal progression. In addition to their visual entrance, Arianna and Keira's process for composing the webpage and hypertext literary analysis often involved an embedded *image-driven modal progression* for each time new content was created. Arianna routinely engaged in the compositional pattern when creating the webpage by first searching for an image online, editing its visual effects in weebly, and then adding the accompanying text. Similarly, the creation of new slides for the PowerPoint literary analysis began with a foundation of edited and collaged images, followed by text, and then occasionally music. In fact, all seven PowerPoint slides that were first created during class workshops originated with images.

Increased cross-modal traversal. Arianna and Keira's image-driven modal progression for the webpage and hypertext did not always occur sequentially when building content, but was embedded as they increasingly traversed various modes while composing. These cross-modal traversals were particularly evident with their process for the hypertext literary analysis where their image-driven progression did not occur within one isolated slide at a time or linearly across slides. Rather, slides were created recursively—Arianna "sporadically" went "back and forth" building slides at different stages of the modal progression. As Figure 6 depicts, after mostly focusing on collaging images for the first two days of workshops, Arianna began the third

workshop by uploading a song to PowerPoint Slide 1 and an image collage she had created at home the night before. Next, she continued her work on Slide 4 from the previous session by adding a new image to the collage, editing it, entering a quotation from the book, and visually sampling the font style 22 times, editing the images some more, and finally hyperlinking the slide. Then, Arianna moved on to creating Slide 5 by initiating the image-driven modal progression by adding and editing the background image and then typing and hyperlinking text to Slide 6. Arianna skipped back to Slide 4 to insert music, thus concluding the embedded modal progression for that slide since she had already layered images and text on it. She watched/listened to a possible song option on YouTube while switching back and forth to Slide 5 five times to add and edit text, and then initiated the image-driven modal progression for Slide 7 by inserting and editing a background image. She skipped back to Slide 5 to hyperlink it and then reinitiated the entire modal progression again on Slide 6 by first adding an image, then text, and then music. In summary, Arianna created a total of four slides during the third workshop; however, during this time she recursively traversed across slides and media-working at different stages of the modal progression for each.

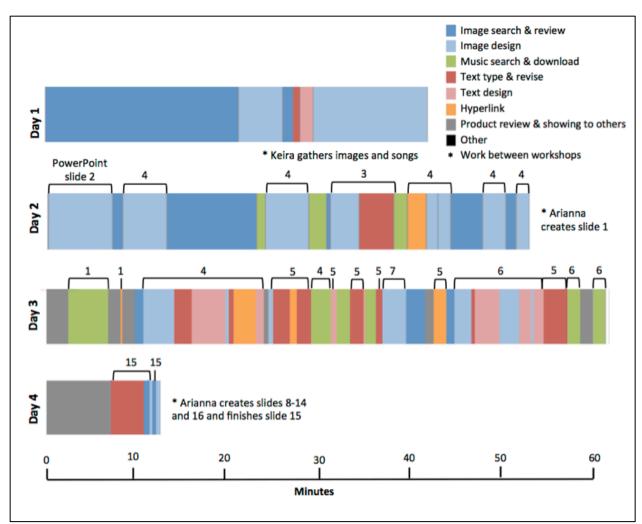


Figure 6. Multimodal composing timescape of Arianna & Keira's in-class process for their hypertext literary analysis. This figure represents their visual entrance, image-driven modal progression, and increased cross-modal traversals.

The frequency and rapidity of cross-modal movement increased with each in-class workshop for the first two projects—peaking at the next to last workshop and then followed by a session of reviewing their final product and editing minor details. Arianna explained her "chaotic and sporadic" process of "going back and forth [across modes and media] a lot" was a compositional strength:

That's one of the best things about how I compose is that I don't focus on one thing for too long...people when they are composing on one thing for too long they get tired of it and they don't go back to it, but since I don't focus on anything for too long, I don't get tired of anything I work on. (hypertext interview)

New tool and process for the audio letter. When composing with a new tool for sound recording and editing (audacity), the process for the audio letter took different shape. Not only did Arianna and Keira collaborate more throughout this project, but also their previous imagedriven process was disrupted. They entered the process by brainstorming verbally, and followed the composing progression of writing their narration script and sound cues first, recording the narration, mixing sounds, and then finding an image last. In addition, Arianna and Keira did not exhibit the same cross-modal traversal as seen with the first two projects, but moved in a more sequenced progression.

Arianna guided their compositional process by beginning with what she perceived to be the most difficult first: "We need to start with the letter because I can do the songs and shit really easy." Arianna quickly typed each letter "snippet" in an epistolary style and format based on the pair's prior brainstorming session (Figure 7), which served as a guiding script for recording the audio narration. Keira leaned over the laptop to watch Arianna's work and occasionally offered suggestions on how to rephrase and make the language sound more realistic for the time period (e.g. "I don't think she would say it like that").

	March 1
	Warch 1
Dear Kiowa,	
Your letter depresses me. The war so	ounds worse than I thought it would be. I can't believe
ound like yourre in a lot of pain. I don't blame	ady talking about dead Charlie and humping around. You you. From what I've heard from Martha, Jimmy says it's hough. That's why you'll make it out. You're strong, God
oves you. I love you.	
	Please be careful. I love you,
	Dahlia
	May 5"
Dear Kiowa,	
	I. I'm thinking of naming her <u>Rozene</u> , after your mother bout Lavender. I know you're hung over that, even if you
don't say it. It hit you harder than you let on, a safe. Don't lose yourself in that place. Please si	nd that's okay. As long as you come home to me, I'll fee tay strong, if not for yourself, then for me.
	I love you

Figure 7. Excerpt from Arianna and Keira's audio letter script.

Once they completed typing the letters, Arianna and Keira searched for and downloaded audio to accompany their letter "snippets" in the same order they were written. Arianna began by searching for songs she was already familiar with in YouTube: "I want to find my audio. I know what song I want for the beginning." She searched "sparrow piano," a melancholic piano instrumental, which she intended to use for the beginning of the letter. Next, the pair worked together to search for "old record" and "1960s music" in YouTube, listening to a few options before deciding on "What the World Needs Now is Love" by Dionne Warwick for their second letter.

The recording process of their audio letter did not traverse modes as with the prior two projects (Figure 8). Rather, they worked within the temporal structure of the written text by recording their narration in the same order and within time boundaries of the pre-mixed music. Throughout their process of recording and mixing the audio letter, reviewing their work and how it sounded with each change was integral for the pair's process. In contrast to their previous processes, Arianna found the image for their audio letter at home as their last step. The process for the audio letter appeared less organic and more organized than the first two projects. There was much more planning involved—from writing out the script first to practicing the voice narration—and each step for finding music and recording the narration was dictated by the pre-arranged structure of the guiding script.

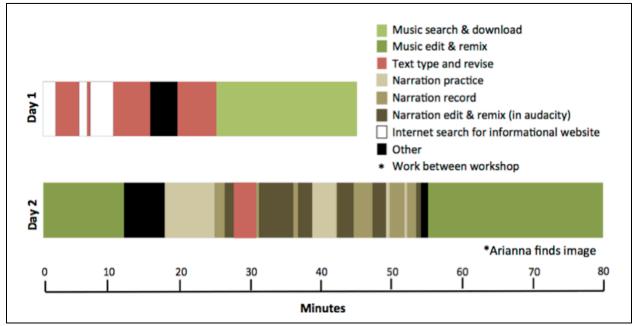


Figure 8. Multimodal composing timescape of Arianna & Keira's in-class process for the audio letter.

Perspectives on Composing Goals and Modal Designs

Students' personal goals overlapped and differed from the instructional goals Mrs.

Buchanan clearly expressed for each multimodal project. Across the three projects, Arianna and

Keira described affective composing goals where they orchestrated modes to cohere and build to

create distinctive thematic multimodal mosaics. In addition, Arianna described interest and

identity composing goals—viewing the projects as a platform for demonstrating her technical skill and creativity to others.

Composing to affect. In their interviews and written reflections, Arianna and Keira separately explained they chose topics, plot lines, and characters to delve into because of personal interest or strong affective responses to the literature. The pair worked to accurately represent the emotions of characters or the tenor of a story or topic. As a result, they wanted their audience to experience the same emotions for themselves. An example of this is when Keira described wanting to see the emotional response in others, especially Mrs. Buchanan, when they heard their audio letter:

We just wanted to kind of make people feel. Make them cry because we wanted it to be sad and powerful...We really wanted her [Mrs. Buchanan] to be proud and we wanted to see what she would actually feel from it. (audio letter interview)

Arianna and Keira worked towards achieving these affective composing goals by integrating visuals and music that represented the emotions of characters. For example, Arianna created striking image collages for the hypertext literary analysis to visually convey the emotional state of a character (Bowker) from the chapter "Notes," who sent a letter to the narrator and ended up committing suicide because "he felt like he couldn't escape the war" (Arianna, hypertext interview). For the opening slide of their analysis (Figure 9), Arianna united plot-specific elements from the novel to abstract and evocative images to create a rich visual analysis of a character's inner turmoil, which also set the thematic tone for the rest of the hypertext analysis. Arianna described collaging "dark," "depressing," and "gruesome" photographs in order to provide a "jumbled" and "chaotic" mood that "conveyed exactly how Bowker was feeling at the point in time when he wrote those letters" (hypertext analysis interview). The collage layered emotionally potent images of a man hunched over in pain with his ribs exposed through his back, an artistic image of a man with typewriter keys on his forehead and words floating in his head, a child's hand reaching upward for an adult's hand, and a pattern indicative of streams of blood. These abstract images were combined with plot-specific visuals including two images of hand-written notes—connecting to the chapter title and how O'Brien communicated with Bowker, as well as images of nooses—connecting to Bowker's suicide. Arianna explained that she also "color drained" the photographs through editing options to bring cohesion and so that a viewer could not "rely on the spark of color to get the emotion," but had "to actually look at the picture and the emotion in the picture" (hypertext analysis interview).

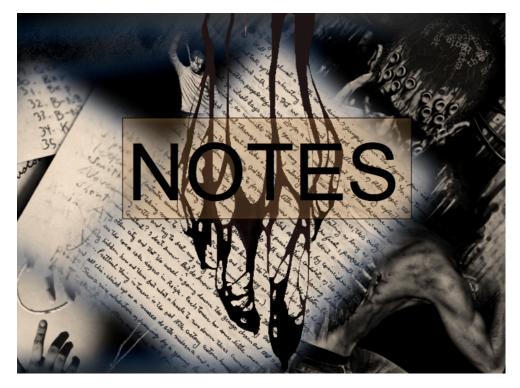


Figure 9. Image collage in the title slide of Arianna and Keira's hypertext literary analysis.

These reoccurring image collages in the hypertext were Arianna's medium of choice for expressing her creativity and the complexity of the emotions she saw the Vietnam soldiers experiencing:

I like doing that [collaging] because I feel that one picture does not speak enough for the emotion that is trying to be conveyed, so that more than one picture sort of, like if one picture speaks a thousand words then four pictures speak a million or something. (audio letter interview)

Composing through interest and identity. As someone who identified herself as technologically savvy and creative, it was important to Arianna that her multimodal projects also stand out as "the best" among her peers (hypertext interview). She used the projects as a platform to showcase her technical expertise and represent herself as a composer. As a result of others seeing her technical skill from the projects, Arianna became a resource for the class during the unit—answering questions and physically helping some students complete tasks. She was even asked to give a mini-lesson to the class on how to change font types and colors using html coding in weebly.

Along with displaying her technical skill, she also wanted to create innovative and artistic multimodal pieces that represented her artistically: "Creativity is just something that I do. It's really just a part of me" (audio letter interview). Her highly edited images, image collages, and creative layering of sound served as a conduit for expressing her aptitude as a designer. After a class gallery walk where students could look at their peers' in-process work, Arianna's collaging techniques were commended and several students attempted the same visual effect with their own projects. Throughout the unit, Arianna was eager to show her work to Mrs. Buchanan and peers and often emphasized that multimodal projects were "easy" for her because of her creative and technical background.

Composing for modal cohesion and content complementarity. When building upon their modal foundation, Arianna and Keira described integrating complementary (Unsworth, 2008) modes to "go with" the primary thematic or affective connection to the content. In these *thematic multimodal mosaics*, modes, media, and content dynamically and synergistically interacted to create complex interpretive spaces—requiring their audience to bring together various pieces of information and modes to construct meaning.

Thematic multimodal mosaics. In their interviews and written reflections, Arianna and Keira described choosing and orchestrating modes so that they connected to the undergirding emotion or theme of their composition. They chose complementary visuals, text, and sound to generatively align at an abstract level.

An example of their use of modes to generate a thematic multimodal mosaic is illustrated in their hypertext literary analysis, which analyzed the chapter "Notes" form *The Things They Carried.* Indicative of their composing process, the pair first devoted considerable time to constructing a modal foundation with a visual collage comprised of plot-specific (e.g., letter written in Vietnamese, a soiled envelop, picture of Vietnam soldiers from the movie *Apocalypse Now*) and abstract images (e.g., bloody hand being held back by another hand, artistic representation of eyes). Next they added a quote connected to the theme of their collage, "you separate it from yourself..." The pair accompanied the slide with alternative metal music that also had "a lot of pain and kind of tormented sound to it" (Keira, hypertext analysis interview). When searching online for a song to include that complemented the theme of their image collage and thematic quote, Arianna and Keira shared a pair of ear buds and watched/listened to versions of music videos by Tool, an alternative metal band, on YouTube that displayed the scrolling lyrics as they were sung. After each viewing, they discussed why they thought certain songs

matched their analysis. For example, Arianna described to Keira the connection she saw between

Tool's "Vicarious" and Bowker's experience:

I say we use this song on this slide because "Vicarious" is talking about living through someone else and not having to do it yourself. If you *separate it from yourself* then you're living vicariously. (emphasis added)



Figure 10. An example of a multimodal thematic mosaic in Arianna and Keira's hypertext literary analysis created with complementary images, text, and music.

Arianna connected the song lyrics and title to Bowker's experience and the exact quote on their PowerPoint slide. In an interview she emphasized they "wanted to be extremely sure the lyrics went with" their analysis: "We chose those songs specifically because the lyrics fit with the purpose of the passage or the slide. Thy lyrics themselves spoke stories of war and of times of chaos" (hypertext interview). Together, the collage, text, and song lyrics interacted to convey Bowker's emotions—creating a multidimensional and coherent multimodal message. Thematic multimodal collages were also created with the audio letter where they assembled complementary narrative "snippets" and layered multiple voices, songs clips, sound effects, and an image to tell their story. These modes did not merely "match," built they built to create a complex and emotional story. They also used complementary modes with their informational webpage where images, video, and text all cohered, but also added new information that contributed to the overall "feel" of the website.

Discussion

Arianna and Keira's case reveals significant similarities and differences in their multimodal composing process across the three projects. Throughout the unit, there were overarching parallels in their affective composing goals, ways of layering modes to connect to content, and overall collaborative structure. However, there were also some important differences in their processes between the first two projects and the audio letter, particularly in their use of modes and interactions.

As made evident in this case, advanced skill and interest with technology provided a great deal of power when students composed multimodally. In controlling the mouse, Arianna not only physically constructed each project, but it was mostly her modal preferences and artistic vision that were expressed in the final projects. Because of Arianna's technical expertise and confidence as a composer, Keira was relegated to an assisting role, which she gladly accepted since she felt inexperienced with the tools.

The first two projects provided *open and flexible composing spaces*—where modes could be layered and arranged in endless ways—that allowed the pair to visually enter the process and build content through an image-driven modal progression. The processes for the webpage and

hypertext analysis also shared likenesses in how images were use to create a modal foundation and Arianna increasingly traversed across modes. With these two projects, Arianna's *modal preference* for using images—not only as a basis for building content, but also serving as the main mode of communication—came to the surface. Arianna explained that she preferred to communicate with images rather than words:

I really understand things through pictures more than I do through words. I can look at something and get it immediately. This [collaging images] helped me sort of put exactly how I was feeling about the passage into words. (hypertext interview)

These patterns in their composing process for the first two projects were disrupted when creating the audio letter, which offered less modal interaction and flexibility. For the audio letter, the pair worked with text, sound, and image in *discrete composing spaces*—bringing them all together in the end. Instead of images carrying the narrative weight, their process became inverted with text and voice narration serving as the modal foundation with an image found last. In addition, Arianna exhibited far less confidence as a composer when forced to primarily work with text and sound instead of her visual modal preference. While she recorded her voice for the main narration, she asked Keira and another peer to turn off all of the lights and stand outside the door of the designated recording room, warning them by saying, "don't look at me!" Arianna explained in an interview that she "didn't like the way [her voice] sounded" because she "stumbled over [her] words" (audio interview). This rare insecurity from working with her non-preferred modes and a new tool also opened Arianna up to receiving feedback from Keira more than with the prior two projects.

There were also similarities in how they connected modes to content and in their composing goals despite different tools and assignments. The pair viewed working with multiple modes as an opportunity to connect with their personal reactions to the novel, convey distinct

tones and emotions, and affect a wider audience. They worked towards achieving these affective composing goals by building thematic mosaics where separate modes and pieces of information synergistically created complex interpretive spaces. This use of complementary modes— abstractly connecting to overarching themes and feelings and concretely connecting to plot-specific details—created a rich multimodal experience for viewers. Lastly, Arianna was able to express herself as a composer and showcase her creativity and technical expertise while simultaneously working to emotionally move her audience and meeting the larger instructional goals.

Vivian and Caitlyn: Writers and Scholars



Figure 11. Vivian (left) and Caitlyn (right) collaborating during an in-class workshop.

Friends in and out of school, Vivian (17) and Caitlyn (18) shared many similarities academically and in their lived experiences. Both students were English Language Learners who emigrated from Africa as children—Caitlyn moved from Nigeria when she was 4, and Vivian from Kenya when she was 10—and primarily spoke their native languages at home. Both students enjoyed to be "active in school," and were members of the track team, various extracurricular clubs, and the National Honors Society (Caitlyn, webpage interview). Mrs. Buchanan described Vivian and Caitlyn as "highly motivated" students who were driven to excel academically. In fact, Vivian was the Valedictorian for the senior class and was defined by Mrs. Buchanan as a "very competitive and opinionated" student who was "dominant in class discussions" (teacher interview #2).

Caitlyn and Vivian's similarities also extended to their use of technology outside of school, which primarily centered on connecting with friends via Facebook, email, and twitter, or

for writing school papers. In class, they exhibited limited proficiency working with technological programs such as Word, PowerPoint, and Audacity and neither described using technology creatively for their own purposes at home. Instead, Caitlyn explained that she enjoyed "writing her feelings" and "making stuff by hand" including picture collages and scrapbooks because she "could touch" what she was working with (webpage interview). She had limited access to a computer at home, which did not possess some of the programs she needed for school (e.g., PowerPoint), so she often worked on computers in the library during lunch of after school.

Together, Vivian and Caitlyn created two projects in response to *The Things They Carried*: A website on "The Aftermath" of the Vietnam War (Appendix R) and a literary analysis hypertext focusing on the chapter, "How to Tell a True War Story" (Appendix U). Caitlyn worked alone for the final audio letter project because Vivian was out of town during the in-class workshops (Appendix X).

As depicted in the following case, several compositional patterns emerged from their work across the three multimodal projects. For the first two projects, Vivian and Caitlyn collaborated closely in class by reading aloud to one another, synthesizing information, editing the phrasing of the written text, and discussing design choices. It was crucial for them to first gain an understanding of the assignment, tools, and content before they began composing. Across all three multimodal projects, the majority of in-class attention was devoted to building a textual modal foundation for their work first before layering images or sound that complemented their leading textual mode. As such, text (or voice narration read from text) was often the primary communicative mode for their projects; however, they layered images and sound in a variety of ways to match text, provide a sensory experience, and create thematic multimodal

mosaics. These compositional patterns, with illustrative examples, will be described in the following section along with a discussion of their multimodal composing processes.

Balanced Divide and Conquer Collaboration

Vivian and Caitlyn strategically divided the first two projects based on their interests and knowledge and collaborated to integrate and revise their work. This *balanced divide and conquer* collaborative style also involved them reconvening throughout their process to read aloud to one another, synthesize information, edit the phrasing of written text, and discuss design decisions. Control over the computer was equally shared as they took turns with who typed and guided the mouse. With both students contributing equally, it was crucial for them to work together to first gain an understanding of the assignment, tools, and content before they began composing and to continuously work together throughout the process.

An example of their close cooperation was illustrated during the first in-class workshop for their informational website; Caitlyn and Vivian worked together to gather as much information as they could on their topic ("Aftermath of Vietnam War") from online resources and those around them. They began by searching the exact title of their subject in the Library of Congress research database. From perusing the search results, they acquired leads for possible subtopics to follow and revisited the assignment sheet. Taking turns, Vivian and Caitlyn reviewed the goals and expectations by reading sections of the assignment sheet aloud to one another. In addition, they verbally synthesized the informational websites they read aloud and brainstormed new directions for their search. For example, they discussed the topic of "hippies" when they read the group was associated with the anti-war movement:

Caitlyn:	It [Vietnam] affected movies and like hippies.
Vivian:	What are really hippies? Like?
Caitlyn:	Hippies are people who wanted no more war.
Vivian:	And it started during the Vietnam War?

Next, Caitlyn took control of the computer and Googled "Hippies + Vietnam War" and read relevant sections from the website aloud to Vivian. After discovering that protest music was associated with the hippie movement, Caitlyn asked Paul, a peer sitting next to them and the class' resident "sound guy," about possible ways music was connected to "the aftermath" of the Vietnam War. They also sought clarification by trying to define their topic with those around them, including Paul and Mrs. Buchanan:

Vivian:	So lasting aftermath, which means that it's something still going on now?
Caitlyn:	Or like five years ago after the Vietnam War or maybe two years ago after the Vietnam war. That would be the aftermath.
Paul:	You want to talk about how it affected, specifically like, you could take (inaudible) for example because he was part of the whole anti-war movement.
Caitlyn (to Mr	s. Buchanan): So Mrs. Buchanan for the lasting aftermath thing, do you want something that's still going on now or like something that was going on then and it's still affecting us now?

Mrs. Buchanan informed the pair that their topic was "pretty open-ended" and that researching Agent Orange might be a fruitful topic because it had lasting effects for the Vietnamese. For the remainder of the workshop, the pair visited numerous websites—taking turns reading aloud while the other took notes by hand (Figure 12). They worked together throughout their composing process to synthesize information, brainstorm images and videos for each subsection, refer to the expectations of the assignment sheet, and ask Mrs. Buchanan clarifying questions.



Figure 12. At the beginning of their process, Vivian reads aloud from an informational webpage while Caitlyn writes notes by hand.

Even though Vivian and Caitlyn remained focused—working side-by-side during in-class workshops—outside of class they strategically divided up their work both by content and media. Leveraging their individual strengths, Caitlyn explained how they assigned the different subtopics of their webpage:

We just divided [the webpage] based on what we could explain more of. Like, Vivian is really good at explaining about government. I'm really good about explaining social society and entertainment and that's basically how we divided it. (webpage interview)

They also separated design tasks for the webpage; Caitlyn explained that she "was in charge of choosing the color scheme, images, videos, and song" and "Vivian was in charge of putting the text and pictures on the actual page" (webpage interview). Similar to their weebly process, Vivian and Caitlyn distributed their workload for the hypertext analysis in half and wrote their sections (six PowerPoint slides each) outside of school before working on other aspects of their analysis.

Their close collaboration of discussing ideas, problem solving, and dividing tasks was crucial for completing the first two multimodal projects. Vivian and Caitlyn relied on each other to gain an understanding of the assignment, topic, and tools and gave each other feedback throughout each stage of their process. When integrating their text, the pair worked meticulously to wordsmith and ensure their writing "made sense." They read the written section aloud numerous times, discussing word choice and grammar (e.g., "you can not finish with 'of' because that's a preposition"), and elaborating on each other's prose by adding details.

The importance of their collaboration was especially evident when Caitlyn chose to work by herself on the final audio letter because Vivian was out of town. Caitlyn struggled throughout the process and felt that "she didn't do her best" and enjoyed the project the least. She expressed in her written reflection that her audio letter "didn't have enough emotion behind it" and she felt "the outcome would have been totally different" if she would have received "more input on her writing" during the early stages of her process (audio letter reflection). Caitlyn believed that she and Vivian "worked really well with each other" for the first two projects because they were "really good friends" and had the ability to consider one another's ideas and "agree to disagree" (webpage interview).

Movement Amongst and Between Modes

Vivian and Caitlyn's multimodal composing processes across the three projects centered on building a *textual modal foundation* first before incorporating supporting images, sounds, or movement. Although text was created first and served as the leading communicative mode, they exhibited increased cross-modal traversals throughout the composing process.

Textual entrance and modal foundation. Vivian and Caitlyn's first steps of physically creating their projects began with a textual modal foundation. For the webpage, the pair wrote the entirety of their sections at home between the first and second workshops before incorporating photographs, videos, and music that accompanied their text (Figure 13).

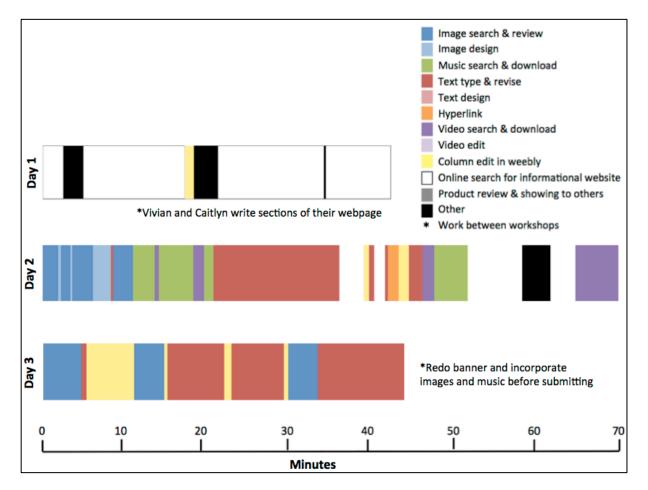
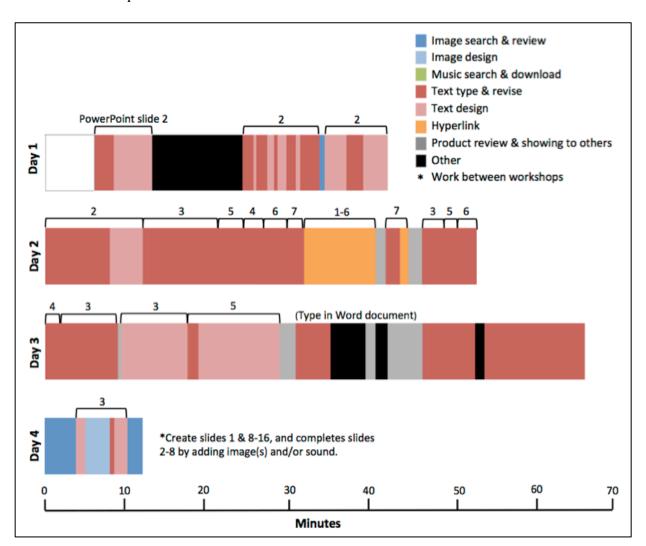


Figure 13. Multimodal composing timescape of Vivian and Caitlyn's in-class process for their informational website. This figure illustrates the their textual entrance and increased cross-modal traversals.

Vivian and Caitlyn exhibited a similar textual entrance into the composing process for their hypertext analysis of the chapter "How to Tell a True War Story" (Figure 14). They dedicated the first three days of in-class workshops to writing—creating a hyperlinked menu, integrating quotations, and entering their written analysis into PowerPoint. It was not until the



last day of workshops, which was only 13 minutes long, that they began to layer the visual and aural modes on top of their written foundation.

Figure 14. Multimodal composing timescape of Vivian and Caitlyn's in-class process for their hypertext literary analysis. This figure illustrates their textual entrance and increased cross-modal traversal on the last workshop day.

Caitlyn, who worked alone while creating the audio letter, began her process (Figure 15) by "first writing" her letter by hand before recording her voice, finding accompanying music online, and then mixing her sounds so that they "went together" (audio letter interview).

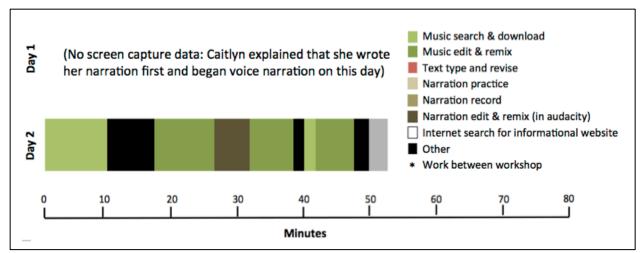


Figure 15. Multimodal composing timescape of Caitlyn's in-class process for the audio letter.

Text (or voice narration derived from text) was not only the first mode they attended to in their process, but it was also the main communicative mode across all three multimodal projects. Vivian and Caitlyn's webpage and hypertext were dense with written explanations and analysis and the narrative was the leading conveying of information for the audio letter. The pair believed it was crucial for them to write first so that they knew how to "put modes on" their textual foundation:

What we did first was try to get the text in because we needed to know like how to pick the pictures and what to pick and like the music and all of that. So first we looked at what we needed to write down, and then after we chose that we went and looked for images and music and everything. (Vivian, webpage interview)

Text served as the rhetorical basis for which other modes were chosen. Caitlyn also explained that after writing their description, analysis, or narrative that it was easier for them to "know what types of designs [they] wanted to do" (hypertext interview).

Increased cross-modal traversal. As illuminated in the multimodal composing timescapes for the first two projects (Figures 13 & 14). Vivian and Caitlyn increasingly traversed across different modes throughout the in-class workshops. The pair felt comfortable searching for a variety of images, movies, and music to accompany their written foundation on

the second and third day of workshops for the informational website. On the last workshop for the hypertext literary analysis, Vivian and Caitlyn crisscrossed between image and text. This cross-modal movement was not exhibited with Caitlyn's audio letter process.

In the time between the last in-class workshop to the day when the final projects were due (usually occurring after a weekend) is when much of Vivian and Caitlyn's work with non-textual modes occurred. The pair changed the look of their website banner and included many more photographs and embedded slideshows after the last workshop. Both composers explained that Caitlyn found numerous photographs at home and emailed them to Vivian, who put them on the weebly and organized the overall look of the webpage. Similarly, Vivian and Caitlyn's final hypertext analysis involved considerable work outside of class, particularly adding visuals and music.

Perspectives on Composing Goals and Modal Designs

The pair expressed two main composing goals across the multimodal projects—the desire to make their audience "feel" and to "grab their attention." They built upon their modal foundation of text in a variety of ways to support their message to modally match, thematically connect, and provide a sensory experience.

Composing to affect. Vivian and Caitlyn choose storylines and characters with which they felt an emotional connection and wanted to represent those affective reactions to others to also make them "feel" (Vivian, hypertext interview). Separately in interviews and written reflections, they explained they picked their chapter for the hypertext literary analysis because of their emotional reactions while reading. Caitlyn described the chapter as "the most heartfelt" of the book, and Vivian said she was drawn to the "really vivid" story because of the multitude of

emotions she experienced while reading it, which she wanted to convey to others (hypertext interview):

First of all you feel pity for the soldiers because they don't want to be there, but they have to fight. And then you feel crazy because of what's happening there...and it's like sometimes you feel happy because they are having fun, but then you feel bad again. It's just like up and down...*I wanted to make the audience feel what I felt when I was reading that*. Yeah, that was my major thing. (hypertext analysis interview)

Working alone on the audio letter, Caitlyn had a similar *affective composing goal* in mind when she expanded on a minor plot point from the same chapter they analyzed for the hypertext analysis. Written from Susan's perspective, a character only briefly mentioned in *The Things They Carried*, Caitlyn developed this peripheral perspective of the story to provide a sense resolution and "to write something that gave Susan's personal feelings" (audio letter interview). Along with constructing a heartfelt narrative, Caitlyn purposefully used music and her voice to emphasize the emotional apex of the letter (Appendix X). Caitlyn described that she changed the intonation in her voice to reflect the emotional state of Susan and chose music that had a similar "melancholic tone" to both her voice and the letter's content: "In my voice I was just trying to make it sound like a little bit of hurt, but also sounds like she's at a stage of forgiveness" (audio letter reflection). Attention was also given to aligning the music to Susan's message so that the "high C" of the piano hit at simultaneously with the emotional crescendo of the letter. In her written reflection for the assignment, Caitlyn explained:

[W]hen she [Alicia Keys] hits the high "C" on the piano key, it corresponded very well with when I said "I hated you," in my audio letter. Before I begun editing my audio letter with the background music, I already knew that's where I wanted the high "C" to hit. This is why I left the music play out for about 15 seconds before I began speaking...Towards the end of the audio, I wanted to step out of the denial stage of lamenting and have her realize that her brother is gone now, that is why the tempo of the audio started going a little faster toward the end. (audio letter written reflection)

The pair chose images and music to align with the emotions they described in their dense text or

voice narration.

Composing for audience experience. In tandem with having others experience their affective reactions to the novel, the pair also designed their projects to be "creative" and "not boring" for their viewer. This attention to audience experience involved choosing colors, images, and animations that were "eye catching" even if they did not see these elements contributing to the substantive meaning to their works:

We wanted to go for a clean look, something really nice and *something that really pops out*, that's why we have like lime green text cuz when you come into our weebly you can see it. We didn't really have much meaning behind our banner...we just liked how it looked, so that's why we put it together. (Caitlyn, website interview)

Echoing a similar design perspective, Vivian provided the following advice for other students when creating a webpage:

My advice is to put a lot of pictures. Make it a way so it can attract the person that you want it to see your webpage. Make it a way where people won't get bored. Make it look nice and pretty. (webpage interview)

To achieve this *audience experience composing goal*, the pair worked to make their projects aesthetically pleasing by "color coordinating" (Vivian, webpage interview) and incorporating images, fonts, colors, and animations they liked with a "cool" effect (Caitlyn, hypertext interview).

Composing for modal cohesion and content complementarity. Vivian and Caitlyn

built upon their modal foundation in a few ways by choosing images and sounds to "go with" their written text (hypertext interviews). In some cases, they *modally matched* text by using a visual or aural representation that directly mapped onto the written content. In other instances, they chose complementary modes (Unsworth, 2006) to create a *thematic multimodal mosaic*.

Modal matching. At the most basic level, photographs and sounds rhetorically matched the textual content. These instances of modal matching ranged from including an image of

Vietnamese children who were burned by Agent Orange next to a description of the chemical's destruction during Vietnam to displaying side-by-side images of a baby water buffalo and a soldier aiming a rifle on a hypertext slide when analyzing a passage from *The Things They Carried* about a character shooting a baby water buffalo. In these examples of modal concurrence (Unsworth, 2008), the visual repeated what was represented textually.

Modal matching was most prominent in Caitlyn's sections of the webpage and her hypertext analysis slides (Figure 16). For example, after Caitlyn typed an excerpt from her chapter focusing on a letter a soldier (Rat) sent to the sister (Susan) of a deceased comrade, which was the same letter she based her audio letter on, she Googled "Images of Letters," "letters," "letter collage," and "make letter collage" to find a background for her PowerPoint slide. Caitlyn described ultimately choosing an image of a postcard, which modally matched the excerpt—the image did not contribute new information to the composition, but reinforced the importance of the unanswered letter.

This is true.
I had a buddy in Vietnam. His name was Bob Kiley, but everyone called him Rat.
A friend of his gets killed, so about a week later Rat sits down and writes a letter to the guy's sister. Rat tells her what
a great brother she had, how together the guy was, a number one pal and comrade. A real soldier's soldier, Rat says. Then he tells
a few stories to make the point, how her brother would always volunteer for stuff nobody else would volunteer for in a million years, dangerous stuff, like doing recon or going out on these really badass night patrols. Stainless steel balls, Rat tells her, the guy was
dangerous stain, ince doing record or going out on these reany backs single parols, coamines siteer bans, real tens rei, the guy was
man against gook. A great, great guy, Rat says.
Anyway, it's a terrific letter, very personal and touching. Rat always writing it. He gets all teary telling about the
good times they had together, how her brother made the war seem almost fundativays raising hell and lighting up villes and
bringing smoke to bear every which way. A great sense of humor, too. Like the time at this river when he went fishing with a whole
damn crate of hand grenades. Probably the funniest thing in world history, rat says, set that gore, about twenty zillion dead gook fish. Her brother, he has the right attitude. he knew how to have a good time. On Halloween, this real hot spooky night, the dude
paints his body all different colors and puts on this weird mask and hikes over to a ville and goes trick-or-treating almost stark
naked, just boot and balls and an M-16.
A tremendous human being, rat says. Pretty nutso sometimes, but you could trust him with your life.
And then the letter gets very sad and serious. Rat pours his heart out. He says he loved the guy. He says the guy
was his best friend in the world. They were like soul mates, he says, like twins or something; they had a whole lot in common. He tells the auv's sister he'll look her up when the war's over
So what happens?
Rat mails the letter. He waits two months. The dumb cooze never writes back.

He's nineteen years old- it's too much for him- so he looks at you with those big sad killer eyes and says cooze, because his friend his dead, and because it's so incredibly sad and true; she never wrote back.
BACK
DACK

Figure 16. Modal matching between image and text in Caitlyn's hypertext literary analysis slide.

Multimodal thematic mosaic. Caitlyn and Vivian also created thematic mosaics where multiple modes cohered at a more abstract level. Particularly evident in their webpage and certain hypertext slides, visuals and sound provided "meanings additional to and consistent with" text to create generative yet cohesive multimodal compositions (Unsworth, 2006, p. 40). The examples of multimodal thematic mosaics in the pair's hypertext literary analysis connected to themes of love, perception, and truth in storytelling. One of the most striking came from a slide Vivian created where she used images to enhance the following poignant quote from their chapter:

Rights spills over into wrong. Order blends into chaos, love into hate, ugliness into beauty, law into savagery. The vapors suck you in, you can't tell where you, where you are or why you're there, and the only certainty is ambiguity. (O'Brien, year, p.86)



Figure 17. An example of a multimodal thematic mosaic created by Vivian for one of her hypertext analysis slides.

Inspired by seeing Arianna's collages, Vivian layered three "surreal" images that thematically connected to the idea of elements "spill[ing] over" into each other and one's perception being challenged (hypertext analysis interview). Curiously, she also placed a picture of a machine gun centrally where all of the images converged in the middle of the PowerPoint slide. Vivian explained that she liked the ambiguity in the pictures and "not being able to tell" what they represented, which emphasized the central theme of the quotation (hypertext analysis interview).

Composing to create a multimodal sensory experiences. Multiple modes were also used to develop a multisensory experience that were indicative of the novel's context or experiences of characters. This intersemiotic effect was achieved through the incorporation of plot-specific sights and sounds that transported an audience into O'Brien's narrative world by experiencing them for themselves.

Vivian created a multimodal sensory experience in one of her literary analysis slides by connecting to the "spooky" sights and sounds soldiers experienced in a scene from their chapter. Indicative of their composing process, she first laid a textual modal foundation with her analysis of the phrase "just listen." Next, she layered a background image of a landscape that was "calm, spooky, and dark," which related to what characters saw in her chapter (audio letter interview). Then, she incorporated a "mash up" aural effect by adding two songs pre-set to play simultaneously—one was Édith Piaf's 1960s rendition of "Non, Je Ne Regrette Rien" ("No, I Don't Regret Anything"), a French song Vivian heard in the Movie *Inception* (2010), and the other an Asian-inspired instrumental of calming stringed instruments—to mimic "the weird mixture of music" that patrol officers heard (hypertext interview).

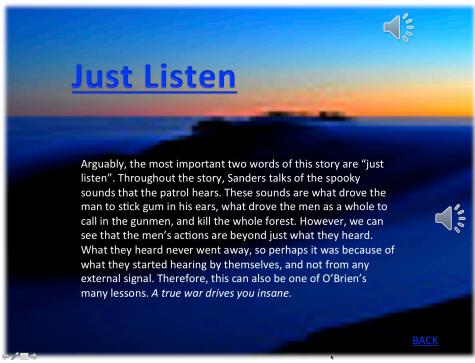


Figure 18. An example of a multimodal sensory experience created by Vivian for one of her hypertext analysis slides.

These examples from the hypertext analysis created a multimodal sensory experience by recreating diegetic sights and sounds from the novel, so the audience could "feel the same thing" as characters (Vivian, hypertext interview).

Discussion

Caitlyn and Vivian's multimodal composing experience reflects a fairly balanced and interdependent collaborative style, as well as an emphasis on text as the modal foundation for their projects. Not only did they want to communicate emotional affect through their projects, but they also were attuned to what their audience would aesthetically enjoy and be interested in. They described different levels of having modes cohere to their textual foundation—tightly through modal matching and at a more thematic level. Caitlyn and Vivian also invited their audience into the narrative world of the novel by integrating diegetic sights and sounds to create a sensory experience.

This case demonstrates that when composers possess the same limited skill with technology, power relationships may be equalized and the division of labor is based on interest and background knowledge. During their balanced divide and conquer collaboration, the pair alternated who was in control of the mouse and closely collaborated on all elements of their projects. As non-native English speakers, their tendency to orally read class materials and websites aloud to one another and work closely to fully understand the assignment, content, and tools demonstrated how crucial collaboration was for their success.

The pair was able to leverage their *modal preference* for text across all three multimodal projects despite differing assignments and tools—demonstrating the versatility of the textual mode. Furthermore, this case shows that students might have initial tendencies for how they orchestrate modes. Caitlyn preferred to modally match images and sounds to text at a basic level. However, through her collaboration with Vivian—who was inclined to create thematic mosaics and sensory experiences—Caitlyn learned that multiple modes could do more rhetorically than just repeat text. For the third project, Caitlyn described the advanced ways she altered her voice and mixed music to accentuate the emotional aspect of her narration.

Caitlyn and Vivian's modal preference for text was indicative of their value in and skill with traditional academic writing. They shared an immigrant experience, each having moved to the US from Africa as children. Excelling academically was important to them and they were recognized for their scholarly achievements at the school. Vivian, the class Valedictorian, viewed herself as "not a very creative person," and described the three multimodal products as "the most creative" she had "ever done in [her] life. She confessed that working with multiple

modes involved "way more brain power" than writing a traditional essay (audio letter interview). Caitlyn's creativity was also stretched during the unit. When asked which she preferred—a multimodal hypertext analysis or a written literary analysis—she responded by saying: "It's harder to do a multimode piece because I like to kind of explain myself, so I'd do a written piece because there is not one image that you can express yourself with" (hypertext interview). However, Caitlyn explained that there was an ultimate payoff for her struggles: "in the end, this project taught me that it's possible, and made me very proud of myself to know that I can do it" (hypertext interview).

In summary, Vivian and Caitlyn's case illustrates how they were able to leverage their textual modal preferences across the three multimodal projects for the *The Things They Carried* unit. However, even though both students were most comfortable with writing, they were still able to use multiple modes in effective, versatile, and nuanced ways.



DeShawn and Calvin: Interest-Driven Entertainers

Figure 19. DeShawn (left) and Calvin (right) record narration for their audio letter.

DeShawn (17, African American) and Calvin (18, African American) grew up together and were teammates since the fifth grade. They were popular students who were heavily involved with sports and well liked among peers. Mrs. Buchanan explained that sports and social life were a "top priority" for the pair, who did not fit the mold of a typical AP student because "their writing [was] not as refined" as their classmates and they often "rushed through projects" (teacher interview #2).

Mrs. Buchanan viewed DeShawn as a "bright and insightful student," who had the keen ability to make predictions and contributions in class discussions that "cut right through the heart of the matter." She also recognized that both students "were willing to work hard when interested in the topic" (teacher interview #1). Calvin and DeShawn's description of their interest in the AP Literature and Composition course echoed Mrs. Buchanan's insights—DeShawn felt "limited" by school writing and Calvin explained, "If I can write about whatever I want to write about, I like to write" (website interviews).

Outside of school, DeShawn and Calvin were avid video gamers whose technology use centered primarily on socializing and working on school projects (e.g., typing a paper or creating a PowerPoint). However, DeShawn divulged that he loved to write poetry about his emotions and past relationships during his free time. He explained, "my drug is writing poetry," which served as an outlet for him to "get away from everything" (webpage interview).

The teens viewed their multimodal composing processes as improvisational—an "unplanned" "flow" where ideas spontaneously originated "off the top of [their] heads" (DeShawn, hypertext interview). Calvin said that the pair tried their "hardest to make what's in [their] head come out" through their projects (audio letter interview). Often, their first points of entry into multimodal project were connections to popular culture, including video games, movies, anime, rap and R&B music.

The pair created three projects in response to *The Things They Carried*, a website on Vietnam Weapons and War Tactics (Appendix S), a literary analysis hypertext focusing on the chapter, "In The Field," (Appendix V) and an audio letter from one of the main characters (Kiowa) to his father before his death (Appendix Y).

As depicted in the following case, overarching compositional patterns emerged from their work across the three multimodal projects. First, DeShawn and Calvin adapted their collaborations based on their interests and content knowledge for each project. They switched back and forth with taking the lead, often distributed separate tasks, and yet consistently reconvening to closely collaborate. Second, their process for the first two projects was imagedriven and involved the swift traversal of modes. However, their process for the final audio letter

took different shape as they progressed from verbally brainstorming, recording audio narration, searching for music, and finding an image. Third, Calvin and DeShawn focused on making their multimodal projects "entertaining" and worked to connect to the emotions of characters. They often leveraged their out-of-school interests in video games and pop culture when composing. These compositional patterns, including illustrative examples, will be described in the following section along with a discussion.

Alternating Lead Collaboration

DeShawn and Calvin adapted their collaborative style of alternating who took the lead based on their interests and understanding of the content. The teens often separated subsections for their projects—weaving in-and-out between working alone and closely collaborating.

This *alternating lead collaboration* was evident with the informational webpage where the pair distributed tasks and subsections "50/50" (Calvin, webpage interview), yet regularly reunited to discuss and finalize the written content, design decision, and media integration. Calvin explained that they picked subsections of their website, which focused on "Vietnam Weapons and War Tactics," based on what they "were interested in"—he was drawn to war tactics and DeShawn "was really interested in the pistols and guns and stuff" (webpage interview). For the second webpage workshop, the pair came to class with text prepared for their individual sections (Calvin' iPod and DeShawn's iPhone) and alternated between whose content was entered into the weebly. Calvin entered his section of text on the laptop first while DeShawn multitasked between periodically commenting on Calvin' work and searching for a video on his smart phone to include. Next, DeShawn dictated his part on weaponry from the notes on his phone while Calvin typed (Figure 20).



Figure 20. DeShawn dictates the text he prepared for his section of the webpage from his iPhone to Calvin while he types.

Along with dividing tasks and sections within a project, the pair also switched who took the lead for each overall assignment. DeShawn directed the webpage and final audio letter, which included coordinating voice recording, brainstorming letter content, and ultimately choosing their background music. Calvin stepped forward for the hypertext analysis because he was more familiar with their chapter and was forced to work alone during a critical in-class workshop when DeShawn was absent. As time progressed throughout the unit, DeShawn and Calvin made their separate contributions less pronounced and discrete—each organically took up different aspects of the project to focus on and contribute while still remaining engaged in the overall process.

The pair's natural and seamless distribution of tasks and ability to convene while also focusing on their own work stemmed from their friendship and *shared composing mindset* (audio letter interviews). Calvin and DeShawn grew up together and exhibited a brotherly relationship while composing—arguing, "goofing around," and talking about "sports and girls" (DeShawn hypertext interview). Often randomly rapping a few lines while they worked, DeShawn played hip hop and rap music during most workshops on his headphones with the volume loud enough for both to hear. DeShawn acknowledged that the pair might have looked unproductive and offtask at time, but that their collaborative style worked because of their shared composing mindset:

When me and Calvin work together, it's kind of like getting two friends who you feel like they don't need to be working together because they won't get anything done, but when you get them together it's like you need those two together. They cannot work with nobody else...Mrs. Buchanan probably didn't want us working together, but she knew that with the topic we had we needed to work together because it came out like this. I mean this [webpage] is probably one of the best projects we've done together in awhile. As far as us getting along and stuff, *he has the same mindset as me*, just get information and just get it done...He wants to make his grade and get an A and that's why I feel like we work well together because we had the same mindset. (webpage interview, emphasis added)

Calvin expressed a similar sentiment that the pair often "got on each other's nerves" since they were so close, but that they "both had good ideas" and "just work well together" (webpage interview).

Movement Amongst and Between Modes

Although DeShawn and Calvin viewed their multimodal composing processes as improvisational and unplanned, there were distinct patterns that emerged across projects. For the first two multimodal assignments (informational webpage and hypertext literary analysis), they exhibited and described a *visual modal preference* where they entered the process visually and followed an *image-driven modal progression* for building new content. However, the third project followed a different audio-production process.

Visual entrance and modal foundation. Calvin and DeShawn's process for the webpage and hypertext analysis was visually driven and involved an initial stage of gathering images through online searches followed by the integration of other modes (e.g., text, music,

videos). During this collecting phase, which Calvin described as "brainstorming," the pair downloaded a variety of image options to select from when they began the actual construction of their projects.

As depicted in the multimodal composing timescape (Figure 21), DeShawn and Calvin devoted almost the entirety of the first workshop session on the visual design of their webpage's banner (Figure 22). With DeShawn in control of the mouse, their visual entrance into the composing process began by Googling the terms "barbed wire fence images," "bloody barb wire fence," "Vietnam war," "guns," and "mushroom cloud" to connect with the overall topic. The pair quickly scrolled up and down the search results *visually brainstorming* and assessing the potential of various images while playfully bantering. After ten minutes of searching with no success, DeShawn said, "Alright, I know what to type in" and searched for "call of duty black ops weapons" and saved a dark, enigmatic image of a faceless soldier looking straight ahead with two weapons secured on his back. This image was the box cover art for the *Call of Duty: Black Ops* video game and was chosen to catch the eyes of their audience. Once the *Call of Duty* image was in place as the featured image of the banner, DeShawn asked Calvin what they should put at the empty space on each side of the image:

DeShawn:	Is that what you want? Should we put some writing here on the sides?
Calvin:	Or some bullets.
DeShawn:	Now you're using your mind, Calvin!
Calvin:	I was using my mind to begin with!
DeShawn:	Shut up, boy ((both laugh))

The pair proceeded to search for bullets, assess multiple options, and place the identical image on both sides of the *Call of Duty* image.

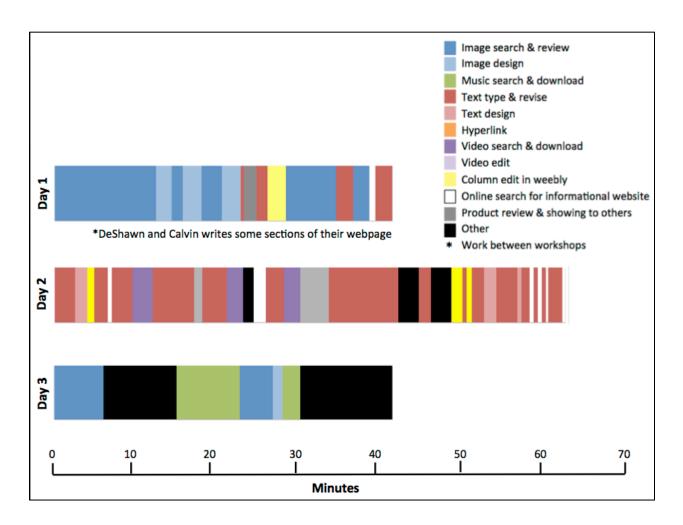


Figure 21. Multimodal composing timescape of DeShawn and Calvin' in-class process for their informational webpage. This figure illustrates their visual entrance and cross-modal traversals.



Figure 22. DeShawn and Calvin' webpage banner consisting of an image from the video game, *Call of Duty: Black Ops.*

Resembling their initiation of the webpage process, DeShawn and Calvin began their hypertext analysis process by gathering images to lay their visual modal foundation. They first

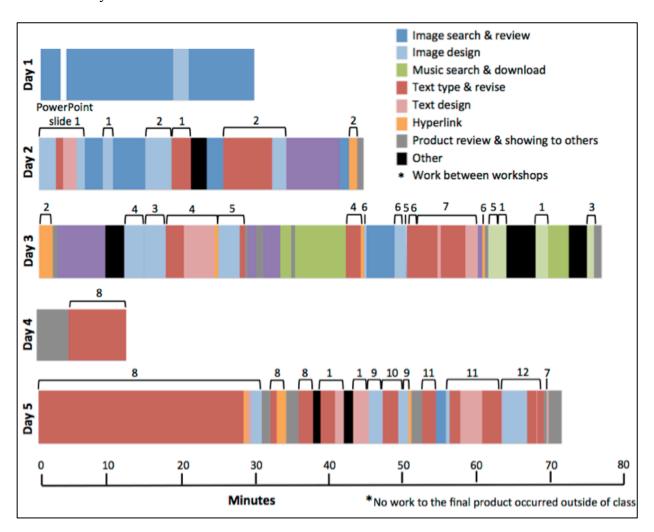
searched for images from a specific scene in the movie, *Joe Dirt* (2001), where a "crapper tank" explodes on the main character, which Calvin connected to how the character Kiowa died by drowning in a field of "muck" (the camp's excrements). The pair spent considerable time visually brainstorming by searching for images that would become the basis for their analysis. Calvin, a self-proclaimed "visual person," explained that their inclination to work with images first happened "naturally":

First we just found the pictures that we thought we was going to use. We didn't use all of them...That's just like how we naturally do stuff. Some people like to start with text and some people like to start with pictures. It's just how we like to go through stuff. (hypertext interview)

As demonstrated in these two examples, the pair not only visually entered their process, but popular culture connections and their interests simultaneously served as entry points for their initial visual brainstorms.

Image-driven modal progression. Along with entering the process through visuals,

DeShawn and Calvin also exhibited an image-driven modal progression when creating new slides for their hypertext literary analysis. In fact, 9 out of 12 PowerPoint slides that were created in class began with an initial stage of visually brainstorming and editing images to lay a modal foundation followed by the layering of text and then sound. This modal progression did not occur linearly through each slide with the pair building up an entire slide and moving on to the next, but recursively across slides. As made particularly evident when examining the multimodal composing timescape for the hypertext analysis (Figure 23), the pair composed at different stages of the modal progression—1) image search, 2) image inclusion and editing, 3) text inclusion, 4) text editing, 5) music search & download (sometimes)—quickly and recursively across slides. For example, on the third day of in-class workshops, Slide 5 was constructed in the order of background image, text, and audio over the span of nearly 35 minutes with video and audio



searches and various stages of the modal progression for Slides 4, 6, and 7 being created intermediately.

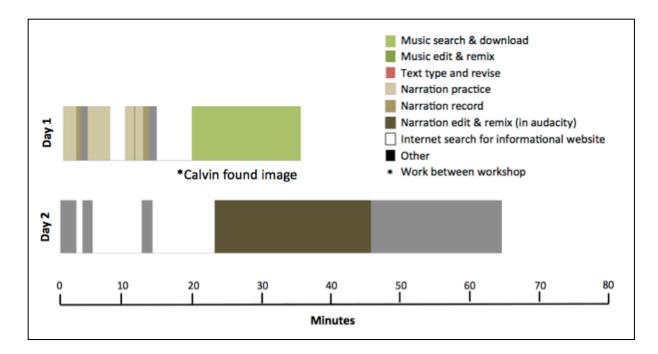
Figure 23. Multimodal composing timescape of DeShawn and Calvin' in-class process for their hypertext literary analysis. This figure illustrates their visual entrance, image-driven modal progression, and increased cross-modal traversals.

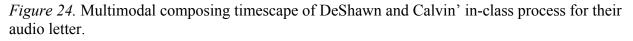
Cross-modal Traversals. Calvin and DeShawn's back-and-forth movement between modes occurred with their informational webpage and increased across workshop sessions for the hypertext literary analysis, with the frequency peaking on the third day and then slowing down as they put the finishing touches on their project. These cr*oss-modal traversals* emphasized the compositional flexibility available to students with these two projects, as well as how important gauging the interaction by quickly moving between modes was for creating their multimodal projects.

New tool and process for the audio letter. Calvin and DeShawn took a unique compositional path for the audio letter that differed from their image-driven pattern with the first two projects. Instead of beginning by visually brainstorming through online image searches, their process for the audio letter involved the steps of verbally brainstorming the contents of their letter first, recording voice narration, searching for music and sound effects, and finally mixing all of the audio clips together (e.g., narration, music, sound effects) (Figure 24). Unlike their prior preference to create a visual foundation first, they found an accompanying image at home between the first and second workshop sessions and uploaded with the audio file to the webpage. Calvin explained why they followed a different modal progression for the audio letter:

We simply recorded the voiceover first, and then added all of the extra audio such as the music and bomb noise...We completed the process that we felt would be the hardest first, that way we were able to spend more time on the simpler processes. (audio letter written reflection)

After verbally brainstorming their narration, DeShawn free-styled by reciting lyrics from the R & B song, "Headlines," by Drake off the top of his head—adding an introduction and two concluding sentences to fit their letter (Appendix Y). DeShawn reviewed, deleted, and recorded his narration three times and then pointed to Calvin—cueing him to say his part of yelling "Kiowa! Kiowa!" while the recording continued (Figure 20). After recording the narration, the pair continuously reviewed their work while mixing the narration, music, and sound effects after each time they changed a volume level or fading effect until they were content with how all of the sounds came together.





Perspectives on Composing Goals and Modal Designs

Calvin and DeSawn were simultaneously driven by personal composing goals to affect and entertain their audience while also representing their interests in popular culture. They layered complementary modes into ways—by *modally matching* and creating *thematic multimodal mosaics*.

Composing to affect. Calvin and DeShawn's key goals for the hypertext literary analysis and audio letter were to represent the emotions of a character they particularly connected with (Kiowa), and "to get the audience to feel" (audio letter interview). They worked to achieve this affective composing goal by choosing images and music that aligned with the emotional tenor of their analysis. For example, Calvin explained they selected images for the hypertext analysis "that fit" or had a "serious tone":

We felt that we could convey our vision of the story much better by using these pictures ... We chose to pick the pictures that would give the audience a sort of strong emotional

aura. We also chose to use pictures that related to the main character's nationality because he was a Native American. This also influenced our decision to add a Cherokee folksong in the slideshow. (Calvin, hypertext written reflection)

Images were extremely important for helping Calvin and DeShawn to meet their affective composing goals and served as the basis for choosing "related" text and music (DeShawn, hypertext interview). In fact, seven out of eleven total PowerPoint slides for the hypertext literary analysis contained a striking background image with less than 15 words of accompanying text.

The pair also used images, music, and sound effects to build upon the affective connection of their audio letter narration. Calvin found an image at home (Appendix Y) that he felt "pretty much represent[ed] how the soldiers were feeling once they got into the war...they were depressed and losing their minds...that's how I picture them feeling on the inside" (audio letter interview). DeShawn echoed Calvin' reasoning for choosing music for their audio letter with a specific tone:

Calvin and I were going for a depressing tone. If you listen to the background music it sounds like something bad is about to happen at any moment. That's the thrill we wanted to give the listeners. A feeling that something bad is about to happen...The image is meant to represent the stress and mental torture of every soldier that entered the war. It is meant to reveal how every one of those soldiers feel in their souls...I hope it evokes the same emotions as the audio. I hope the image brings a feeling of sorrow and pity to the audience. (audio letter written reflection)

Composing for audience experience. Calvin and DeShawn's interviews and reflections

also revealed keen audience awareness while they composed. The pair attributed many of their design decisions based on how they anticipated their audience would react and what they would find "entertaining" (DeShawn audio letter interview).

They described designing their webpage purposefully to have textual information on the left and "all of the entertainment on the right" of the page—including an "environment and weapon teaser trailer" for a video game set in Vietnam (Battlefield 2), the audio clip of a "rap"

mashing up all of the weapon sounds from the same video game, and a slide show of five historic photographs of Vietnam soldiers in combat. The "entertainment" was sequenced purposefully vertically with the "best first to grab your attention" (DeShawn, webpage interview). As described earlier, the webpage also included a banner with an image from the video game Call of Duty: Black Ops, which DeShawn anticipated his audience would enjoy:

People who see this [website] are instantly going to know where that came from because if they play Call of Duty...they're going to be like "oh my god something just caught my eye. I've seen that box a million times. Let me see what this webpage has to offer." (Deshawn, webpage interview)

Composing through interest and identity. The teens' desire to entertain their audience was accomplished in part by drawing on their own interests in popular culture, and their "fun" out-going personalities. Describing himself as "loud" and "flashy," DeShawn linked his vibrant use of color for his hypertext personal response slide to his personality: "I'm just trying to goof off and have fun with it... This is show-off art" (hypertext analysis interview). DeShawn also explained they included an explosion sound effect in their audio letter because they were "loud people" and he wanted to "grab a listener's attention" (audio letter interview).

Along with DeShawn wanting to "show off" his personality through his multimodal composing, both he and Calvin leveraged their pop culture interests in order to create "entertaining" products for their audience. In his written reflection for the webpage, Calvin explained, "The design decisions that my partner and I choose were heavily based off of our interests and what we thought our peers were interested in" (webpage written reflection). Their interests included integrating their knowledge of video games, movies, rap and R&B music, and anime (see Table 7 for a complete list of pop culture connections during their processes throughout the unit). For example, they used an image of the pop singer Rhianna to represent a female character in *The Thing They Carried* because Calvin "was in love with her," (DeShawn,

hypertext interview) and an instrumental version of a 'Lil Wayne song for the audio letter because DeShawn was "just crazy" about him (Calvin, audio letter interview). DeShawn explained that having the ability to draw from their out-of-school interests and experience contributed to them liking the webpage the best of the three projects because it "reflected [their] personality and it showed [their] creative side" (webpage interview).

Table 7.

Pop culture connections during DeShawn and Calvin' composing processes

Informational Website on Vietnam era weapons and war tactics

- Include image in website banner from video game set in Vietnam (Call of Duty: Black Ops)
- Include YouTube "teaser" video of weapons for a video game set in Vietnam (Battlefield 2)
- Include "Rap" mash up audio of all of the weapon sounds from a video game (Battlefield 2) set in Vietnam

Hypertext Literary Analysis of chapter "In the Field"

- Search for "crapper tank" scene from the movie *Joe Dirt* on YouTube
- Include image of pop singer Rhianna
- Include the song "Billie Jean" by Michael Jackson

Audio Letter from Kiowa, soldier who drowned in excrement pit

- Voice narration included lyrics from the hip hop song "Headlines" by Drake
- Search for instrumental version of the rap song, "Pop that Trunk" by Yelawolf
- Include instrumental version of the hip hop song "President Carter" by Lil' Wayne
- Search for a "bomb explosion sound effect" on YouTube from a specific episode the anime television series Dragon Ball Z

Composing for modal cohesion and content complementarity. Calvin and DeShawn

often described using complementary modes (Unsworth, 2008) to reinforce and enhance their

main thematic or affective connections to the content.

Thematic multimodal mosaic. In some instances, modes aligned but generatively build

off one another to provide new information. For their webpage, text, images, sound, and video

cohered yet assembled a multi-sensory experience to inform their viewer about Vietnam

Weapons and War Tactics. Some of their hypertext literary analysis slides incorporated modes to create a *thematic connection* to the novel. For example, text and music built upon an image in their opening slide of a man standing outstretched in the rain (Figure 25). After Calvin imported the image, DeShawn pronounced what text should accompany it: "I got it! Tears from the sky. There you go; right there." Later in an interview, DeShawn explained that he saw the rain possibly representing "God crying" and that it connected to Kiowa's tragic story. Calvin finished the slide by including a Cherokee folk song—connecting to Kiowa's Native American heritage. Calvin described that they tried to achieve a "serious tone" and a "feeling of sorrow" with their opening slide. In this example and others, abstract images and text were affixed to the story by *plot-specific connections* to the action, setting, or characters.



Figure 25. Calvin and DeShawn use complementary modes to create a thematic multimodal mosaic for their first slide of the hypertext literary analysis.

Modal matching. DeShawn and Calvin sometimes chose concurring (Unsworth, 2008) modes to repeat and support their modal foundation without providing additional information. In the hypertext literary analysis, these instances of *modal matching* usually occurred on slides that had plot-specific connections to the setting of their chapter, Kiowa's character, and how he died. An example of this modal matching included a slide with a historical image of a muddy battlefield, overlayed with a quote from the novel describing the "muck" where Kiowa died. In another example, Calvin closely aligned music and text with an image focusing on Kiowa's "sweetheart" back home, Billie (Figure 26). Calvin first selected a red background with a heart in the middle and placed a picture of the pop singer Rhianna in the middle, which he used because "she was cute" (hypertext interview). Next, he typed her name "Billie" above the picture and imported Michael Jackson's song "Billie Jean." The alignment of these modes hinged on the name Billie; Calvin explained that he chose images and text that "went with the picture" (webpage interview).



Figure 26. Example of modal matching in one of Calvin' hypertext analysis slides.

Discussion

DeShawn and Calvin' multimodal composing processes demonstrated illuminating similarities and differences across tools and genres. For the first two projects, which offered unlimited ways to combine and layer modes, they exhibited a visual modal preference for building content and conveying meaning. However, they adapted their process for the audio letter by beginning with voice narration and attending to visuals much later in their process.

Calvin and DeShawn divided their labor alternating who took the lead with each project. Because the pair possessed the same level of proficiency with the tools, their division of labor was based on content knowledge and interests. Calvin was much more familiar with their chapter when they began the hypertext literary analysis and led the project—completing the heft of the physical creation during a session where his partner was absent. However, the pair possessed the same understanding of the content for the first and third projects and divided sections and design tasks based on their interests. This case suggests that when students have the same level of technical knowledge and interest that content knowledge is the main determination for the division of labor, followed by student interests.

One of the most consistent themes across the unit was DeShawn and Calvin' tendency to enter projects through pop culture connections and leverage their out-of-school interests. In particular, they were able to call upon their experience with first-person shooter video games situated in Vietnam when creating their webpage, which was their favorite assignment:

Since me and Calvin like talking about weapons, we created this flow and it's all on the page...everything is straight from the top of our heads...our knowledge came from playing video games. That fast, knowing about Call of Duty—what weapons they had and knowing about Battlefield [2] and what weapons they had. (DeShawn, webpage interview, emphasis added)

Calvin and DeShawn were able to make lifeworld connections to video games, movies, rap and R&B music, and anime when responding to a novel about the Vietnam War. The pair called upon their interests in pop culture as a way to connect with content and also integrated these elements to make their work "entertaining" and representative of who they were as composers.

DeShawn viewed their approach to multimodal composing as an artifact of who they were as people—their interests and personalities. He linked certain "show off" design decisions to their "loud" and "flashy" personalities (hypertext interview). Often laughing and "goofing off" while working, both students placed an emphasis on having "fun" while composing. Twice, DeShawn connected how the pair approached the multimodal projects to their mentalities on the football field: "I go out there and have fun with it and that's how I always try to do everything. Just go out there and have fun...that's what I did with this" (hypertext interview). On another occasion, DeShawn explained that the pair's focus on earning a high grade as efficiently as possible was "just like our football game. Straight forward—I'm going to catch the ball and I'm going to go straight for 99 yards. Not cutting...everything is going straight in motion" (audio letter interview).

In summary, Calvin and DeShawn's case illustrates how friendship, interests, technical skill, and a desire to entertain their audience worked together in creating three multimodal projects for the novel, *The Things They Carried*. They demonstrated a modal preference for image, yet were able to flexibly adapt their composing process when required by the tool and/or task.

CHAPTER V

COMPARATIVE CASE ANALYSIS

In the following, I provide a comparative case analysis (Stake, 2006) of the three pairs of students' multimodal composing processes: Arianna and Keira: The Designer and her Assistant; Vivian and Caitlyn: Writers and Scholars; and DeShawn & Calvin: Interest-Driven Entertainers. These findings are organized by the three main foci—collaboration, modal movement amongst and between modes, and student perspectives on their composing goals and modal designs—across cases in relation to the overarching research question for this study: How do urban 12th grade students compose multimodally in response to literature?

Processes of Multimodal Composition

As illustrated in the three cases, composing with multiple modes in response to literature was a complex, dynamic, and varied process. Never occurring linearly or in an ordered fashion, students swiftly and nimbly traversed modes, media, resources, and sections of their projects to achieve their creative visions. In design interviews and written reflections, students described how *The Things They Carried* unit challenged them to work through the "sporadic" and "chaotic" multimodal composing process of "trying to bring in all of the components into one big piece" (Caitlyn, hypertext interview). Vivian, the class Valedictorian, explained that the multimodal projects involved "way more brain power" (Vivian, audio letter) than the usual class writing assignments with which she excelled. Even though students described the process as complex and "messy" (Arianna, hypertext interview), they simultaneously described it as organically developing and being "unplanned," "improvised," and "flowing."

Students' multimodal compositions did not occur in isolation; multiple factors contributed to the complexity and variation of processes across pairs and projects. Some of these influencers were outside of the control of composers, including the nature of the multimodal assignment, available tools, and time constraints. However, these factors interacted with students' technical skill and experiences, content knowledge, collaborative styles, lifeworlds, and modal preferences. Each multimodal project was a unique artifact of these composer qualities interacting with the composer qualities of their partner—all within a specific and rich composing context.

Collaboration and Multimodal Composition

Collaboration was integral for students' multimodal composing process and each pair exhibited a distinctive cooperative relationship. DeShawn and Calvin displayed an *alternating lead collaboration*—switching back and forth with who directed each project, often distributing separate tasks, yet consistently reconvening during workshop sessions to discuss their written content, design decisions, and media choices. Resembling DeShawn and Calvin' collaborative style, but with both students sharing the lead for each project, Caitlyn and Vivian presented a *balanced divide and conquer collaboration*. They worked closely in class by reading aloud to one another, verbally synthesizing information, and discussing design options; however, outside of class they strategically divided up their work by both content and media. Exhibiting a less balanced *designer and assistant collaboration*, Arianna's role was that of lead designer physically constructing each project and following her creative vision—while Keira assumed the helper role of preparing text and gathering media outside of class for Arianna's choosing.

Division of labor. Despite these collaborative differences between students, they were similar in that labor was divided. Students did not always work side-by-side through each section of their projects in tandem, but efficiently distributed tasks based on technical skill, content knowledge, and interests. Furthermore, technological skill and experience with tools greatly swayed the balance of power relations when students collaborated. Arianna's ease with technology and view of herself as a "techno geek" granted her power to not only physically construct each project, but also be the creative visionary (interest survey). Her partner found ways to contribute through gathering media and writing sections for Arianna to select and edit, but the ultimate power within their partnership was bestowed upon who controlled the mouse. The first two projects—which Arianna directed and constructed—showcased her technical skill and creativity, and it was sometimes difficult to locate Keira's contributions.

Even though Arianna remained in control of technical aspects throughout the unit, the steep pitch of their collaborative imbalance reduced when she worked with a tool with which she was not as proficient and on a project where she could not fully express her visual modal preference. Collaborative space opened up and Keira was able to make more contributions to the content of their projects. Another possible reason why their collaboration increased over time was that they became more comfortable working together and their trust developed.

When partners possessed the same level of proficiency with the technological tools, content knowledge became the next determining factor for the division of labor. For example, DeShawn and Calvin possessed a similar understanding of their topics for the first and third projects; however, Calvin was much more familiar with their chapter when they began the hypertext literary analysis and stepped forward to lead the project—completing the heft of the

physical creation. Similarly, Vivian and Caitlyn divided the subtopics of their webpage by their "background knowledge" and what they "could explain more of" (Caitlyn, webpage interview).

Lastly, when pairs possessed the same level of technical skill and content knowledge, they divided sections and design tasks based on their interests. For example, Calvin and DeShawn distributed sections of their webpage by what they "were interested in": Calvin was drawn to war tactics and DeShawn "was really interested in the pistols and guns and stuff" (Calvin, webpage interview). Calvin explained that DeShawn took the lead with voice narration for the audio letter because "he loved the sound of his voice" (Calvin, audio interview). Similarly, Vivian explained that she integrated her and Caitlyn's separate parts for the first two projects because "she liked" the task of bringing all the pieces together (Vivian, hypertext interview).

Shared composing mindset. Although students had the freedom to work alone or switch partners before each project, all three pairs continued their collaborative arrangements. Students expressed satisfaction with their partnerships in their design interviews and written reflections, and it was apparent from workshop observations that they generally enjoyed working with one another.

Across interviews and reflections, students attributed their success to a shared composing "mindset" between partners, which included possessing the same goals and approach to composing, trusting one another, and being able to compromise. Pairs acknowledged their roles within each partnership, as well as each member's individual strengths. Students often attributed this underlying mutual understanding to being friends with their partners outside of class.

Even though their unique collaborations worked for each pair, students were also aware that from an outsider perspective that their collaboration could appear unbalanced or off-task.

Arianna explained that she and Keira "kind of have the same mindset," making it "easy to get ideas across" without a lot of interaction (webpage interview). Keira was also aware of the imbalance in their contributions, but did not outwardly express dissatisfaction. Similarly, Calvin and DeShawn acknowledged that their playful banter while composing could appear off-task to an observer, but that these interactions were just a part of their process.

Choice in student partnerships was integral for students' enjoyment and perceived success with multimodal composing. By working with peers they had already established a relationship with, students had a shared composing mindset—an underlying trust and mutual understanding.

Movement Amongst and Between Modes

As depicted in a comparison of multimodal composing timescapes (Figure 27) and described in student interviews and reflections, there was a great deal of variation in multimodal composing processes across pairs and projects. Students dexterously moved between and among modes to recursively create different pieces of their projects, while also crisscrossing between online searching, creating, editing, and reviewing. Amidst the complexity of modal movement, key patterns emerged based on the composers, tools, and genres.

Open and flexible composing space. The variation in processes was particularly evident with the first two projects, the informational website and hypertext literary analysis, which were created with tools that provided open and flexible composing spaces for students to work with and combine modes. The tools students used for these projects, Weebly and PowerPoint, both offered blank compositional slates where text, images, sound, videos, hyperlinks, color, and movement could come into contact in endless ways—placed in any location, order, or

combination. Along with there being relatively few restrictions with each tool (e.g., students could not change the background color for the website and they were limited to the image editing effects and font colors), Mrs. Buchanan also left the processes open for students by not scaffolding it in a particular way where they had to write first or create other parts of their projects before diving in. These open and flexible composing spaces fostered multiple points of entry (Jewitt, 2009), the layering of modes (Dalton & Smith, 2012), and cross-modal traversals.

Modal preferences. All three focal pairs exhibited and described noticeable parallels in their modal usage across the first and second projects. These *modal preferences* related to the similar ways they modally entered projects, as well as how they followed modal progression when constructing new content—both of which were driven by their preferred entry mode. For example, Vivian and Caitlyn textually entered into the composing process by first writing their separate sections (at home or in workshops) before attending to non-textual modes, and new content usually followed a text-driven modal progression. The other two pairs—Arianna and Keira and DeShawn and Calvin—displayed a comparable modal preference by visually entering into their projects through visually brainstorming and sampling editing options on images first. They also followed a comparable image-driven modal progression for building content that began with a foundation of images, followed by text, video, or music (often in that order). This progression was particularly evident in their work on the hypertext literary analysis where all of the slides they created in class began by searching for and editing images, followed by the layering of text and sound.

Although the instructional goals and requirements of the first two projects were quite different—a webpage intended to build contextual background knowledge and a hypertext intended for students to closely analyze text with multiple modes—students naturally followed

the same modal path with each when offered freedom by the tool and genre. This finding suggests that different students viewed modes having different modal affordances for creating and communicating. Students exhibited a proclivity for expressing themselves with a particular mode when they were working with genres and tools where a variety of modes had strong potential for conveying meaning. In other words, neither genre overly privileged a mode in communication, which was not the case with the audio letter.

Students' processes not only demonstrated a modal preference for creating these first two projects, but their interviews and reflections also revealed they viewed certain modes having communicative affordances. Vivian and Caitlyn's modal foundation across projects was writing, a mode they relied on much more than others when composing. Their projects were dense with text. For example, the average number of words per PowerPoint slide for their hypertext literary analysis (166.9 words/slide) was nearly double that of Arianna and Keira (88.2 words/slide) and over four times as much as DeShawn and Calvin (35.8 words/slide). Caitlyn and Vivian explained that creating a textual foundation first helped them to organize their projects and come up with their ideas so that knew what kinds of music and text "to pick" that "went with" their text (Vivian, webpage interview). Arianna believed she could express herself better with images than through writing: "Sometimes there really are no words to put into effect what I'm feeling, so pictures just really help me express myself a lot more" (audio letter interview). Similarly, Calvin thought he and DeShawn "could convey [their] vision of the story much better by using pictures" for the hypertext literary analysis (hypertext interview). Students were flexible in their modal usage across projects; however, when working with tools and genres that offered open composing spaces, they were inclined to use a specific mode for entering their projects, laying a

modal foundation, building new content, and carrying a large portion of the communicative weight.

Cross-modal traversals. Students' modal progressions did not occur sequentially for isolated sections with students building up one section and then moving to the next. Rather, they skipped around different sections of their projects—working at different stages of the modal progression for each.

The frequency and swiftness of such cross-modal movement often increased across workshop sessions within the in-class workshops for a project. The gradual building of modal movement typically peaked at the next to last workshop and was followed by a session of reviewing the final product and editing minor details. With the exception of Calvin and DeShawn's webpage process, increased cross-modal traversals occurred for all of the processes for the first two projects.

There are a few possible explanations that account for this compositional pattern. One is that with the modal freedom offered through the open and flexible composing spaces of each project that students became increasingly comfortable composing with the tool, thus their crossmodal dexterity also ramped up with time. It is also possible that the more time students spent working on a project, the more vital the intersemiotic relationships between modes became while composing. Students' movements between modes while composing could point to them seeing how modes were interrelated, built upon one another, and cohered to meet their creative visions. In addition, the pressure of time while they worked towards a deadline could have also attributed to this finding.

Discrete composing space. The final audio letter project offered less modal interaction and flexibility, which affected students' processes and opportunities for compositional variation.

In addition, the genre of the project innately emphasized the importance of sound as the main mode of communication. To create their audio letters, students used Audacity to record their narration and mix multiple sounds (voice, music, and sound effects). They were also asked to find an image that connected to their soundscape, which was placed on individual webpages with the completed audio file.

Because students worked with text, sound, and image in discrete composing spaces bringing them all together in the end on the webpage, their processes were much more comparable than with the prior two projects. All students entered their project by first focusing on developing the audio narration—either by writing and/or verbally brainstorming. As illustrated in Figure 27, there was much less movement between and among modes and students composed in a more layered progression. For example, Arianna and Keira moved from writing their script, to searching for music and mixing their background track, to recording narration and sound effects, mixing their sounds, and then ultimately finding an image outside of class. They did not progress to a new stage until they had completed the prior one. Calvin and DeShawn also followed a new modal progression for the audio letter that was different from their image-driven pattern with the first two projects, progressing from verbally brainstorming, to recording narration, to searching for and mixing music. And although Caitlyn began the audio letter by writing, which is how she and Vivian began the first two projects, she worked with modes in a gradual manner with the audio letter that was dissimilar to her earlier processes.

The similarity in processes for the audio letter raises a few important points. Even though students exhibited modal preferences for the first two projects, they saw a need to adapt their process based on the nature of the assignment. Voice narration was the most important mode for communication with this project, thus students concentrated on it first. Interestingly, Caitlyn was

able to similarly enter the project through text, indicating that students who have a modal preference for writing are able to leverage it over a wider variety of genres.

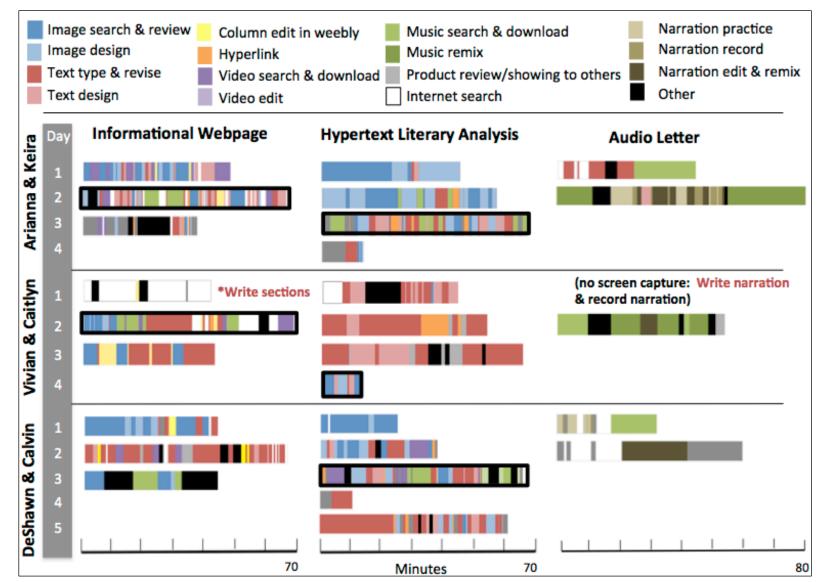


Figure 27. Comparison of multimodal composing timescapes across collaborative pairs and products during the literature unit. The black boxes represent increased cross-modal traversals over time for some student processes.

Perspectives on Composing Goals and Modal Designs

Students also shared their own personal goals for each project, which sometimes overlapped with and differed from Mrs. Buchanan's clearly expressed instructional goals. Interviews, written reflections, and presentations revealed keen composer awareness of a wider audience, whose experience and possible reactions were considered. Students often described cooccurring goals meant to simultaneously meet teacher expectations, appeal to their audience, and express themselves as composers. In addition, there were often direct parallels between students' processes and how they orchestrated modes in analyzing and responding to literature.

Composing to affect. A reoccurring pattern across composers and projects was that students were personally driven to use multiple modes as a means to represent the emotions of characters or the tenor of the Vietnam time period. They described choosing topics, themes, plot lines, and characters to delve into because of personal interest, a connection they felt, and strong affective responses. By exploring the emotions of characters and their reactions to the text, students ultimately wanted their audience to also experience those feelings for themselves.

To meet these affective composing goals, students described using evocative images and music with a distinct tone or poignant lyrics that they believed encapsulated an emotion. They incorporated multiple modes to align with a specific affect they were going after to provide a cohesive affective experience for their audience.

Composing for audience experience. Along with having others experience similar affective reactions, two pairs of students also described wanting an audience to view their projects as entertaining and aesthetically interesting. For example, Caitlyn and Vivian composed for audience experience by choosing "eye-catching" colors, images, and animations that "really popp[ed] out" even if they did not see these elements "really hav[ing] much meaning" and they

"just liked how they look[ed]" (Caitlyn, website interview). Calvin and DeShawn wanted their audience to be "entertained" by their projects, and they described choosing media they thought others would "find interesting" (Calvin, website interview).

These findings across cases demonstrate that students were acutely aware of their audience—Mrs. Buchanan, peers, and beyond. Some of this audience awareness could be attributed to Mrs. Buchanan allocating time and space for students to share their work. She posted two of their projects on the class website, which could be seen by anyone online, and had students informally present their work to peers during workshops and participate in the culminating end-of-school celebration where they presented their favorite project to administrators, teachers, and community members. With a broader audience in mind, students often anticipated how they would react and what they would like. Caitlyn also talked about "attracting" the right type of audience to her webpage through various design decisions (hypertext interview). Students were often more concerned about their audience's experience and affective reactions than what they learned from interacting with their works.

Composing through interest and identity. Some students described expressing and representing themselves through their multimodal projects. DeShawn and Calvin integrated "loud" and "flashy" media and multiple connections to popular culture in order to "show off" their personalities through their projects (DeShawn, hypertext interview). They believed that by integrating their "interests," including video games, rap music, and movies, that their audience would share similar interests and enjoy their work even more. Arianna viewed multimodal composing as a platform for showcasing her technical skill and innovation as a designer. As someone who viewed creativity as an integral aspect of her identity (e.g., "it's really just a part of me," audio letter interview) each multimodal project took personal meaning as a representation

of her emotions and artistry. Highly edited images and image collages were her medium of choice for portraying her technical skill and creativity. Caitlyn and Evelyn also connected to their academic identities by exhibiting intense focus on understanding their tasks and relying on academic writing strengths when composing multimodally.

Findings suggest that not all design decisions had significant rhetorical meaning behind them or were even carefully planned decisions. Sometimes students chose media, animations, and colors simply because they "liked them" and thought they "looked cool." These aesthetic and affective elements of their projects were extremely important for students and served as a way for them to impress their audience, develop an aesthetic that travelled across projects, and represent themselves as composers and individuals.

Composing for modal cohesion and content complementarity. When building upon their modal foundations, students described choosing modes that would "go with" co-present modes; however, the degree of modal cohesion and content complementarity varied. In their interviews, written reflections, in-class debriefs, and presentations, all students described choosing complementary modes (Unsworth, 2006) to connect to main themes or emotions in the novel. Two pairs matched modes to reinforce information at a more straightforward level, and one pair integrated modes to provide a diegetic sensory experience of the novel. These different intersemiotic relationships were not discrete; some projects contained multiple variations within the same composition.

Thematic multimodal mosaics. Students explained their designs behind modal orchestrations where various modes provided "meanings additional to and consistent with" the modal foundation to create generative yet cohesive multimodal compositions (Unsworth, 2006, p. 40). Modes, media, and content synergistically interacted to create full interpretive spaces

where modes cohered while also providing different pieces of information that supported an overall topic, theme, or emotion.

There were several ways thematic multimodal mosaics were achieved across cases. With each informational webpage, text, images, sound, and video all aligned with the overarching topic, but each mode also contributed new information. With the hypertext literary analysis, modes cohered and connected to themes in the novel (e.g., perception, truth in storytelling, love) or central emotions of characters (e.g., Bowker's depression or the sorrow surrounding Kiowa's death). These thematic mosaics were often created by combining abstract modes (e.g., images and music connecting broadly to emotions or mental states) with plot-specific modes (e.g., an image of a noose, a song connecting to Kiowa's Native American heritage) in order to affix the emotions to a concrete details from the novel. With the audio letter, students described using non-textual mode to build upon the affective tone of the audio letter narration to create modal unity.

Modal matching. Two pairs of students (Vivian and Caitlyn; DeShawn and Calvin) built upon their modal foundation with other modes that rhetorically repeated content at a basic level without contributing substantial new information to the composition. Similar to Unsworth's (2008) description of *ideational concurrence*, this type of intersemiotic relationship occurred when layered modes had "equivalence" In these instances of modal matching, students often made plot-specific connections to the novel, ranging from images that visually showed what was described in text or conversely layering text on top of a parallel image. They also matched music to text at a simple level as seen when Calvin imported Michael Jackson's song "Billie Jean" on a slide meant to represent the character "Billie." These examples of modal matching underscored

the importance of the modal foundation for carrying the rhetorical weight since subsequent modes were so tightly connected to the main content.

Multisensory experiences. Vivian and Caitlyn described orchestrating modes to develop a multisensory experience that was indicative of the novel's context or experiences of characters. This intersemiotic effect was achieved through recreating diegetic sights and sounds from the novel to transport the audience into O'Brien's narrative world so they could "feel the same thing" as characters (Vivian, hypertext interview).

Each of the types of semiotic relationships students described emphasizes the importance of modes aligning and "going with" each other to support the modal foundation. Interestingly, none of the products demonstrated *ideational divergence* (Unsworth, 2008) where modes "follow very different courses—without intersecting" (McCloud, 1994, p. 154). These findings also point to the importance of the modal foundation—usually the first mode students attended to in their process—for carrying the weight of their ideas and connections to literature and serving as a basis for subsequent modal usage. Lastly, some students (e.g., Caitlyn and Calvin) leaned towards a more simplistic style of modal matching when working on their own; however, over time and through collaborating with their partners, they began to use modes in more sophisticated and varied ways to build meaning to their compositions.

In summary, this comparative case analysis elucidates key similarities and differences in students' multimodal composing processes. Collaboration was imperative and its structure took different shape based on a tiered system of influential factors, including technical skill, content knowledge, and interests. There was variation in composing processes, yet patterns emerged based on the nature of the tool and student modal preferences. Lastly, student's perspectives revealed that they orchestrated modes at different levels of coherence and their personal

composing goals were based on emotional connections, audience experience, and personal expression.

CHAPTER VI

DISCUSSION

In this chapter, I discuss the significance of comparative case findings in relation to research literature on adolescents and multimodal composition. I also highlight the implications of these findings for practice and research.

The purpose of this qualitative study was to closely examine how urban 12th grade students composed with multiple modes within a classroom context of reading and responding to literature. This study was designed to shed new light on the complexity and variation of multimodal composing processes across composers, modes, and tools. Comparative case study methods (Stake, 2006) were employed to closely follow the compositional journeys of three collaborative pairs of students as they created three different multimodal projects (informational webpage, hypertext literary analysis, and audio letter) that connected to *The Things They Carried* (O'Brien, 1990), a novel set during the Vietnam War.

The overarching research questions and sub-questions guiding this study were the following:

- How do urban 12th grade students compose multimodally in response to literature?
 - How do students collaborate with peers as they compose?
 - How do they move amongst and between modalities as they compose?
 - What are students' perspectives on their composing goals and modal designs?

Contributions to Understanding Processes of Multimodal Composition

These findings support our current understandings of adolescents and multimodal composition while also extending what we know. Whereas the majority of multimodal research has focused on the experiences of an individual composer or one group of students creating one project, the design of this study illuminates interesting comparisons in processes across composers and projects at a finer grain of detail. As a result, commonalities and variations are revealed that have implications for our understanding of multimodal composition processes as they are enacted by specific learners and in a specific instructional context. In addition, a large portion of multimodal research focuses on at-risk and struggling urban adolescents, often with projects that are not explicitly connected to academic literacies. The study expands our focus to examine the multimodal composing practices of urban students (predominantly African American) in an Advanced Placement course with rigorous academic goals and curriculum. Further, although this school might be characterized as serving "at risk" youth, these students had high expectations and pushed themselves to succeed academically.

Collaboration

In accord with prior research, collaboration was extremely important for students' multimodal composing processes. They divided labor (Goodman, 2003), provided one another feedback (Chandler-Olcott & Mahar, 2003; Smythe & Neufeld, 2010; Thomas, 2007), and tackled various pieces of projects based on skill or interest (Oldaker, 2010). Through collaboration, a collegial environment was established (Chavez & Soep, 2005; Goodman, 2003) where students valued and mutually depended on one another's skills and perspectives in order to complete each project.

This study contributes to our current understanding of collaboration with multimodal projects to demonstrate three different types of cooperative partnerships: 1) designer and assistant collaboration, 2) balanced divide and conquer collaboration, and 3) alternating lead collaboration. Through examining the nuances in these collaborative partnerships, it becomes clear that the division of labor was based on a tiered system of factors, with technical expertise being the most important determinant of power relations, followed by content knowledge, and then personal interests.

These findings also emphasize the relational nature of collaborative partnerships. By working with peers they had already established a relationship with outside of school, students expressed experiencing a shared composing mindset with one another—an underlying trust and mutual understanding—that was essential for completing their projects. Over the course of the multimodal unit, it was evident that collaborative relationships evolved over time and students became increasingly comfortable working with modes and their partners. As seen in Arianna and Keira's case, the steep pitch of their collaborative imbalance reduced when Arianna worked with a tool with which she was not as proficient and in a genre where she could not leverage her visual modal preference. Collaborative space opened up and Keira was able to make more contributions to the content of their projects. This study also demonstrates that choice in student partnerships was integral for student enjoyment and perceived success with multimodal composition.

Composing Amongst and Between Modes

This study also contributes to our limited understanding of how students move across modes when composing. Multimodal composing timescapes provided innovative insights into

the complexity and intricacy of students' crossmodal traversals. Reaffirming existing literature, there was recursion between modes (Dalton & Smith, 2012) and various phases of their process (Bruce, 2009b). However, amidst their dynamic and multifaceted modal movement, we learn new information about students' differing modal preferences and how their process was shaped by the tool (Gilje 2011; Ranker 2008) and genre. For open and flexible composing spaces such as the webpage and hypertext analysis, where modes could come into contact in endless ways, pairs exhibited similar composing patterns across projects and were inclined to rely on the same mode for entering the process and building new content. Students also described the importance of their modal preference for carrying the communicative weight for their projects and serving as a modal foundation on which to layer other modes. Importantly, these modal preferences were consistent for students across the first two projects, yet varied between pairs of students, with two pairs relying on visuals and one pair on writing. Given modal freedom, composers pursued their preferences.

As described by Wertsch (1998), "mediational means constrain as well as enable action" (p. 25). The discrete composing space of the audio letter supported a sequential process of modal movement from text to audio-recording to image enhancement. Thus, there was less variation in process across pairs. Students who had a visual modal preference for the first two projects, composed in a much different manner by focusing on writing and/or voice narration first. These finding emphasize that even though students exhibited distinct modal preferences for the first two projects, they saw a need to adapt their process based on the tool and aural-heavy nature of the assignment. Importantly, the teens were quite successful when they had to work with a less preferred mode as a primary communicative vehicle and expressed enjoyment about their experience with the emotionally-laden audio letters.

Perspectives on Composing Goals and Modal Designs

The majority of research has portrayed increased engagement (Bruce 2009a; Callahan, 2002; Ranker, 2008a) and identity expression (Guzzetti & Gamboa, 2005; Ito, et al., 2010) through multimodal composition, particularly when adolescents have topical choice or create for their own purposes outside of school. However, this study adds to the research demonstrating that even with constrained choice (Jocius, 2013; Dalton & Smith, 2012) these experiences are possible when students respond to literature. For this study, *The Things They Carried* was the last unit of the year, and even when experiencing "acute senioritis" (teacher interview #3), students remained engaged and expressed pride in their work. Two of the three pairs—not surprisingly, those with a visual modal preference—said they would rather analyze literature multimodally than through a written assignment:

You got to really express what you felt about the book and with writing you can express yourself, but not in colors and everything. Blank ink, that's not really going to do anything. When you really want to express yourself, something like this is amazing because it really other people really see how you feel. Not everybody is good at writing, so if you're not good at writing and you write an essay, nobody is going to get what you felt. They're just going to be like "oh this isn't that great." But if you're good at something like this [hypertext] and you do it, people are going to be like "wow!" (Keira, hypertext interview)

Through students' perspectives, we learn they simultaneously composed for multiple local and global audiences: students worked to meet Mrs. Buchanan's instructional goals, emotionally affect and entertain their audience, and represent themselves as composers. These findings also provide new information about the importance of affect in students' multimodal processes and products. Students were not just conveying the emotions of characters or a time period—multiple modes allowed for them to delve into their own emotional reactions with the hope of also moving their audience. Even when working with content set during the Vietnam War—which could feel irrelevant to some of today's urban students—they found ways to personally connect and express themselves.

Student' perspectives on their modal designs demonstrate that although various modes were foregrounded and backgrounded according to the tool and modal preferences, emphasis was on creating cohesive compositions. The different levels of modal propinquity ranged from close modal matching at a rhetorical level (Dalton et al., in press) to building meaning at a thematic level. In addition, one pair used modes to transport their audience within the diegetic space of the novel by creating a sensory experience through visuals and sound. However, not all design decisions had significant rhetorical meaning behind them or were even carefully planned decisions. Some designs were purely a result of affective or aesthetic inclinations (Leander & Boldt, 2013), and on a few occasions students did not have an explanation for their specific use of modes.

This study also contributes to the development of multimodal methods. Examining and representing process through multimodal transcription (Flewitt et al., 2009) was an aspect of the analysis. In addition, the multimodal composing timescape was developed for this study as a new tool to understand and represent students' composing processes across modes, scenes, and workshop sessions. This systematic representation of their process revealed new compositional patterns that expand our understanding of multimodal composition. Multimodal composing timescapes has recently been applied with another data set involving multiple raters with high inter-rater reliability (Dalton & Smith, 2012; Dalton, Smith & Ehret, 2013), further suggesting its promise as a methodological tool.

Implications for Practice

This research has implications for how multimodal composition is integrated into the secondary English classroom. As the findings demonstrate, instructional decisions concerning collaborative pairings, assignment genres, compositional tools, and scaffolding have direct impact on students' multimodal composing processes. It is clear that collaboration skills were a critical aspect of students' composing experiences—including the division of labor and students being able to successfully negotiate and leverage their unique skills and interests. Providing choice in their partners allowed for students to work comfortably with a friend with whom they had a shared composing mindset. However, inequalities in technical expertise between composers in one student pair greatly constrained the less proficient member's ability to contribute meaningfully beyond an assistive role. Conversely, in partnerships with balanced technical skill, contributions were easier to recognize and each student had the opportunity to step forward to take the lead.

In order to foster productive and balanced collaborations while still providing students collaborative choice, it is important for the teacher to consider ways to equalize disparities in technical skill. As others (Bruce, 2008; Lawrence et al., 2006; Mills, 2010) have emphasized, overtly teaching students how to use tools early on when assigning a multimodal project is essential, particularly for urban students who might not have the same access to technology at home. In addition, the introduction of new tools and programs are an additional means to disrupt technical inequalities and place students on even grounding. This does not suggest however, that is it not valuable (and realistic) for there to be variation in student expertise, and for a distributed model of technical skill and interest to be applied. What is to be avoided is the separation of an underclass of students who feel so technically inadequate that they are relegated to the sidelines.

It is imperative, however, for teachers to be aware of their students' technical skills and access to technology outside of school, as well as understand the tools themselves in order to know how to best support students.

This research also raises important issues concerning scaffolding the multimodal composing processes (Dalton, 2012/2013; Gilje, 2010). Often teachers constrain and stifle the process by requiring students to begin by writing first or completing a storyboard. As demonstrated in these findings, students viewed the first mode they worked with in their process as carrying the most communicative weight in their projects, and other modes were often layered in relation to that primary modal foundation. However, only one pair of students preferred to begin their projects by writing-others began with visuals or by verbally brainstorming without writing. Students also saw a need to adapt their modal entrance and progressions based on the tool and assignment. Processes were extremely individualized and variable, and the freedom to travel across modes was an integral aspect of their compositional processes. These findings emphasize the importance of teachers negotiating the fine line of scaffolding the process while also allowing for multiple points of entry and compositional freedom so that students can exercise their modal preferences and progressions. By not reverting to traditional written scaffolds or attempting to tame the process, teachers can capitalize on the compositional individualism made possible through multiple modes.

Another instructional consideration this study raises is in the sequencing of multimodal assignments. Prior research describes how teachers strategically transitioned students into multimodal projects by incremental modal integration (Tan & Guo, 2010; Vasudeven et al., 2010). This sequencing involved students first creating bimodal projects and then ramping up to using more and more modes. Throughout the unit described, the teacher followed a digital

writers' workshop model (Dalton, 2012/13; Dalton & Smith, 2012). introducing the genre and tools, modeling the process, and offering opportunities for peer feedback and presentation to an authentic audience. However, students jumped into multimodal composing head first by creating two projects with open and flexible composing spaces and then moving to a more restricted project where sound was the leading mode. Issues of sequencing and scaffolding multimodal projects need more attention, particularly considering how the nature of the genre and tool shape the compositional arc of students' development as composers.

Lastly, these findings demonstrate how students are often able to orchestrate modes in sophisticated ways when responding to or analyzing literature. On their own, students created rich thematic mosaics that combined abstract and plot-specific elements and sensory experiences evocative of the narrative world of the novel. Yet, some students' first impulse was to use modes as a means to merely match and repeat their primary modal message. Just as it is important to explicitly teach students different techniques for expanding their written craft (Ray, 1999; Romano, 1995), students are also likely to benefit from explicit instruction (New London Group, 1996) that helps them learn how to capitalize on the unique semiotic power of modes and learn different ways to orchestrate modes for different rhetorical effects.

Implications for Research

Along with providing new insights into adolescents' processes of multimodal compositions, this study points to new areas of exploration. These findings are deeply situated in a particular instructional context where students created three distinctive multimodal projects within a scaffolded digital composers workshop model. Much more needs to be understood about the multimodal composition processes with differing students, contexts, tools, and genres. Only one composition model has been advanced for understanding the process of multimodal

composition and it focused on video composition (Bruce, 2009b). More models need to be developed that acknowledge the great diversity in modal orchestrations, genres, and tools. Furthermore, the scope of this investigation was confined to how students composed during inclass workshops and inevitably did not capture some important aspects of their process that occurred outside of school. Future research is needed that traces youth's multimodal composing processes across contexts and material and virtual spaces.

There are many instructional considerations when incorporating multimodal projects into the curriculum. Research is needed that focuses on effective instructional methods for sequencing and scaffolding the multimodal composing process, as well as ways for assessing students' rich multimodal products.

More also needs to be learned about students' modal preferences—in the ways they work through modes while composing and in how they choose to communicate their multimodal message. We still have much to learn about students' views of modal affordances and how they orchestrate and layer modes to make meaning. Along with closely examining the process, it is equally important to also gain students' perspectives of their modal usage to understand the intentional, aesthetic, and affective dimensions of their process.

Moving forward, an important issue for researchers to consider is the learning possibilities of multimodal composition. One of Mrs. Buchanan's primary instructional goals was for students to further develop their literary analysis skills and understand complex themes of the text by using multiple modes. When reflecting on the unit, she was pleased with the learning she witnessed and believed students developed analytic and compositional skills that would transfer to traditional writing assignments. Students also expressed that they learned a lot about the novel and using technology from creating the multimodal projects. Although these

personal accounts of student learning are powerful, research is needed that examines academic learning, and particularly, the potential transfer from one academic context to another. Similar to research in writing-to-learn (Graham & Hebert, 2010; Graham & Perin, 2007; Newell, 2006), an important issue for researchers to consider is the possibility of multimodally-composing-to-learn. Focusing on the learning opportunities through multimodal composition would aid in transitioning multimodal composition from being viewed as merely an engaging and novel activity, to becoming a more integral part of the curriculum. Especially in the results-based environment of today's schools, research examining the relationship between print-based writing and multimodal composition would be beneficial.

Finally, research in new forms of communication requires new forms of investigation and analysis. The development of the multimodal composing timescape as an analytic tool and display elucidated compelling differences and patterns in students' complex use of modes that might have otherwise gone undetected. Currently, research on multimodal composition is constrained by print-centric practices (however, see Dalton & Smith, 2012; Domingo, 2011; Hull & Katz, 2006; Hull & Nelson, 2005; Phillips & Smith, 2013). New methods for transcribing, capturing, analyzing, presenting, and publishing research on multimodal composition need to continue to be developed in order to illuminate adolescents' complex multimodal processes and products.

Conclusion

Through examining the diverse compositional journeys of three pairs of urban students in a digital writers workshop, new light is shed upon how they orchestrated multiple modes when responding to and analyzing literature. Each process was distinctively shaped by a convergence of compositional influencers—ranging from the tools, assignment genres, and workshop context—to composer's technical skill, content knowledge, lifeworlds, and modal preferences. The process was further transformed when a student's unique experiences, skills, and preferences intermingled with the equally unique experiences, skills, and preferences of their collaborative partner. The space between modes not only offered students flexibility in how they reached personal and instructional goals, but also opened up opportunities for them to connect with literature, achieve high academic standards, and express their individuality as composers.

Appendix A

Student Interest Survey

1. People like to create and express themselves in lots of different ways. Think about how you liketo create. Circle the activities you like to do:WriteDrawTalkSingDanceAct

Other activities:

2. People take on different roles when they work on school projects. What do you like to do best?

3. Rate the following statement: Before writing or creating a multimedia project (e.g., video, blog, podcast, website, etc.), I like to make a plan of what I'm going to write or create:

Strongly Disag	gree D	Disagree	Undecided	Agree	Strongly Agree
Please describe	e your response	:			
4. Rate the fo	llowing staten	nent: I like to writ	te		
Strongly Disag	gree D	isagree	Undecided	Agree	Strongly Agree
Please describe	e your response	:			
home:	-		while writing or creat	0 0	
outline	take notes	share with othe	ers to get feedback	brainstorm	sketch
Other activities	s not listed:				

6. Rate the following statement: I feel comfortable using technology to create things:

Undecided	Agree	Strongly Agree
	8	~8-78
•	Undecided	Undecided Agree

Please describe your response:

7. Please circle any of the technological activities below that you take part in at home or outside of school:

video games	texting	online chatting	fanfiction	creating videos
writing a blog	Facebook	Twitter	taking photos	recording music

Other activities with technology not listed:

Appendix B

Informational Webpage Assignment Sheet

What comes to mind when you think of the 1960s and 70s? Hippies? War protests? Music? The years 1965-1975 were a time of great social change and upheaval in America. They were also the years in which we were engaged in the Vietnam War. In order to better understand the cultural context of the novel *The Things They Carried*, you are going to create an informational website that explains various aspects of history and culture during this time. These will be made public on the Internet so that others can use them as a resource as well.

This is more than Wikipedia! You are going to use images, sound, and more to engage as many senses as possible and to recreate the experience of your topic for the website viewer. The Steps

- 1. Research your chosen topic by browsing websites and looking through books (provided).
- 2. Gather factual information about your topic in the form of text
- 3. Gather artifacts in other modes that represent significant aspects of your topic e.g. videos, podcasts, songs, images, artwork, maps, primary texts (letters, speeches, etc.)
- 4. Design a web page (Weebly) that presents your research in a cohesive, attractive, informative way.

The Criteria

Your website will be evaluated on the following criteria. You will receive a formal rubric soon.

- 1. Overall design of web page (including banner images, font, color, and layout) contributes to viewer's understanding of your topic
- 2. Web page cites and/or links to at least THREE (3) different sources
- 3. Sources include both text and non-text (video, image, audio recording, etc.)
- 4. Website shows evidence of thought and synthesis; rather than just copying and pasting, you have thought about, reorganized, and interpreted information from all of your sources to create a cohesive web page
- 5. Website utilizes all of the required modes (see below)

Required Modes

Your website MUST include ALL of the following components.

- 1. **Text** (written by you and your partner; not copied and pasted)
- 2. **Images** (in the form of a slideshow, with written captions)
- 3. Video (you will have access to YouTube)
- 4. Audio clips (e.g., music, podcasts, a recording of your voice reading a primary document, etc.)

Optional Modes

In addition to these required modes, you may also include maps, links to outside resources, poll questions for people who visit your website to answer, and anything else that you feel will contribute to your viewers' experience and understanding of your topic.

Appendix C

Informational Webpage Grading Rubric

Topic:

Grading Explanation:

You will receive a score from 1-10 for each category. These categories match the requirements listed on your assignment sheet for this project.

Your final grade will consist of your **average score** from all categories, converted to a numeric grade:

10 = 98 (high A) 9 = 93 (low A) 8 = 88 (B) 7 = 80 (C) 6 = 74 (D) 5 or below = 70 or below (F)

Overall design of web page (including banner images, font, color, and layout) contributes to viewer's understanding of your topic

Web page shows evidence of thought and synthesis; rather than just copying and pasting, you have thought about, reorganized, and interpreted information from all of your sources to create a cohesive web page

Website incorporates text, image, video, audio; media chosen is impactful and relevant to topic

Text is well-written and free of careless mistakes

Average Score:	Numerical Grade: _	
Comments:		

Appendix D

Hypertext Literary Analysis Assignment Sheet

For this assignment, you will create a hyperlinked PowerPoint that explores the multiple layers of meaning in a passage from *The Things They Carried*. You will use analytical skills like those you have developed with traditional written assignments, but this digital format will give you more freedom and creativity in your response.

What You Will Do

- Work within a PowerPoint template provided by Mrs. Renner & Ms. Smith
- Create a "home" slide that contains your chosen passage
- Create links in the text that lead to other slides in the PowerPoint or to outside web pages
- Use those links to develop an analysis and personal response to the text
- Integrate multiple modes and a lot of creativity within your responses

The Steps

Stage One: You will perform a close reading, just as you would for an AP essay, by identifying and responding to the elements in the chart below:

What you link	What to say about it	Examples & Suggestions
Key Words & Phrases (At least 3 slides)	Why are the words and phrases integral for understanding the passage? How do these words and phrases connect to the main themes of the book?	Look for words and phrases that repeat, that connect to the chapter or novel title, and/or reveal the big ideas or themes of the text.
Literary Devices (At least 3 slides)	What device is used here? What does it mean and how does it contribute to the overall meaning or emotion of the passage?	See the back of this page for some ideas of what to look for
Intertextual Connections (At least 2 slides)	Can you connect this passage to "texts" in other modes or media (images, music, photographs, film, etc.) to add to the meaning of this passage? Focus on connections to Tim O'Brien, <i>Heart</i> of Darkness, Apocalypse Now, or your classmates' Vietnam Weebly pages.	For instance, the passage might remind you of a music video or movie clip you've seen – you could link to that video and explain how it is related. Or, you might want to create a collage of images that connect in some way to the themes of the text
Questions (At least 2 slides)	What new questions do the phrasing, subject matter, and/or images bring up for you? Direct these questions to the author or to the ether.	-Questions to O'Brien about why or how he did something -Questions about Vietnam -"Big Questions" about life & human nature that arise from the text

Personal Reactions	What is your emotional or thoughtful response to various elements in the passage?	-Written response (journal, letter, informal musings, story, etc.)
(At least 2 slides: 1 per partner)		-Original creative response (artwork, collage, music, musical mashup, recorded narrative, original video, etc.)

Stage Two: You will add a "synthesis slide" that brings together your analysis with final thoughts about the text's themes and O'Brien's overarching storytelling techniques. More instructions on this Tuesday.

Requirements:

- Minimum of 12 slides that link to your main passage (see chart for breakdown)
- At least 5 embedded images incorporated into any of the slides
- At least 2 embedded video or audio clips incorporated into any of the slides

Notes:

You have more **freedom with design** than you did on the Weebly and will be evaluated accordingly. Carefully consider background colors and images, fonts for text and titles, layouts, graphics/images, sound, and how all of these elements work together to organize information and provide an additional means for analysis of your passage.

Also, you are encouraged to make as much of your work **original** as possible, including images, sound, video, etc. For example, you might create a musical mash-up or speak and record an original narrative. The more creativity the better—the sky is the limit!

Helpful Resources:

One of the major categories you will analyze is literary devices, or elements of writing style. In addition to the standard list of devices, O'Brien often uses...

...Concrete, physical details

- ...Intentional sentence fragments
- ...Intentional short sentences alternating with longer sentences
- ...One-sentence paragraphs
- ...Rhetorical questions

...Polysyndenton (the use of a conjunction several times in one sentence: "sirens and melting ice caps

and radioactive gleamings")

- ...Metaphor
- ...Syntactical repetition for effect ("I was a witness. I saw it happen.")
- ...Allusion
- ...Paradox ("I was a coward. I went to war.")

These are the types of literary devices and elements of style that you will identify and analyze.

Appendix E

Hypertext Literary Analysis Grading Rubric

Requirements:

- There are a minimum of **12** slides that link to your main passage _____
 - At least **3** slides include **key words & phrases**
 - At least **3** slides include **literary devices**
 - At least **2** slides include **intertextual connections**
 - At least **2** slides include **questions**
 - At least **2** slides (1 per partner) include a **personal reaction**
- At least 5 embedded images incorporated into any of the slides _____
- At least 2 embedded video or audio clips incorporated into any of the slides _____
- There is a **synthesis slide** that makes a statement about a theme or big idea in your story _____
- The synthesis slide includes an expression of that theme or big idea in a non-text mode _____

Grading Criteria	Description	Points
Quality of Analysis &	Analysis (both written and multimodal) offers a compelling, perceptive, and sophisticated	/ 30
Response	interpretation of the text. Analysis acknowledges complex or multiple meanings within	
	the text. References and connections are apt and specific.	
Use of multiple	Multiple modes (visuals, sound, format, video, etc.) are used to as a means to analyze and	/ 15
modes	respond to the text. These modes do not only serve as decoration, but also serve as a	
	primary vehicle for analysis or response.	
Creativity	Much of your work is original as possible, including images, sound, video, etc. This may mean that you created original artwork, etc. or that you altered, edited, or combined	/ 15
	media in creative and impactful ways.	
Design	There is careful consideration of background colors and images, fonts for text and titles, layouts, graphics/images, sound, and how all of these elements work together to organize information and provide an additional means for analysis of your passage.	/ 15
Linking	The links are appropriate. They promote thoughtful analysis, reader engagement, and movement through the text. There are few dead ends for the reader.	/ 10
Synthesis	Theme statement is accurate & insightful, and it connects to the analysis work completed in the other slides. Statement is deepened and supported by the incorporation of a non- text mode.	/ 10
Mechanics	There are few, if any, grammatical, editing, or proofreading errors.	/ 5

Appendix F

Audio Letter Assignment Sheet

Dear Mom...

Letter writing was a significant experience for soldiers and their loved ones during the Vietnam War. With no access to cell phones, e-mail, or video chat, people had to use the written word to convey their thoughts and feelings—though sometimes they would record tape reels so that they could hear one another's voices! In this project, you will compose a—yes, you guessed it—**multimodal letter** to or from a character in *The Things They Carried*. You will use only the means of communication available to the soldiers: recorded voice, still images, and background sounds or music. However, you will put these together in a thoroughly modern way, using audio editing software, and you will publish your final product online.

The Goal:

Express what the character experienced during the war and how he/she felt about it. Tell the story in a way that seems true to the character. **Don't use plot material** from the book—instead, **use your imagination** to extend beyond what we read on the page. In this way, you become a co-author of this character's story. **Your letter should reveal things that are hidden, implied, or glaringly omitted in the book.**

The Assignment:

Choose a character from *The Things They Carried*. Compose an audio letter—either FROM or TO that character—that includes a "soundscape" (sound effects / background sound). Choose an image to accompany your letter.

The Requirements:

- 30-60 seconds in length
- Recorded voice
- Music or sound effects that play behind your recorded voice
- A single image to display while your audio plays

Extension Possibilities:

- Multiple/layered audio tracks (music + sound effects, etc.)
- A collage or original drawing/artwork instead of a photograph

Questions to Consider:

Would your character use all concrete detail and vivid description, or would he talk more about his thoughts and feelings? Would she say exactly what she felt, or would she only imply it? Would he miss life back home, or would he love the thrill of war? Would her language be literary or simple?

How do you want to reveal your character's experience? Some possibilities...

- One letter in its entirety
- An excerpt from a longer letter
- Several short excerpts from a series of letters over time
- An exchange of letters between your character and someone else
- Parallel letters (recall the Real Estate radio ad example)

Appendix G

Audio Letter Grading Rubric

	Advanced (20)	Proficient (15)	Basic (10)	Below Basic (5)
Storytelling Voice & Emotional Tone / 20	Storytelling voice/style is authentic to the character. Emotional tone is clear, prominent, and appropriate to content	Storytelling voice/style is plausible for the character. Emotional tone is clear but may be subdued or less appropriate to content	Storytelling voice/style is not strongly connected to the character. Emotional tone may be unclear or not quite appropriate for the content.	Storytelling voice/style is detached from character. Emotional tone is inscrutable or inappropriate for the content
Content	Letter reveals unexpected details based on what is hidden, implied, or glaringly omitted from the book. Connection to character and story is clear and sophisticated, connecting at multiple points or levels.	Letter reveals details that make sense based on what is hidden, implied, or glaringly omitted from the book. Further explanation is not needed to identify the connection to character and story.	Letter does not go far beyond what is already told in the book. Some further explanation is needed to identify the connection to character and story.	Sticks close to plot of story. May be unclear how it relates to the story or character from <i>The Things They Carried</i> .
Written Expression / 20	Writing is evocative and impactful (though not necessarily literary, given that it is written in a character's voice)	Writing is well-crafted and expressive.	Writing is clear but may lack expressiveness, originality, or emotional impact.	Writing is unintentionally disjointed, sloppy, or mundane
Use of Sound	Multiple layers of sound are integrated with the voice and add richness, meaning, and emotional impact to the letter. Music & sound effects are highly appropriate for the content of the letter	Additional sounds contribute to the meaning or impact of the letter but are not as carefully integrated or are only somewhat appropriate for the content of the letter	Additional sound does not detract from the meaning of the letter but fails to add richness, meaning, or emotional impact. Sound may be irrelevant to or inappropriate for the content of the letter	Additional sound detracts from the meaning or emotional experience of the letter; may be irrelevant to or inappropriate for the content of the letter
Image / 20	Image adds richness, meaning, and emotional impact to the letter. Highly appropriate for content.	Image contributes to the meaning or impact of the letter but is only somewhat appropriate for content	Image aligns reasonably well with content of letter but does not add significantly to the letter's meaning or impact	Image is missing, irrelevant, or detracts from the meaning or emotional experience of the letter.

Appendix H

Graphic Organizer for Hypertext Literary Analysis

Directions: Use this planning worksheet to prepare for in-class workshop on Tuesday of next week. You will only have two in-class workshop days to create your PowerPoint, so it is important that you use your time outside of class to do the textual analysis part of this project.

This planning worksheet will be taken as a separate grade. Each partner must complete this separately; you will then use class time to pool your work and choose the strongest and most creative ideas to use in your final product.

Key Words & Phrases

Write the word or phase:	Why is the words and phrases integral for understanding the passage?	How do these words and phrases connect to the main themes of the book?
1.		
2.		

Literary Devices

What is the literary device?	Where in the passage do you see it?	What does it mean and how does it contribute to the overall meaning or emotion of the passage?
1.		
2.		

Intertextual Connections

What connection do you see?	What will you need to create (e.g., collage, artwork, video, song, mash-up, etc.) or find (e.g., YouTube video, images, etc.) in order to creatively show this connection?
1.	
2.	

Questions	
Element (e.g., phrasing, subject matter, images, etc.) stimulating the questions:	Question:

Personal Reaction

Journal here: What is your emotional or thoughtful response to various elements in the passage?	How can you express this personal reaction creatively in your project?

Design Elements: Brainstorm how you can use the following elements to deepen your analysis

Images (pictures,				
artwork, symbols, etc.)				
Sound (song—original				
or premade, recorded				
voice, sound effects,				
etc.)				
Color (slide				
backgrounds, font,				
titles, etc.)				
Animation of text and				
transitions between				
slides				

Are there any things you want to create, but you are not sure you have the skill, resources, or tools in order to? If so, write these here and we will try to figure out a way to help you get what you need:

Appendix I

Teacher Interview Protocol

Name	Date
Interviewer	Audio-recorded? yes no
	Camtasia? yes no
	Est. 45 minutes: Time start: Time stop:

Purpose: The interview is designed to elicit the teachers views on how things are going in the classroom during the unit and their views of a few examples of students' multimedia products. Estimated time: approximately 30 minutes

Process: Prior to the interview, turn on Camtasia, check sound for yourself and then keep it going until you've completed the interview.

Introduction: You've been working with students on a variety of multimodal activities for this unit. The purpose of this interview is to get your views on the multimodal workshop instructional materials and approach and hear what you think about some examples of student work. There are no right or wrong answers.

To help us document this interview, I have Camtasia running on this computer, which will record your voice and the computer screen, as well as a back-up audiotape that we will transcribe. Once I have a transcription, I'll email you a copy and you can let me know if you would like to make any changes to it.

We'll begin with a sound check to make sure that the mic is picking up everyone's voices. This interview will take about 30 minutes. Do you have any questions before we begin? *Perform sound check*.

Questions (follow up on issues that emerge during the interview):

- 1. What were your overarching instructional goals for this unit?
- 2. Describe for me your thinking in the sequence and scaffolding of the unit?
- 3. What was the anchor text? Can you describe it for me?

Specific for assignments: Think back over the time students have worked on this multimodal project (discuss specific project).

4. What were your overarching instructional goals for this multimodal project?

- 5. How did you design and facilitate the multimodal workshop for this project?
- 6. Did you make any adaptations to your original plans for this project? Why or why not?
- 7. What do you consider to be the strengths of the project? Why?
 - a. What are the weaknesses? Why?
- 8. What were you looking for when grading these assignments?
- 9. Do you think the multimodal activities helped students to comprehend and analyze the novel for this unit? Why or why not?
- 10. Would you change anything if you assigned the project again in the future?

Questions on Focal Students: *Ask the following questions for each of the four focal students. Bring up final multimodal project on the computer screen and view before questioning.*

- 11. What aspects of this multimodal product are effective?
- 12. What connections do you see to the text?
- 13. What aspects for this multimodal product were less effective? What are areas for improvement?
- 14. How successful was this student in meeting the requirements of the assignment?
- 15. What grade did you give this student? Why?
 - a. What feedback did you provide to this student?
 - b. How could he/she improve their project?

- 16. What observations did you make about this student while he/she composed during the workshop sessions?
- 17. Did this student collaborate with others?
 - a. If so, what did you notice about their collaboration with others?

Other general questions:

- 18. Some students were more successful than others composing with multimedia. Describe key characteristics of the more successful students/least successful students.
- 19. What advice would you give to other teachers interested in integrating multimodal composition?
- 20. Any other feedback or suggestions?

Appendix J

Name	Date
Webpage Partner	Camtasia? yes no
Interviewer	Audio-recorded? yes no Time start: Time stop:

Student Design Interview Protocol: Informational Webpage

Prior to the interview, turn on Camtasia, check sound for yourself and then keep it going until you've completed your last interview.

Introduction: During *The Things They Carried* unit, you and your partner have done a great job creating your Vietnam-era webpage. When you presented your web page, you shared what you liked and some of your design decisions. This interview will be a little bit like that. I want to interview you to learn about how you designed your webpage. First, I'll ask you a few questions just to get to know you a little better. Then, we'll look at your webpage together and I'll ask you about your design. Is that all right with you?

If yes, I want to remember what you say, so I'm going to audio record you and also take some notes. We're interested in your thoughts and ideas, so there are no right or wrong answers. It's like when you present your work in the workshop and talk about your design.

Let's do a sound check for the audio tape recorder

Part 1: Student Background (for focal students)

- 1. Tell me a little bit about yourself. What you like to do outside of school?
- 2. What type of technology do you like to use?
- 3. Do you like to create anything outside of school? *Here ask anything interesting that stems from the students' tech survey.*
- 4. Do you like to write?

Part 2: Collaboration & Process

Process: Open up the Weebly to get some general commentary.

Let's view your webpage

5. Tell me a little bit about what we are seeing here...

- 6. What was your topic? Why did you choose this topic?
- 7. Tell me about how you and your partner created your webpage together. Where did you get your ideas and how did you work together to make it happen?
- 8. How did you divide up the work?
- 9. How well do you think you guys worked together? Were there any aspects you compromised on?
- 10. What was your biggest contribution?
- 11. What was your partner's biggest contribution?
- 12. Describe for me step-by-step what your overall process was for creating your webpage.
- 13. Did you do work on it outside of class? If so, what did you do?

Part 3: Design Decisions

- 14. How did you use images, sound, writing, video, and other visual elements to inform your viewer and give them a multi-sensory experience? (*Prompt for each mode if not addressed*):
 - a. Images:
 - Banner
 - Images on webpage
 - b. Music:
 - c. Writing:
 - Headings
 - Text
 - d. Video

- e. Visual elements
 - Colors
 - Fonts
 - Layout

f. Hyperlinks

- 15. What is your favorite part of the webpage? Why?
- 16. Did you feel like you were successful? (One goal of the assignment was to create a webpage that "uses multiple sense to recreate the experience of your topic for your website viewer.") Why or why not?
- 17. Interviewer question, free choice focus on some aspect of their webpage that you find interesting
- 18. What advice would you give other students about how to create an effective webpage?
- 19. If you had more time to work on your website, what would you add or change? Why?
- 20. Did you develop or enhance some design or technical skills?
- 21. Of the other websites you saw your classmates present, which is your favorite and why?
- 22. Anything you'd like to add?

Appendix K

Student Design Interview Protocol: Hypertext Literary Analysis

Name	Date
Hypertext Analysis Partner	Camtasia? yes no
Interviewer	Audio-recorded? yes no

Prior to the interview, turn on Camtasia, check sound for yourself and then keep it going until you've completed your last interview.

Introduction: During *The Things They Carried* unit, you and your partner have done a great job creating a hypertext analysis. Similar to your weebly interview, I will ask you to share what you liked and some of your design decisions, as well as your process for creating it. We'll look at your hypertext together as I ask you questions about your design. Is that all right with you?

If yes, I want to remember what you say, so I'm going to audio record you and also take some notes. We're interested in your thoughts and ideas, so there are no right or wrong answers. What you say will not affect your grade.

Process: Open up the Hypertext Analysis to get some general commentary.

- 23. Can you explain to me what we are seeing here?
- 24. Why did you choose this passage to analyze?
- 25. What were some big goals, things you wanted to do?

Part 1: Collaboration & Process

- 26. Tell me about how you and your partner created your hypertext together. Where did you get your ideas and how did you work together to make it happen?
- 27. How did you divide up the work?
- 28. How well do you think you worked together? Were there any aspects you compromised on, or changed your mind about to go along with your partner?
- 29. What was your biggest contribution? Why?

- 30. What was your partner's biggest contribution? Why?
- 31. Describe for me step-by-step what your overall process was for creating your hypertext analysis
- 32. Did you do work on it outside of class? If so, what did you do?
- 33. Was your process for creating the hypertext similar or different to the process for creating your weebly? How so?

Part 2: Design Decisions

34. *General question:* How did you use images, sound, writing, video, and other multimodal elements to communicate your analysis of the passage?

13. Go through each slide (10-12) and ask students to explain their analysis and design elements. Use the following prompts

- What was your goal for this slide and how did you use text and media to accomplish it?
- Why did you choose this element? (*ask about the following elements if present*)—*only ask if not mentioned in response to the goal question*
 - Image (image collage, wordle, etc.)
 - Music
 - o Video
 - **PowerPoint transitions**
 - Font or layout
 - Links ("how did you decide what words to link to?)
 - Colors (background, font, etc.)
 - Writing
- How does the design element connect to your analysis or response on this slide? Only ask if not mentioned spontaneously in relation to above.

Slide 1:

Slide 2:

Slide 3:

Slide 4: Slide 5: Slide 6: Slide 7: Slide 8: Slide 9: Slide 10: Slide 11: Slide 12:

- 13. What is your favorite part of the hypertext? Why?
- 14. How successful do you think you were in meeting the goals of this assignment?
- 15. Optional: Interviewer question, free choice *focus on some aspect of their hypertext that you find interesting or would like for them to describe in more depth.*
- 16. What advice would you give other students about how to create an effective hypertext analysis?
- 17. If you had more time to work on your hypertext analysis, what would you add or change? Why?
- 18. Did this assignment help you to understand the passage or book better? Why or why not?

19. How was creating a multimodal hypertext analysis similar to and different from writing an analysis? Do you have a preference?

Appendix L

Student Design Interview Protocol: Audio Letter

Name	Date	
Hypertext Analysis Partner	Camtasia?	yes no
Interviewer	Audio-recorded?	yes no

Prior to the interview, turn on Camtasia, check sound for yourself and then keep it going until you've completed your last interview.

Introduction: During *The Things They Carried* unit, you and your partner have done a great job creating an audio letter. Similar to your weebly and hypertext interviews, I will ask you to share what you liked and some of your design decisions, as well as your process for creating it. We'll listen to your audio letter together as I ask you questions about your decisions. Is that all right with you?

If yes, I want to remember what you say, so I'm going to audio record you and also take some notes. We're interested in your thoughts and ideas, so there are no right or wrong answers. What you say will not affect your grade.

Process: Open the website with the audio letter and image to get some general commentary.

- 35. Can you explain to me what we are seeing and hearing here?
- 36. What were some big goals, things you wanted to do?
- 37. What is the connection between your audio letter and *The Things They Carried*?
- 38. From who's perspective is it written from and who is the intended audience?

Part 1: Collaboration & Process

- 39. Tell me about how you and your partner created your audio letter together. Where did you get your ideas and how did you work together to make it happen?
- 40. How did you divide up the work?

- 41. How well do you think you worked together? Were there any aspects you compromised on, or changed your mind about to go along with your partner?
- 42. What was your biggest contribution? Why?
- 43. What was your partner's biggest contribution? Why?
- 44. Describe for me step-by-step what your overall process was for creating your audio letter
- 45. Did you do work on it outside of class? If so, what did you do?
- 46. Was your process for creating the audio letter or different than the processes for creating your weebly or hypertext? How so?

Part 2: Design Decisions

- 11. General question: How did you use sound and images to tell your story?
- 12. Whose voice did you use for the narration? Why did you want to use his or her voice?
- 13. Was there a specific effect you were trying to achieve by using this voice? Did you give the narrator any directions on how to tell the story? Only ask if not mentioned spontaneously in relation to above
- 14. Other than your narration, what music or sound effects did you include? (Get artist and song title if they know)
- 15. Why did you choose these sounds?
- 16. How does these sounds connect to your letter? Only ask if not mentioned spontaneously in relation to above
- 17. Why did you choose this image?

- 18. How does this image connect to your letter? Only ask if not mentioned spontaneously in relation to above.
- 19. What is your favorite part of the audio letter? Why?
- 20. How successful do you think you were in meeting the goals of this assignment?
- 21. What advice would you give other students about how to create an effective audio letter?
- 22. If you had more time to work on your audio letter, what would you add or change? Why?
- 23. Did this assignment help you to understand the characters or book better? Why or why not?

24. How was creating a multimodal audio letter similar to and different from a written letter? Do you have a preference?

- 25. Out of the three multimodal assignments for this unit, including the weebly, hypertext analysis, and audio letter, which was your favorite? Why?
- 26. Optional: Interviewer question, free choice focus on some aspect of their hypertext that you find interesting or would like for them to describe in more depth.

Appendix M

Metanarrative Reflection for Informational Webpage

Please **thoughtfully** answer each of the following questions about your weebly in a **typed reflection** (minimum of two pages, double spaced). This descriptive reflection will be counted as a separate quiz grade. You will be evaluated on the **thoughtfulness** and **detail** of your responses. You may answer each question separately or weave your answers into a narrative.

- 1. What do you like best about your weebly? Why? What did you struggle with? Why?
- 2. What design decisions did you and your partner make? For example, why did you choose certain images, videos, fonts, colors, etc.? Do you think you were successful in using multiple senses to recreate the experience of your topic for the website viewer? If not, what were the obstacles that prevented you from succeeding in this task?
- **3. How did you and your partner collaborate to create the weebly?** What was your process? How was the work divided up between the two of you? What did you discuss while you worked?

Due: Friday, April 13. Handed in during class or submitted via Edmodo. Length: 2 double spaced pages.

Appendix N

Metanarrative Reflection for Hypertext Literary Analysis

Please **thoughtfully** answer each of the following questions about your hypertext analysis in a **typed reflection** (minimum of two pages, double spaced). This descriptive reflection will be counted as a separate quiz grade. You will be evaluated on the **thoughtfulness** and **detail** of your responses. You may answer each question separately or weave your answers into a narrative.

- 2. What do you like best about your PowerPoint? Why? What did you struggle with? Why?
- 4. What design decisions did you and your partner make? For example, why did you choose certain images, videos, fonts, colors, etc.? Do you think you were successful in using links to move through your text? In using multiple modes to represent your analysis of the text? If not, what were the obstacles that prevented you from succeeding in this task?
- **5. How did you and your partner collaborate to create the presentation?** What was your process? How was the work divided up between the two of you? What did you discuss while you worked?
- 6. How were your process and design decisions for this project different from creating the weebly?

Due: Tuesday, May 1. Handed in during class or submitted via Edmodo. Length: 2 double spaced pages.

Appendix O

Metanarrative Reflection for Audio Letter

Please **thoughtfully** answer each of the following questions about your audio letter in a **typed reflection** (minimum of two pages, double spaced). This descriptive reflection will be counted as a separate quiz grade. You will be evaluated on the **thoughtfulness** and **detail** of your responses. You may answer each question separately or weave your answers into a narrative.

1. **Connections:** Explain the connections between your letter and *The Things They Carried*. To what character is your letter connected? How is it connected to that character? Who is at the "other end" of your letter? How did you decide what to write about and how to write about it in a way authentic to your character?

2. **Emotions:** What emotions were you trying to express on behalf of the "letter writer"? What is the emotional *tone* of your letter? What emotions would you expect the recipient to feel upon reading the letter? How are these emotions conveyed in your choice of language, sounds, or image?

3. Audio: What additional audio did you include? What is the significance of your additional audio (music and/or sound effects)? Did you edit the audio for your soundscape? Why?

4. **Image:** What is the significance of your image? How did you choose it? What do you hope it brings to mind for the viewer? How does your image connect to the language of the letter and accompanying sounds?

5. **Process:** What was your process for completing the soundscape? How was your process similar and/or different than the weebly and hypertext assignments? What were your successes and challenges with this assignment?

Due: Friday, May 10. Uploaded via Edmodo if possible (or submitted to me on paper) **Length:** At least 2 double spaced pages

Appendix P

Arianna & Keira's Informational Webpage



Appendix Q

Vivian & Caitlyn's Informational Website (part 1)



Appendix R

Vivian & Caitlyn Informational Website (part 2)

Government

United States

"Every president has faced the ghosts of Vietnam in his own way, though each has been wary of being sucked into another unpopular war. Ford (during the Mayaguez crisis) and both Bushes (Persian Gulf, Iraq, Afghanistan) deployed massive force, as if to say, "Vietnam, be damned." On the other hand, Carter, Clinton, and Reagan (to the surprise of many) acted with extreme caution, mindful of the Vietnam experience. Obama has also wrestled with the Vietnam legacy, using doses of American firepower in Libya while still engaged in Iraq and Afghanistan."

Vietnam War has haunted the United States Government since the end of the war. The strange war tactics the military encountered in Vietnam caused the United States to take a step back-literally, withdrawing its aid from Southern Vietnam- and analyze its own military tactics. The war, combined with the Watergate scandal, enabled the United States citizens to get better access into its government's endeavors. The war caused such an uproar, that ever since, the draft has not been used.

Vietnam

After Northern communist Vietnam won the war, Vietnam's government settled into trying to rebuild the country under a communist government and as many Southern Vietnam citizens field from the country, however, this was not so easy since, Cambodia's communist leader was terrorizing members of Vietnam's border Villages. Vietnam's engagement in various wars after the Vietnam War, gave it the fourth ranking Military in the world, and one of the worst economies in the world also. The government stepped back and emerged in July of 1976 as the **Socialist Republic of Vietnam (SRV)**. Today as Vietnam works its way into a capitalist society, no one can tell that Communist Northern Vietnam had won that war.

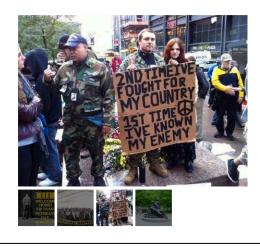
Social Society and Entertaiment

The Aftermath of the Vietnam War has had many effects in present and past day society in so many levels. First and foremost, The Vietnam war can be described as the war that raised the modern-day War Hawks in the United States. After the devastating loss of the war to a peripheral country, xenophobia haunted social society around the world because nobody wanted the spread of communism to emerge. In addition, the aftermath of Vietnam War changed the way war movies were viewed. The Vietnam War could be described as a T.V War because many war movies such as: Apocalypse Now, Another Brother, Cold War, The Anderson Platoon, <u>The 13th Yalley</u>, and Diverting the Buddha were all based of the Vietnam War. This was the first time that unrestricted footage horror of a war was welcomed right into people's living rooms.

Where are the Jobs for the Vietnam Vets?

(Truth is not many exist today)

"When the soldiers came home from Vietnam, there were no parades, no celebrations. So they built the Vietnam Memorial for themselves." William Westmoreland





For More on Vietnam Veterans:

http://www.youtube.com/watch?v=Qx_QJSqiqG8 http://www.youtube.com/watch?v=bb51KrjvQ74

Appendix R

DeShawn & Calvin'S Informational Webpage



Weaponry:

U.S. Weaponry:

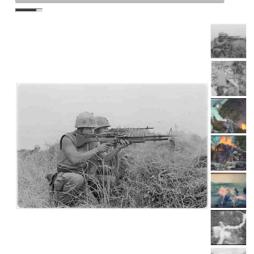
The U.S military during the Vietnam War used the M7 Bayonet for close quarters combat along with Colt M19, the main sidearm for the typical U.S. troop. The U.S. weapon of choice was the M16 assault rifle, a 3-round burst weapon capable of killing an enemy from just about any range and could be enhanced with scopes. Explosives included claymores, frag grenades, and C4 along with the M18 smoke grenade used for tactical purposes, such as sneaking and decoys. The most brutal weapon was the Flamethrower because it killed not only the enemy but themselves because of the broad range of the weapon.

Vietnamese Weaponry:

The Vietcong's arsenal consisted mostly of Russian AK-47s and the occasional heavy machine gun. To destroy vehicles, the Vietnamese troops had access to highly-effective **Rocket-Propelled Grenades and mortars. The** Vietnamese knew their environment so well that they had an advantage from the start. They also made boobie traps from anything that they could salvage.



00:00



Guerilla Tactics:

The Vietnamese forces utilized two main strategies in their confrontations with the U.S. military. Their guerilla tactics consisted of a main force which employed a vast number of troops for head-tohead conflicts, while their secondary plan consisted of using boobie traps, underground tunnels, and even the environment which allowed them to use a hit-and-run tactic.

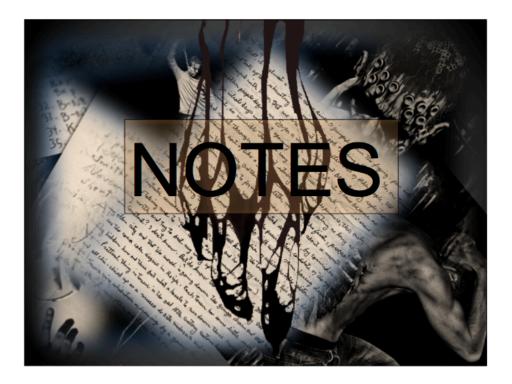
Weapons and War Tactics

LINKS:

- 1. vietnamwarinfo.org/weapons-of-the-vietnam-war/
- 2. www.olive-drab.com/od_history_vietnam_weapons_equipment.php
- 3. www.vietnam-war.info/weapons/
- 4.www.pbs.org/battlefieldvietnam/guerrilla/index.html
- 5. www.eleven-bravo.co.uk/the-war/tactics/eagle-flight.php

Appendix S

Arianna & Keira's Hypertext Literary Analysis





"You separate it from yourself."

This quotation shows exactly how the narrator separated everything from himself. He took everything that happened to him in the war and he put it all into a book. He separated himself from the war and everything that occurred, including the people he fought with, such as Bowker.

O'Brien took his novel and put in the theme of baggage. The literal context shows "the things they carried" such as the machine guns and the rations and the ammo, but also the proverbial "things they carried" such as their memories, their turmoil, and their stress.

The image in the background shows a man, presumably O'Brien, literally separated from himself. His mouth and eyes are on one side, symbolizing that what he saw and said had the most impact on him. The nose on the other side is short-sided, showing that he tried to distance himself from the vile scents of the war scene.

BACK <-

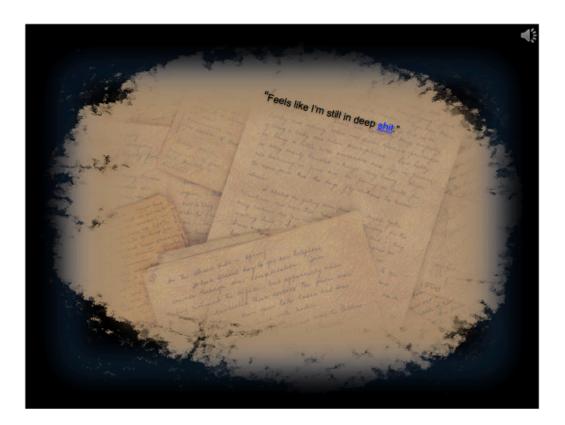


"FEELS LIKE I'M STILL IN DEEP SHIT."

From this quot how couldn't on, e can see ex ir. He pe it, or "separate himself" from it li felt like he was esca Row eeper and deeper ed inside the war and he did trap into the war, even after him under, but people who loved hir

Once again, the theme of baggage comes up. O'Brien shows baggage differently in this scene, however, because he has so many memories of the war that they weighed him down in a way you can't just lift off. That baggage weighed him down to the point that he had to find a way of release, which was his <u>suicide</u>.

The image in the background shows the forces pulling him apart. The war (the black elements of the image) are ripping, shredding, and biting him and making sure he doesn't forget that they are there. The people he loves (the white elements) are trying to take him away from the war so that he may live his life normally once more.



The irony of the situation:

"Speaking of Courage" was written in 1975 at the suggestion of Norman Bowker, who three years later hanged himself in the locker room of a YMCA in his hometown in central lowa. (page 155)

Ironic, isn't it? That a man who wants a story about courage didn't have enough courage and strength to keep himself alive? This passage contributes to the passage as a whole because all of the "notes" written in this section were from Bowker himself. This whole section describes a person who was trying to make up for something he didn't have by reading about it in a friend's book.





Yes. Throughout the whole passage, O'Brien refers to Bowker as "Norman Bowker" not "Norman" or even "Bowker". This excerpt shows how distant O'Brien really was from the war. He couldn't even call his friend by his first name because it connected him to the war, and he couldn't cope with that, just as Bowker couldn't cope with the thought of the war hautting him forever.

Personal Reaction: Arianna

My personal reaction?

Well....it's quite jumbled. This passage haunted me. It kept me wondering exactly what was going on. At first I thought this passage was absolutely pointless. Nothing made sense to me and I began thinking that there was nothing emotional about it or thoughtful. Then I reread it.

The whole passage to me is one big oxymoron. Bowker begged O'Brien, his friend, to write a story about courage. Bowker, however, contained no courage as he committed suicide. This passage spoke to me, as I've had friends who've wanted to commit suicide.

This passage made me believe that there was hope for you if you know how to express your feelings. Personally, this passage is comprised of like seven different things. It's thoughtful, but detached. It's caring, but it's also emotionless. It's careful, but it's messy in its execution. It's also very heartfelt.

I felt like this passage made no sense, but it made sense. "Speaking of Courage" was something Norman Bowker never understood how to do.

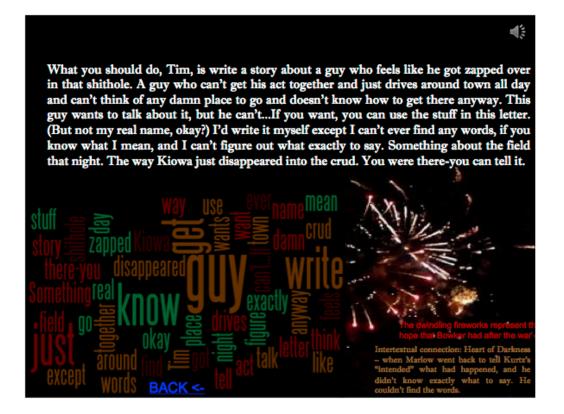
Personal Reaction: Keira

I found "Notes" to be very sad, having involved Bowker and his friend's death. I believe O'Brien may have not wanted to come to terms with how the death happened. He may have thought deep down that Bowker could have done something and that is why he originally left notes out.

It seems as if Bowker may have hung himself because he felt that Kiowa was not getting the truth behind his death like he had deserved. Maybe Bowker needed to come to terms by letting everyone know what happened. Since Bowker was always the one who felt like nothing was being done, maybe hanging himself was "doing something about it". God, this is starting to sound like some jerkoff vet crying in his beer. Sorry about that. I'm no basket case – not even any bad dreams. And I don't feel like anybody mistreats me or anything, except sometimes people act *too* nice, too polite, like they're afraid they might ask the wrong question...But I shouldn't bitch. One thing I hate-really hate- is all those whiner-vets. Guys sniveling about how they didn't get any parades. Such absolute crap. I mean, who in his right mind wants a *parade?* Or getting his back clapped by a bunch of patriotic idiots who don't know jack about what it feels like to kill people or get shot at or sleep in the rain or watch your buddy go down underneath the mud? Who *needs* it?

Anyhow, I'm basically A-Okay. Home free!! So why not come down for a visit and we'll chase pussy and shoot the breeze and tell each other old war lies? A good long bull session, you know?





Why, O'Brien, did you put so much irony and juxtaposition in that sentence?

"Speaking of Courage" was written in 1975 at the suggestion of Norman Bowker, who three years later hanged himself in the locker room of a YMCA in his hometown in central Iowa. (page 155)



This sentence is juxtaposed between the "courage" that Bowker wanted and the "hanged" that he ended up becoming.

Why did O'Brien put so much distance between himself and Norman Bowker? Throughout the entire passage, he refers to Bowker as Norman Bowker. That was his friend, so don't you think he should have used only Norman? Why so much distance?

This would have to be phrasing? Why'd he phrase that the way he did? It's strange that he only referred to Kiowa as "Kiowa" but used Bowker's full name.

191

Appendix T

Vivian & Caitlyn's Hypertext Literary Analysis







POSTCARD

I had a buddy in Vietnam. His name was Bob Kiley, but everyone called him Rat.

A friend of his gets killed, so about a week later Rat sits down and writes a letter to the guy's sister. Rat tells her what a great brother she had, how together the guy was, a number one pai and comrade. A real soldier's soldier, Rat says. Then he tells a few stories to make the point, how her brother would always volunteer for stuff nobody else would volunteer for in a million years, dangerous stuff, like doing recon or going out on these really badass night patrols. Stainless steel balls, Rat tells her, the guy was a little crazy, for sure, but crazy in a good way, a real daredevil, because he fixed the challenge of it, he liked testing himself, just man against gook. A great, great guy, Rat says.

Anyway, it's a terrific letter, very personal and touching. Ret already bawls writing it. He gets all teary telling about the good times they had together, how her brother made the war seem almost fund aways raising hell and lighting up villes and bringing smoke to bear every which way. A great sense of humor, too. Like the time at this river when he went fishing with a whole damn crate of hand grenades. Probably the funniest thing in world history, rat says, all that gore, about twenty zillion dead gook fish. Her brother, he has the right attitude. He know how to have a good time. On Halloween, this real hot spooky night, the dude paints his body all different colors and puts on this weird mask and hikes over to a ville and goes trick-or-treating almost stark naked, just boot and balls and an M-16.

A tremendous human being, rat says. Pretty nutso sometimes, but you could trust him with your life.

And then the letter gets very sad and serious. Rat pours his heart out. He says he loved the guy. He says the guy was his best friend in the world. They were like soul mates, he says, like twins or something, they had a whole lot in common. He tells the guy's sister he'll look her up when the war's over So what happens?

Rat mails the letter. He waits two months. The dumb cooze never writes back.

....

He's nineteen years old- it's too much for him- so he looks at you with those big sad killer eyes and says cooze, because his friend his dead, and because it's so incredibly sad and true: she never wrote back.

BACK



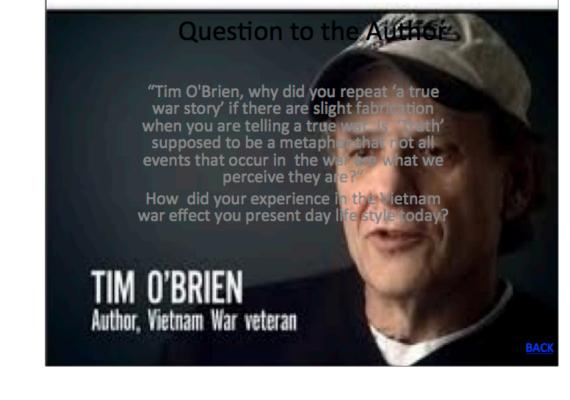
Personal Reaction

In the Thixes They Carry the author Tim O Brien reflects back on his experience in the Vietnam War the story that period any stuck out the most to me, was when O'Brien tells a true war story about his friend Bob 'Re'. Kiley .This story really stuck out to me because it was the most heart felt. It really shows us the crings that soldiers carry into war, like memories, love and grief. Love was what Rat brought into the war and memories about his friends Curt Lemon is what Rat will always treasure. I believe that an' Vet from the Vietnam War can feel the sorrow Rat felt in the descriptive letter he wrote lamentine. Curt's death to his friend's sister. This story exemplifies the story's theme because in his Rat's eiter "Right spills over into wrong. Order blends into chaos, love into hate, unicess into beauty, aw into anarchy, civility into savagery'. Rat is a young man that, probably, never experienced the complexity of how it really feels to lose a friend. Curt and Rat didn't resemble typical soldiers, instead they resembled two teenagers looking to have a goodtime in "serious" environment. They fooled around, and their foolery caused Curt his life.

BACK

I think that the reason why Curt's sister didn't reply back to any of Rats letters was because she was upset that her brother got drafted to a war that appeared to not have any meaning





"Affirm," he said. "Invisible. So what happens is, these guys get themselves deep in the bush, all camouflaged up, and they lie down and wait and that's all they do, nothing else, they lie there for seven straight days and just listen. And man, I'll tell you—it's spooky. This is mountains. You don't know spooky till you been there. Jungle, sort of, except it's way up in the clouds and there's always this fog-like rain, except it's not raining—everything's all wet and swirly and tangled up and you can't see jack, you can't find your own pecker to piss with. Like you don't even have a body. Serious spooky. You just go with the vapors—the fog sort of takes you in....And the sounds, man. The sounds carry forever. You hear shit nobody should ever hear."

Sanders was quiet for a second, just working the yo-yo, then he smiled at me. "So, after a couple days the guys start hearing this real soft, kind of wacked-out music. Weird echoes and stuff. Like a radio or something, but its not a radio, it's this strange gook music that comes right out of the rocks. Faraway, sort of, but right up close, too. They try to ignore it. But it's a listening post, right? So they listen. And every night they keep hearing this crazyass gook concert. All kinds of chimes and xylophones. I mean, this is wildemess—no way, it can't be real—but there it is, like the mountains are tuned in to Radio Fucking Hanoi. Naturally they get nervous. One guy sticks Juicy Fruit in his ears. Another guy almost flips. Thing is, though, they can't report music. They can't get on the hom and call back to base and say, 'Hey, listen, we need some firepower, 'we got to blow away this weirdo gook rock band.' They can't do that. It wouldn't go down. So they lie there in the fog and keep their months shut. And what makes it extra bad, see, is the poor dudes can't horse around like normal. Can't joke it away. Can't even talk to each other except maybe in whispers, all hush-hush, and that just revs up the willies. All they do is listen." Again there was some silence as Mitchell Sanders looked out on the river. The dark was coming on hard now, and off to the west I could see the mountains rising in silhouette, all the mysteries and unknowns."

"This next part," Sanders said quiety or even the "Probably not," I said. "You won't. And you know why?" "Why?" "Because it happened. Because every word is absolute

NEXT

dead-on true

"These six guys, they're pretty fried out by now, and one night they start hearing voices. Like at a cocktail party. That's what it sounds like, this big swank gook cocktail party somewhere out there in the fog. Music and chitchat and stuff. It's crazy, I know, but they hear the champagne corks. They hear the actual martini glasses. Real hoity-toity, all very civilized, except this isn't civilization. This is Nam.

"Anyway, the guys try to be cool. They just lie there and groove, but after a while they <u>start hearing</u>-you won't believe this—they hear chamber music. They hear violins and shit. They hear this terrific mama-san soprano. Then after a while they hear gook opera and a glee club and the Haiphong Boys Choir and a barbershop quartet and all kinds of weird chanting and Buddha-Buddha stuff. The whole time, in the background, there's still that cocktail party going on. All these different voices. Not human voices, though. Because it's the mountains. Follow me? The rock—it's *talking. And the fog, too, and the grass and the goddamn mongooses.* Everything talks.

The trees talk politics, the monkeys talk religion. The whole country. Vietnam, the place talks.

"The guys can't cope. They lose it. They get on the radio and report enemy movement—a whole army, they say—and they order up the firepower. They get arty and gunships. They call in air strikes. And I'll tell you, they fuckin' crash that cocktail party. All night long, they just smoke those mountains. They make jungle juice. They blow away trees and glee clubs and whatever else there is to blow away. Scorch time. They walk napalm up and down the ridges. They bring in the Cobras and F-4s, they use Willie Peter and HE and incendiaries. It's all fire. They make those mountains bum. "Around dawn things finally get quiet. Like you never even *heard quiet before. One of* those real thick, real misty days—just clouds and fog, they're off in this special zone—and the mountains are absolutely dead-flat silent. Like Brigadoon—

pure vapor, you know? Everything's all sucked up inside the fog. Not a single sound, except they still hear it. "So they pack up and start humping. They head down the mountain, back to base camp, and when they get there they don't say diddly. They don't talk. Not a word, like they're deaf and dumb. Later on this fat bird colonel comes up and asks what the hell happened out there. What'd they hear? Why all the ordnance? The man's ragged out, he gets down tight on their case. I mean, they spent six trillion dollars on firepower, and this fatass colonel wants answers, he wants to know what the fuckin' story is. "But the guys don't say zip. They just look at him for a while, sort of funnylike, sort of amazed, and the whole war is right there in that stare. It says everything you can't ever say. It says, man, you got wax in your ears. It says, poor bastard, you'll never know—wrong frequency—you don't even want to hear this. Then they salute the fucker and walk away, because certain stories you don't ever tell."





per·son·i·fi·ca·tion

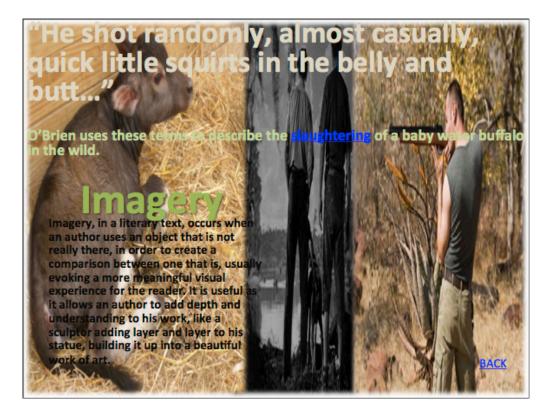
noun \pər-ˌsä-nə-fə-ˈkā-shən\ **Definition of** *PERSONIFICATION*

1: attribution of personal qualities; *especially* : representation of a thing or abstraction as a person or by the human form

2: a divinity or imaginary being representing a thing or abstraction

3: embodiment, incarnation

BACK







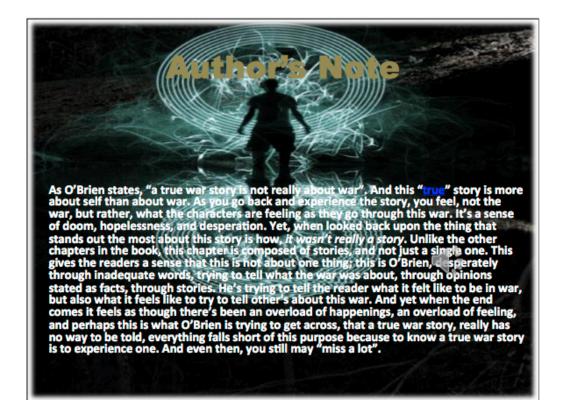
Rat's characteristics reminds me of Kurtz characteristics in Apocalypse Now. Their characteristics are so much alike because all of their actions are amoral. Kurtz lost his mortality and brainwashed throughout the whole plot because of the environment he was trapped in. His actions were amoral it was neither morally good nor was it morally bad. So many things pointed out that both "Rat" and Kurtz were insane because Kurtz was brought into the Cambodia as an experiment, and than he became his own prisoner. Rat's

NEXT

"YOU CAN TELL A TRUE WAR STORY BY THE QUESTIONS YOU ASK. SOMEONE TELLS A STORY, LET'S SAY, AND AFTERWARD YOU ASK, 'IS IT TRUE?' AND IF THE ANSWER MATTERS, YOU'VE GOT YOUR ANSWER."

So, to O'Brien, the author, I ask – Is it true? The book, the story, the experience. Is any of it true





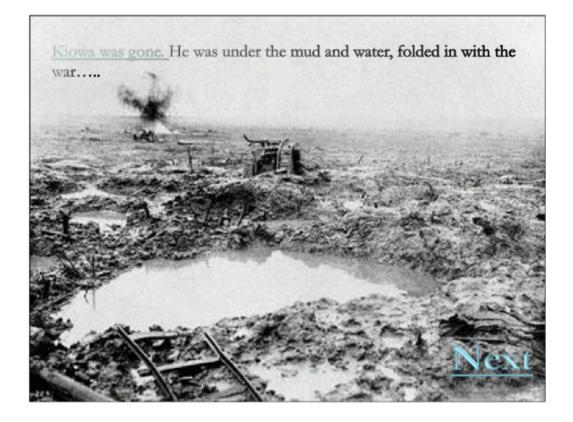
Appendix U

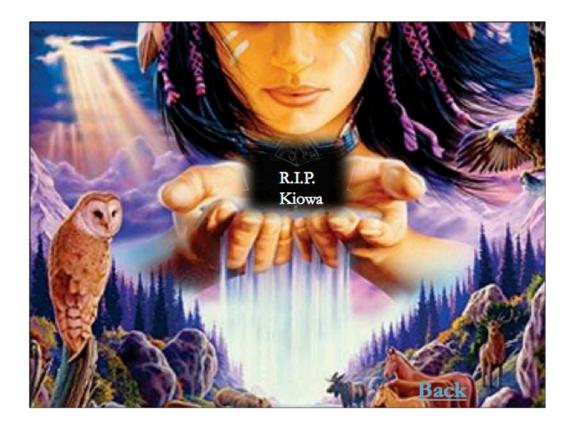
DeShawn & Calvin's Hypertext Literary Analysis













Personal Reflection

"The rain was the war and you had to fight it"

I see a very deep meaning in this quotation. To me, this is saying the war is just like the rain in the sense that there is nothing you can do to speed it up. A soldier has no shoice, but to codure the rain no matter how bad the weather is. Like the tain, a soldier has to codure the war regardless of what happens, who dies, or the

Calvin

Personal Reflection:

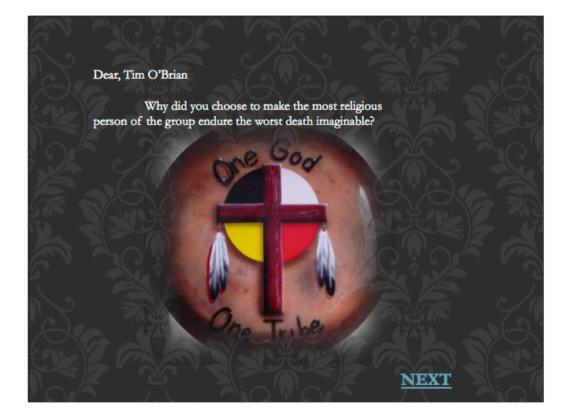
The rain could not be avoided. The rain kept falling and falling without stopping which caused the "poo" to rise thigh-deep in the field along the river. I think the rain had to be the biggest enemy because men can not control mother nature. Tim O'Brien in my eyes has a personal vendetta against Native Americans. Then again, they referred to their missions at times as being "In the S***" Soooooooooo the irony of this story in my opinion is "If you call your job or hobbies s*** you may end up in it. LITERALLY!!!

DeShawn

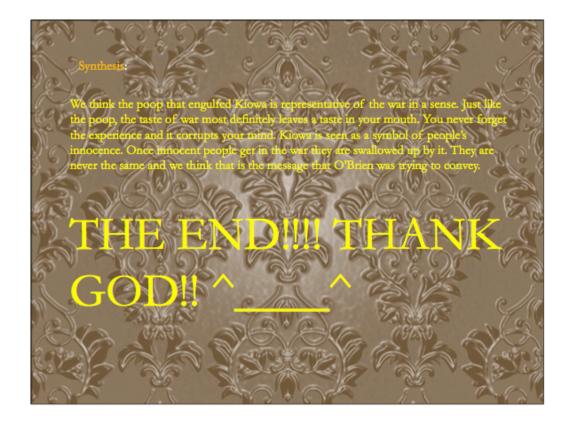
BACCCKKKI

Backkkkk!!









Appendix V

Multimodal Transcript of Arianna & Keira's Audio Letter

Time 00:00	Music	Sound Effect	Voice Narration		
00:00			[Arianna's voice] March 1st		
00:01	["What the World Needs Now is Love" by Dionne Warwick (1965)] What the world needs now, is love sweet love . It's the only thing that there's just too little of.		Dear Kiowa, Your letter depresses me. The war sounds worse than I thought it would be. I can't believe you've only been there a month and you're already talking about dead Charlie and humping around. You sound like you're in a lot of pain. I don't blame you. From what I've heard from Martha, Jimmy says it's hard out there. You don't talk about it much though; that's why you'll make it out. You're strong. God loves you. I love you. Please be careful, Dahlia		
00:22	What the world needs now is love sweet love. no not just for some but for everyone.		September 12, Dear Kiowa, I know I haven't been writing. That's my fault because the baby is hard to manage by yourself. Rozene is a sweet girl. Our daughter is perfect just like you. I've been showing her pictures of you		
00:33	["Sparrow" by Miika 153]	Baby giggling	She laughs every time she sees your face. She doesn't even really know you and she misses you as much as I do. There is a picture of us in this letter. I thought you'd want to see us. I also put in her first pair of socks. They are a good luck charm for you to come home safely. Please do.		

			Be safe my love,
			Dahlia
00:49	[Same song but		October 18,
	started at a		Dear Kiowa,
	different section]		Your mother came by to visit to see Rozene.
			She sends her love though I know that might
			not mean much in the loveless place you're in.
			Dwelling on Lavender for this long isn't
			healthy. You know it wasn't your fault. Be safe
			while you're moving through the hole you're
			in. I was reading an article and they said the
			muck over there can pull you under. Don't let
			yourself be pulled.
01:10			[Paul's voice]
			Ma'am there's a telegram for you.
01:14			[Arianna's voice]
			Dead?
01:16		[Keira's voice]	
		Sobbing	
01:23			He, he, he can't be dead
01:25		Sobbing	
01:33-			[Paul's voice]
01:36			I'm sorry miss. He was a great soldier.

Appendix W

Multimodal Transcript of Caitlyn's Audio Letter

Time	Music	Voice Narration
(min)		
00:00	Instrumental version of "Diary" by Alicia Keys	
00:09		Dear Rat, Sorry it took me so long to write you back. It was really hard for me to lament the death of my brother. I hated that his life was taken by a war that did not have a purpose. There was a time period where I wanted to come to your base and kill you for helping to take my brother's life. I hated you for such a long time. And when I mean I hated you; I really hated you, but now I'm thankful for getting to know somebody who appreciated my brother Curt the way I did. I hope you have a safe journey back home. Thank you. Love, Susan
00:44- 1:00	▼	

Appendix X

Time	Music	Sound Effect	Voice Narration			
00:00	Instrumental version of "President Carter" by Lil' Wayne					
00:19			DeShawn : ((sigh)) Dear Dad, I heard once that they would rather hear about memories than enemies / Rather hear about what was or will be than what is / Rather hear about how you got it over how much it cost you / Rather hear about finding yourself and how you lost you / Rather you make this an open letter / About family and struggle and it taking forever / About hearts that you've broken and ties that you've severed / No doubt in my mind, that'll make them feel better. I love you dad, and I hope that one day that I will come home and we will be united as one again. Note: Lyrics from Drake's "Headlines" are italicized			
:50		Explosion with broken glass				
:54		51000	Calvin: Kiowa! Kiowa!			
:55	<u>⊢</u>	Static				
:57-1:17						

Multimodal Transcript of DeShawn & Calvin's Audio Letter

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