

Collaborative Composing in the Digital Dimension:  
An Investigation of Young Adolescents' Multimodal Processes and Products

By

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To my husband, Sean, and my daughter, Amelia, for their unwavering love and encouragement

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## CHAPTER 1

### INTRODUCTION

The vast and rapidly changing technological landscape has broken down old boundaries for literacy learning—and presented new conundrums. On one hand, new and reimagined technologies have created collaborative spaces for reading and writing, provided alternative pathways for children and adolescents to shape meaning, and enabled the often instantaneous dissemination of information. However, these technologies, which are nearly ubiquitous in the lives of 21<sup>st</sup> century students (Madden et al., 2013; Rideout, Foehr, & Roberts, 2010), have also introduced new questions for the study and practice of literacy—in hybrid spaces, cultures, and institutions, what constitutes a literacy practice? As “new” contexts for literacy emerge, what happens to the “old” ones? And, across these contexts, how can educators support students in making, evaluating, validating, and contesting meaning from print-based, digital, and multimodal texts?

More than two decades of sophisticated and wide-ranging literacy research has addressed many of these questions, illuminating numerous ways in which adolescents are using multimodal tools to create in the digital dimension (see reviews of literature authored by Buckingham et al., 2005; Ito et al., 2008; Jewitt, 2008; Mills, 2010a). Researchers have studied digital literacies across contexts, documenting the use of new media in classrooms (Miller & McVee, 2013; Smythe & Neufield, 2010; Wilson, Anders, & Chavez, 2012), out-of-school settings (Black, 2008; Lam, 2009; Yi & Hirvela, 2010), and in informal learning environments (Halverson, 2010; Ehret & Hollett, 2013; Hull & Zacher, 2004). Researchers have also directed their attention to the ways in which children and adolescents are collaborating across space, place, and time to

engage in joint activity that emerges from shared personal interests or goals (Black, 2008; de Haan, Leander, Ünlüsoya, & Prinsen, 2014; Lam, 2009).

In terms of instructional implications, this growing body of literature reveals that digital, multimodal pedagogies can engage the knowledge, identities, and expertise that adolescents have developed in nonschooled contexts (Vasudevan, DeJaynes, & Schmier, 2010). While multimodal composing has been widely acknowledged as useful tool for motivating learners (Alvermann, 2008; Bailey & Carroll, 2010), recent research also suggests that combining modes in a rich, intertextual landscape (Dalton, 2012; Ranker, 2008) can present “not just a new way to make meaning, but a different kind of meaning” (Hull & Nelson, 2005, p. 225). In particular, multimodal composing practices can represent a shift from traditional authority to an epistemology of shared expertise (Mills, 2010b), which asks students and teachers to construct new, relational identities.

What is missing from the literature is a rich understanding of how students are collaboratively creating digital, multimodal products for academic purposes in face-to-face contexts. This is perhaps surprising, given the interest in collaboration and communication from researchers studying adolescents’ out-of-school literacy practices and the emphasis on digital collaboration from policy-makers and documents. For example, organizations such as the International Society for Technology in Education (ISTE) have consistently recommended the use of technology to encourage both online and face-to-face collaboration. Further, the Partnership for 21st Century Skills lists collaboration and communication as two of the four key skills that students must build in schools (Partnership for 21st Century Skills, 2012), while ISTE calls for educators to develop students’ 21<sup>st</sup> century competencies, which include crafting creative and original multimedia work in complex project-oriented teams in which the problems,

tasks, players, roles, and processes are in flux (ISTE, 2014). In a recent study by the Bill and Melinda Gates Foundation (2014), teachers even listed “supporting student collaboration and providing interactive experiences” and “increasing class-wide engagement through multimodal instruction” as two of the six expressed expectations for digital tools used for instructional purposes (p. 8).

However, across research, policy, and instructional documents, despite the espousal of the benefits for collaborative, multimodal composing in the digital dimension, there is a lack of clarity surrounding what these composing processes look, sound, and feel like. In addition, there are open questions surrounding the venues (i.e., online, in person, a combination of the two), configurations of student collaborators (i.e., pairs, small group, student-chosen, teacher-determined), and structures (i.e., types of leadership models, such as expertise-based or role-driven) that can best support the co-construction of meaning and the negotiation of ideas. In order to respond to these lingering questions, this study is organized around three main goals: (1) exploring young adolescents’ individual, multimodal composing processes and products; (2) examining young adolescents’ collaborative, multimodal composing processes and products; and (3) identifying instructional conditions which support collaborative, multimodal composing. A critical element of this work is the integrated analyses of students’ multimodal processes and products with the goal of understanding the negotiations that occur as students plan and produce digital, multimodal responses to literature.

### **Research Questions**

The following research questions guided this study:

- 1. What processes do students use as they compose individual multimodal products?*
- 2. What processes do students use as they compose collaborative multimodal products?*

3. *What instructional conditions support students' collaborative, multimodal composing?*

These questions were tracked throughout the analysis of data collected during a six-week study in which a group of fifth-grade students read and responded to a series of texts using digital and multimodal tools. Overall, students created ten final multimodal products, both individually and collaboratively. They also completed a series of daily multimodal activities, such as vocabulary videos, and responded to each other's work using a digital tool called VoiceThread. Chapter 3, *Methodology*, provides detailed information regarding data collection and analysis techniques, including the selection of focal students, events, and projects for more detailed analysis.

### **Overview of the Dissertation**

The dissertation is divided into seven chapters. This chapter has presented the objectives of this study in relation to what we currently know about adolescents' digital and multimodal composing practices. Chapter 2 highlights the theoretical frameworks that underlie the design of the research and the analysis of data. I also detail findings from a review of related empirical literature and conclude the chapter with a description of how this study was designed to provide new and needed insights into adolescents' multimodal composing practices. In Chapter 3, I focus on methodological concerns. First, I describe the site and context for the study, outline my role as teacher-researcher, and present demographic and background information for study participants. I then provide an overview of the various digital tools that students used during the data collection period, describe data collection procedures, detail the primary sources of data, and outline methods for data analysis. Chapter 3 concludes with a discussion of the strengths and limitations of the research.

Findings are arranged in three chapters and organized around research questions. In Chapter 4, I present findings from the first phase of data analysis, which centered on two focal students' individual, multimodal composing processes and products. Chapter 5 contains findings from a microanalysis of these focal students' collaborative composing interactions and addresses how knowledge is generated, distributed, and negotiated in the collaborative multimodal composing process. The third and final findings chapter, Chapter 6, presents a set of instructional conditions which supported students' collaborative, multimodal composing practices. Chapter 7 contains an overview of the study's findings, a discussion of this work's contributions, and suggestions for future research.

## CHAPTER 2

### LITERATURE REVIEW

This chapter reviews the theoretical, conceptual, and empirical literature that guided this study. First, I outline some of the theories and resulting assumptions that underlie the design and enactment of the research. Next, in order to situate this study in existing empirical research, I examine representative examples from the literature on adolescents' digital and multimodal literacy practices. Finally, I explore some of the gaps in the existing knowledge base and make an argument for in-depth, qualitative research that addresses young adolescents' individual and collaborative multimodal processes and products, as well as the instructional conditions which can support students' collaborative, multimodal composing.

#### **Theoretical Framework**

This study is informed by conceptual work in two major areas: new literacies (Knobel & Lankshear, 2007; Leu, Kinzer, Coiro, & Cammack, 2004; New London Group, 1996) and multimodality (Jewitt, 2006; Kress, 2003). These theories draw upon various disciplinary and theoretical traditions (e.g., critical theory, cultural studies, literary theory, semiotics, and theories of communication and globalization). However, new literacies and multimodal theories share overarching sociocultural principles: sign systems emerge from social interactions and are rooted in cultural and historical traditions (Enciso & Ryan, 2011), literacies are embedded in ideologies that develop recursively through social practices (Moje & Lewis, 2007), and literacies are always situated in specific social contexts and have links to everyday life (Barton & Hamilton, 1998; Gee, 2003).



## **New Literacy Studies**

The field of New Literacy Studies (NLS) has sought to rename (from literacy to literacies) and redefine (from an autonomous set of isolated skills to locally situated and culturally bound) the numerous practices that make up what we call literacy (Barton, Hamilton, & Ivanic, 2000; Leu et al., 2004). From this perspective, literacy is a social practice, one that is always situated in a specific time and place, and one that asks questions about whose literacies are valued and whose are marginalized (Street, 1995). Reading and writing are not isolated skills that can be separated from other social processes; instead, they are interwoven with other representational systems (Bakhtin, 1986; Gee, 2001). In the 21st century, this notion is particularly pertinent; reading and writing processes are linked to and shaped by new means for the representation and dissemination of information. Theorists acknowledge that the construct of literacy itself is continuously morphing as new technologies both emerge and disappear (Knobel & Lankshear, 2007; Leu et al., 2004).

NLS draws from a variety of different disciplines: critical literacy and discourse studies, genre studies in functional linguistics, gender studies, and critical culture studies (Jewitt, 2008). Coiro et al. (2008) argue that the multi-faceted and interdisciplinary nature of NLS has led to major discrepancies in how this theory has been conceptualized, situated, and taken up; while some scholars envision literacy as a social practice (Street, 2003), others look towards new discourses (Gee, 2011), new semiotic contexts (Kress, 2003), and new technologies (Coiro et al., 2008). For the purposes of this review, I define *new literacies* as encompassing “the skills, strategies, and dispositions necessary to successfully use and adapt to the rapidly changing information and communication technologies and contexts that continuously emerge in our world and influence all areas of our personal and professional lives” (Leu et al., 2004, p. 1572).

As a result, new literacies involve the development of skills in the interpretation, criticism, and creation of texts and can present new opportunities for social participation in a globalized world.

NLS aids the understanding of the ways in which adolescents interact with social practices as they respond to texts using multimodal, digital tools. Take, for example, a student who is composing a digital video response to Joseph Conrad's *Heart of Darkness*. The student uses a variety of cultural, social, and personal experiences in his or her multimodal composition: a history with film, with technology, with the novel, with interaction with others in digital spaces, and with literature response. As researchers continue to document how students and teachers use "new" literacies in the classroom, 21<sup>st</sup> century literacy practices need to be conceptualized as more than skills in the use of new and emerging technologies, but as a set of socially situated, culturally bound practices that aim to change the way in which knowledge is constructed, communicated, and disseminated.

Since the publication of "A Pedagogy of Multiliteracies" in 1996, scholars have sought to clarify and expand the theoretical reach of new literacy studies. Early critiques (Brandt & Clinton, 2002; Collins & Blot, 2002; Street, 2003) cautioned against collecting more and more ethnographic accounts of specific, contextualized literacy practices without attention to larger questions of theory and practice. Brandt and Clinton (2002) further ask for increased attention to how "forms of literacy can disrupt, tear up, and destabilize patterns of social life" (p. 351). However, other theorists (Gee, 2005) defend the focus on local, situated contexts, arguing that they, too, disrupt; "Situations (contexts) do not just exist. Situations are rarely static or uniform; they are actively created, sustained, negotiated, resisted, and transformed moment-by-moment through ongoing work" (p. 190). So, while NLS might privilege specific, situated, and local contexts, these contexts provide rich material for analyzing specific literacy experiences in order

to address overarching theoretical and pedagogical questions about learning, interaction, and the movements between and among shifting literacy practices.

### **Multimodality**

One could argue that reading and writing have always been multimodal; throughout history, people have experienced and created texts by making use of all available cultural and linguistic tools. For example, cultural groups such as the Egyptians (Gardiner, 1988) and Aztecs (Boone, 2000; Boone & Mignolo, 1996; Leon-Portilla, 1990) created and read texts where the interplay of words and letters, images and color, created meaning; words alone could not carry the weight of representation. More recently, scholars interested in literacy education have argued for the importance of conceptualizing literacy as a multimodal practice. For example, Harste, Woodward, and Burke (1984) showed that even preschool children demonstrate the ability to move in and among sign systems. Further, “taking what we know in one sign system and recasting it in terms of another is both natural and basic to literacy” (Harste, 2000, p. 6). This work has been extended over the past decades by scholars who have studied children and adolescents’ multimodal meaning-making in their drawings (Albers, Frederick, & Cohen, 2009), writing (Rowe, 2008), and play (Wohlwend, 2008).

However, even if we see the history of human communication as multimodal, the theory has never been more prominent than in today’s world, where people are continually constructing and making meaning from a variety of modes, which are shaped by existing and emerging technological innovations. Or, as Siegel and Rowe (2011) argue, “The texts and practices characteristic of Web 2.0 point to the need for a theoretical lens broad enough to explain what counts as a text, how texts mean, and how to do things in this new communicative landscape” (p. 202). As new technologies emerge, modes such as images, sounds, music, writing, speech,

special effects, and movement become more readily available to readers and writers. The wide availability of digital tools, new media forms, and semiotic materials also suggests that educators need to be purposeful and critical in determining how student readers and composers can interact with multiple modes.

For work in academic contexts, such as schools, semiotic theory can be helpful to understanding how students move among the vast array of modes that are accessible through the advent of new technologies. As Kress and Mavers (2005) state, “Linguistics has been the science of the signifier, focused on form; semiotics has been the science of the sign, a fusion of form and meaning, of signifier and signified” (p. 173). Two distinct theories, developed by the linguist Ferdinand Saussure and the philosopher Charles Peirce, help to explain how “artifacts come to be interpreted as signs.” Saussure (1959/2011) focuses on the connections between the signifier (the form of the sign) and the signified (the idea or concept that it is representing); his argument is that meaning is constructed through the relationships between these entities and the context in which the sign is used. Peirce’s work (1991) on semiosis adds another layer, exploring how the meaning of signs is expanded through the relationship between the representamen (the sign), the object (what the sign stands for), and the interpretant (the sense that is made of the sign). For example, as a student creates a Twitter account (representamen) for a character from a chosen novel (objects), he or she also creates a personal representation of a text that other students are then able to interact with (interpretant). As meaning-makers interpret a given set of signs, these signs must also be reinterpreted in relation to other signs and the context in which the meaning is made. For example, as another adolescent student composer uses a piece of music from his or her iPod and combines it with quotes from a print text, images from an online news repository, and

other modes, he or she is using the socially constructed meaning of these signs and transforming them to create new meaning.

Multimodal composition also gives children and adolescents the chance to convey their interpretations and understandings through the purposive selection and combination of modes. As multimodal composers move both within modes and among modes in order to construct meaning, they use a process called synaesthesia, or the move “from one semiotic mode in meaning to another semiotic mode, an activity constantly performed by the brain” (Kress 1998, 76). Kress (2003) points to two important components of synaesthesia: transformation and transduction. Transformation operates on the forms and structures of each individual mode and explains how composers can reshape modes for multiple purposes. While it is important to recognize evidence of transformation in a multimodal context, it is also necessary to look at the process by which these sign systems are being navigated. Modes also work with each other (and sometimes against each other) in a continuous process of transduction (c.f., transmediation, Siegel, 1995), or the move of semiotic material from one mode to another (Bezemer & Kress, 2008). Therefore, as student composers use images, text, sound, embodied action, and other modes, they must engage in serious reflection on how modes work with (and sometimes against) each other to create meaning.

So, how do multimodal composers create cohesive compositions that employ various modes and navigate “different organizing logics and epistemological commitments” (Nelson, 2006, p. 99)? When attention is further focused on the potential of multimodal composing for academic purposes, this question becomes even more complicated—how can educators design learning experiences in which students translate, transform, and transduce modes when simultaneously navigating the intertextual connections between digital and print? Although

researchers have just begun to explore the instructional possibilities for multimodal composing, the complexities of these processes necessitate new instructional approaches and new forms of teacher-student and student-student interactions. After all, theories of multimodality recognize that the experience of viewing or creating a “text” is both connected to and different from traditional notions of reading and writing. As Jewitt (2006) points out, “The potential structure and interactivity of digital media provide new possibilities for interaction...and offer different potentials for learning” (p. 2).

While multimodal theories provide a valuable lens for exploring how young composers’ identities interact with the meaning created through their use of different modes, there are limitations to the theoretical reach. Recent critiques of multimodality target the narrow focus on representationally-bound modes (Ehret & Hollett, 2014), and the lack of attention to affect (Lemke, 2013) and the senses (Pink, 2011) in the meaning-making process. Other critiques (Leander & Boldt, 2013) caution against placing rational design and explicit pedagogies at the center of theory, research, and instruction; in other words, “design leaves out movement and surprise” (p. 43). In order to provide a richer picture of the ways in which artifacts, spaces, and structures become entangled in the processes of multimodal composing, some researchers (Burnett, Merchant, Pahl, & Rowsell, 2014; Hollett & Ehret, 2013) suggest tracing children and adolescents’ activities and interactions through and across literacy experiences. This more expansive view can allow multimodal research to account for the interactions of modes, interactions, and ideas (Hollett, Ehret, Jocius, & Wood, 2014) with ephemeral physical, social, and institutional environments.

## **Assumptions Guiding the Design and Enactment of this Study**

This study draws heavily on existing empirical research and my own prior experiences as a teacher and researcher who has worked extensively with adolescents, digital media, and multimodal composition. However, the theoretical literature also had a significant impact on the design of this study and the analysis of data. First and most importantly, this study is founded on the idea that “new,” “digital,” and “multimodal” literacies involve more than the use of digital tools like PowerPoint, Edmodo, Google Earth, or other existing and yet-to-be-created innovations. Instead, these digital and multimodal literacies should be understood as a set of “socially situated practices supported by skills, strategies, and stances that enable the representation and understanding of ideas using a range of modalities enabled by digital tools” (O’Brien & Scharber, 2008, p. 66-67). Or, to put it more simply (and as Picasso once said), “Computers are useless. They can only give you answers” (Fifield, 1964). It is thus the task of educators to develop ways of using these tools to support students in evaluating, validating, contesting, and creating meaning.

In conceptualizing and designing this study, I drew upon two assumptions which emerged from theories of new literacies: digital, multimodal pedagogies should 1) present a hybrid model of print and digital learning, and 2) draw on students’ diverse personal and cultural histories. Two additional guiding assumptions emerged from the theoretical literature on multimodal composition: 3) multimodal pedagogies should strive to represent shifts in form and function, and 4) students should move between and among a variety of modes within the multimodal composition process. As discussed in the following sections, I attended to these assumptions in the instructional design and enactment of the study.

**Digital and print texts.** My instructional design provided students with a variety of interactions with print and digital texts. These texts, which included poetry, websites, film, fictional passages, essays, music, and art, represented numerous styles and discourses. As the New London Group (1996) states, “When learners juxtapose different languages, discourses, styles, and approaches, they gain substantively in meta-cognitive and meta-linguistic abilities and in their ability to reflect critically on complex systems and their interactions” (p. 69). For example, we read our main text, *Love that Dog* by Sharon Creech, in a print format, but many of the other texts that we read and created were entirely digital. Further, students’ interpretations were often challenged by texts from different stylistic traditions and the multimodal responses created by their peers.

**Students’ personal and cultural histories.** Throughout the design and enactment of the study, I engaged in a deliberate text selection process, in which I researched texts, authors, and social contexts in order to reflect students’ racial, socioeconomic, and linguistic backgrounds. In her discussion of African American children’s literature, Bishop (1990) described texts as mirrors, which validate and reflect the cultural norms and values of the reader, and windows, which juxtapose the familiar with the unfamiliar, allowing readers to glimpse into another cultural world. I felt that it was essential for students to engage in critical conversations about texts in which they questioned who and what is depicted, and how those depictions reflect societal values (Wood & Jocius, 2013). Therefore, I relied upon my knowledge of students’ racial, cultural, and personal identities as I chose texts that acted as both mirrors and windows. I also designed response projects in which students examined characters, themes, and actions in light of their own experiences. For example, after reading a series of poems that described the authors’ neighborhoods, students went home and captured digital artifacts in preparation for



composing their own multimodal neighborhood poems. Then, as they created their digital poems, students examined and often counteracted pervasive stereotypes about their own communities.

**Shifts in form and function.** Digital, multimodal tools present opportunities for students to explore new forms of composing (i.e., creating a visual essay in place of a written essay), as well as new functions (i.e., instead of writing autobiographies, students create autobiographical digital stories for which they must consider modal interactions, tensions, and means for collaboration and dissemination). When I designed this study, I wanted to build in response activities that took advantage of the affordances of digital and multimodal tools and represented shifts in both form and function. For example, the use of the VoiceThread tool, which is discussed in more depth in the Chapter 3, allowed students to respond synchronously and asynchronously to literature and to each other's work using annotation tools, video, audio, written, and visual responses.

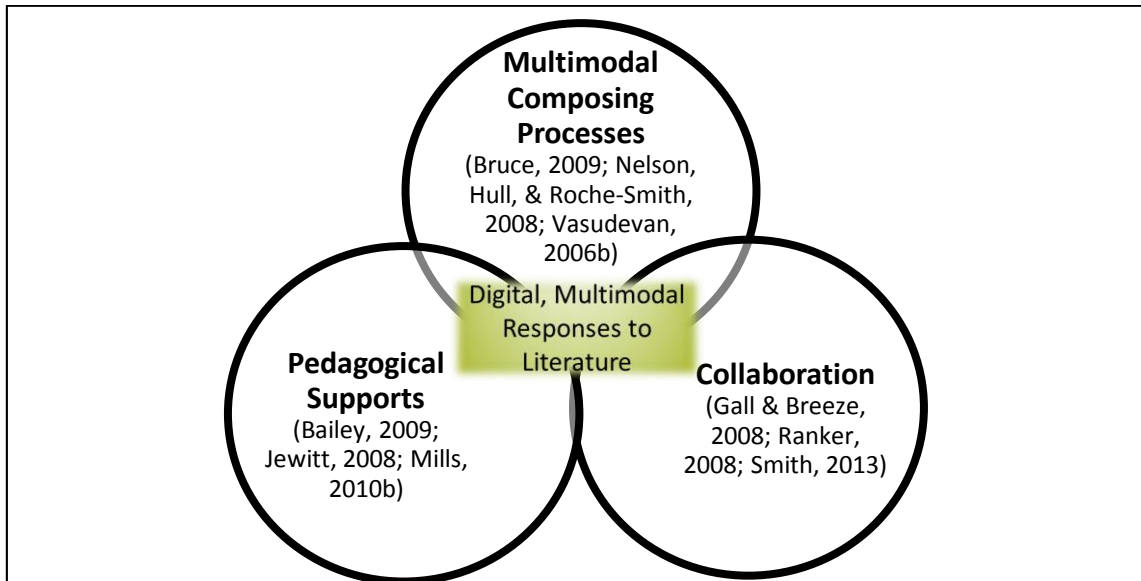
**Moving within and among modes.** I also attempted to ensure that students had opportunities to weave in between and among modes as they composed. For this reason, I introduced a variety of digital tools (movie making software, slide show software, online collaboration tools, etc.), compositional structures, and instructional activities. I also provided opportunities for students to redesign and reshape their compositions. Like writing, multimodal composition does not proceed in a linear path (Krashen, 1984), and the pedagogical design of the study reflected the importance of allowing students to develop their own ways of translating, transforming, and transducing modes. For example, in the latter stages of the workshop, after students developed familiarity with particular digital tools through individual and group exploration, they were asked to compose in a way that felt most natural to them.

## Literature Review

While the underlying theoretical framework played a major role in guiding the design and enactment of this study, my work was also shaped by existing research on digital and multimodal composing. Specifically, I see the current study as existing at the nexus of three interconnected bodies of empirical literature: multimodal composing processes, pedagogical supports for multimodal composing, and collaborative, multimodal composing (see Figure 1). In order to review the research that was most directly relevant to the current study, I selected literature according to the following criteria: studies had to (1) focus on the composing practices of adolescent learners (grades 5-12); (2) include detailed information about these learners' composing products and/or processes; and (3) involve the use of digital tools for multimodal composing.

In the following sections, *Multimodal Processes*, *Pedagogical Supports for Multimodal Composing*, and *Collaborative Multimodal Composing*, I synthesize findings from my review of the literature. Each section includes a discussion of patterns and themes that emerged from the review, as well as a description of representative studies. The final section, *Research Questions*, points to areas for further research and explicitly outlines how each of the research questions in the current study address a specific gap in the existing literature.

Figure 1. Location of the current study within existing empirical research



### **Multimodal Composing Processes**

While descriptions of children and adolescents' multimodal composing processes are often embedded within other findings relating to multimodal products and pedagogical supports (Bruce, 2009; Jocius, 2013; Walsh, 2009), a number of recent studies have provided vital information about the ways in which adolescents are using digital, multimodal tools to compose (Hull & Nelson, 2005; Gall & Breeze, 2008; Smith, 2013; Vasudevan, DeJaynes, & Schmier, 2010). This section describes three themes emerging from my review of the research on adolescents' multimodal composing processes—1) engagement and motivation (Brass, 2008; Smythe & Neufield, 2010; Ranker, 2008; Ware, 2008), 2) identity development (Vasudevan, 2006b; Vasudevan, Schultz, & Bateman, Wilson, Chavez, & Anders, 2012), and 3) the use and combination of semiotic resources (Hull & Nelson, 2005; Chavez & Soep, 2005; Gall & Breeze, 2008; Smith, 2013).

**Engagement and motivation.** A persistent theme in the research on multimodal composing, across both academic and informal learning environments, is the potential for

engaging and motivating adolescent learners, who, for one reason or another, have become disengaged from traditional literacy practices (Black, 2008; Brass, 2008; Jewitt, 2008; Kirkland, 2008; Lam, 2006; Ranker, 2008; Smythe & Neufield, 2010). In informal learning environments, researchers have argued that multimodal composing practices can allow students to experiment with new forms of expression and complex modal interactions (Brass, 2008; Hull, Nelson, & Roche-Smith, 2008; Ware, 2008). In classrooms, multimodal composing can engage the digital expertise that adolescent students have developed across academic and out-of-school contexts (Ranker, 2008; Rogers et al., 2010; Smythe & Neufield, 2010).

Ware (2008) documented how students used two digital composing tools, PowerPoint and digital storytelling software, in two different settings—classrooms and out-of-school learning clubs, respectively. She found that while students were using digital video software to craft sophisticated digital stories in out-of-school learning clubs, students primarily used linguistic and visual modes in their “basic PowerPoint presentations” for school-based projects. While Power-Point allows users to insert music, graphics, video clips, and other forms of multimedia, students were either unaware of these affordances or chose not to use them. She noted that in classrooms, “the majority of the student-produced texts tended to use Power-Point primarily for information display and summary using only text, clip art, and pictures downloaded from the Internet” (p. 42). In the after-school club, students instead created layered compositions and collaborated to write and rewrite stories that displayed their knowledge of complex modal interactions. This finding has been echoed by other researchers, who have argued that students often engage in sophisticated composing practices in informal learning environments, as opposed to their more traditional multimodal interactions in academic settings (Hull, 2003; Hull &

Nelson, 2005; Hull & Zacher, 2004; Ohler, 2006; Nelson, Hull, & Roche-Smith, 2008; Ware, 2008).

Other research has specifically addressed the potential of multimodal composing for increasing student motivation in school-based settings. In investigating the use of podcasts in a classroom where 20 of 25 students were considered ELLs, Smythe and Neufield (2010) found that the project engendered more student engagement in the literacy curriculum. For example, one student, Maya, said that she normally just turned written work into her teacher without checking it over first, but she worked differently when completing the podcast. She pointed to the affordances of composing for an authentic audience, stating that “Cause it’s when you know that people would read, so you do not want to make a mistake, or you would probably be embarrassed that somebody would come up to [you] and be like: ‘Oh, you made a mistake on this word.’” (p. 495). Likewise, other researchers (Black, 2008; Mills, 2010b; Oldaker, 2010; Phillips & Smith, 2013; Rogers et al., 2010) have demonstrated how composing for an authentic audience served as a motivational tool for students.

Other studies have addressed the ways in which student choice in modes and composing forms can allow for greater self-efficacy (Gilje, 2010; Halverson, 2010; Jocius, 2013; Ranker, 2008). In Ranker’s (2008) study, two focal students created a documentary film on music and baseball players from the Dominican Republic, including written text, spoken narration, images, music, and graphic representations while moving in and among different types of media. Ranker describes the composing space as interactive and nonlinear, a dialogic arena that “was greater than the sum of its individual media components” (p. 225). Ranker found that “multimedia writing environments” may produce “new, motivating, self-guiding purposes for writing as afforded within the whole activity of producing a multimodal, digital text video” (p. 230).

**Identity development.** There has been a great deal of interest, particularly from researchers working in informal learning contexts, in the role that multimodal composition can play in the development and expression of adolescents' identities (Hull & Nelson, 2005; Lam, 2000; Vasudevan, 2006b; Vasudevan, Schultz, & Bateman, Wilson, Chavez, & Anders, 2012). Some researchers have even conceptualized multimodal composing as a process of identity formation and re-formation; as Rowsell and Pahl (2011) argue, "By paying close attention to text production, and understanding the way in which practices, mediated by identities sediment into texts, a view of text production emerges that is alive to what happens during the making of texts" (p. 402). In other words, the act of creating a text always shapes a student's identity; through the careful and purposeful selection of modes, students create not only multimodal products, but they also engage in the process of creating their own identities—as both composers and human beings.

In a case study of Romeo, an African-American adolescent composing a digital movie in an after-school program, Vasudevan (2006b) explores the power of *counterstorytelling*, or telling alternative stories in the hope of questioning and destabilizing knowledge of a particular cultural group (in this case, African American males). In group discussions, Romeo and the other boys in the program expressed feelings of being "unknown" and "unseen" in their schools, and talked about assumptions that their teachers (White, middle-class females) made about them. However, as Romeo created digital stories, enacting the roles of actor, director, and producer, he was able to explore his identity in new and personally meaningful ways. As Vasudevan (2006b) argues, "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" (p. 214).

Other researchers have studied how the creation of a multimodal self can serve to solidify certain aspects of a person's identity, which can have both positive and negative consequences. In a case study of one African-American adolescent, Nelson, Hull, and Roche-Smith (2008) describe how, when he was twelve, Steven composed a digital story called "Lemonade" that described his tumultuous childhood. In the video, he recounted how he spent weeks in the hospital after being born to a mother who took drugs during her pregnancy. Aided by a volunteer who encouraged him to put a positive spin on his childhood experiences, the story included a description of Steven's personal successes and a "take-away" point—"the importance of being positive and grateful" (p. 434). When the authors went to interview Steven five years later, they found that the meaning of the story was both fluid and fixed—fluid in the sense that specific audiences viewed the product differently (other adolescents made fun of Steven's metaphoric treatment of "making lemonade" from lemons, while many adults celebrated his resilience and positive attitude); and fixed in the sense that "fixity, clarity, and cogency of the particular multimodal Self he presented seemed to preclude interpretation of the story on the part of his audiences, leaving only evaluations of Steven himself to be made" (p. 434).

Research (Vasudevan, Schultz, & Bateman, 2010) has also explored how multimodal composing practices can allow adolescent students to express and develop their personal identities within a classroom setting. In designing and implementing a series of interconnected unimodal and multimodal projects in a fifth-grade classroom, the authors hoped to reconceptualize traditional writing practices. Two specific projects—a poem activity describing social, personal, and cultural development, and memoir pockets, or multimodal life stories—required students to incorporate artifacts, such as self-taken photographs and material objects from their homes and communities, into their work. The authors argue that in the production,

presentation, and discussion of these multimodal projects, students were able to author new identities as engaged and motivated participants within the classroom space. For example, one student, Saima, was able to “achieve a presence” as “she brought together several threads of a single story through digital artifacts that represented various aspects of her identity” (p. 459).

Like Vasudevan (2006b), Hull, Nelson, and Roche-Smith (2008), and Vasudevan, Schultz, and Bateman (2010), Wilson, Chavez, and Anders (2012) point out that students’ individual identities can be transformed and reconstructed through the multimodal composing process. In their study of adolescent English language learners’ digital podcasts, Wilson, Chavez, and Anders (2012) documented students’ multimodal responses to the following questions: “Who am I? Where do I come from? Who do I want to be? What do I value? How can I represent answers to these questions in powerful and effective ways?” (p. 374). The authors found that students were able to enact identities in relation to people, places, and things that were of personal interest, that they used a number of different modes and media forms to design and organize their podcasts, and that the multimodal forms allowed students to feel competent in communication techniques while building English proficiency. As a whole, the project lent itself to “identity enhancement,” providing “students with opportunities to consider and to share their wishes, histories, and senses of self in nuanced, interconnected ways” (p. 381).

**Deployment of semiotic resources.** A common theme across studies of adolescents’ multimodal composing processes is a discussion of the ways in which adolescents deploy modes (image, text, writing, etc.), tools (scripts, storyboards, etc.), and technical resources (software, hardware) in the multimodal composition process (Bruce, 2009; Chavez & Soep, 2005; Gall & Breeze, 2008; Jocius, 2013; Oldaker, 2010; Smith, 2013). For example, Smith (2013) describes *modal preferences* as the tendencies of composers to begin working on compositions with a



preferred mode, such as images, and to follow similar *modal progressions* (i.e., beginning with image, adding sound and text, and then layering music) as they composed (p. 134). Other researchers have emphasized the importance of composers' personal preferences and beliefs to the composing process. For example, Gall and Breeze (2008) note that pairing students with different musical tastes (classical and hip hop, for example) led to more diverse compositions with more nuance and texture.

One persistent theme across studies is the development of students' understanding of modal interactions (Bruce, 2009; Curwood & Cowell, 2011; Gall & Breeze, 2008; Hull & Nelson, 2005; Kervin, 2009). Hull and Nelson (2005) found that the creation of a digital story, "Lyfe-N-Rhyme," helped one African American student, Randy, to understand how sophisticated composing techniques work together to create a new kind of meaning. In telling his story as part of an after-school digital storytelling program, Randy incorporated spoken narration, written words, images, and music into his composition. Each of these modes carried significance and was an essential component of the narrative structure. Hull and Nelson argue that Randy's story shows that multimodal writing practices offer a new kind of composing and viewing experience. As they write,

Believing as we do that a culture's and a time's mediational means...are intimately connected with our capacities to think, represent, and communicate, it would seem hugely important to widen our definition of writing to include multimodal composing as a newly available means. (p. 252)

Other studies highlight the limitations of specific modes (Ranker, 2008), technical tools (Brass, 2008; Oldaker, 2010) and composing resources (Gilje, 2010). In his study of students' video game compositions, Oldaker (2010) states that many students had difficulties in bringing

together a variety of semiotic resources. One student even said that her finished game looked like “a ‘toddler’ had made it (p. 22). These problems led to the simplification of the project and a more limited selection of semiotic resources; many students chose to use fewer modes, like colors, text, and images, than they had originally intended.

In some cases, the limited resources that composers used to plan and enact their compositions also constricted their work; Gilje (2010) found that students were unable to take advantage of storyboarding, a common technique in professional video composition, as a tool for thinking about their work. Instead, students carried the problem of how to portray a specific scene from the brainstorming process through storyboarding through the final composition. So, like more unimodal composing processes, modes, technical tools, and composing resources all have their own affordances and constraints that need to be considered in the design and enactment of multimodal composing experiences.

**Implications for the current study.** Research on adolescents’ multimodal composing processes has provided insight into the potential for engagement and motivation, identity development, and the use of semiotic resources. This growing body of work has found that as adolescents engage in multimodal composing practices, they have opportunities to explore their personal interests, identities, and ways of combining modes to create meaning for a variety of audiences. However, in my review of this research, I found that we still know little about *how* adolescents compose—for example, how are their choices in modes and composing tools related to their personal identities and preferences? When composing for academic purposes, how do the goals and requirements of particular projects support or limit students’ abilities to compose? And, how do students rely upon various composing tools and structures to shape their work?

## **Pedagogical Supports for Multimodal Composing**

As students move from traditional writing activities to multimodal composition, teachers must employ a variety of scaffolds, models, and approaches. A number of recent studies have addressed the role of pedagogical supports in the multimodal composing process (Bailey, 2009; Bailey & Carroll, 2010; Dalton & Smith, 2013; Grisham & Wolsey, 2006; Kervin, 2009; Mills, 2010b; Ranker, 2008; Rogers et al., 2010; Selfe, 2009; Selfe & Selfe, 2008; Shin & Cimasko, 2008). These studies provide valuable information about how teachers can structure multimodal composing projects—and examine instructional techniques that allow students to work within and across a range of modalities. In the following sections, I discuss three themes across studies: 1) leveraging students' skills in print-based reading and writing (Grisham & Wolsey, 2006; Larson, 2009; Miller, 2011; Mills, 2010b; Rogers et al., 2010; West, 2008), 2) employing explicit instruction in the use of multiple modes (Bailey, 2009; Bruce, 2008; Dalton & Smith, 2013; Hughes & Tolley, 2010; Walsh, 2009), and 3) scaffolding students' understanding of modes and mediums (Selfe & Selfe, 2008; Shin & Cimasko, 2008; Smythe & Neufield, 2010; Tan & Guo, 2009; Turner, 2011).

**Leveraging print-based reading and writing skills.** Researchers (Jocius, 2013; Mills, 2010b) have argued that the creation of a cohesive digital narrative involves many of the same conventions as creating or interpreting a print text—a deep understanding of character, setting, plot, theme, initiating events, climax, and resolution. In order to highlight these connections, several studies (Grisham & Wolsey, 2006; Miller, 2011; Mills, 2010b; Rogers, 2010; West, 2008) have pointed to the ways in which teachers have leveraged students' knowledge of print-based text structures to design multimodal composing activities. Through the remixing of digital

and print, images and text, teachers can create classroom spaces where multimodal composition is an essential part of the literacy curriculum, not just a “hook” to capture student interest.

For example, West (2008) examined how three focal students created digital blog entries to explore issues of text, character, and theme in *The Crucible* and *The Great Gatsby*. In selecting and interpreting the sections of the texts that most interested them, they integrated their personal identities, knowledge of digital tools, and understanding of the structures of print-based texts. The focal students ultimately “called upon the tools of formal literary analysis that they had learned in pre-AP courses in middle and high school, but they also disrupted AP notions of language embedded in the curricula of their school by incorporating out-of-school literacies into their work” (West, 2008, p. 597). Findings also suggest that students’ digital composing activities improved their abilities to interpret texts and to write in more print-centric forms.

Several studies have examined how teachers have used print-based texts alongside new media forms to encourage critical thinking about the multimodal composing process (Ranker, 2008; Rogers et al., 2010; Tan & Guo, 2009). Tan and Guo (2009), for instance, worked in collaboration with a classroom teacher to study the introduction of a multimodal curriculum with a group of 14-year-old English-proficient students. Ultimately, the researchers found that after many months of work using different forms of media, students were able to analyze the differences between print, digital, and paper media, and used discourse styles that incorporated sophisticated vocabulary and rhetorical techniques.

Other research has explored students’ understandings of the unique affordances of both print and digital mediums (Larson, 2009; Miller, 2011). In Miller’s (2011) study, students created digital videos illustrating thematic issues from *Their Eyes Were Watching God*, and then used their newfound knowledge to write critical analysis essays. As one student noted, “With

your essay and with your video you have to have thought before you start it" and in both you need to "perform, meaning writing it down," and finally put "your ideas in a very creative way, where it all runs together and makes sense" (p. 399). Miller found that the combination of these two projects—the digital videos and the critical analysis essays—allowed students to examine ways in which meaning was conveyed in different formats. Students pointed to similarities across meaning-making structures, but also documented specific affordances of each form—their digital video compositions required them to think more deeply about how to convey their thoughts, while the critical analysis essays allowed for more explanation of textual references and connections.

**Explicit multimodal instruction.** Another pedagogical support outlined in the research on adolescents' multimodal composing practices is explicit instruction in the use and combination of modes (Bailey, 2009; Bailey & Carroll, 2010; Bruce, 2009; Hughes & Tolley, 2010). These pedagogical approaches involve the discussion of design principles inherent in meaning-making systems, as well as step-by-step instruction in how to combine and transduce modes. Jewitt (2008) argues that students can benefit from the "systematic and explicit teaching of an analytic vocabulary for understanding design processes and decisions entailed in structures and systems of meaning" (pp. 248-249).

In their work, Hughes and Tolley (2010) explored the role of explicit multimodal instruction in supporting 10<sup>th</sup> grade students' creation of multimodal responses to *Lord of the Flies*. Originally, the instructional plan offered only minimal multimodal supports, but as the project progressed, the teacher found that students needed more explicit instruction. The authors argue that "even seemingly media-savvy students have only a nascent understanding of how multiple modes of expression converge to make meaning" (p. 17). When the teacher asked

targeted questions that addressed the gaps in students' knowledge, they began to develop more sophisticated understandings of how to combine a variety of modes to convey meaning to different audiences.

Similarly, during five months of daily classroom observations in a 9th grade English classroom, Bailey (2009) collected teacher and student artifacts that documented the value of leveraging print-based writing skills in multimodal composing. The teacher purposefully combined explicit instruction in poetic devices (similes, metaphors, imagery, etc.) and guided students in understanding the expressive potential of composing tools, such as PowerPoint and digital video. For example, one assignment involved repeated viewings of a video text; through their answers to teacher-designed questions, students examined how individual modes contributed unique meanings to a piece. For their final projects, students presented their PowerPoint interpretations of a poem that they had chosen. As one student said, "It makes it more real. But in PowerPoint, when you see the pictures and the movement . . . [i]t actually shows you what's going on, and it makes you feel, even if you don't realize it" (Bailey, 2009, p. 224).

Bruce's (2009) study of students' digital video composing practices incorporated two elements of explicit instruction that allowed students to move flexibly among modes. First, in order to introduce students to video grammar, he led group discussions in which students examined several distinct models. Through these comparisons, students developed a set of principles that they could then employ in their own work. Then, he required students to draw upon these conversations, presenting a set of project guidelines that required them to incorporate multiple shots/perspectives into their digital videos. He found that the discussion of models and

the provision of guidelines for their final projects helped students to make sense of the available resources for designing and sharing their multimodal work.

**Scaffolded multimodal approaches.** Other recent research has described the use of scaffolded multimodal approaches in which teachers slowly introduce new skills in combining and transducing modes (Bailey & Carroll, 2010; Dalton & Smith, 2013; Kervin, 2009; Selfe & Selfe, 2008). The gradual introduction of new modalities can allow students to critically examine the affordances of various mediums (Selfe & Selfe, 2008) and allows for students with differing skill sets to engage in multimodal composing practices (Dalton & Smith, 2013). However, teachers must strike a careful balance between the provision of these scaffolds and the gradual release of support; as Dalton (2012) warns,

Successful learning depends on customization, and scaffolding is essential to making it work for each child. However, scaffolding can limit growth and actually cause students to disengage if it is too constraining or if there is no progression toward increasing independence. (p. 337)

In their discussion of students' creation of public service announcements (PSAs), Selfe and Selfe (2008) employed several different layers of multimodal scaffolding: after discussing the purpose and formats of different PSAs, students researched a topic of interest, wrote a short research paper, and created print versions of their PSAs. Then, students created audio and video adaptations. The authors created a series of questions for teachers to use when developing similar projects, focusing on rhetorical techniques; genre; structure, organization, and arrangement; and design (p. 88). This scaffolded, multi-step approach helped students to recognize that different media forms offer different ways in which to convey meaning; students began to think critically about which modalities and mediums best suited their topics of interest.

Dalton and Smith (2013) discuss how secondary teachers employed a scaffolded, multimodal approach to designing student engagements with online sources. The authors argue that as teachers designed strategy prompts for an online composing tool, they learned how to provide incremental supports for students. These supports were aligned with Universal Design for Learning (UDL) principles, and allowed students with differing levels of technological expertise to engage in multimodal composition. These scaffolded approaches allowed for the creation of productive learning engagements for all students.

**Implications for the current study.** Previous research has provided important insights into what teachers can do to support students' multimodal composing practices. Three strategies—leveraging student knowledge of print-based structures, providing explicit multimodal instruction, and using scaffolded, step-by-step approaches—have shown promise for developing students' abilities to compose with multimodal, digital tools. However, we have little information about the effects of these scaffolds on students' composing processes—what affordances and limitations do various structures offer students with different composing preferences and tendencies?

### **Collaborative Multimodal Composing**

In many existing studies of multimodal composing, researchers report that adolescents worked in pairs or teams to create their work (Bailey, 2009; Bailey & Carroll, 2010; Black, 2008; Boyatzis & Albertini, 2000; Brass, 2008; Bruce, 2009; Ito et al., 2010; Oldaker, 2010; Gilje, 2010; Kervin, 2009; Mills, 2008, 2010b; Ranker, 2008; Rish & Caton, 2011; Smith, 2013; Smythe & Neufield, 2010; Walsh, 2009). This research points to various benefits of collaborative composing: opportunities for students to learn new creative and technical skills from their peers (Bailey, 2009; Mills, 2010b), the provision and receipt of detailed feedback (Boyatzis &



Albertini, 2000; Brass, 2008; Gilje, 2010; Smythe & Neufield, 2010), and possibilities for engaging in new forms of social interaction (Black, 2008; Ito et al., 2010). This section discusses three themes related to adolescents' collaborative multimodal composing processes: imbalanced composing roles, the role of peer feedback in shaping composing, and students' direct and indirect imitation of their peers.

**Imbalanced composing roles.** Across studies of adolescents' multimodal composing processes (Bruce, 2009; Gall & Breeze, 2008; Oldaker, 2010; Rojas-Drummond, Albarrán, & Littleton, 2008; Smith, 2013), researchers have studied the division of collaborative work—and found that students often employ imbalanced composing role structures, in which one student does significantly more work than his/her collaborators. Researchers have argued that these imbalances are primarily related to composers' technical expertise (Bruce, 2009; Oldaker, 2010), and personal characteristics (Gall & Breeze, 2008; Rojas-Drummond, Albarrán, & Littleton, 2008; Smith, 2013).

In some cases, composers with more technical expertise assisted their peers in navigating composing tools, and in doing so, took on leadership roles (Bruce, 2009; Oldaker, 2010; Smith, 2013; Walsh, 2009). In the eyes of their peers, these “expert” students were viewed as resources; for example, a participant in Oldaker's (2010) study points out, “We had to ask a kid in our class that was already done with the game and knew a lot about it...he was very helpful. I don't know what the class would've done without him” (p. 22). Other studies point to a similar phenomenon; Smith (2013), for instance, describes the collaborative composing processes of three pairs of high school students. In one of these cases, two girls identify their respective roles as a “designer” and an “assistant.” The “assistant” stated that she and her partner each “performed tasks that ‘played to their strengths’” (p. 73). In fact, every study I reviewed reported positive

outcomes from imbalances in students' individual composing roles; no study explored how an unequal distribution of labor served to limit or constrain students' collaborative work.

Smith (2013) further describes how another pair of high school students divided work based on their personal characteristics. Two males employed an "alternating lead collaboration," in which a student's individual interests, in conjunction with the goals of a particular project, determined which student would take on the main composing role. For example, because one student had an interest in sound and voice recording, he took the lead role in composing an audio letter. Smith (2013) argues that the reason for the pair's "natural and seamless distribution of tasks" stemmed from a longstanding personal relationship; the students spent a lot of time "arguing, 'goofing around,' and talking about 'sports and girls'" (p. 114).

**Peer feedback.** Previous research on multimodal composition has shown that peer feedback (including verbal, digital, written, and/or multimodal forms) can shape composers' revising and editing processes (Boyatzis & Albertini, 2000; Smythe & Neufield, 2010). For example, Boyatzis and Albertini (2000) argue that there are a variety of verbal exchanges that occur as students compose multimodally: self-criticisms, ongoing commentary, comments about technical qualities and the realistic depiction of subjects, and unsolicited and solicited evaluations from peers. More critical feedback (i.e., "You're missing a part," or "That needs more color") was more likely to lead to revisions.

Other researchers (Brass, 2008; Smythe & Neufield, 2010) argue that students are more likely to offer substantial feedback on multimodal composing projects, as compared to more traditional writing assignments. Smythe & Neufield (2010) state that while adolescent students often struggled to revise their written essays, the "playful" learning communities created by a podcast composition project led to more dynamic, and extensive, revision (p. 494). Likewise,

Brass (2008) found that when students were asked to provide feedback on their peers' multimodal compositions, their comments related to classroom conventions as well as multimodal styles, which resulted in lengthier and more targeted feedback for revision. While other researchers (Chaves & Soep, 2005; Gilje, 2010) mention that differences exist among various forms of feedback (oral, written, multimodal), none of the studies I reviewed explicitly discussed how these types of feedback differed. Further, I found limited evidence detailing the ways in which students employed this feedback in composing, revising, and editing their work.

**Direct and indirect imitation of peers.** In a small group of studies (Boyatzis & Albertini, 2000; Ranker, 2008; Smythe & Neufield, 2010), researchers found that multimodal composers engage in the intentional and unintentional appropriation of subject matter, styles, technical forms, themes, and meaning from their peers' work. Boyatzis and Albertini (2000), for example, describe how students relied upon peer-created models during a class period in which the teachers instructed students to make drawings of their choice. Boys working at one table all drew variants of fighter planes, and even looked at each other's drawings to copy specific plane sections, like a wing or a tail. For example, when one student, Max, told another boy, Jon, that he was missing a tail from his plane, Jon immediately looked to Max's paper to find a solution (p. 39).

Also, I found one study that pointed to students' indirect appropriation of ideas during the revising process. Ranker (2008) found that one student's video, describing baseball players from the Dominican Republic, was influenced by his observations and discussion of a peer's composition. After seeing how other students had constructed their videos, the student added additional baseball players, images, and more specific information about their statistics and backgrounds. However, Ranker does not discuss whether this student was aware of the influence

of his peers' work. Further, while other studies hint at the fact that students use each other's work as models and referents (Smith, 2013; Smythe & Neufield, 2010), there is little discussion of how these models can shape the collaborative multimodal composing process.

**Implications for the current study.** While much of the research on adolescents' multimodal composing practices espouses the benefits of collaboration, I found that findings specifically related to these collaborative interactions were often completely absent from the reports of research. What little research exists has highlighted three themes in relation to students' collaborative, multimodal composing processes: an imbalance in composing roles, the role of peer feedback, and students' direct and indirect imitation of their peers. However, many questions remain—how do students take on different individual roles within the collaborative composing process? What are the affordances and constraints of different forms of collaborative composing? How do different venues (online, in-person, formal, informal) affect the types and volume of feedback that students provide to each other? What role do student-created models play in shaping collaborative multimodal composing processes and products?

Further, every study describing students' individual roles within the collaborative composing process reports potential benefits arising from different composing styles and imbalances in technical expertise; research has yet to provide an in-depth discussion of the limitations of collaborative, multimodal composing processes. Many questions remain—what potential roadblocks exist when different students, who exhibit individual composing preferences and beliefs, come together to create joint work? How do students' relative positions as “experts” or “novices” impact their contributions to collaborative composing?

## **Research Questions**

This chapter reviews existing empirical research on adolescents' digital, multimodal composing in three areas directly relevant to the current study: multimodal composing processes, pedagogical supports for multimodal composing, and collaborative multimodal composing. In the following sections, I describe how each research question was designed to address gaps within the literature.

### **RQ1: Students' Collaborative Multimodal Processes and Products**

Research on adolescents' multimodal composing processes and products has provided important information about the potential for engagement and motivation, identity development, and the use of semiotic resources in multimodal composition. However, despite a growing body of literature targeting students' multimodal composing processes, we still know relatively little about how adolescents compose multimodally with digital tools. In order to address this gap, I ask, *What processes do students use as they compose individual multimodal products?* Findings related to this first research question emerge from an integrated analysis of young adolescents' individual composing processes and products and provide a thorough description of the tools, resources, and structures that support multimodal composing for academic purposes.

Also, while previous research has highlighted what teachers can do to support students' multimodal composing (Bailey, 2009; Grisham & Wolsey, 2006; Kirkland, 2009; Smythe & Neufeld, 2010), there is a need for research that examines how students utilize these instructional supports, models, and scaffolds. Specifically, this study highlights individual students' use of teacher- and student-created models. I take a critical look at the role that these models play in shaping students' work, outline potential affordances and constraints, and offer suggestions for the provision of models to support students with different strengths and needs.

## **RQ2: Students' Collaborative Multimodal Processes and Products**

Collaboration is repeatedly cited as a crucial component of digital and multimodal composing (Greenhow, Robelia, & Hughes, 2009; Mills, 2010a; Voogt & Roblin, 2012), and previous research on students' multimodal composing processes in and out of the classroom has espoused a number of benefits for this collaborative work: opportunities for students to learn from each other, the potential for providing and receiving more detailed feedback, and the possibilities of interacting across online and in-person environments. In my review of the literature relating to collaborative composing, however, I found that few findings related specifically to adolescents' collaborative composing interactions. So, in order to highlight different forms of collaborative composing, the second research question posits, *What processes do students use as they compose collaborative multimodal products?* Findings point to the role of contextual and interactional factors in allowing students to analyze and build on their peers' ideas.

Also, previous research has yet to explore the potential limitations of students' collaborative work. Across all existing studies, researchers have reported positive outcomes from collaborative composing, even when composers have vastly different levels of previous experience in using and manipulating digital tools. The current study addresses potential obstacles to the collaborative composing process. Specifically, I examine how various composing structures, the material features of digital tools, and interactional tension among collaborators sometimes led to frustration and disengagement from the composing process.

## **RQ3: Instructional Conditions Supporting Collaborative, Multimodal Composing**

Across academic and informal learning environments, researchers have documented ways in which teachers can support students as they compose multimodally; proposed instructional

strategies include leveraging students' skills in print-based reading and writing (Miller, 2011; Mills, 2010b), providing explicit instruction in the use of multiple modes (Bailey, 2009; Bruce, 2008), and scaffolding multimodal composing (Selfe & Selfe, 2008; Smythe & Neufield, 2010). However, while this research has discussed general pedagogical supports for multimodal composing, we know little about how these supports can support or hinder students' collaborative composing. In an effort to provide an initial set of supports which can be further refined and tested in future research, I ask a third and final research question, *What instructional conditions support students' collaborative, multimodal composing?* In this study, I analyze students' multimodal composing processes and products in order to identify a set of instructional conditions which supported students' collaborative composing activities. These instructional conditions allowed for student discussion around the goals of multimodal composing projects, collaborative decision-making, and the generation and negotiation of ideas during multimodal composing.

## CHAPTER 3

### RESEARCH METHODOLOGY

This qualitative study explores how young adolescent students enrolled in an academic enrichment program used multiple forms of media (i.e., digital video, slide show software, video editing tools, and interactive response programs) to respond to literary texts (poetry, short narrative pieces, multimodal texts, and a novel). Specifically, this research documents young adolescents' multimodal composing processes and products. I address the following research questions:

1. *What processes do students use as they compose individual multimodal products?*
2. *What processes do students use as they compose collaborative multimodal products?*
3. *What instructional conditions support students' collaborative, multimodal composing?*

In this chapter, I first present a description of the research site, participants, researcher role, instructional focus, and the digital tools used throughout the course of the study. Next, I detail the methods for data collection, the data sources, and the methods used for data analysis. I conclude with a discussion of the strengths and limitations of the study.

#### **Site, Participants, and Study Design**

This section describes the research site and presents an outline of the context in which the study was conducted. Next, I provide my rationale for choosing this site and program and discuss the benefits and limitations of this selection. Finally, I provide demographic and contextual information about the participants in the study and summarize my dual role as the instructor and researcher.



## Site Description

The site where this research was conducted was Westlake Community Center<sup>1</sup>, which is located in an urban area in the Southeastern United States. Westlake was founded more than 100 years ago with the expressed goal of providing better education and employment opportunities for the city's most vulnerable families. Westlake's main community center includes three large classrooms, a cafeteria, a gym, offices, and an outdoor sports area. In addition to the main center, there are satellite campuses located within schools and in the most densely populated housing areas of the city. According to Westlake's website, it serves over 6,000 individuals each year through a wide variety of programs, such as infant and childcare services, after-school academic enrichment activities, college and career placement programs, social worker assistance, and counseling services. Approximately 40% of the people that the center assists are younger than eighteen years old.

Westlake also serves a specific geographical area within the larger urban center. Although this neighborhood has recently begun a process of gentrification, the geographic population that Westlake supports face a number of challenges. In this area, over 60% of high school students read on a sixth grade level or below, 9 of 10 children do not attend college, unemployment is 15% above the county average, and the dropout rate is 23% above the county average.

In the summer months, Westlake offers a number of academic enrichment programs for children and adolescents. One program, GROW, serves approximately 150 students from 6-14 years of age each year. In order to participate in the program, students must meet income criteria

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<sup>1</sup> Pseudonyms have been used for the names of the community center, specific geographic regions, the summer program, and the student participants in the study.

(parents must provide proof that students receive free or reduced-price lunch) and live within the geographic area served by Westlake. Over a six-week period, students attend GROW four days a week, from 8:00 a.m. to 4:30 p.m. Although some GROW activities are program-wide (i.e., weekly field trips to a community garden), most activities are limited to specific age groups. Students are divided into groups as follows: lower elementary (rising 1<sup>st</sup> and 2<sup>nd</sup> graders), elementary (rising 3<sup>rd</sup> and 4<sup>th</sup> graders), lower middle school (rising 5<sup>th</sup> graders), middle school (rising 6<sup>th</sup> and 7<sup>th</sup> graders), and high school (rising 8<sup>th</sup> and 9<sup>th</sup> graders). Three program directors (elementary, middle school, and high school) are responsible for curriculum development and arranging field trips. Each group is also accompanied by one to three counselors, depending on the number of students enrolled in each grade for any given day. Although I worked with numerous groups (lower middle school, middle school, and high school) on a regular basis during the 2013 GROW program, research activities were limited to the lower middle school students (rising 5<sup>th</sup> graders).

The expressed goal of this program was to offer academic support and enrichment to prepare students for the upcoming school year. As a result, GROW devoted substantial time and resources to students' literacy and math development. In the 2013 program, the lower middle school students began each morning by spending approximately sixty minutes engaged in literacy activities, including reading, writing, and responding to texts. In the afternoons, students participated in sustained silent reading for approximately forty-five minutes. GROW offered a print-rich environment; each of the three classrooms contained a variety of reading materials, such as narrative and informational books, magazines, comic books, and graphic novels, and students could borrow these texts at any time. Literacy activities were also supplemented by visits to local cultural and athletic events.

## **Rationale for Site Selection**

When selecting a site for this study, I developed three criteria: the site 1) must be open to instructional experiences involving technology; 2) should emphasize academic skills in relation to literacy; and 3) must be open to allowing me to adjust and adapt the curriculum based on students' needs, prior experiences, and familiarity with technology and literature response.

Given that the purpose of the study was to investigate students' digital, multimodal composing processes and products, it was necessary to select a site that was welcome to introducing experiences involving technology. Before the study began, Westlake received a grant from PBS to purchase a number of iPads, and the summer program directors were eager to explore the potential benefits of student technology use. However, it was clear from discussions with the program directors and my initial observations that the center was in the very early stages of technology integration. In addition to the set of iPads, the center had two computers in each classroom, but these tools were primarily used to enforce foundational reading and math skills. On multiple occasions, I was informed by the program directors and counselors that technology was mostly used for "stuff like MathBlaster" and for "letting kids type up their homework." I viewed the lack of a fully integrated technology curriculum as a positive; it meant that I could contribute to the development of future curricular activities in a meaningful way.

Next, while many summer programs aim to incorporate technology and provide enrichment opportunities for students, it was important to me to find a site with the expressed goal of fostering academic growth in relation to literacy. In the past, I had worked with small groups of students during "tech camps," and while these experiences were valuable in shaping my thinking about how children and adolescents learn about and interact with technology, I was specifically interested in digital and multimodal composition for academic purposes. Given that

academic growth (particularly in regards to literacy and math) is an expressed goal of the GROW program, Westlake clearly met this criterion.

Finally, the particular aims of this study required me to be receptive to students' needs, interests, and ability levels. As a result, I knew I would have to adapt the curriculum on an ongoing, and even a minute-to-minute, basis. This requirement aligned with my interest in exploring the challenges of introducing a digital literature response curriculum from the perspective of the teacher, so I also sought a site that was responsive to allowing me to be the sole instructor on a consistent basis. Westlake offered the opportunity for me to teach the morning literacy workshop for the lower middle school group. The middle school program director also suggested that the students would be available during other times, as their schedules allowed. I presented a proposed outline for the workshop in May of 2013 (see Appendix A) and told the program director that given the inquiry-based nature of the instructional plan, I would make changes throughout the course of the program as a regular part of research and instruction activities. The program director informed me that the outline "looked great" and that I had complete control over any changes that I wanted to make. The directors also asked me to teach the middle school and high school groups on a twice-weekly, volunteer basis, and while these experiences are not documented in my research, they allowed me to gain a richer and deeper understanding of Westlake and the students that it serves.

### **Benefits and Limitations of Site Selection**

In many ways, the GROW program presented an ideal opportunity for researching an inquiry-oriented, digital, multimodal curriculum. The fact that I was given the sole responsibility of instructing students during the appointed literacy block time, in addition to the fact that I was able to alter the curriculum at any time to suit students' needs and/or my pedagogical goals, were

huge incentives for completing this research at Westlake. Finally, Westlake's receptiveness to technology use was a key component in my decision.

However, one of the major questions that remains in the literature surrounding digital, multimodal literacies is their place in classroom settings. Research has shown that many teachers see multimodal composing activities as supplementary projects that have little connection to "academic" curricula that promote achievement on standardized measures. In other words, teachers "see integration more in technological, rather than curricular, terms that are more supplemental to instruction. Neither do they typically believe that new genres of reading and writing are important aspects of integrating ICTs into instruction" (Hutchinson & Reinking, 2011, p. 328). Furthermore, many teachers and administrators, faced with the challenges of meeting strict state and national standards and accountability measures, may believe that the "institutionalized structures of schools are often incompatible with the purposes and enactments of digital literacies" (O'Brien & Scharber, 2008, p. 67). While Westlake does target academic literacies, institutional pressures like standardized testing and the Common Core Curriculum were not present in the GROW program. In order for educators to see value in multimodal, digital literacy practices, future research needs to identify the specific affordances and constraints of implementing multimodal composing in classroom settings.

While I had other opportunities to complete observational studies of students' multimodal composing practices during the academic year, recent administrative changes in the school districts in the urban area in which this study was conducted, such as an intensive focus on test preparation and increased use of scripted reading programs like READ180, made it impossible for me to implement a full, digital, multimodal curriculum in a school setting. However, I felt that there was a great deal of value in developing and enacting a digital, multimodal curriculum

over an extended time period. So, I ultimately decided that it was preferable to choose Westlake as the site for this research.

### **Participant Selection and Description**

When the study began, there were nine students enrolled in the lower middle school GROW program. All were rising fifth-grade students, and their ages ranged from 10 years, 1 month to 12 years, 3 months. Two additional students joined the class in the third week, but left in the middle of the fourth week.

In order to enroll their children in GROW, all parents were required to attend a mandatory informational meeting the month before the program began. After talking with the program directors, I was given permission to attend this meeting in order to talk briefly about the study and my plans for instruction. I gave parents a written outline of the curriculum and reviewed my instructional goals, which included enhancing reading and composition skills, developing proficiency with technology, and building skills in the analysis of literature. All students in the lower middle school program were invited to join the study. Parents and students could consent to participating in all aspects of this study, including collection of video and interview data, or they could consent to the collection of student products and artifacts only.

I distributed consent and assent forms at this time. I received four consent and four assent forms at the meeting, and another three consent and three assent forms before the study began. I sent home consent and assent forms with the remaining two students after our first course session, and received them by the beginning of the second session. The parents of all nine students who participated in GROW for the duration of the program consented to all aspects of the study, and all nine students also assented. I attempted to consent and assent the final two students, who joined the course in the third week, but they left the program before consent and

assent could be obtained. (Please see the section entitled *Data Collection* for further information about how I attempted to exclude these students from the research process.)

Of the 9 students who participated in this study, 6 (66.7%) self-identified as Black, 1 (11.1%) self-identified as Hispanic, 1 (11.1%) self-identified as White, and 1 (11.1%) self-identified as other (Mixed). One student (11.1%) reported speaking a language other than English (Spanish) in the home.

Overall, students had less access to a variety of digital screens than other students of the same age living in the United States. For example, a 2010 survey (Rideout, Foehr, & Roberts, 2010) of the media usage of more than 2000 children and adolescents living in the U.S. showed that 84% of 8-18 year-olds had a computer with internet access in their homes. In this study, 4 of the 9 students (44.4%) reported having a computer with internet access at home, and an additional student (11.1%) reported having both a computer and an iPad with internet access. Four of the nine students (44.4%) reported that they did not have access to a computer or the internet in their homes.

The time that students in the study reported spending on a computer or other device with internet access on a typical day was also far less than U.S. averages for students in their age group. Rideout, Foehr, and Robert's (2010) nationwide survey showed that students aged 11-14 spent 1 hour, 46 minutes using a device with internet access. In this study, while students' responses to an initial survey question regarding their use of the internet on a typical day varied widely, from 0 minutes to 3 hours, 20 minutes, the average was 46.7 minutes. Finally, students had fairly limited experience with the technology that we used during the instructional period. Of the 9 students, only 2 (22.2%) had created a PowerPoint. 4 (44.4%) had created a digital video,

but none of them had worked with digital video editing software. Also, none of them had used the Windows 8 operating system, which presented its own unique challenges for instruction.

Therefore, on various measures, students' use of technology fell below U.S. averages. Several studies (Common Sense Media, 2011; Rideout, Foehr, & Roberts, 2010; Pew Internet and American Life Survey, 2013) have shown that children and adolescents from low-income homes often have fewer opportunities to access technology. Given the income requirements of the GROW program and the resulting socioeconomic make-up of the students enrolled in this study, this is perhaps not surprising.

However, students' relative unfamiliarity with technology resulted in a number of implications for instruction. First, I had to provide additional scaffolding for the use of different software programs, such as PowerPoint and MovieMaker. For example, when we began to use Microsoft Paint as a tool for image manipulation, I showed students various sample products that I had created; modeled the use of features, such as the drawing tool, shape tool, color tool, typing tool, and so on; gave students structured practice tasks to build skills and knowledge; and provided multiple reminder tutorials for students. I also built in numerous peer interactions into the daily sessions and encouraged students with extensive experience in using technology to assist other students and to serve as leaders within the workshop. For example, during the third week of the workshop, one student, Eric showed the rest of the students how to use the Audacity music program to mix together two tracks of music. Finally, I altered the curriculum to include more collaborative products, and when I gave students a choice between working individually or working with a partner, I encouraged them to work in pairs or small groups. Finally, even when students chose to work individually, I continuously prompted them to ask their peers for composing help and advice.



## Researcher Role

My personal, professional, and research experience qualified me to pursue this specific line of research. First, I have extensive experience in teaching adolescents to use technology and new media to respond to literature. As a former classroom teacher, I used a variety of software programs (e.g., PowerPoint, digital video software), social networking websites (e.g., Facebook, Twitter, Google), and multimodal projects (e.g., song writing, art, graphic design, digital graphics) to enhance the literature response process. Students in my classes designed and created a wide range of projects, from digitally reconstructing the final battle in George Orwell's *Animal Farm* to live-blogging the trial in Walter Dean Myers's *Monster*. I have also led numerous workshops for practitioners that focused on developing digital, multimodal literature response projects for adolescent students.

At Vanderbilt, I have worked on a number of research projects involving the use of digital technologies for academic purposes. These projects include an examination of students' digital book trailer products, a study tracing students' personal and critical responses to *The Kite Runner*, a summer research program documenting students' creation of number of digital artifacts in a weekly enrichment course, and a collaborative study in which we examined how Reading M.Ed. candidates scaffolded middle school students' digital book trailer composition processes. This previous work was instrumental to the conceptualization and design of this study.

However, this study represented a departure from my previous research experiences, particularly in terms of researcher role. Throughout the course of the study, I acted as an active participant (Spradley, 1980; Merriam, 2009), and served as both the course designer and the course instructor. For 16 of the 19 sessions, I was the sole adult responsible for the students in my class. One note—for 3 of the 19 sessions, one counselor was present for part of the

instructional time; while she provided individual behavioral support for one student, she did not participate in the instruction. While taking on an instructional role allowed for a unique opportunity to investigate the nature of a digital, multimodal literature response curriculum from an insider's perspective, it also presented a number of challenges.

Initially, I struggled with balancing my role as the instructor and my role as the researcher. While some of the techniques I used, such as frequent verbal prompting and questioning of students about their work during the composing process, were ultimately beneficial for the research, the impetus for these decisions was often pedagogical. Furthermore, there were times in which I was unable to complete focused observations due to the urgent learning needs of other students. For example, during the second week of sessions, I was engaged in questioning a pair of students, Davonte and Eric, about a debate they were having about image selection when another student's computer crashed and she lost all of her work. Due to the unpredictable nature of technology and these students' relative unfamiliarity with multimodal and digital composition, incidents such as this were a semi-frequent occurrence.

However, as soon as the class sessions were finished, I engaged in a variety of research activities. Immediately after each course session, I watched the day's videos, reviewed student artifacts and products, and recorded ethnographic field notes. Then, I chronicled my thoughts and observations about the curriculum and made adjustments to future instruction in what I called a "teacher's log." This work was essential to reconceptualizing and revising the curriculum map and future lesson plans, which was done on a daily basis. The teacher's log was extremely valuable throughout the data analysis process; it allowed me to track my own thoughts about specific collaborative partnerships and students. More information about these data sources and

the data collection process is available in the *Data Collection and Data Sources* section of this chapter.

### **Instructional Focus**

In designing the workshop, I drew on my previous experience as a classroom teacher, as well as my experience in leading research projects that have involved young adolescents' use of digital, multimodal tools for literature response. Given the limited timeframe, I wanted to select an instructional focus that allowed students time to read and respond to texts, as well as engage in a variety of multimodal response activities. After reviewing a number of potential texts and topics, I felt that using poetry as the instructional focus would allow for a cohesive and interactive learning experience.

After determining that I would use poetry as the underlying thread for the workshop sessions, I selected a text, *Love That Dog* by Sharon Creech, to serve as an anchor for students. *Love That Dog* traces the experiences of a young boy named Jack whose teacher forces him to read and write poetry. Over the course of the book, he reads a number of canonical poems, such as "The Red Wheelbarrow" by William Carlos Williams, discovers how to identify and use various literary devices, and begins to write his own poetry. While the first week was dedicated to activities designed to introduce the students to each other and to the digital tools they would use throughout the workshop, for each session over the final five weeks, I selected a poetic focus, such as imagery, rhythm, or metaphor, which aligned with students' *Love That Dog* readings. In order to provide students with a range of print and digital texts, so I also incorporated supplemental texts, such as additional poems, websites, news stories, film, fictional passages, essays, music, and art, which represented numerous styles and discourses. Appendix B contains a curriculum map, which includes a layout of the sessions by week, session number,

poetry emphasis, texts, students' multimodal products, the technology used, students' response to literature, and students' response to each other's work.

### **Digital Tools**

Throughout the data collection period, students used various digital tools in order to compose their final multimodal projects, to create multimodal artifacts for their final compositions and daily projects, and to respond to literature and each other's compositions. The following sections detail the features of each piece of hardware and software students used in the workshop. I also describe some ways in which each tool was used by students in the study in order to provide contextual information about how these tools were used for multimodal composing purposes.

### **Computers and Internet Access**

Throughout the study, there were ten Dell laptop computers available for student use. So, for each session of the workshop, there were enough computers so that each student could compose individually if they chose. The laptops were specifically purchased for this study, and came preloaded with selected software from the manufacturer, such as Microsoft Paint and the Google Chrome internet browser. In preparation for the workshop, I also downloaded the Microsoft Office Suite, Audacity, and MovieMaker for student use during composing.

The Westlake Center has a wireless internet network, which was accessible using a password. Before the workshop began, I received the password, checked connectivity on each of the student computers, added the wireless network to each student computer, and set the preferences so that students would be automatically logged into the network when they powered on their computers. So, students had access to the internet for the duration of the workshop.

Although there were a few occasions in which the wireless network would lose connectivity for a few minutes, for the most part, these instances did not affect students' composing processes.

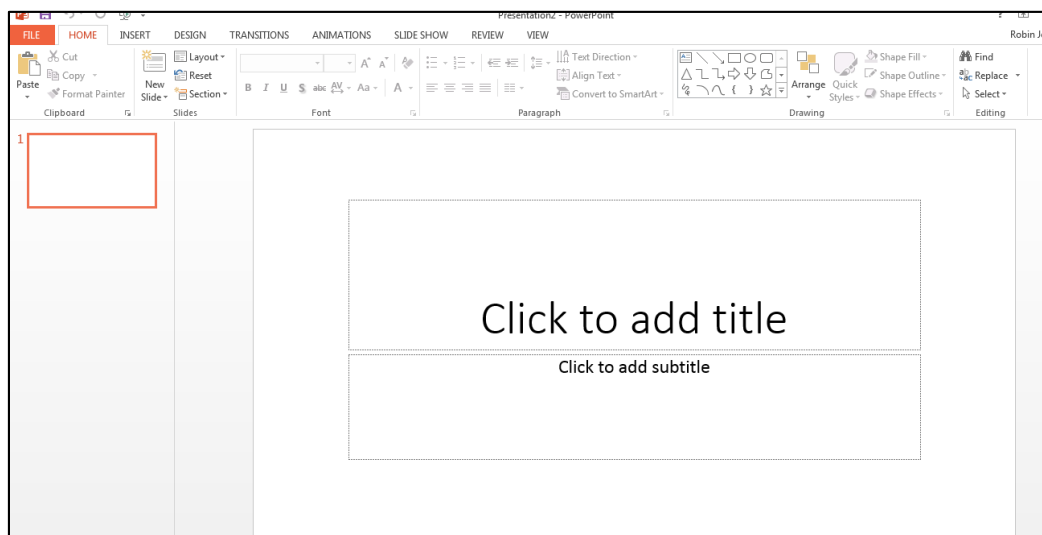
### **Digital Composing Tools for Creation of Final Multimodal Products**

For the composition of their ten final multimodal projects, students used three composing tools: Microsoft PowerPoint (PowerPoint); Microsoft MovieMaker (MovieMaker); and an online tool called *Wild About Woods* Concrete Poetry Maker (Concrete Poetry Maker). Before students' first use of each tool in the workshop setting, I provided a tutorial and demonstration of the features. For some projects, such as the *All About Me* project, students were instructed to use a specific composing tool (i.e., Microsoft MovieMaker). However, for other projects, such as the *Visual Haiku*, students were told that they could choose a composing tool based on their needs and interests.

**PowerPoint.** Students completed several final projects using PowerPoint (Microsoft PowerPoint 2013, Version 15.0.4420.1017). PowerPoint allows users to create multimodal presentations to be shared in person or online. While this tool allows for the inclusion of many different modes, such as text, student-created and downloaded images, music, video files, sound effects, backgrounds, colors, and transitions, some of these modes are more easily accessible than others. For example, on the main composing screen, or the primary screen that users see when they begin a composition, PowerPoint prompts them, through visual and written cues, to add title text and body text (see Figure 2). There are also easily accessible buttons that allow users to insert pictures, change the background layout, and add shapes. While users can add other modes, such as special effects, transitions, music clips, and sound effects, these functions are not as readily accessible to users. So, while PowerPoint does allow for the inclusion of a great variety of modes, the specific visual layout does influence which modes are most readily

available to users. For the students in this study, who were either novice PowerPoint users or had used the tool once before in previous academic settings, this limitation was particularly important. Although I provided some instruction in how to use the various features and emphasized that students could add sound, music, special effects, sound effects, and other modes, many students, particularly at the beginning of the workshop, chose to include only the most visible features, such as the text background template, and images.

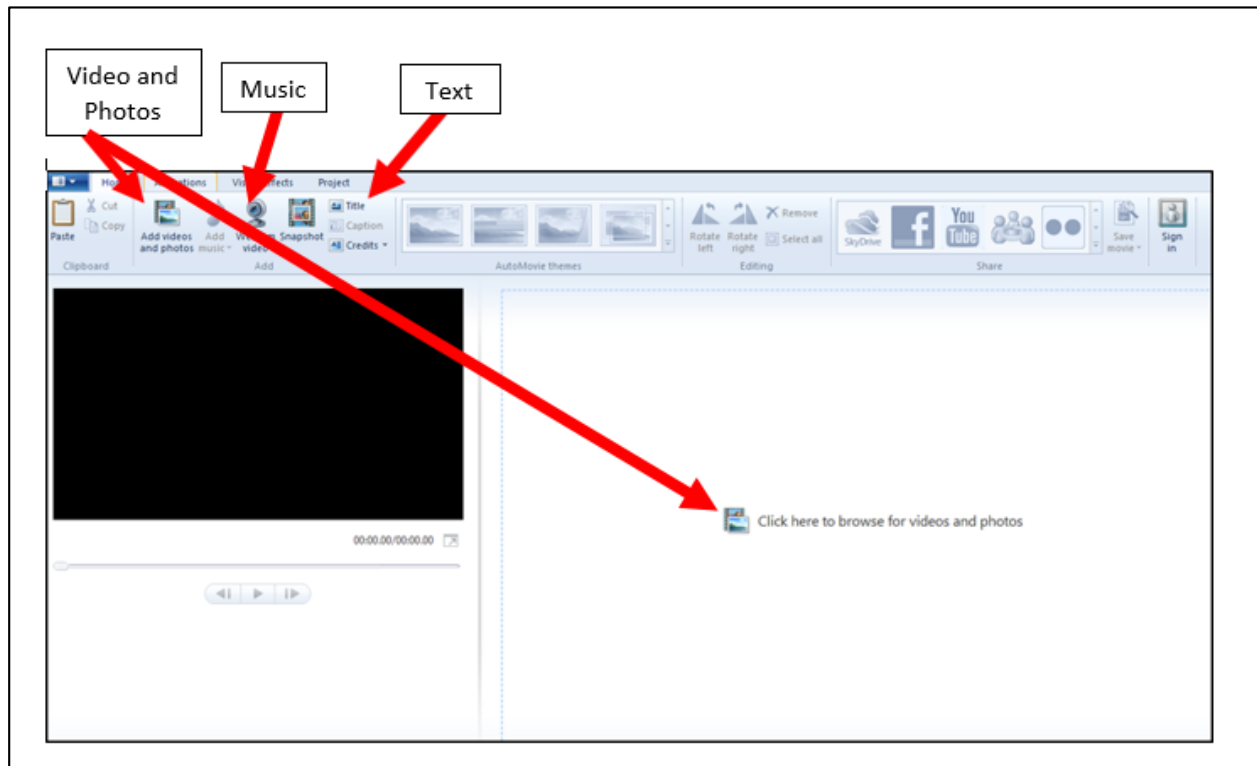
*Figure 2.* Screenshot of PowerPoint's main composing screen



**MovieMaker.** MovieMaker (Microsoft MovieMaker 2012, Version 16.4.3522.110) is a tool designed to allow users to create and edit digital videos. Like PowerPoint, in MovieMaker, some modes are more easily accessible than others. For example, on the main composing screen, users are prompted to add video and photos (see Figure 3 for screenshot of MovieMaker's main composing screen). While there is a button to add text, such as titles and credits, the button is fairly small and located in the top menu, not on the main screen. Music is also a prominent feature on the main composing screen. As with PowerPoint, particularly at the beginning of the workshop, as students were just beginning to understand how to use the various features of

MovieMaker, many students used only the most visible features, such as images, video, and music.

Figure 3. Screenshot of MovieMaker's main composing screen



**Concrete Poetry Maker.** The Concrete Poetry Maker (Woodland Trust, 2011, Version 1.1) is an online tool designed for the creation of concrete, or form, poems. It was created by the Woodland Trust, a UK organization which creates online learning tools related to nature and natural resources. The tool allows users to either select a picture shape from a prefabricated selection of animals, trees, and other natural resources, or to draw their own using a digital pencil. Then, users can write their own words or use the suggested words to write the text for their concrete poems (see Figure 4 for a screenshot of the tool's main composing screen). The

Concrete Poetry Maker also allows users to add their own colors and patterns to their poems. Students used the tool to create their *Form Poems* in the third week of the workshop.

Figure 4. Screenshot of Concrete Poetry Maker's main composing screen



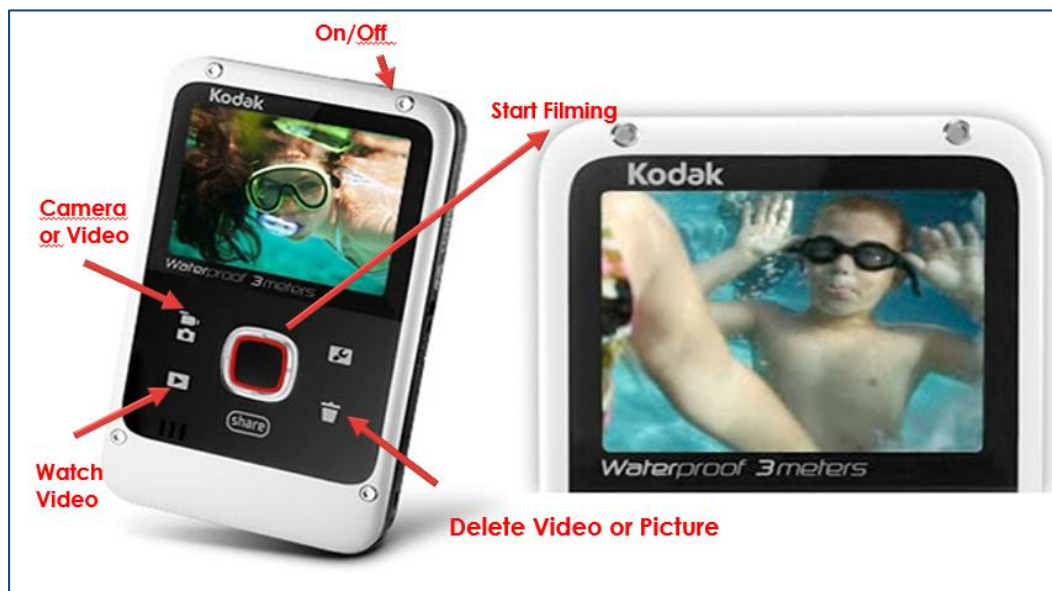
## Digital Tools for the Creation and Manipulation of Modes

In composing their multimodal projects, students brought together a variety of modes, including student-captured and downloaded images, videos, music, sound clips, and special effects. In some cases, students created their own modes; for example, many students captured photographs and video of the Westlake Center, their homes, and their communities using digital video cameras. Students also used programs such as Audacity to record their own sound effects. In addition, students occasionally used prefabricated modes, such as images downloaded from the Internet. The following sections detail the digital tools students used for creating and manipulating modes: student digital video cameras, Google Images, Google Music, Free Music Archive, Microsoft Paint, and Audacity.



**Student digital video cameras.** Kodak Play digital video cameras, which are no longer being manufactured, were used by students to capture photographs and videos for their final multimodal compositions, to film daily vocabulary videos, and to document their multimodal composing processes. The Kodak play camera was specifically chosen for affordability and ease of use. Users are limited to three basic functions: capturing pictures or video files, viewing images or watching playback of captured videos, and deleting pictures or video files. Each camera also had a built-in flash drive for convenient downloads to a computer or other digital device. On the first day of the workshop, I demonstrated how to use the cameras and provided students with pictorial reference cards (see Figure 5). Each student was then assigned a specific camera, which was subsequently labeled with their name. Students were able to take the cameras home and into their communities in order to capture photos and videos for their work. For collaborative projects, students used one camera to capture the images for their work.

*Figure 5.* Pictorial reference card for student camera features



**Google Images.** Students' multimodal compositions featured two types of images: images that students captured using the student cameras and images downloaded from the Internet. During the second week of the workshop, I led a short tutorial on how to search for and download images using the Google Images search feature. Although I never specifically limited students to using Google Images to find and select images for their compositions, all students used this tool throughout the workshop.

**Microsoft Paint.** Microsoft Paint (Microsoft Paint 2013, Version 6.2) is an image manipulation program which allows users to alter and enhance images. Student computers came preloaded with the program. In the first week, I demonstrated the use of selected features, such as adding text to an image, drawing on top of an image, resizing and cropping images, and saving the altered images. For students who wanted to learn how to use some of the more advanced features of the program, I provided individual assistance. So, throughout the workshop, individual students experimented with features that related to their needs and interests, such as adding image filters and layering two images on top of one another.

**Google Music.** Google Music allows users to listen to and download selected music clips and songs. While some songs and music clips are only available for purchase, there are also a number of clips that are freely available. Before the workshop began, I bookmarked Google Music on each student computer. I then showed students how to access and search for music clips during the first week of the workshop.

**Free Music Archive.** The Free Music Archive (Free Music Archive, 2014) is a collection of open-source audio files that users can download. All clips are free to users. Before the workshop began, I bookmarked the Free Music Archive on each student computer. After showing students how to download and search for music clips using Google Music, I

demonstrated how to use the Free Music Archive, and as a group, we compared the two tools and discussed how they were alike and different.

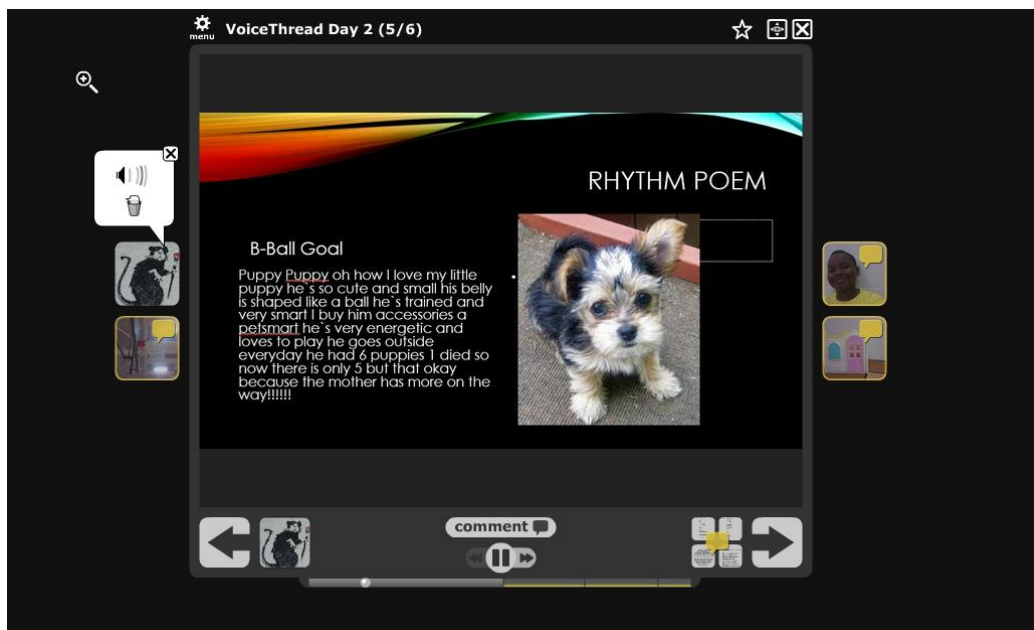
**Audacity.** Audacity (Audacity, 2014, Version 2.0.6) is a free, online tool that allows users to edit and record sounds and music. During the second week of the workshop, I provided a brief demonstration of how to use the tool, and told students that I would be happy to provide more detailed instruction, either during or outside of dedicated workshop time, for those who wanted more information on how to use the various features. While not all students used Audacity throughout the course of the workshop, a few students were especially interested in sound manipulation and recording, and used the program to layer multiple sound clips, to record sound effects, such as the sound of a slamming door, and to edit music clips.

### **VoiceThread: A Digital Tool for Daily Multimodal Responses**

Students used VoiceThread (VoiceThread, 2013, Version 3.0) to create daily multimodal responses to literature, to respond to other students' work, and as a reflective tool. VoiceThread allows teachers and students to post videos, images, pieces of text, PowerPoints, and other digital artifacts to a common forum called a VoiceThread. Students can then respond to the artifact by writing a message, creating a video response, recording an audio response, and/or annotating the artifact using drawing tools (see Figure 6 for a screenshot of a sample VoiceThread from the *Rhythm Poem* project). Before GROW began, I created a class account and made individual accounts for each student. In the second week of instruction, students personalized their accounts by uploading images to represent themselves, which allowed them to distinguish their comments from those of other students. Starting in the second week, students used the VoiceThread program to create their responses to literature, other students' work, and their own work. In total, students created 14 distinct VoiceThreads, all of which have numerous pages.

At the time of the study, VoiceThread had a monthly usage fee of \$10 for a teacher and a “class” of up to 30 students. While students could have used free online tools, such as Google documents, to create their daily responses, I ultimately chose VoiceThread because of the annotation functionality, the ease in uploading multimodal products, and finally, because students had the ability to customize their accounts and create avatars with images.

Figure 6. Screenshot from sample VoiceThread (page 5 of 6)









### Data Collection and Data Sources

Data collection occurred over a six-week period in June and July of 2013. The primary sources of data included video and audio recordings of classroom events, ethnographic observations and field notes, students’ 10 final multimodal compositions, students’ daily digital and multimodal responses to texts and to other students’ multimodal products, artifacts from the instruction and composition processes, photo and video recordings from student video cameras, screen capture recordings of students’ multimodal composing processes, artifacts from the

instructional design process (i.e., curriculum maps, lesson plans, PowerPoint presentations, and the teacher's log), interviews with student participants, and student surveys. Table 2 contains an overview of data collection procedures, including method, data sources, and frequency, and the timeline for data collection. Given that the study focused on students' interactions across the composition of numerous multimodal projects, it was necessary to draw upon on a wide range of data sources. In the following sections, I describe the methods for data collection, including observation of classroom interactions, collection of students' multimodal response products and artifacts, collection of artifacts from the design of instruction, surveys, and two types of interviews.

Table 1. Overview of data sources and data collection procedures

Method	Data Source	Frequency	June	July
Observation of classroom interactions	Video- and audio-recordings	Daily (3-4 times per week)		
	Ethnographic field notes	Daily (3-4 times per week)		
Collection of students' multimodal response products and artifacts	Multimodal response products	10 total products (1-2 per week)		
	Digital, multimodal responses (VoiceThread)	14 total responses (2-3 per week)		
	Artifacts	Daily (3-4 times per week)		
	Screen capture	Daily (3-4 times per week)		
Collection of artifacts from the design of instruction	Curriculum maps	Pre-study, adjustments during study, post-study		
	Lesson plans	Daily (3-4 times per week)		
	PowerPoint presentations	Daily (3-4 times per week)		
	Teacher's log	Daily (3-4 times per week)		
Surveys	Final Student Survey	End of data collection period		
Interviews	In-process composition interviews	Daily (3-4 times per week)		
	Final interviews	End of data collection period		

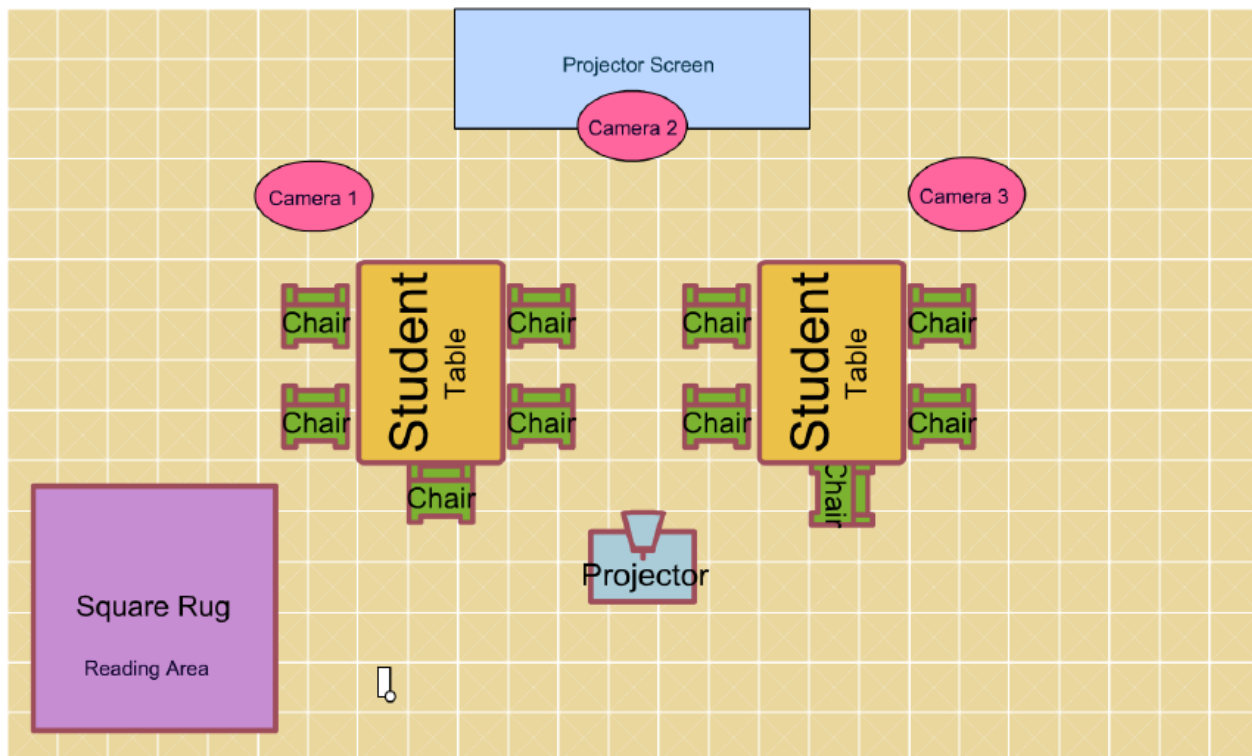
### Observation of Classroom Interactions

Over a period of six weeks, students participated in 2-4 class sessions per week, for a total of 19 sessions. The discrepancy in the number of sessions per week was due to a number of factors, such as holidays, field trips, and program-wide assemblies. Most sessions took place after students ate breakfast and during the scheduled literacy block time, between 9:00 a.m. and 10:15 a.m. However, a few sessions occurred later in the morning or in the afternoon. Each

session was approximately 75 minutes long; however, some sessions were only 60 minutes long and others lasted up to 130 minutes.

Class was mostly conducted on the stage in the gym area, which was set up like a classroom space, with two student tables, a number of chairs, and a rug that we sometimes used as a reading area. There were eight total laptop computers available for student use, which I powered on and placed at the tables before each session began. During sessions where all nine students were present and students worked on individual projects, my personal computer was appropriated for student use. Each session was recorded using three video cameras and four audio-recorders (see Figure 7 for a map of the classroom space, including typical camera positions).

Figure 7. Map of classroom space including typical camera positions



Before beginning data collection, I experimented with a number of different camera positions. I ultimately decided to place a camera at the front of the stage in order to capture the entire “classroom” space. I also placed a camera at a slight diagonal to each of the student tables to capture student interactions. In order to account for students’ movements and to record more interactions and collaborations, I was flexible in terms of camera positioning. Two audio-recorders were placed at each student table to provide back-up for the video sound. Also, at a number of points throughout the instructional period, students moved to other indoor and outdoor areas of the Westlake Center to take photographs, to create digital videos, and to create other artifacts for use in their multimodal compositions. When students moved from the classroom area, I removed Camera 1 from the tripod and followed the students with the camera. Student cameras also provide alternative perspectives of the composing process.

While all students who were present for the duration of the workshop were consented and assented, there were two students present for four sessions each for whom I was unable to attain consent. I attempted to position the stationary and moving cameras so that these students were not in view, and I did not collect any of their composing data, such as their final products or any artifacts from the composition process. For the instances in which one or both students appeared on the video recordings, I did not analyze their actions or interactions with other students.

Because I was the instructor for the course, I was unable to take field notes as interactions occurred. So, ethnographic field notes were written immediately after each classroom interaction, as I watched the video data from that day. In writing field notes, I wanted to capture a broad account of the activities of all students during the workshop activities. Therefore, having three cameras to capture multiple viewpoints of student interactions was extremely beneficial. I primarily created field notes from watching the footage from Camera 2; however, I occasionally



used the footage from the other two cameras to supplement my field notes or to hone in on specific aspects of students' composing processes and/or interactions.

The purpose of these observations was to better understand the processes students used as they composed individually-created and collaboratively-created multimodal products. I documented my own behavior as part of the instructional design process, making notes of the scaffolds I provided as students read, composed, and responded to literature and to each other's work; the questions I asked about texts, students' compositions, and students' responses; and how I may have supported and/or hindered students' work. I documented student behavior to understand the ways in which they approached the multimodal composing process; how they collaborated with their peers in both the reading, composing, and response processes; and how they used digital tools to create their multimodal literature responses.

### **Collection of Students' Multimodal Response Products and Artifacts**

Throughout the instructional period, students created ten final multimodal response products, in addition to daily multimodal products, like vocabulary videos. While some products, like the *All About Me* project and the *Westlake Poems*, were individually-created, many students chose to work with a partner to compose collaboratively-created multimodal products. See Table 3 for a chart showing which students completed which multimodal projects (some students were absent during particular sessions; therefore, they did not create those products). Partnerships are coded by color; for example, Eric and Davonte worked together to complete five different multimodal projects; their partnership is indicated in red.

Table 2. Students' multimodal products and collaborations

	Eric	Davonte	Clinton	Tyrus	Marcus	Tiana	Terrell	Gabriel	Ben
<b>Week 1</b>									
<i>All About Me</i>	X	X	X	X	X	X	X		X
<b>Week 2</b>									
<i>Family Poem</i>	X	X	X	X	X	X	X	X	X
<i>So Much Depends Poem</i>	XX	XX	XX	XX	X	XX	XX	X	
<i>Rhythm Poems</i>	XX	XX	XX	XX	X	XX	XX	X	X
<b>Week 3</b>									
<i>Form Poem</i>	XX	XX	X	X		X	X	X	X
<i>Fireworks Poem</i>	X	X	XX	XX		XX	XX	X	X
<b>Week 4</b>									
<i>Neighborhood Poem</i>	X	X	XX	X		X	X		XX
<i>Simile and Metaphor Poem</i>	XX	XX	XX	XX	XX	X	XX	X	X
<i>Visual Haiku</i>	XX	XX	XX	XX		XX	XX	X	X
<b>Week 5</b>									
<i>Westlake Poem</i>	X	X	X	X	X	X	X	X	X

**Multimodal artifacts.** I collected numerous artifacts which documented students' multimodal composing processes: video and pictures from student cameras; handwritten artifacts; downloaded pictures, video, and music files; students' VoiceThread responses, and composition drafts. Throughout the study, there were nine mobile video cameras available for student use; one was assigned to each student. Students used the cameras for a variety of tasks, like creating their daily vocabulary videos, taking pictures for their compositions, and recording videos of daily life at the Westlake Center. After each session, I downloaded all files from each student camera. Students also sometimes created paper-and-pencil brainstorms for multimodal compositions; all of these were collected at the end of each session. Furthermore, student computers often contained a number of artifacts, like pictures, videos, or music files that students downloaded from the internet, as well as the composition drafts. After each session, I downloaded all files from each student computer and archived them.

**Screen recordings.** Each student computer was equipped with CamStudio (CamStudio, 2013, Version 2.6b), a screen recording software program. I used the screen recording software

to capture specific and detailed information about students' composing processes. Although CamStudio does not record audio, it does record each click of the mouse, each deletion and addition, and each change that students made to their composition. After each session, I saved the CamStudio recordings and archived them for future analysis. In the first two weeks of instruction, I had a few issues with students closing the CamStudio program because their computers froze, but I did collect most CamStudio recordings for each session.

### **Collection of Artifacts from the Instructional Design Process**

Before beginning instruction, I created a proposed workshop outline (see Appendix A) and an initial curriculum map. After the first session, in which I interviewed students about their experiences with technology and began modeling the first project, the *All About Me* videos, I realized that I would need to make significant changes to the scope and sequence of the curriculum due to students' limited experiences with technology. I continued to make changes throughout the instructional process, which included adding and removing readings; changing, altering, and removing multimodal projects; designing more opportunities for collaborative interactions and group projects; and building in more time for students to respond to each other's work using VoiceThread. The final curriculum map (Appendix B) represents a significant shift in the conceptualization of the workshop.

I also collected other artifacts from the instructional design process, such as lesson plans and PowerPoint presentations. These artifacts were invaluable in designing and redesigning workshop sessions, and across all stages of data analysis. They also allowed me to chart patterns in instruction and to better understand the scope of the project on both the micro and macro levels.

Finally, I created a daily “teacher’s log” in addition to my field notes. After watching the session videos and recording ethnographic field notes, I recorded my reflections and observations from the sessions using audio recording and a written journal. While there was some overlap between the field notes and the teacher’s log (for example, I often included notes about student collaboration and the level of productivity within specific partnerships in both documents), the log was used primarily to reflect upon my own experiences as an instructor. Also, the log often informed changes in future lesson plans. For example, I often recorded notes about which students seemed to be grasping major themes in the literature, which students needed more support with using specific technological tools, and how I could adjust my questioning to get students to think more critically about the literature.

### **Surveys**

Although I informally interviewed students about their previous experiences with technology and their access to technology at home during our first class session, I wanted them to provide more detailed information for data analysis purposes. Student surveys were used to collect demographic and background information. I also asked questions about students’ use of technology at home and in school settings. Finally, the surveys helped to shape my final interviews with students (see Appendix C for final student survey).

### **Interviews**

I conducted two types of interviews: in-process composing interviews and final, individual interviews. Before beginning instruction, I anticipated that because multimodal composition is often an internal process, particularly when students are working individually, I would need to ask probing questions that encouraged students to share their thinking. However,

after the first collaborative project, the *So Much Depends Poems*, I noted in my teacher's log that many students were struggling to communicate with their partners during collaborative composing, which sometimes led to frustrated students and behavior management problems. As a way to support students' collaborative work, I began asking targeted questions that delved into students' roles within their partnerships.

For example, I often asked questions such as "What was your role today?" or "Tell me about your ideas for this piece and how they are being used in your work so far." In addition, I asked more general questions like "What's been the most difficult task you've completed today?" and "Tell me about how you've improved the images by using that image filter." The primary purpose of these questions was instructional; it helped me to support students, to clarify misunderstandings, and to support collaborative composing. However, these in-process interviews were also invaluable in illuminating students' thinking during multimodal composing.

I also conducted final student interviews, which were completed individually after the final class session at the Westlake Center. Interviews lasted approximately 15-20 minutes, but some ran longer because some students were enthusiastic and wished to discuss their work in more depth. The semi-structured interview format was used to learn about young adolescents' 1) experiences with digital media and multimodal composition before and during the GROW program, 2) reflections on their individual and collaborative multimodal composing processes and products.

I designed three categories of interview questions: general questions about learning with digital media, targeted and general questions about individual and collaborative composing, and product-based questions about students' choices during the composing process (see Appendix D for sample interview questions). The first two sections of interview questions emerged from my

prior experiences, from my observations of students, both during instruction and from my review of the video and audio recordings, and from student survey information. All questions were used to initiate conversation on the bolded topics, while follow-up questions were used to probe further on the topics/examples provided by the students.

In the final portion of the interview, I showed students the product that they chose as their favorite on the survey. After they viewed their work in its entirety, I asked some general questions about the choices they made during the composing process. Then, we reviewed the product together. I stopped the viewing to ask specific questions about composing choices and to allow students to provide additional insight into their thoughts and ideas. Because I wanted to have a full set of design interviews for one of the workshop products, I also chose to complete the same procedure for the final student project, the *Westlake Poems*. This product was chosen because it was the most recent one that students had completed and was thus fresh in their memories. Also, since this project was produced at the end of the instructional period, students generally used more sophisticated techniques and more semiotic resources, which provided additional fodder for interview questions. The purpose of these interviews was to gain a new perspective on students' individual and collaborative work and to illuminate some of the complexities of the collaborative, multimodal composing process.

### **Data Analysis**

Data analysis was organized into three phases, which corresponded to the three research questions and the goals of the study: (1) exploring young adolescents' individual, multimodal composing processes and products; (2) examining students' collaborative, multimodal composing processes and products; and (3) identifying instructional conditions which can support collaborative, multimodal composing. Table 3 contains a visual map of the data analysis


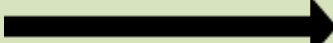


process and outlines the data source, focus of analysis, and specific focal projects for each phase of analysis.

*Table 3. A visual map of the data analysis process*

<b>Phase</b>	<b>Data Source</b>	<b>Focus of Analysis</b>
3	Focal Students	All Individually and Collaboratively-Created Projects
2	Focal Students	Focal Projects <i>So Much Depends Poem</i> <i>Simile and Metaphor Poem</i>
1b	Focal Students	Focal Projects <i>All About Me</i> <i>Westlake Poem</i>
1a	All Study Participants	Open Coding: Looking Across Students, Interactions, and Projects (See Table 6)
1a	Existing Empirical Research	Developing Initial Codes: Examining Existing Empirical Research (See Table 5)

Also, see Table 4 for an overview of the research questions, primary data sources, analytic methods, participants, and timeline for data analysis. The following sections, which are organized according to the research questions, contain in-depth descriptions and examples of each method used in the data analysis process.

Table 4. Phases of data analysis

Research Questions	Primary Data Sources	Analytic Method	Participants	Timeline		
				Summer 2013	2013-2014	2014-2015
Phase 1: What processes do students use as they compose individual multimodal products?	Field notes; video-and audio-recordings of classroom interactions; instructional artifacts; in-process and final student interviews	Constant comparative method (Strauss & Corbin, 1998);	Phase 1a: All students			
	Video- and audio-recordings of classroom interactions Multimodal compositions; multimodal artifacts	Constant comparative method (Strauss & Corbin, 1998); Multimodal transcription (Norris, 2004; Hull & Nelson, 2005)	Phase 1b: Focal students			
Phase 2: What processes do students use as they compose collaborative multimodal products?	Multimodal compositions; Multimodal artifacts; video-and audio-recordings; in-process and final interviews; instructional artifacts	Idea tracing (Jocius, Wood, Hollett & Ehret, 2013); Multimodal discourse analysis (Norris, 2004)	Focal students: Eric and Davonte			
Phase 3: What instructional conditions support students' collaborative, multimodal composing?	Multimodal compositions; Video-and audio-recordings; instructional design artifacts	Constant comparative method (Strauss & Corbin, 1998); cross-case analysis (Merriam, 1998)	Focal students: Eric and Davonte			



## **RQ1: Students' Individual Multimodal Processes and Products**

Phase 1 targeted the first research question: *What processes do students use as they compose individual multimodal products?* The primary data sources for this phase included: 1) field notes from classroom observations; 2) video-and audio-recordings of classroom interactions; 3) artifacts from the instructional design process; 4) in-process and final student interviews; 5) multimodal products; and 6) artifacts from the multimodal composing process. This phase had three distinct goals: to develop a set of categories and themes for further analysis, to select focal students using purposive sampling, and to analyze individual students' multimodal composing processes and products.

**Developing initial codes: Examining existing empirical research.** While a number of recent studies have begun to explore children and adolescents' multimodal composing practices, descriptions of children and adolescents' collaborative composing processes and interactions are often embedded within other findings (see Chapter 2 for a more detailed description of existing empirical research). Therefore, in order to identify patterns and categories that might be useful for the analysis of data in this study, I selected ten key studies and coded for findings specific to children and adolescents' composition processes.

The majority of these studies (Brass, 2008; Chavez & Soep, 2005; Gilje, 2010; Oldaker, 2010; Ranker, 2008; Rojas-Drummond, Albarrán, & Littleton, 2008; Smith, 2013; Smythe & Neufield, 2010) were selected from comprehensive reviews of literature on multimodal composition (Jewitt, 2008; Mills, 2010a; Smith, 2014). However, after reviewing dozens of studies with the specific goal of categorizing evidence pertaining to children and adolescents' individual and collaborative composition processes, I chose to include two additional studies from related fields: art education (Boyatzis & Albertini, 2000) and music education (Gall &

Breeze, 2008). In my review of the literature from literacy and literacy education, I found only limited evidence pertaining primarily to composing processes, and I felt that the expansion of the review would allow me to develop a richer understanding of individual and collaborative multimodal composing.

From these studies, I identified a set of research-based themes that served as a starting point for grounded categories which were later expanded and refined through the analysis of data for this study. The following categories emerged from the literature: 1) the imbalance in student roles during collaborative multimodal composing; 2) connections between composers' experiences and the ways in which their semiotic resources are deployed; 3) adolescents' direct and indirect imitation of peers in the multimodal composing process; 4) the effects of verbal, multimodal, and written peer feedback on students' final multimodal products. Table 5 includes the category names that emerged from the literature (imbalanced composing roles, deployment of semiotic resources, direct and indirect imitation or peers, and role of peer feedback), a definition, and key study concordance (Rowe & Wilson, 2014). The key study concordance row includes a list of the studies that report a finding, example, or category with an equivalent description. If a specific term was used by a study's author(s), the label is noted in the table in italics.

Table 5. Key study concordance: Process and collaboration

Category	Imbalanced Composing Roles	Deployment of Semiotic Resources	Direct and Indirect Imitation of Peers	Role of Peer Feedback
<b>Definition</b>	An unequal distribution of labor in the creation of multimodal products, due to composers' technical expertise, academic identity, or personal relationships within the pair or group	The ways in which modes (image, text, writing, etc.), tools (scripts, storyboards, etc.), and technical resources (software, hardware) are used according to composers' preferences and experiences	The use of subject matter, styles, technical form, themes and meaning from others' work, whether intentional or unintentional	The types of verbal, written, or digital/multimodal peer feedback and the resulting effects on a composers' work, beliefs, and/or attitudes towards the composition or composition process
<b>Key Study Concordance and Reference Terms</b>	4: <i>Control within the collaborative process</i> 6 8 9: <i>Designer and assistant collaboration</i> 10	3 4 5: <i>Adoption of semiotic tools</i> 6 7 9: <i>Modal preference</i>	1: <i>Conformity to peers' thematic preferences and technical styles</i> 7	1: <i>Solicited and unsolicited evaluations</i> 2: <i>Signifying as brainstorming</i> 3 5 6 10

### Key Studies

1. Boyatzis, C. J., & Albertini, G. (2000).
2. Brass, J. J. (2008).
3. Chavez, V., & Soep, E. (2005).
4. Gall, M., & Breeze, N. (2008).
5. Gilje, ý. (2010).
6. Oldaker, A. (2010).
7. Ranker, J. (2008).
8. Rojas-Drummond, S. M., Albarrán, C. D., & Littleton, K. S. (2008).
9. Smith, B. E. (2013).
10. Smythe, S., & Neufeld, P. (2010).

### **Open coding: Looking across individual students, interactions, and products.**

Analysis targeting the first research question proceeded in two phases (see Table 4): 1a, which began during data collection and continued throughout the remainder of the data analysis period, and 1b, which began with the selection of focal students and continued throughout the data analysis period. The goal of this analysis was to identify overarching categories relating to the processes students use as they compose individual multimodal products. So, in Phase 1a, I expanded and refined the initial set of codes, which emerged from my review of the key studies, as I identified patterns and themes across the 9 student participants and the 19 workshop sessions. I analyzed qualitative data, such as the video data and artifacts from students' composing processes, using standard methods such as the constant comparative method (Glaser, 1965; Strauss, 1987) and qualitative coding procedures informed by grounded theory (Strauss & Corbin, 1990), which involves viewing and reviewing data sources to identify emergent patterns and themes. In a recursive process, I used open coding to identify concepts and themes for further analysis and axial coding to organize and integrate categories (see Table 6 for examples of initial categories and codes). As Strauss and Corbin (1990) argue, the open and axial coding processes should not be completed in a linear fashion, but researchers should rather refine codes throughout the analytic process. Patterns and themes also formed the initial direction for the analysis of focal students' individual multimodal processes and products in Phase 1b.

Table 6. Categories and codes emerging from open coding across students, interactions, and projects

Categories	Codes
Role within Workshop Setting	academic, modally-driven, photographer, videographer, writer, interaction-driven
Technological Expertise	peer leader, distributed expertise, peer imitation, areas of specialization, resentment, imbalanced composing roles, frustration
Collaborative Composing	modally determined, composing in pieces, expertise-driven, designer-assistant, shared leadership, digital tools, personal histories, composing histories, composing identities, roles within workshop setting, technological expertise , peer feedback
Digital Tools	Student cameras, laptops, headphones, video cameras, VoiceThread, PowerPoint, MovieMaker, Concrete Poetry Maker, Audacity, Paint, Google Images, Google Music, Physical limitations, concerns about, expectations, crashing
Use of Modes	<i>Modal preferences</i> : images, text, special effects, transitions, sound, music, acting <i>Deployment of semiotic resources</i> : increasing modal diversity, decreasing modal diversity, explanatory complexity, modal matching, modal mismatch
Imitation of Peers	Direct, indirect, conversations, presentations, interactions, disruption, admiration, teacher intervention
Instructional Scaffolds	Models, step-by-step instruction, as-needed instruction, restricted choice, free choice, composing breaks
Composing Spaces	Stage, gym, classroom, garden, Westlake offices, sports field, community, home, playground, vehicles

**Purposive sampling of focal students.** An explicit goal of this study was to undertake an in-depth examination of young adolescents’ multimodal composing processes. As discussed in Chapter 2, there is an explicit need for research that addresses students’ multimodal composing processes—and what collaborative multimodal composing for academic purposes looks, sounds,

and feels like. In order to explore students' individual and collaborative multimodal processes and products in depth, I felt that it was necessary for me to select individual students and projects for detailed microanalysis.

Purposive sampling is “based on the assumption that one wants to discover, understand, gain insight; therefore one needs to select a sample from which one can learn the most” (Merriam, 1988, p. 48). After developing the set of initial codes, I used purposive sampling to identify focal students for more detailed analysis. Because the focus of Research Questions 2 and 3 was to analyze students' collaborative composing processes, I wanted to select a focal partnership that continued throughout the GROW program and which produced four or five collaborative products. Three partnerships met these particular criteria: Eric and Davonte, Clinton and Tyrus, and Tiana and Tyrell.

Before selecting the final focal partnership, I reviewed the in-process and final student interviews for these six students. One of the questions that I asked each student in the final interview elicited a discussion of the benefits and limitations of working with a partner. Eric and Davonte provided the lengthiest responses to this particular question. Each student outlined many of the things that they liked and disliked about working together and spoke at length about collaboration in a more general sense. The fact that Eric had fairly extensive prior experience with using technology while Davonte was a relative novice, in addition to my observations of their collaborative composing processes, also contributed to their selection.

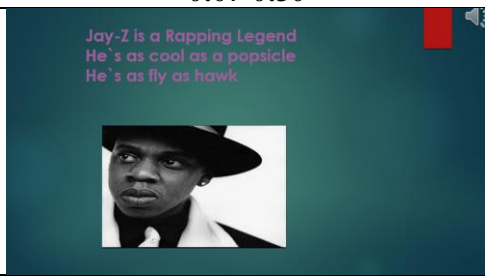
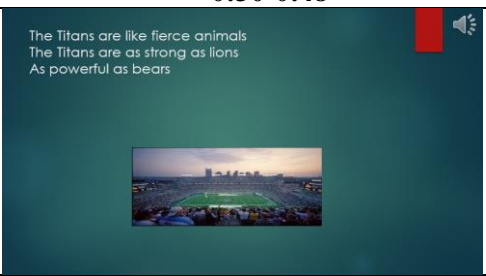
**Multimodal product analysis: Transcription and selection of focal projects.** In addition to their five collaboratively-created multimodal products, Eric and Davonte each composed five individually-created multimodal products (see Table 2 for complete list of their individually-created and collaboratively-created multimodal products). In Phase 1b, my first step

in the analysis process was to create multimodal transcripts for each of these individually-created products. Transcribing each of these multimodal compositions allowed me to see patterns in Eric and Davonte’s use of modes across digital tools, and how those patterns changed over the course of the workshop. The multimodal transcription process also documents the diversity of modes existing in each composition, each scene, and each moment. For each “scene” of a composition, any and all of the following might have been present: writing, images, photographs, music, special effects, sound clips, live acting, and so on. Further, there were sometimes a variety of ideas within a specific mode. For example, “video” often included ideas in terms of characters, noises, text, voiceover, props, and costumes. Likewise, “sound” was sometimes composed of a student-recorded sound, a pre-existing sound clip, two or more different music clips layered together, and special effect sound filters. Although this method of multimodal transcription has its limitations, and often emphasizes the visual at the expense of other modes, such as sound, it is widely used (Brass, 2008; Hull & Nelson, 2005; Jocius, 2013; Ranker, 2008) and recognized as a way of documenting the modes within a given composition.

I began the multimodal transcription process by breaking down each product into “scenes.” Some products had fairly clearly delineated scenes. For example, when analyzing students’ products which were created using PowerPoint, I generally marked each individual slide as a scene (see Figure 8 for a section of the transcript for Eric and Davonte’s *Simile and Metaphor Poem*; Appendices E and F for full multimodal transcripts for Eric’s *All About Me* project and *Westlake Poem*; and G and H for full multimodal transcripts for Davonte’s *All About Me* project and *Westlake Poem*). In some cases, students used transitions or special effects within individual slides that altered the visual landscape of the PowerPoint (i.e., one picture entered the frame and another came in, but it was technically all included on the same slide). In those

instances, I divided the scenes in accordance with the visual disruption. For students' video compositions, creating transcriptions was slightly more complicated—students tend to use more special effects, like blurring and shuttering, to mark or extend frames, and there is often a great deal of movement within the video, especially if live acting was involved. To mark divisions within these scenes, I relied primarily on visual cues, such as a change in the major image. It also allowed me to be consistent with the way in which I transcribed products created across software programs.

Figure 8. Sample slides from the multimodal transcript of Eric and Davonte's *Simile and Metaphor Poem*

Time	0:07-0:30	0:30-0:48
Image		
Text	Jay-Z is a Rapping Legend He's as cool as a popsicle He's as fly as hawk	The Titans are like fierce animals The Titans are as strong as lions As powerful as bears
Sound Effects		Lion roaring (approx.. 4 seconds)
Music	Start at :10 "Rub that dirt off your shoulder"—Jay-Z (10 seconds played on loop)	
Transitions	1. Picture flies in on a diagonal 2. Text Flies in from Top	1. Zoom Out
Color	Green background with red stripe in upper right	Green background with red stripe in upper right

After creating full multimodal transcripts for each of Eric and Davonte's individually-created products, I selected two projects for more detailed analysis: the *All About Me* videos and *Westlake Poems*. These projects were chosen because they were completed near the beginning



and end of the data collection period, respectively, and I felt that they would represent the development of students' skills in multimodal composing.

The multimodal transcription process provided valuable information about the modes that students used most frequently when composing individually. My analysis identified which modes Eric and Davonte used most often, which ones each student tended to deemphasize or ignore, and how their specific modal preferences and composing patterns either stayed consistent or changed as they grew more familiar with composing tools and techniques. This analysis also served to inform the coding of qualitative data documenting the processes Eric and Davonte used as they composed individual multimodal products.

**Individual multimodal process analysis.** My next step was analyzing qualitative data, such as the video data, screen recordings, and multimodal artifacts, which documented Eric and Davonte's multimodal composing processes for their individually-created products. Using qualitative coding procedures informed by grounded theory (Strauss & Corbin, 1990), I developed a set of initial categories that served as the basis for the analysis of composing processes described in Chapter 4. Patterns and themes that emerged from this analysis also formed the initial direction for the second phase of data analysis, which focused on students' collaborative composing processes.

## **RQ2: Students' Collaborative Multimodal Processes and Products**

Phase 2, the product-to-process analysis of Eric and Davonte's collaborative composing processes and products, was designed to answer the second research question: *What processes do students use as they compose collaborative multimodal products?* The primary data sources for this phase of analysis were: 1) classroom video- and audio-recordings; 2) Eric and Davonte's collaboratively-created final multimodal products; 3) artifacts from Eric and Davonte's

collaborative composing processes; 4) their screen capture recordings; and 5) Eric and Davonte's in-process and final interviews. The goal of this phase was to combine product and process analyses to provide a detailed picture of Eric and Davonte's interactions as they composed collaboratively-created products using digital and multimodal tools.

**Multimodal transcription and selection of focal projects.** In addition to the five products that Eric and Davonte created individually, they also composed five collaboratively-created multimodal products, with both students working together to create one final multimodal product. In Phase 2, I began the data analysis process by creating multimodal transcriptions of each collaboratively-created product: *So Much Depends Poem*, *Rhythm Poem*, *Form Poem*, *Visual Haiku*, and *Simile and Metaphor Poem*. In this process, I followed the same procedure as I did for their individually-created products. After reviewing the multimodal transcriptions, I selected two projects, the *So Much Depends Poem* and the *Simile and Metaphor Poem*, for further analysis. These two projects were chosen primarily because they were completed near the beginning and end of the data collection period and thus represented changes in students' knowledge and skills, as well as the development of their collaborative composing partnership.

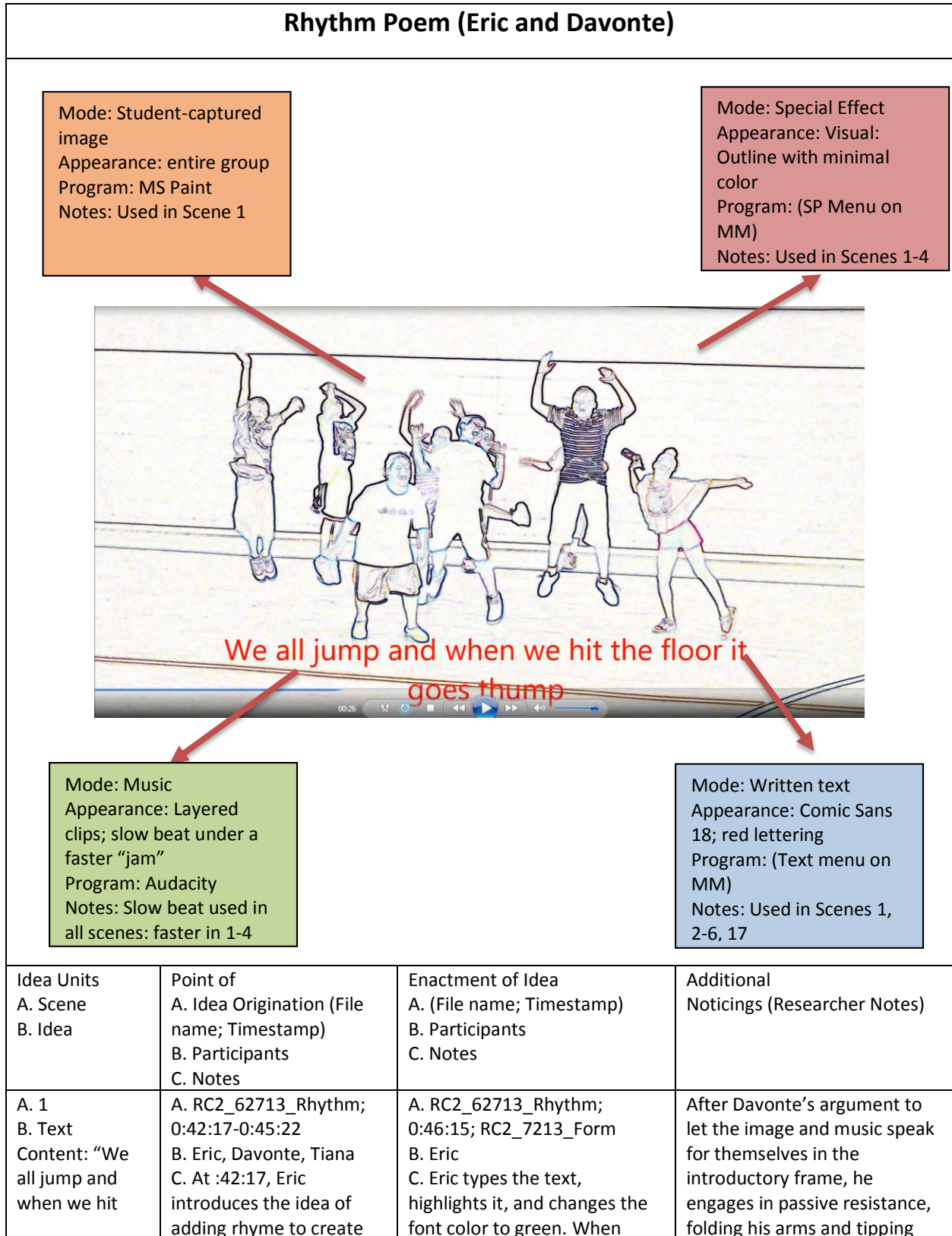
**Idea tracing.** Idea tracing is an analytic technique that my colleagues and I developed while attempting to analyze the collaborative composing process of five students creating a digital book trailer for Louis Sachar's *Holes* (Jocius, Wood, Ehret, & Hollett, 2013). We were interested in exploring how students contributed and negotiated ideas during the planning process, but we struggled with finding a way to combine product and process data. So, we created "idea tracing" to show how and from whom ideas originated, how they were negotiated at different points in the composing process, and how they were manifested in the final product.

The technique was designed to show the progression of ideas, individual student contributions to the multimodal products, and students' roles within the multimodal composing process.

Idea tracing was completed for all five of Eric and Davonte's collaboratively-created multimodal products. I began with the two focal projects, the *So Much Depends Poem* and the *Simile and Metaphor Poem*, and then extended the analysis to the remaining three collaboratively-created multimodal products in order to check the applicability of emerging patterns and themes. The first step in the idea tracing process was to review the multimodal transcript for a given product. Then, I recorded each potential idea for a particular mode (for example, students may have negotiated the placement of text, the content of the text, and the color of the text).

Next, using my analysis notes as a guide, I went back to the videotapes of students' collaborative interactions to find the point of idea origination. This allowed me to see which student generated the idea (or if it was collaboratively generated). If the idea was a point of contention, debate, or agreement, I engaged in a more thorough multimodal discourse analysis (for more information on this process, see the next section). For example, Figure 9 traces the origination of the text content: "We all jump and when we hit the floor it goes thump" in Eric and Davonte's *Rhythm Poem*. The structure of the poem, and the content of the text, was a point of contention between the two boys. Eric initially wanted to include rhyme within the poem, because that was "one of the four ways [of creating rhythm in poetry] we talked about." Davonte argued that they could instead use music to create the rhythm and they could "add their poem later." Eric's idea was ultimately chosen for the final video after he provided a justification for his idea and even brought in another student, Tiana, to add to the discussion.

Figure 9. Sample idea tracing analysis, Eric and Davonte's *Rhythm Poem*



<p>the floor it goes thump”</p> <p>Also included: Text Color: Red Text Place: Bottom Text Size and Font: Comic Sans 24 (Note: These are not marked as separate idea units, because there was no negotiation)</p>	<p>rhythm (“Look up there; it’s one of the four ways we talked about”). Davonte argues against rhyme: “But we can let the music start the rhythm and add our poem later.” Eric brings in Tiana at :43:41, “Tiana, do you think we need rhyme?” Tiana murmurs something about “rhyme is good.”</p>	<p>students wrap up the projects the next week, Eric changes the font color to red and the increases the font size.</p>	<p>backwards in his chair. Around :49, he asks me to go to the restroom and I allow him to go. Once he returns, he and Eric work on the music and he appears to gradually reengage with the project. His first active sign of participation is when he nixes a layered music clip that would have slowed the beat down.</p>
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The next step in the idea tracing analysis was to review video, audio, and screen recording data from Eric and Davonte’s composing, editing, revising, presenting, and reflecting processes. This method allowed me to combine the analyses of product and process to explore the tensions and agreements that occurred as students composed their multimodal, digital products. I also used the idea tracing technique to trace the dynamic nature of ideas and peer relationships. For example, in the case illustrated in Figure 9, I was able to trace changes in Davonte’s behavior (i.e., he exhibited nonverbal signs of frustration and temporarily removed himself from the activity) to the moment when his idea was discarded. Finally, it’s important to note that in order to solidify my analysis and to revise my coding, I returned again and again to specific data points in a recursive process. See Appendices I and J for the full idea tracing analyses for Eric and Davonte’s *So Much Depends Poem* and *Simile and Metaphor Poem*, respectively.

**Multimodal discourse analysis.** One goal of Phase 2, which incorporated idea tracing and multimodal discourse analyses, was to trace how Eric and Davonte negotiated ideas, composing strategies, and interactional roles within the collaborative composing process. So,

using the idea tracing process, I identified moments of *creative tension*, or moments in which outcomes were changed after a disagreement (Autio, 2005). These moments of creative tension were microanalyzed using the multimodal discourse analysis (MMDA) approach, which assumes that social interactions necessarily rely on forms of communication beyond language (Kress & van Leeuwen, 2001; Norris, 2004). This approach allowed me to: (1) understand how the composing process was defined and negotiated by participants, and (2) explore how social positions or identifications were created, offered, and/or denied by participants (Davies & Harré, 1990).

Given my analytic focus on multimodality, the multimodal discourse analysis sought to better understand Eric and Davonte's interactions, which were comprised of both verbal and nonverbal modes. As Jewitt (2011) writes, "When making signs, people bring together and connect the available form that is most apt to express the meaning they want to express at a given moment" (p. 30). There were moments in which a combination of verbal language and visual referents was the most direct and effective way to communicate, such as when Eric commented upon a teacher-created PowerPoint to make an argument for the use of rhyme: "Look up there; it's one of the four ways we talked about" (see Figure 9). Nonverbal cues were also sometimes the primary forms of communication; for example, there were instances in which Davonte or Eric demonstrated frustration by crossing their arms or leaning backwards in their chairs. Further, students' movements during the composing process (i.e., their physical positions at the computer, or movements during photography shoots and class discussion) influenced the roles they took on during collaborative composing. So, in addition to transcribing verbal interactions, I have attempted to report on—and include supporting visuals for—nonverbal means of interaction.

### **RQ3: Instructional Conditions Supporting Collaborative, Multimodal Composing**

Phase 3 was designed to answer the third research question: *What instructional conditions support students' collaborative, multimodal composing?* In a cross-case analysis, I compared illustrative examples from the individually-created focal projects, *All About Me* and *Westlake Poems*, and the collaboratively-created focal projects, the *So Much Depends Poem* and *Simile and Metaphor Poem*, with findings and themes from the additional workshop projects that Eric and Davonte completed, both individually and collaboratively. The primary data sources for this phase of analysis were: 1) all of Eric and Davonte's individually- and collaboratively-composed multimodal compositions and artifacts; 2) video-and audio-recordings of classroom interactions; and 3) artifacts from the instructional design process. I also examined relevant instances in which one or both boys collaborated with other students in the workshop. The goal of this phase of analysis was to identify and develop an initial set of instructional conditions which can support students' collaborative, multimodal composing.

**Cross-case analysis.** As Merriam (1988) points out, cross-case analysis differs “little from analysis of data in a single qualitative case study...it can build categories, themes, or typologies that conceptualize the data from all the cases” (p. 157). So, I looked across projects and data sources from Eric and Davonte's collaborative partnership and tested specific patterns and findings from the first two phases of analysis. The purpose of this phase was to build a conceptual definition of instructional conditions which can collaborative multimodal composing. Video data from students' composing processes for their individually-created projects was also analyzed to review and code collaborative interactions in which students solicited advice from their peers, collaboratively tested ideas, or asked other students to view and respond to their work.

## **Strengths and Limitations**

As I designed the study and then collected and analyzed data, I attempted to adhere to the principles of naturalistic inquiry. Trustworthiness (e.g., Erlandson, Harris, Skipper, & Allen, 1993) was addressed in numerous ways. Although this study took place over a fairly short period of time (six weeks), I felt that I was able to establish one of the most important characteristics of trustworthiness—prolonged engagement (Lincoln & Guba, 1985). First, as a full participant (Merriam, 1998) and the sole instructor for the course, I was able to develop rapport and trust with my students fairly quickly. Also, through past research and volunteer work at Westlake, I had encountered a number of my students in other contexts. So, in some cases, I was able to reestablish existing relationships. Next, the frequency (2-4 times per week) and duration (60-130 minutes) of the class sessions was sufficient to allow for both prolonged engagement and persistent observation. Finally, I also worked with other age groups at Westlake on twice-weekly volunteer basis, which allowed me to develop strong relationships with various members of this community. These experiences allowed me observe aspects of this specific setting from multiple perspectives (as sole instructor, visiting teacher, curriculum designer, assistant, and advisor).

In addition, this study meets the criteria for two other hallmarks of credibility—peer debriefing and member checks (Lincoln & Guba, 1985). A university colleague provided invaluable support throughout the instructional design and data collection processes. Further, as I characterized and summarized issues in my analysis of data, she provided insight and coding assistance. I also conducted member checks throughout the study. First, during the data collection period, I reviewed information from my field notes with student participants to obtain their perspectives on my observations and ideas. Students' responses gave me invaluable feedback on important issues that they felt needed to be highlighted. During students' final



interviews, I presented some emerging patterns and themes from the initial phase of data analysis and asked students about their opinions. Although I would have liked to follow up with student participants during the latter stages of data analysis, I no longer had access to the students.

Transferability in qualitative research is generally established through two separate benchmarks—rich description of events, participants, or artifacts, in addition to purposive sampling (Erlandson, Harris, Skipper, & Allen, 1993). Throughout my reports of findings, I have attempted to include rich description of students' multimodal composing processes and products. Where appropriate, I also provide artifacts, such as multimodal transcripts and the idea tracing analyses, to support these descriptions and to provide additional detail about my analytic processes. Next, I utilized purposive sampling to develop theoretical categories that were tested against other student projects and collaborations. These themes are further detailed in the findings chapters. Finally, the number and variability in the data sources also allowed me to triangulate my analysis; I also sought sources of evidence that either confirmed and/or disconfirmed the findings.

Another strength of this work is my own experience with using digital and multimodal projects in the classroom and my role within this particular project. Because I have completed similar projects and units with students before (as both an instructor and a researcher), I was able to anticipate many of the issues students would experience in using digital tools to compose multimodal products. This was especially helpful as I designed the project and throughout the data collection process. Also, my role as an active and complete participant gave me valuable insight into students' thinking and interactions that I would have been unable to obtain had I taken on a different role.

Although this work certainly has its strengths, it does have a number of limitations. First, I approached this project with preconceived notions about digital and multimodal composition for academic purposes. As a classroom teacher, I found that my students responded positively to the introduction of this type of projects. In a previous study (Jocius, 2013), students stated that they were more engaged when they created digital, multimodal literature responses, and that they felt they developed four skills (writing, presentation, technology expertise, and content knowledge) as opposed to one or two skills (writing, revising) with traditional written assessments. So, my own experiences and beliefs definitely colored this work, from the design of the initial study and instructional activities through data analysis.

As previously discussed, my role as an instructor-researcher did have its own limitations. During the class sessions, I was unable to take field notes since I was an active participant in course instruction and student support. Although I immediately watched the session videos and took detailed notes after each session, the camera provides a limited view of the classroom setting. My perspective on the sessions was also far different than if I had been an observer or a less active participant. While my active role in the instruction process allowed me to speak to some of the challenges that teachers face while integrating multimodal and digital responses to literature into their curriculum, my perspective changed the design of the study, the collection of data, and the analysis of data. Throughout my reporting of findings, I have attempted to provide a critical perspective on my role as the instructor.

I would have liked to have spent more time with the participants. The GROW program took place over a period of six weeks, and I did maximize my opportunities to spend time with the students. However, observing students and their digital, multimodal composing processes and products in an academic setting over a long-term period (at least a semester or a year) would

offer valuable insight into the ways in which students' thinking and abilities change over time. Hopefully, my next research project will allow me to spend a more prolonged period in the field.

Finally, this study highlights the multimodal composing practices of two focal students. The small sample size was chosen due to the nature of the research questions and my goal of integrating the analyses of product and process. In order to present rich descriptions of students' behaviors, interactions, and composing tendencies, I felt that it was necessary to select a smaller sample for more detailed analysis. I deliberately chose focal students who were present throughout the workshop; who worked together on a consistent basis; who provided insight into their collaborations during the in-process and final interviews; and who represented divergent tendencies in terms of their previous experiences with technology, their participation in different phases of the workshop, and the types of modes and strategies they used most frequently while composing. While the behaviors and interactions of these specific focal students may not be representative of other young adolescents in terms of their multimodal composing processes, I do feel that they represent multiple possibilities in terms of composing patterns and interactions. It is my hope that my analysis of their composing practices will present a series of themes that can be expanded and refined in future research undertaken by other researchers and myself.

## CHAPTER 4

### STUDENTS' INDIVIDUAL MULTIMODAL PROCESSES AND PRODUCTS

This chapter addresses the first research question: *What processes do students use as they compose individual multimodal products?* I introduce the two focal students, Eric and Davonte, by describing each student's previous experiences with digital tools; their attitudes in regards to school, reading, and composing; and their roles within the workshop setting. Then, findings are arranged around three major themes: 1) students' *composing identities*, which I define as a combination of students' modal preferences (Smith, 2013) and the ways in which they deployed and/or withheld semiotic resources; 2) their *composing pathways*, which denotes how students began and completed their compositions and the strategies they used to compose, edit, and revise along the way; and 3) the ways in which teacher-provided and student-created models shaped each student's multimodal composing processes and products. Given the other research questions and the focus of the study, I also pay particular attention to collaborative interactions during the composing of the individual multimodal products. For example, I describe instances in which Eric and Davonte explicitly asked other students for technical help and composing advice, as well as cases where both focal students engaged in indirect and/or direct imitation of teacher-provided and student-created models.

I highlight findings related to Davonte and Eric's individual approaches to digital, multimodal composing by providing illustrative examples from each student's *All About Me* project and *Westlake Poem*. I chose these as focal projects for three reasons: 1) Eric and Davonte composed both projects individually, although I did encourage collaboration by suggesting that students share their thoughts, questions, and in-process work with each other; 2) both projects

were created using the same digital tools—namely, student cameras, video software, the internet, and the MovieMaker program; and 3) the *All About Me* project was the first that students completed in the workshop, and the *Westlake Poem* was the last. I also felt that these products represented the progression of students’ multimodal composing skills. Detailed descriptions of these two focal projects and the instructional strategies for supporting students’ work are included in the following sections.

The final section of the chapter offers implications from the comparative analysis of Davonte and Eric’s individual composing processes. This chapter provides the necessary background and context for Chapters 5 and 6, which illuminate, respectively, Davonte and Eric’s composing processes for their collaboratively-created multimodal products, and instructional conditions which supported students’ collaborative, multimodal composing.

### ***All About Me***

I designed the *All About Me* project to familiarize students with both the physical technology (student cameras, computers, headphones, and camera adapters) and selected pieces of software (Windows 8, MovieMaker, Google Images, VoiceThread) that they would be using throughout the six-week workshop. I had two main goals for the project—first, I wanted to gauge students’ levels of expertise with using digital tools, and second, I hoped to gain insight into their personalities and reading styles. The information I ultimately gathered allowed me to select texts, adapt projects, and approximate the level of scaffolding needed for future workshop sessions.

During the first session, I presented a model *All About Me* video (see Appendix K for screenshots of the video frames). After describing the goals of the project, I tasked students with creating a digital video containing the following elements: a title frame with the student’s name; pictures and/or videos (students could choose to use photographs/videos they took using student

cameras, images from online sources, or a combination of both types); information about favorite activities and hobbies (in oral, written, or visual form); and images representing their favorite books or kinds of reading materials. After students asked questions about both the project and the workshop, they were given time to take pictures and/or videos of themselves, their friends, and the Westlake Center. I also observed students as they used their cameras and added images to MovieMaker, documented student questions, catalogued technical issues, and asked specific students some probing questions about their experiences with technology. From those observations, I determined that students would need several layers of scaffolding throughout the composing process, at least for this initial project.

So, for the second day, I designed a tiered approach to scaffolding the projects. In a PowerPoint format, I presented examples from my model *All About Me* video, screenshots from the MovieMaker program, and video clips (see Appendix L for screenshots from the PowerPoint presentation). Then, we talked through the various steps involved in creating videos, as students simultaneously experimented with various tools and features of MovieMaker and Google Images. The PowerPoint presentation, complete with demonstration videos, was saved to student computers so that they could refer back to it as they composed. If they desired, students could also choose to employ an additional layer of scaffolding by using a teacher-created MovieMaker template and/or file folders with pre-selected images and music clips.

After familiarizing themselves with their computers, the MovieMaker program, and the images and music clips available in the file folders, students added more photographs and/or videos, inserted special effects and transitions, chose images from folders of pre-selected images, used Google Images to download pictures, manipulated images, and edited/revised their videos. Then, at the beginning of the third workshop day, students shared their projects with their peers.

During the composing and editing processes, I encouraged students to collaborate with each other—to share tips, techniques, and to ask for advice and help regarding their projects.

### *Westlake Poems*

The idea for the *Westlake Poems* project, in which students created a multimodal poem about the Westlake Center using a number of the poetic terms that we studied (i.e., alliteration, onomatopoeia, assonance, simile, metaphor, imagery, tone, and mood) emerged from a discussion that I had with Eric, and another student, Tiana, as they created their *Neighborhood Poems*. Eric asked whether Westlake “counted” as part of his neighborhood and if he could include pictures of the center within his poem. When I told him that he could include any image that he felt represented his neighborhood, Tiana then asked, “Can we make poems about just Westlake? And like, take pictures? Of people, even the counselors?” Since I had wanted to gather student input on our final project, I then asked the rest of the group whether they would be interested in doing poems about “just Westlake.” Most students were enthusiastic about the prospect, so we determined that we would spend the final two workshop days making *Westlake Poems*.

Like the *All About Me* project, the *Westlake Poems* were completed over a two-day period. However, given that students were much more familiar with the digital hardware and software by the final workshop sessions, there was much less teacher-provided scaffolding and much more time spent taking pictures, selecting music, reviewing special effects, and revising. I provided only limited guidance—I asked students to include multiple images and to “try to use” at least five of the poetic devices that we studied during the workshop (see Appendix M for instructional materials regarding the project).

On the first day, after a brief brainstorming session, students spent about thirty minutes shooting photographs of Westlake with their cameras. After returning to their computers, they began to compose their poems. Students could use any composing tool they wished, including MovieMaker, PowerPoint, VoiceThread, or Paint, but most students, including Eric and Davonte, chose to create digital videos using MovieMaker.

Many students expressed the desire to use each other's images, videos, and music files, so for the second day, I created a shared folder with all of the student-captured images and video from the entire workshop, including the Westlake photo shoot. The second day was entirely devoted to work on the projects; students spent almost ninety minutes revising and editing their poems before sharing them with counselors, other students, and directors from other GROW programs. During the presentations, students also talked about the workshop and their experiences with poetry and digital technology.

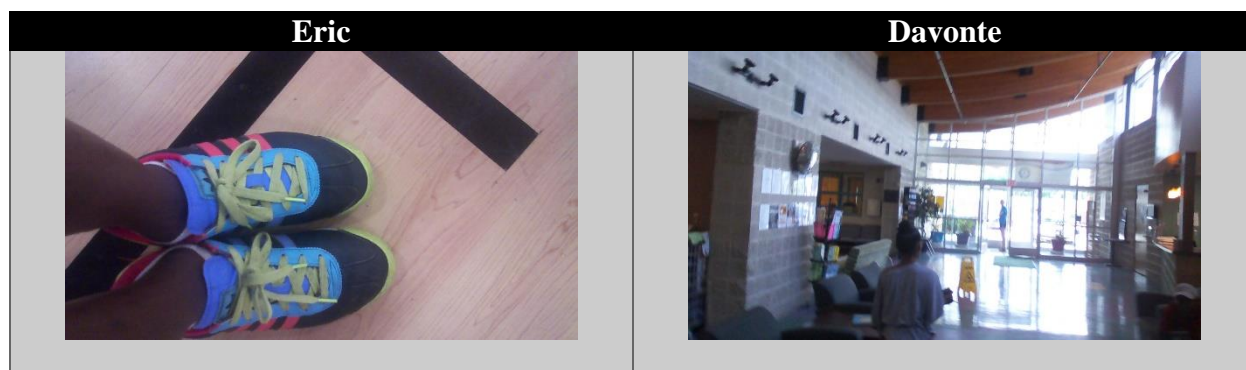
### **Focal Students**

As outlined in Chapter 3, the two focal students, Eric and Davonte, were chosen for very specific reasons—they worked together throughout the workshop; collaborated on five final multimodal projects and a number of daily activities, such as VoiceThreads and vocab vids; and each provided valuable insights into their collaborative composing processes in the in-process and final interviews. Eric and Davonte also represented an interesting series of contrasts in terms of their previous experience with digital tools, attitudes towards school and reading, and modal preferences. Their respective choices in subject matter and their photographic styles in composing their *All About Me* projects provide a microcosm of their participation within the workshop: while Davonte returned with hundreds of pictures snapped in the space of just a few minutes, and even required an additional memory card, Eric lingered over his subjects, and



returned after fifteen minutes with only four pictures. Eric’s final photographs were usually unexpected, abstract shots—a sideways view of a student mural or a slightly blurred pair of discarded gym shoes positioned at a diagonal (see Figure 10). Davonte, on the other hand, chose familiar faces and places, taking dozens of photographs of the environs of the Westlake Center from slightly different angles, so that he could “pick the best one” if and when he needed it.

*Figure 10.* Photographs taken by Eric and Davonte for the *All About Me* project



In the following sections, I describe Eric and Davonte using information from the in-process and final interviews, student surveys, and my own observations of each student within the workshop setting and the GROW program. I specifically highlight Eric and Davonte’s previous experiences with technology, since their levels of expertise played an important role in shaping their participation within the workshop, as well as their interactions during collaborative composing, which are detailed in Chapter 5.

## Eric: The Good Student

*Figure 11.* Eric, as photographed by Davonte during the *All About Me* project



“I’m a kid who loves to learn, which is good, because I want to become a doctor—an ophthalmologist—and I have to go to school for a really long time,” Eric, a ten-year-old Black male, said, after I had asked him to describe himself. Throughout the workshop, Eric’s love of learning was clearly evident—he was often the first student to enthusiastically volunteer to read, ask a question, or provide assistance to one of his peers. Although Eric (see Figure 11 for a photograph of Eric taken by Davonte) had attended various Westlake programs as a young child, his family had just moved back into the area served by Westlake during the previous school year, and this was his first summer attending the GROW program.

**Previous experience with digital tools.** Of all of the students in the workshop, Eric had, by far, the most prior experience using digital technology and new media. He reported spending approximately three hours per day on the computer at home, using it mostly for “looking up

words [he] doesn't know," "playing games," and "looking other stuff up." Eric said that while he wished that his teachers used more technology in his reading and writing classes, "we play different reading games and math games, so we learn those things." He was one of only two students who had ever made a PowerPoint before, and when I asked him about the experience, he described a social studies project in which students were asked to choose a famous Black figure, research their background and achievements, and create a PowerPoint presentation. Eric chose Elijah McCoy, who held 57 patents, and held him up as an inspiration: "I might try to get some patents someday."

**Attitudes in regards to school, reading, and composing.** An eager reader who enjoyed stories about "sports and real life," Eric stated that he was in "special hard classes" at his school because he was a "good student" and that the students in those classes "get to read extra books and stuff." Math was "definitely" his favorite subject and he didn't like writing time because his "hand got tired." Eric came into the workshop with an extensive understanding of poetic devices and strong skills in the analysis and interpretation of texts. For example, during a discussion about "what poetry is and isn't," one student said that poetry "always has to" rhyme. Eric replied, "It doesn't have to rhyme. Poetry is a genre. Poetry is expression. But it doesn't have to rhyme." When I recruited volunteers to read aloud, his hand was always the first to shoot up, and when it was his turn, he read fluently and clearly, with expression and animation for different characters. Other students recognized Eric's academic prowess, both within the workshop and across the GROW program. As Terrell said, "He's got all the answers. Like, in his head and stuff."

In addition, during discussions, he was often the first student to volunteer a response. His questions consistently demonstrated his intellectual curiosity and often related to poetic terms,

themes of specific poems, or character motivations. For example, during one of the workshop sessions, we watched a video of Maya Angelou reading her poem, “Still I Rise,” then reread the poem as a class, and finally engaged in a lively discussion about the role of the narrator. Eric offered the following insight: “I think she’s writing from the perspective of herself. It just sounds personal, like it’s her story. She’s been through it all, but nothing gets her down.”

Eric was also eager to share and build upon his previous experiences with using digital tools to compose. For example, when I thanked him for helping another student to choose music for his *All About Me* video, he smiled and said, “I have a computer and an iPad at home. This is a little different, but once you know the basics, it’s pretty easy to use.” In his final interview, he also said that everything we did in the workshop was “pretty easy,” but he still reported a positive attitude towards the class and the creation of digital, multimodal compositions: “I think this was very fun and exciting, and I liked learning new things, especially when I was using PowerPoint.”

**Role within the workshop setting.** Eric’s role as a “good student” was evident throughout all stages of the workshop, including warm-up activities, reading, group discussions, and composing, presenting, and responding to other students’ work. Most workshop sessions began with the composition of daily vocabulary videos (see Dalton & Grisham, 2011, for a detailed description of the “vocab vid” process), for which students were asked to choose one word from a list of vocabulary terms that they would later encounter in that day’s reading. Then, they had between 5 and 10 minutes to plan and film a 30-second skit that demonstrated the meaning of the word. Eric took a leadership role during the brainstorming and filming sessions, and often determined which words to use, reminded his group to stay focused, and even acted out the word within the videos. For example, the first set of vocabulary words included “crave.”

While students in other groups asked me questions about the format of the final videos and the process for creating their skits, Eric, who had paid close attention during the presentation of examples, provided a strong justification for choosing *crave*: “We can...I mean, it’s easy to show how bad somebody wants something. We could *crave* candy. It would be good.” He also kept other students focused on the task; for example, when Davonte took a picture of a plastic playhouse in the gym area, Eric tapped his shoulder and brought him back to the group. Also, Eric often played the main role in the skits, such as when he demonstrated his “*craving*” for candy (see Figure 12).

*Figure 12.* Eric as actor, demonstrating his “*craving*” for candy



As Eric pointed out during his final interview, part of being a “good student” is helping the teacher, and throughout the workshop, and particularly during composing time, he acted as a teacher’s assistant. For example, on the first workshop day, while the other students and I struggled with learning the ins and outs of using Windows 8 to create and edit digital videos, Eric seemed to adjust to the new technology with relatively little trouble. Then, as students began

to compose their *All About Me* projects, he began to assist his peers on his own recognizance. For instance, when another student, Marcus, grew frustrated when he was unable to figure out how to change his camera from photo mode to video mode, Eric pointed to the instruction sheet and said, “Look at this. In the picture, there’s a red circle at the top. It changes to video when you press the button there.” Marcus was then able to adjust his camera; he ended up shooting a video of other students playing basketball that he ultimately used in his final project. Like many of the other students in the workshop, Marcus returned to Eric to ask for help with digital tools numerous times throughout the workshop. In fact, Eric’s help was so much in demand that his composing and revising time was often interrupted by other students. As he put it, “People ask me how to do things because I’m good with the computer.” He added that since he usually finished early, it wasn’t a “big deal” and that he was willing and able to help other students when they got “stuck.”

When presenting his projects and responding to other students’ work, Eric continued to serve in the role of a “good student.” In each verbal presentation, students were asked to share one thing that they learned about poetry and one thing they learned about making new media. Eric always offered more than one example and never needed further prompting. Also, he offered substantial feedback for his peers when using the VoiceThread tool to respond to their work. Although other students often struggled to come up with questions for each other, even when prompted to do so, Eric often included questions alongside constructive criticism and positive feedback. As one of the comments he left for Tiana on her *Simile and Metaphor Poem* stated, “I like this poem. I like the videos and the pictures that you used and I want to know how you found all of the bright colors, but I want to know why you picked the dollhouse instead of one of the other pictures.”

## **Davonte: The Westlake Veteran**

*Figure 13.* Davonte, giving advice to other students during his final interview



Davonte (see Figure 13 for screenshot from video footage of his final interview), an eleven-year-old male who described himself as “Black and White, so I guess I’m mixed,” was Eric’s frequent collaborator during the workshop. He reported “loving” basketball, music, and hanging out with his friends. During breakfast and GROW free time, he could usually be found at one of the two basketball hoops, nodding his head to a piece of music and chatting away with other students. His favorite subject in school was science, because he got to “see how the stuff works,” and he didn’t like math because “all those teachers” were “mean.”

On the first day of the workshop, I recognized Davonte from the introductory meeting with parents, as well as my previous work at Westlake. As students introduced themselves to me and to each other, he confirmed that he was a Westlake veteran, having attended “at least three” GROW summer programs and a number of after-school programs during the school year. When

I asked if he remembered working with me in a reading tutoring program two years ago, he said he “kinda” remembered, but that it was a long time ago.

**Previous experience with digital tools.** Davonte had never used digital tools for composing purposes before, as he didn’t have a computer at home and had never made a PowerPoint or digital video for school. He did report spending about an hour a day texting people on his phone, and he was an experienced photographer, as he often captured photos and video using mobile devices. When I asked him about how he had used technology in school in the past, he said, “All my teachers do...we play on the computer. We don’t learn nothing.” When I asked him to say more about what kinds of games he played, he said that they mostly “did zombie games,” which were “so fun.” After determining that he and Eric attended the same elementary school during the school year preceding the workshop, I prompted Davonte to expand on his response by asking about specific programs that Eric had mentioned, such as Cool Math. However, even with this prompting, Davonte couldn’t remember ever using computers or other types of technology in his previous ELA or math classes.

**Attitudes in regards to school, reading, and composing.** While Davonte told me that he “sort of” liked reading, his attitude towards school was largely negative; on surveys and in interviews, he repeatedly said that school was boring and that he couldn’t remember the types of things that he learned. However, despite his negative experiences with school, throughout the workshop, Davonte was an engaged and active participant, attending all sessions and volunteering to participate on a regular basis. While he had limited experience with reading and interpreting poetry, he eagerly offered his perspective on texts and was often among the first students to volunteer to read.



Further, while Davonte reported that he “hated” writing, he was an eager multimodal composer. He was specifically interested in how different modes worked together and sometimes against each other to craft meaning. For example, when I asked him about using different modes to “tell a story,” he said that he like “putting them together” and then “cutting them back up,” in order to craft a more compelling composition.

**Role within the workshop setting.** Starting from the very first day of the workshop, Davonte was most intrigued by the student cameras, asking and repeating a series of questions before many of his fellow students even arrived: “We get those?” “To take stuff?” “Do I get my own?” “Like pictures?” “Can you do video?” Although I assured him that we would be using the cameras throughout the workshop to capture both pictures and video, and that he would get to start filming a vocabulary video that very day, he remained concerned about the cameras, and kept looking back at them throughout the modeling and directions for the vocabulary videos. After getting the go-ahead to begin filming, Davonte was the first student to reach across the table. As he grabbed one of the two student cameras set aside for that day’s vocab vids, he took on the role of group photographer, which he would continue to inhabit for the remainder of the workshop sessions.

As students began the process of filming their first vocabulary videos and then their *All About Me* projects, it also became clear that Davonte was extremely familiar with the people and places of the Westlake Center. Everyone, from the students and administrators to visiting social workers and guest tutors, knew him and greeted him with enthusiasm. He was eager to share his knowledge of the building and all of the “secret” places with his peers; for example, as students began taking photos, I heard him say to another student, Tiana, “There’s more back there but you gotta go near the side by the corner. I’ll show you.”

Davonte's extensive knowledge of the students, staff, and physical spaces of the Westlake Center played a key part in shaping his participation in different phases of the workshop, including planning and filming vocabulary videos, selecting subjects and areas for filming, composing his individual projects, and responding to other students' work. First, Davonte was able to use his knowledge of Westlake to assist other students in finding new spaces in which to film their work. His interest in various elements of Westlake's geography also influenced the types of images he included in his own work; unlike the other students, he took a wide variety of photographs during the photography sessions and rarely used stock images from online sources.

Like Eric, Davonte was eager to help both me and his peers during the workshop time. However, instead of showing other students how to use a specific digital tool, as Eric often did, Davonte usually offered assistance that was related to his knowledge of the Westlake Center. For example, from the first day of the workshop, he helped the students who were new to Westlake, like Tiana, by helping them find unexpected places to take pictures. He took a particular interest in pointing out the restricted areas, like the administrative offices, and he even offered tips on "sneaking in" to take photographs: "If you go there [points to area behind closed door], you can...find the counselors taking breaks." He also prided himself on having a thorough knowledge of the physical spaces of the Westlake Center. On more than one occasion, when our classroom (i.e., the stage in the gym) became unavailable due to an African drumming rehearsal or a children's yoga class, Davonte was able to scope out a free area in which we were able to hold a workshop session.

His expertise was often useful for composing purposes as well. For example, he was aware of where the staff kept key props, like gym equipment and objects from past Westlake

performances. For example, during the filming of vocabulary videos on the second day, Davonte's group selected the word "loathe." At first, the group planned to film a skit demonstrating another student's loathing for basketball. This choice caused dissent among the group members, and particularly troubled the potential star of the video, Clinton, who said, "That's stupid." Davonte pointed to some workout equipment in the very corner of the stage and suggested that the group could use that in place of basketball. The final video featured Clinton kicking and punching the mats in order to show his "loathing" for gym class.

### **Composing Identities**

My analysis of Eric and Davonte's multimodal products, in conjunction with my analysis of composing process data from the classroom video and screen recordings, allowed me to examine how each student exhibited specific tendencies in the types of modes they used most frequently and the ways in which they used their semiotic resources in their final compositions. I found that Eric and Davonte's *composing identities*, or sets of modal preferences (Smith, 2013) and ways in which students deployed and/or withheld their sets of semiotic resources, persisted throughout the workshop, even as each student developed more sophisticated understandings of ways to combine and transduce modes. In the next section, *Modal Preferences*, I discuss how Eric and Davonte used two specific modes, images and text, within their compositions. I do so in order to illustrate the differences between the two students and their use of these modes, and to show how their roles within the workshop setting shaped these preferences. The following section, *Deployment of Semiotic Resources*, includes visual representations depicting both Eric and Davonte's use and combination of modes across the two focal projects. I then discuss how each student's use of semiotic resources were shaped by their respective roles and views of the

multimodal composing process. I conclude with a discussion of Eric and Davonte's *composing identities* and the implications for their individual multimodal processes and products.

### **Modal Preferences**

Throughout the workshop, Eric and Davonte consistently demonstrated very different modal preferences, which were connected to their personal experiences and their roles within the workshop setting. As discussed in the following section, Eric's use of substantial pieces of text related to his identity as a "good student" and his understanding of multimodal composition as closely connected to the writing process. In contrast, Davonte rarely used text within his compositions, and instead used other modes, such as images and music, to carry the weight of the meaning. Also, while both students frequently used images within their work, Davonte was much more likely to use images he took with his camera, while Eric often used images from a variety of sources, including Google Images and his peers.

**Text.** Throughout the workshop, Eric used text to convey a substantial portion of the meaning within his compositions. As the workshop progressed, and after he learned how to add text to pictures and to PowerPoint slides when composing his *So Much Depends Poem* during the second week, he included text in every PowerPoint slide/video frame of each project he completed. This was in direct contrast to other students, including Davonte, who would include multiple "stand-alone" images within their work and often had to be prompted to include text.

Eric's textual preference was evident from the very first workshop session. For example, the primary mode in the model *All About Me* project was visual—all frames, except for title slides and one film frame, included images; text was only included for captions (see Appendix K). Although 6 of the 7 other students who completed *All About Me* projects omitted the captions between images, Eric chose to include all of the following: "Eric: All About Me," "Pictures of

Me,” “Things I Love,” and “As a Reader.” He was also curious about my use of text within the model *All About Me* project, and asked, “How do I add the words to the pictures?”

Eric also tended to include more substantial pieces of text when compared to the other students in the workshops. In the *Fireworks Poem* project, for instance, students created digital videos in celebration of the 4<sup>th</sup> of July after reading a series of Shel Silverstein poems which demonstrated the use of onomatopoeia. While other students captioned various images of fireworks with one-word phrases such as “pop,” “bam,” and “crash,” Eric’s captions described the images in much more detail; using words, he outlined the contents of each photograph and crafted a narrative about fireworks, a parade, and a cake. Figure 14 contains the following sample frames from his work: “BOOM LOOK AT THE BEAUTIFUL FIREWORKS,” “TANG THE PARADE HAS BEGUN,” AND “YUMMY IN MY TUMMY.”

Figure 14. Sample frames from Eric’s *Fireworks Poem*



Eric also tended to emphasize his use of text when presenting his poems to the group; while other students chose to highlight specific special effects or pieces of music, Eric often read his text aloud and provided detailed explanations for his use of poetic elements. As a result, students who were less proficient with writing poetry looked to Eric for advice as they composed text for their projects. For example, at one point as students were creating their *Fireworks*

*Poems*, Gabriel threw down his headphones in frustration, looked to Eric, and said, “I got all my others, but I can’t figure out these onomatopoeia stuff.” Eric then offered a few examples—“crash,” “pop,” and “bang,” all of which Gabriel ultimately used in his poem.

In contrast, Davonte was reluctant to use text, and sometimes omitted it from his compositions altogether. For his *All About Me* project, for instance, he neglected to include any captions, even the title slide. In place of the opening frame reading “All About Me, by [Student Name],” which every other student used, Davonte included an image of himself that Terrell had taken during the photo shoot. It was one of the only images from his camera that featured his face within the photographic frame, and he would later use the same image in other projects, including his *Neighborhood Poem*.

Davonte’s reluctance to include text persisted throughout the workshop. During the second day of the *Westlake Poem* project, he shared a “finished” version of his work with me. After I noticed that he didn’t include the written text for the poem he had composed during the previous day’s brainstorming session, I praised his work, but reminded him that one of the goals for the project was for students to “show off what they learned about making new media projects and poetry.” He then told me that he thought the text would “mess up” his *Westlake Poem*, but if I really wanted him to add it, he would. I suggested that it might help tell “the story,” and he reluctantly agreed. However, while most other students included text within each frame of their videos, so that each image or video clip was accompanied by words, Davonte added all of the text he had written to a single, final frame (see Appendix H for a transcript of his work, including the final frame).

**Images.** In contrast to Eric, who generally used text to carry the weight of meaning-making, Davonte’s composing process and products were driven by images, and specifically, the

images that he captured himself using his student video camera. During photography shoots for the multimodal projects, one of Davonte's goals was to capture as many images, perspectives, and angles as possible. That way, he had multiple options during composing time; or, as he said, "I want to [get] everything so I can pick later." He often came back from the various photography sessions with many more images than he was ultimately able to use; for example, during the photo shoot for his *All About Me* project, he took over 100 photographs and 11 videos in just over fifteen minutes.

Although he captured a wide range of subjects in and around the Westlake Center, Davonte's most frequent subjects included the other students in the group. After a filming session, his camera always contained numerous photographs and short video clips of other workshop students as they gathered their own pictures. He used these clips within his own work; for example, his *All About Me* project documented the activities of various students and adults at Westlake as they went about their daily activities in the gym. The clip follows three groups of subjects; after Davonte filmed me working with another student in our "classroom," his attention was captured by two other workshop students, Clinton and Eric, who were filming a yoga session in the other half of the gym. He quickly ran back down the stairs and paused in the center of the gym to capture the other students with their cameras before turning his camera on the yoga class (see Figure 15 for a still image used in Davonte's final *All About Me* video).

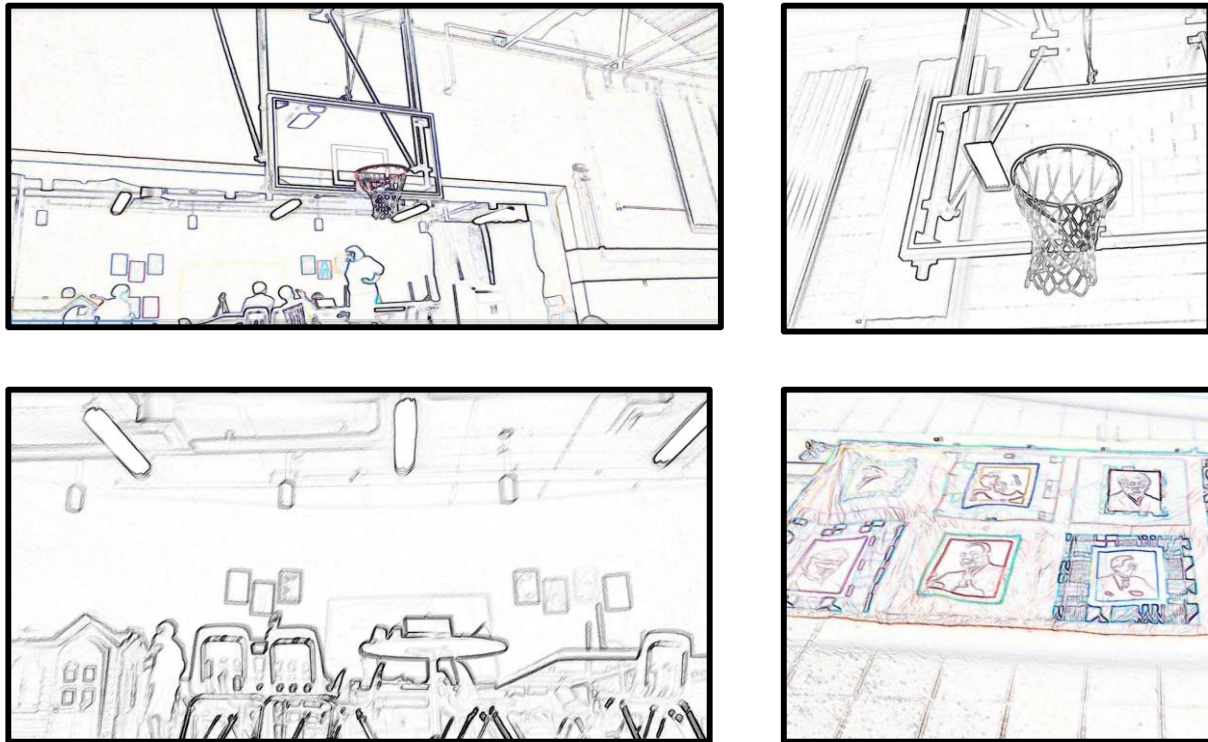
Figure 15. Still image from Davonte’s video of other students filming *All About Me* projects



Davonte was proud of his photography skills and specifically referenced his volume of photographs when speaking with other students. “Hey, come see all the pictures I got,” he said, as he handed his camera to Terrell during the *All About Me* shoot. Within his compositions, such as his *Westlake Poem*, Davonte would often use several photographs of the same object or person, taken from different vantage points and/or manipulated through the use of an image filter. When photographing, he took dozens of shots, varying the angle very slightly for each new photo—to outside observers, the final shots appeared almost identical. When I asked him why he needed so many pictures, he responded, “Cause I want the best one. I maybe need one that...look[s] a little different so that it fits right in the video. I don’t know ‘til I get back to the computer to see.” Sometimes, he did pick photographs that “fit” best within a PowerPoint or video; for example, he used a horizontal shot of his apartment building in his *Neighborhood Poem* because he wanted it to fill the whole screen. However, he often included multiple photographs from slightly different angles as well; his *Westlake Poem* included several views of our “classroom” area taken from various vantage points (see Figure 16).



Figure 16. Images of the stage area from Davonte's *Westlake Poem*



As other students became more adept with using digital tools and composing software, they began to insert a variety of image types into their work—using more pictures from online sources and from fellow student photographers, and fewer images that they captured using their personal cameras. However, throughout the workshop, Davonte continued to use “his pictures.” In fact, all of Davonte’s individually composed projects, including the *All About Me* project, *Family Poem*, *Westlake Poem*, *Neighborhood Poem*, and even his *Fireworks Poem*, included images from in and around Westlake and the neighboring community. For example, for the *Fireworks Poems* project, which was completed on the day before the 4<sup>th</sup> of July, most students used pre-selected photographs and online images to create digital videos which included examples of onomatopoeia. Davonte, who was hesitant to use “other people’s pictures,” asked if he could wait to write his poem until “after the real fireworks.” Since the *Fireworks Poem* was

only intended to be a one-day project, we agreed to compromise: if he created a rough draft of the poem using the stock images, he could take a student camera to the local fireworks show. Then, in the subsequent workshop session, he could add “his pictures” before presenting his work to his peers.

Davonte’s interest in including arresting and unique visuals in his compositions also led him to develop expertise in manipulating and transforming images. After learning about the basic functions of video editing during the *All About Me* project, Davonte was one of the first students to use filters on his photographs as he experimented with different colors and shapes within his work. Then, as other students began to transform their own images, he asked about specific elements of his peers’ work. For example, when Tiana used a neon effect in her *Neighborhood Poem*, Davonte admired her work and then asked her to take him, step-by-step, through the process for adding the filter to one of his images. He then used the new technique in his own poem, experimenting with multiple images before finally selecting a picture of the Westlake Center to use the effect with. By the time he composed his *Westlake Poem*, each image, except for one, was transformed using a filter.

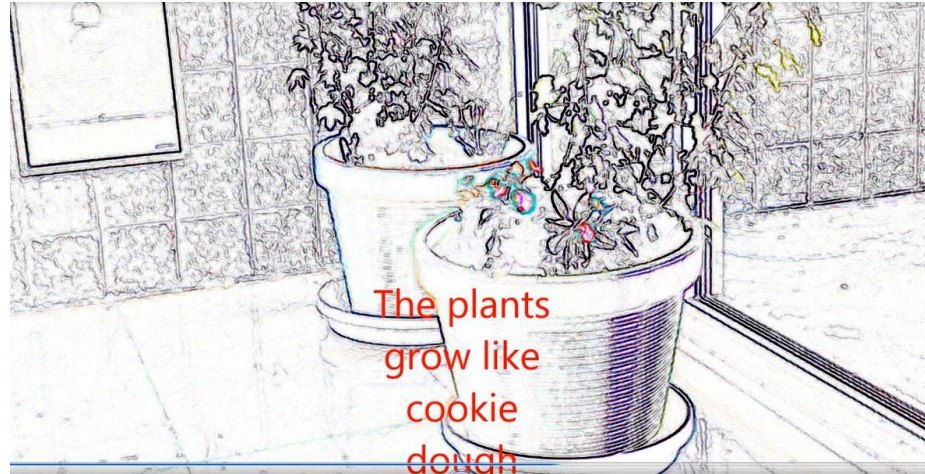
Also, Davonte often emphasized his images during his oral presentations by talking at length about his photographic process. So, when he presented his *All About Me* project to the group, other students took notice of the fact that he had captured images of them. Different students—Clinton, Gabriel, Terrell, and Tiana—then asked him if they could borrow the pictures he took for their use in future projects. As the workshop progressed, Davonte often called attention to the fact that his work was included in multiple students’ projects. For example, during composing time for the *Westlake Poems*, for example, he called me over and whispered in my ear, “Did you see? Did you see? Gabriel got my picture in his video.”

On a number of occasions, Davonte offered to serve as my “videographer” when students left the stage area and worked in other parts of the Westlake Center. He took the role seriously, using a student camera to capture mobile recordings of other students’ photographic and composing processes. He also expressed concern for the usefulness of “his” data; after he took videos of other students working on their *Fireworks Poems*, he watched as I downloaded the video to my computer, asking repeatedly, “Did you get anything good?”

Eric also included many images within his compositions, but he differed from Davonte in both the types of images that he included and the ways in which he used them within his compositions. He was much more likely to use images from other sources, like Google Images and his peers. For example, Eric’s *All About Me* project (see Appendix E for a full multimodal transcript) included several images that he downloaded: pictures of a puppy, a picture of Jay-Z, one of a pair of headphones with a caption reading “Music is Life,” and two images pertaining to his interest in sports. He also borrowed several images from his peers (including Davonte) for use in his projects, like the *Westlake Poem*.

The way in which Eric used images within his compositions also differed from Davonte’s preferences. Because Eric generally wrote the text first, then selected images (see the *Composing Pathways* section in this chapter for a detailed description of Eric’s composing process), the images tended to reinforce his writing. For example, as he composed his *Westlake Poem*, he came up with the line: “The plants grow like cookie dough,” noting that he thought of it because we had previously read another poem where the author compared a flower to food. He then searched other students’ photographs to find an image that would match his text (see Figure 17).

Figure 17. Frame 7 from Eric's *Westlake Poem*



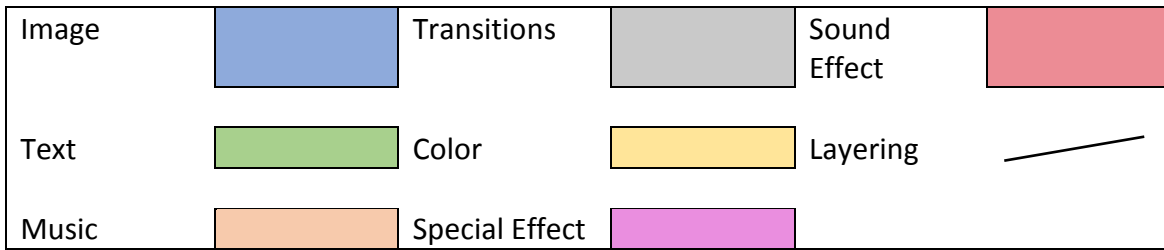
So, Eric and Davonte's personal preferences and their roles within the workshop influenced the types of modes they chose to use and emphasize. Eric, who saw himself as a "good student" and developed a reputation in the group for his extensive knowledge of poetic devices, tended to include substantial portions of texts within his compositions. Davonte, whose previous experiences with reading and writing were largely negative, was hesitant to use any text at all within his work. While both students used images, the image types and the function of the images within their compositions revealed further differences in their modal preferences.

### **Deployment of Semiotic Resources**

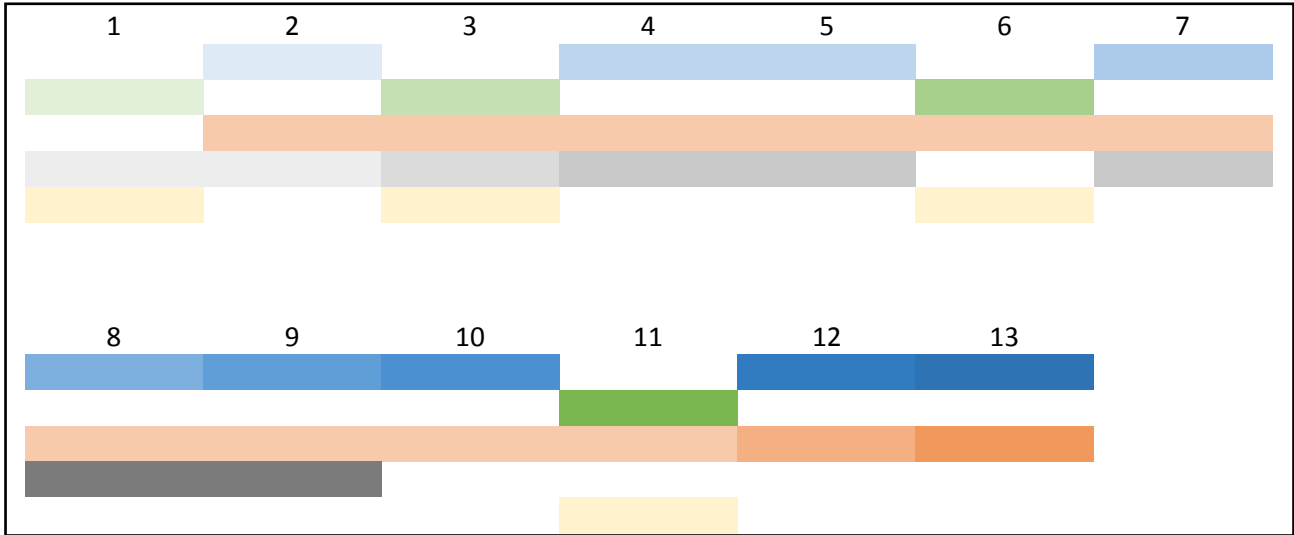
Both Eric and Davonte also demonstrated distinct tendencies in the ways in which they deployed and withheld semiotic resources within their compositions. In this section, I first present visual representations to illustrate how students combined different modes to create meaning in the two focal projects. Then, using supporting evidence from the in-process and final interviews, I discuss how each student described their decision-making process in terms of the modes that they used and reserved.

**Eric.** Despite the fact that Eric was very technologically skilled in relation to the other students, he had fairly limited experience with designing multimodal products when he entered the workshop. So, as he created his *All About Me* video, he was restricted to inserting pictures; adding music; viewing and changing transitions between video frames; and altering, inserting, and deleting text title frames, all of which we explicitly discussed during the introduction of the project (see Appendix L for instructional materials). Over the course of the workshop, however, he developed new skills as a multimodal composer and added many new elements to his semiotic repertoire, such as image manipulation and music mixing. Figure 18 shows the development of Eric's mode use for the *All About Me* to the *Westlake Poem* projects. Within Figure 18, each color represents a different mode, and each shade denotes a unique use of that mode (i.e., each new image is marked by a darker shade of blue). If modes are repeated (i.e., using the "fade to black" transition for the entrance to Frame 4 and Frame 7), the same shade is used.

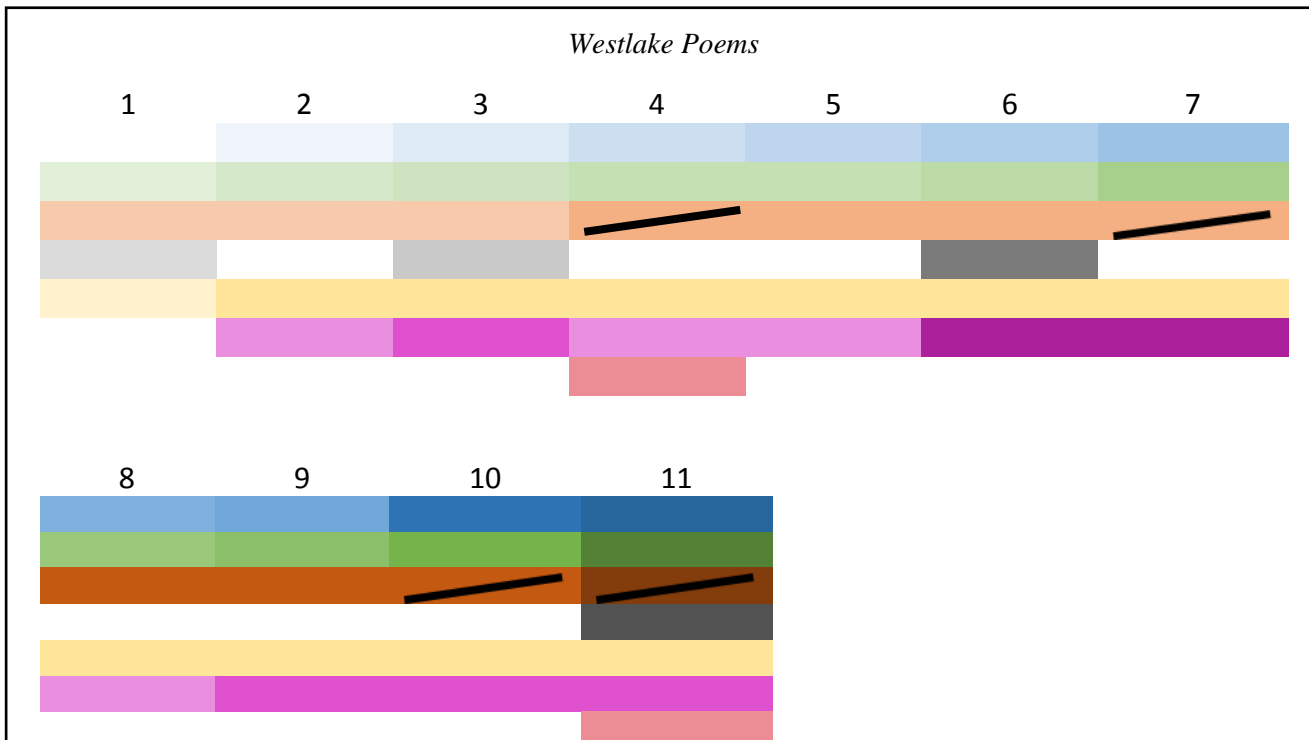
Figure 18. Eric's mode use in the *All About Me* and *Westlake Poems* projects



*All About Me*



*Westlake Poems*



As the workshop progressed, I emphasized the importance of understanding how modes work together to create meaning for an audience. Eric, who listened attentively to these discussions, demonstrated an interest in combining a number of modes within his work: “I want to use...like, all of the stuff together so that it makes sense to people...like how I did the stuff and what I am trying to say.” So, as Figure 18 illustrates, Eric not only added new modes and strategies to his semiotic repertoire, he also developed new ways of navigating and manipulating modes. For example, his soundscape (Phillips & Smith, 2013) for his *Westlake Poem* incorporates four distinct types of music, all of which are layered on top of each other.

In other workshop projects, Eric selected special effects for their ability to add meaning to the text. For example, in his *Westlake Poem*, Eric used transitions to emphasize specific poetic elements, as in the movement from Frame 5 to Frame 6 (see Appendix F). Frame 5 features a box of flowers that also appears on the left side of Frame 6. Eric chose to have the text fly in from the left side of the screen because “it’s like where the flowers are in number 5.” So, the final video digitally represents the physical transition from Westlake’s main hall to the specific location of the flower box.

In his in-process and final interviews, Eric referred to the importance of demonstrating his newfound knowledge to me, his teacher. As he said, “I want to show that I...got how to do all the different stuff.” As a result, he often included many different modes within his compositions. For example, Frame 11 of his *Westlake Poem* includes images, text, multiple pieces of music, color, special effects, and sound effects. While other students, like Davonte, became more selective about the modes that they used and emphasized as the workshop progressed, Eric added more modes to his work, “showing” me that he was able to use everything that he learned about multimodal composing and digital tools.

Eric's use of semiotic resources was related to his identity as a good student in a number of ways. First, he wanted to understand how modes work together to create meaning, which was a skill that I, the teacher, emphasized throughout the workshop. As a result, his later compositions, such as his *Westlake Poem*, demonstrated how he used transitions to emphasize specific poetic elements or pieces of text. Next, he was eager to demonstrate his new skills in using digital tools to compose multimodally. This sometimes resulted in an abundance of modes used within a particular composition; for example, Eric chose to show the other students and me how he was able to layer several music clips and transitions together in his *Westlake Poem*.

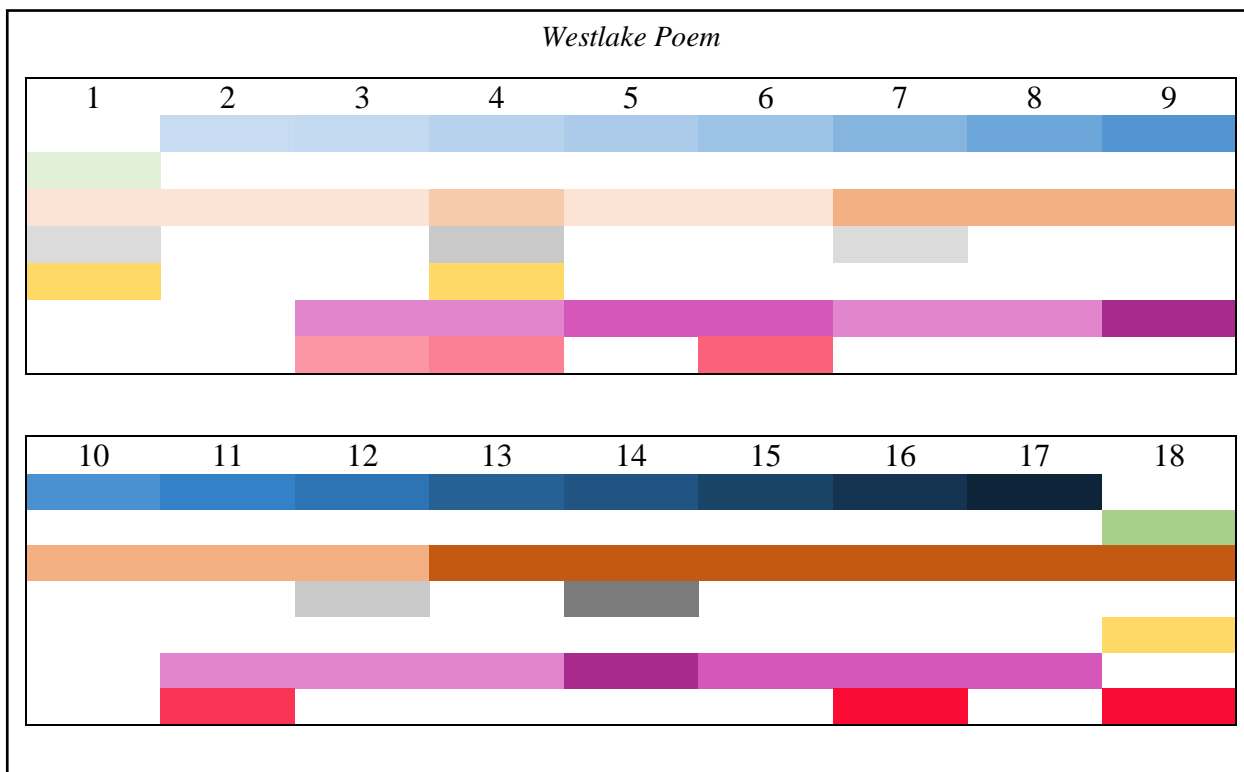
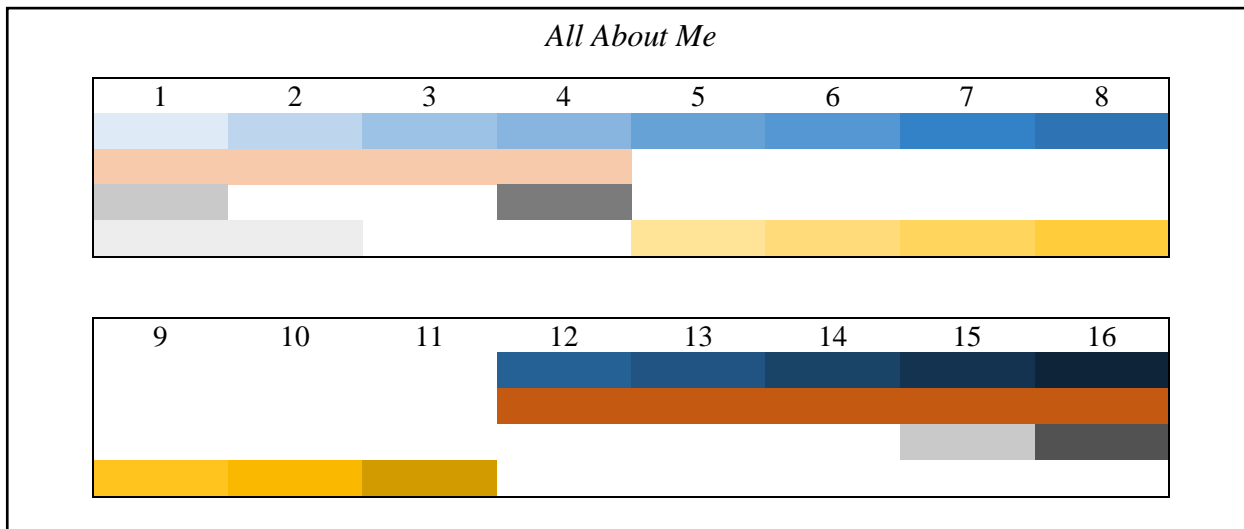
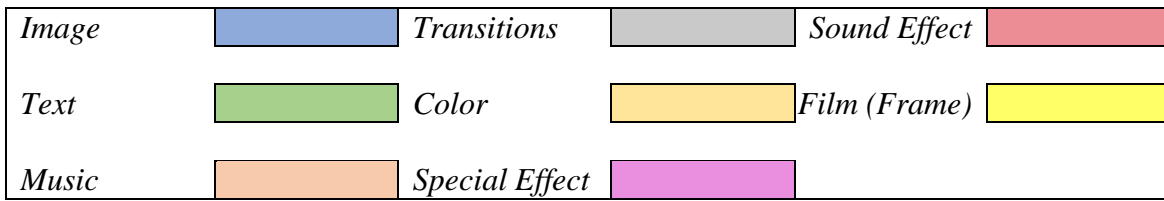
**Davonte.** Before the workshop began, Davonte had never created a PowerPoint or a digital video. So, he entered the *All About Me* project as novice multimodal composer. His initial understanding of the multimodal composing process related mainly to adding images; as he asked me, "I just put my pictures and the stuff I like, right? So everyone can see? That's it?" In order to support his thinking about how to bring together different modes within a composition, I pointed out various elements of the model *All About Me* project, such as sound effects, music, text, background color, font, and special effects, and then demonstrated how he could add these modes to his own project. I also referred repeatedly to the video tutorials and the templates that I created, but despite these scaffolds, Davonte continued to struggle with the idea of adding any modes other than images to his *All About Me* project.

It was only after he received detailed assistance from his peers that he was finally able to add music, transitions, and a video clip to his project. At the very end of Day 2, he expressed an interest in incorporating additional elements, like manipulated photographs and sound effects, but he simply ran out of time. However, despite his struggles, Davonte's skills as a multimodal composer developed over the course of the workshop. Slowly, he began to include many more



modes within his work (see Figure 19 for a comparison of his mode use across the two focal projects), because, as he said, “sometimes” adding more modes “makes the videos cooler and more fun when you add the effects and stuff.” He also began to show an interest in the ways in which he could bring together different modes to create meaning for his audience.

Figure 19. Davonte's mode use in the *All About Me* and *Westlake Poem* projects



Across all of his compositions, even in the latter stages of the workshop, Davonte was judicious in selecting from a limited set of modes, such as images, music, sound effects, special effects, and image filters. Like Eric, he demonstrated a growing interest in the ways in which modes come together to create meaning, and even asked me about whether I thought his work “made sense, like, all of it” during the *Neighborhood Poem* project. However, like the modes that he chose to emphasize, his choices in terms of combining and restricting modes were much different from Eric’s. For example, unlike other students, who were generally hesitant to use sound effects because of the potential for interference with their music clips, Davonte made extensive use of the available sound effect features in PowerPoint and MovieMaker. His comments during in-process and final interviews showed that he was well aware of the role that sound played in his final projects, and he was particularly deliberate when selecting sound effects to enhance specific images. For example, as I tried to encourage him to finish his *Fireworks Poem*, he pointed to the pictures he took during the 4<sup>th</sup> of July fireworks show. Then, he pointed to the sound effect choices in MovieMaker and told me, “I can’t...be done yet. This doesn’t sound good. It’s gotta be the right one.”

As the workshop progressed, Davonte developed new understandings of how different modes could be used to add to the overall meaning of the composition. As a result, his use of modes became more targeted towards crafting a specific kind of meaning. For example, his *Westlake Poem* included five different sound effects, some of which directly related to the image subjects (i.e., a thunderous noise to indicate the slamming of a door). He also repeated a specific effect, the chiming noise, as a way to emphasize the transitions between video frames. Unlike Eric, in his in-process and final interviews, he never mentioned “showing off” his ability to use digital tools to compose multimodally. Instead, he focused on the goals of a specific

composition. In reference to his *Westlake Poem*, for example, he said, “It needs to be like Westlake...like, how it is, in person, with noise and stuff. That’s why it gotta be like it.”

## **Discussion**

Throughout the workshop, both Eric and Davonte demonstrated distinct *composing identities*, which I define as a combination of students’ modal preferences (Smith, 2013) and the ways in which students deployed and/or withheld their sets of semiotic resources. First, Eric and Davonte’s modal preferences were generally quite different. For instance, while Eric used substantial pieces of text throughout each of his compositions, including the *All About Me* project, Davonte tended to limit the amount of text—and even omit it—whenever feasible. Instead, Davonte often used images to carry the bulk of the meaning within a composition. Further, while both students used numerous images in their work, they differed in the types of images they used (self-taken photographs, in Davonte’s case, and downloaded images, in Eric’s) and their choices in the final presentation of these images.

Next, although both Eric and Davonte developed new skills in using digital tools to manipulate and combine modes within their work, the ways in which each student chose to deploy their semiotic repertoires differed. For example, Eric used more and more modes as the workshop progressed and often layered multiple modes, such as transitions and music clips, on top of each other. This was related to his desire to demonstrate his new learning to me, the teacher, and to his peers. On the other hand, Davonte consistently demonstrated a judicious focus on specific modes. Further, as he became a more experienced multimodal composer, Davonte began to scale back his use of transitions and special effects in order to emphasize specific images or ideas.

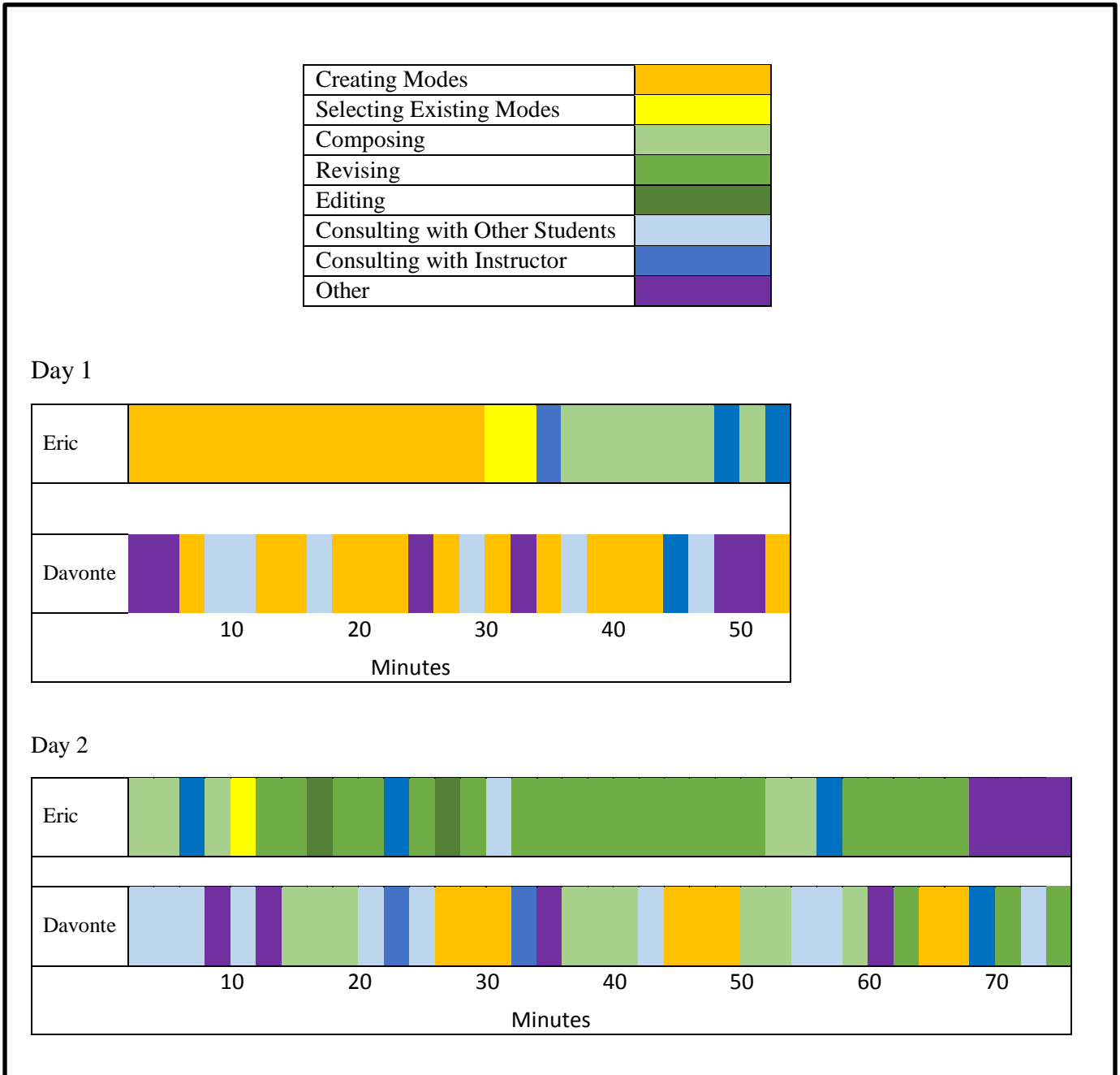
Students' composing identities also affected the ways in which each spoke about their work. For example, while Eric often provided a detailed explanation for the music he used in a given project, he sometimes struggled to explain why he used specific transitions or image filters. He instead focused on the volume of modes: "I wanted to try all the different ones." In contrast, as Davonte used a select set of modes in order to convey specific meanings to his audience, he was able to provide targeted justifications for his work. For example, in his discussion of his *Westlake Poem*, he was able to articulate why he used a specific sound effect or transition with great ease: "This [referring to image of no-bullying sign] flies in and there's a noise, because that sign be important to [Westlake]."

### **Composing Pathways**

Throughout the workshop, Eric and Davonte followed different *composing pathways*, which I define as their entries into the composing process--how they launched their compositions—as well as the strategies they used to compose, revise, and edit their compositions. The analysis of video data, data from student cameras, and screen recordings, allowed me to see how Eric and Davonte utilized composing time—how each student began and finished their compositions, and the strategies they used to create their work. In order to create representations of students' composing pathways, I devised different categories for student's use of composing time: creating modes, selecting existing modes, composing, editing, revising, consulting with other students, consulting with the instructor, and other. I then tracked Eric and Davonte's composing activities on a minute-to-minute basis for each of the focal projects. Figure 20 provides a visual representation of each student's composing pathway for their *Westlake Poems*. In the following sections, *Entry into Composing* and *Strategies Used to Compose, Edit,*

and Revise, I refer back to this figure in order to illustrate the distinctions between Eric and Davonte's composing pathways.

Figure 20. Comparison of Eric and Davonte's composing pathways for their *Westlake Poems*



## Entry into Composing

As illustrated in Figure 20, Eric and Davonte demonstrated distinct differences in terms of their entries into the multimodal composing process. As he did for his *Westlake Poem*, Eric usually took a fairly linear route through composing, often beginning by crafting a rough draft, then returning to revise and edit. Davonte, on the other hand, followed a more circuitous route, breaking his composing into many distinct parts. In the following sections, I use in-process and final interview data, as well as students' composing process data, to illustrate these different entry processes.

**Eric.** For each of his compositions, Eric followed a similar composing pattern: he began by quickly crafting a rough draft, and then spent a substantial period of time revising for content and editing for spelling and grammar (see Figure 20). In addition, his creation of these rough drafts followed a fairly linear process in terms of his progressions in mode use: he wrote the text first; then added images, special effects, transitions, and other modes; and then finished by adding music.

For projects composed over a two-day span, such as the *All About Me* and *Westlake Poems* projects, Eric tended to divide his work into two large chunks: time for composing a rough draft and a period of revision. For instance, on the first day of the *Westlake Poems* composing, he mapped out each slide of his composition: first writing the text, then adding images, and then finally layering different pieces of music over each frame of the composition. When I asked him about his goals for the day, he said, "I want to write, I mean, get it all out so I can go back tomorrow." He saw writing the text as the most important part of each "assignment", while the music was something to "play" with. Or, as he said in an in-process interview, "That's

[pointing to a frame in his *Fireworks Poem*] like the main part. Now I'm going to play with my music.”

**Davonte.** Unlike Eric, who sat down at his computer and began to create his rough draft as soon as composing time began, Davonte employed a “collaborative” entry into the composing process, during which he sought numerous opinions and viewpoints before beginning to compose. For example, on the first day of the *Westlake Poems* project, he chatted with several different students after returning from his photo shoot. During these discussions, he compared notes on which photographs he had taken and what subjects other students had chosen to capture. Then, he decided to take multiple pictures of other students “at work,” before consulting with several of his peers about their plans for their compositions.

Across all of the different composing projects, the only consistent pattern that Davonte demonstrated in terms of his entry into the composing process was these frequent consultations with his peers. Unlike Eric, he didn't necessarily begin composing with a specific mode. For some projects, such as his *Westlake Poem*, he began by selecting images, but for others, such as his *Fireworks Poem*, he chose music first. Also, generally, he only completed one draft of any given composition, and he didn't follow any predetermined patterns in terms of how he revised specific modes or sections of his work.

### **Strategies Used to Compose, Edit, and Revise**

In addition to differences in their entries into the multimodal composing process, Eric and Davonte displayed distinct tendencies when it came to the strategies they used to compose, edit, and revise their work. Eric's composing process was marked by three strategies: creating checklists to ensure that he included all “required” composing elements, undergoing extensive and numerous cycles of revision and editing, and consulting with other students that he deemed



as experts in a given mode or digital tool. Davonte’s composing process was instead marked by frequent conversations with other students; the completion of a “final” draft, rather than many rounds of revision; and time spent capturing additional self-taken photographs during composing time.

**Eric.** From the very first workshop session, Eric was determined to include every “required” element within his work. So, for every project that he completed as an individual (*All About Me*, *Family Poem*, *Fireworks Poem*, *Neighborhood Poem*, and *Westlake Poem*), he created checklists for himself. Sometimes, these checklists included all of the poetic elements I listed in the guidelines for a given project. For the *Westlake Poem*, for example, I encouraged students to incorporate five poetic devices from the following list: imagery, rhythm, mood, tone, onomatopoeia, rhyme, repetition, simile, and metaphor (see Appendix M for instructional materials). However, when students struggled with the assignment, I emphasized the importance of writing about their experiences, and stated that students could choose to include fewer devices, if they chose. Eric followed the original guidelines—and his checklist—and included every single poetic device. Each individual frame of his composition ultimately included both rhythm and rhyme. Further, as was typical of his work, his *Westlake Poem* includes extra frames, poetic devices, and extensive pieces of original writing.

Next, in connection with his “good student” identity, Eric often continued to revise and edit until he created what he called “perfect” compositions. Or, as he said, in one of the in-process interviews, he said, “It’s like, in writing, when they make you do it over and over and over.” When other students finished their work early, they usually asked to either take their cameras to shoot more videos or to play basketball. Eric, who always finished his work first, would instead return to his compositions, going back to edit again and again. For example, on the

second day of composing his *Westlake Poem*, he began by reviewing each slide. Then, he tried out thirteen different sound clips and seven different music mixes so he could get the “best” match. He was also extremely sensitive about errors within his work; after showing his *Westlake Poem* to the group, Tyrus pointed out a misspelling. Eric insisted on taking his computer back out of its bag and fixing the mistake. When he finished, he looked at me and said, “And now...it’s perfect.”

According to Eric, being a “good student” also involved relying upon other students for assistance and advice: “Sometimes the teacher can’t always get there. When you get stuck, ask somebody. They can help you if you need help.” However, during the first two workshop sessions, as students composed their *All About Me* videos, Eric rarely solicited help from other students. Even though his experience with multimodal composing was fairly limited—he had previously created the PowerPoint presentation on Elijah McCoy—his previous experience with digital tools and his linear composing process allowed him to work much more quickly than the other students. So, in those early sessions, he was far more likely to provide assistance than to receive it.

As the workshop progressed, however, Eric became much more likely to ask other students for assistance regarding composing strategies. When asking for advice, Eric often chose specific students according to his perceptions of their expertise in specific areas. For example, when he needed artistic advice, such as an opinion on a specific background color or PowerPoint design, he usually asked another student, Tiana. When I questioned him about his work with Tiana, he said, “She always has nice backgrounds and stuff. And she talks about why they look good so I ask for her help.”

**Davonte.** Unlike Eric, Davonte’s composing process was nonlinear and marked by frequent conversations with other students; the completion of one “final” draft, rather than many rounds of revision; and time spent capturing additional self-taken photographs during composing times. First, Davonte relied heavily on his conversations with and observations of other students. For instance, during the first day of composing his *All About Me* project, after talking with me and spending about ten minutes in front of a blank screen, Davonte got up to talk to Terrell, who had already added all of his images and transitions. After he observed Terrell adding transitions, the two engaged in a brief conversation, and then Davonte went back to his computer and began to add his own pictures and transitions. A few minutes later, he got back up and went to speak with another student, Clinton, who was browsing through the available music clips. Again, when Davonte returned to his own computer, he used his newfound knowledge to begin experimenting with various music clips. As the workshop progressed, his conversations and observations began to relate more to composing techniques and tips and less to basic functionality, but Davonte continued to rely heavily upon his peers for models and advice.

Also, as illustrated in Figure 20, Davonte spent very little time revising and editing his compositions. Unlike Eric, he didn’t like spending long amounts of time sitting at a computer to compose a single draft; as he said, “it’s more fun to get up and talk to people.” Instead, he tended to compose one “final” draft in a process often broken down into much smaller parts. For example, during the second day of composing for his *Westlake Poem*, he began by talking with other students, then he reviewed a series of potential music clips, went back to consult with additional students, then talked to me about his work, all before finally beginning to add modes to his work. This composing process, which involved numerous consults with various students, did take significant time. Instead of creating numerous drafts, as Eric did, Davonte usually only

had time to compose one “final” draft, after spending a significant portion of the composing time conversing with other students and viewing their work. When he did have time to go back and revise after completing a draft, he generally spent that time reworking the soundtrack, and in particular, the sound effects. For example, he spent about fifteen minutes choosing the “thunder clap” effect for the frame of his *Westlake Poem* in which he wanted to indicate a slamming door. As he told me, “There’s not...one [a sound effect] that sounds right (points to thunder clap) kinda close, but not really.”

Finally, although Davonte took many more photographs than the other students, often returning from a picture session with hundreds of different shots, he was never satisfied with the amount and quality of his images. For example, after he finished adding images, music, and special effects to his *Westlake Poem*, he began fiddling with his camera, clearly impatient to get back out into Westlake’s campus. When I glanced over at him, he jumped out of his seat and said to me, “I need more pictures. I gotta get back to the hallway.” Because he didn’t want to “waste” his pictures, he often included many more images within his compositions. This resulted in longer PowerPoints and videos; for example, his *Westlake Poem* had a run time of over two minutes, which was significantly more than the project average of one minute, eight seconds.

## **Discussion**

So, Eric and Davonte’s previous experiences with digital composing tools and various forms of composing had implications for their *composing pathways*. For Eric, who saw himself as a successful student with previous experience with digital tools and a strong foundation in writing, multimodal composing was an extension of the writing process. When given instructions and directions, he was able to begin composing quickly and took a linear approach, beginning with the composition of a rough draft. Using checklists to make sure that he included all

“required” composing elements, Eric then began to follow extensive and numerous cycles of revision and editing, only consulting with other students that he deemed as experts in a given mode or digital tool.

In contrast, Davonte’s nonlinear composing process and the strategies that he used to compose, edit, and revise his work—consulting frequently with his peers, creating one final draft, and returning to capture photographs on an as-needed basis—emerged from his prior experiences and his role within the workshop setting. Because his experience with digital composing tools was extremely limited, he had to rely upon his peers and their advice in the early stages of his workshop. Also, the fact that his previous experience with writing was largely negative shaped his more unconventional composing pathway—he didn’t follow any typical stages of a writing process, and instead composed one final draft in several sessions, which were often broken up by further conversations with his peers and trips to capture additional photographs.

These findings provide new insight into students’ entries into the multimodal composing process and the ways in which they used strategies to compose, edit, and revise their work. First, when students compose multimodally using digital tools, they bring their experiences with technology, like computers, cameras, and cell phones, as well as their histories in relation to composing in other forms, like writing, drawing, and making music. Recognizing the role that these histories play in shaping the multimodal composing process allows for a more nuanced understanding of how students develop as multimodal composers.

### **Use of Teacher- and Student-Created Models**

Although both Eric and Davonte’s multimodal composing processes were shaped by models, the types of models they used most frequently and the ways in which they used these

supports to shape their own work differed greatly. My examination of students' multimodal products, when taken in conjunction with their reflections on their experiences and multimodal process data, allowed me to document how each student used teacher- and student-created models to create their work, as well as how these models may have impacted the final multimodal compositions. I found that Eric, whose experiences with school were largely positive, tended to rely upon teacher-created models. Throughout his composing process, he referred repeatedly to the importance of his work being "like the ones" that I provided. On the other hand, Davonte, whose experiences with school were largely negative, but who had long-standing relationships with other students in the workshop, looked to his peers for examples.

Both types of models carried specific affordances and constraints. For example, the teacher-created models I provided gave students a stable point of reference and sometimes enabled a jumping-off point at the beginning of the composing process. However, these structures may have also hindered student creativity and engagement. After closely examining all of the models I created, I found that I have a distinct modal preference for using text, captions, and images. I tend to favor these three modes over others, such as special effects, color, and sound effects. By presenting my work as the "official" model for students, I may have inflicted my own modal preferences upon students, like Eric, who chose to rely mostly upon these teacher-created models. On the other hand, student-created models, by virtue of having many different composers, each with different personal preferences and composing identities, provided a much wider range of modal preferences. In the following sections, *Teacher-Created Models* and *Student-Created Models*, I discuss how Eric and Davonte used the different models to shape their work.

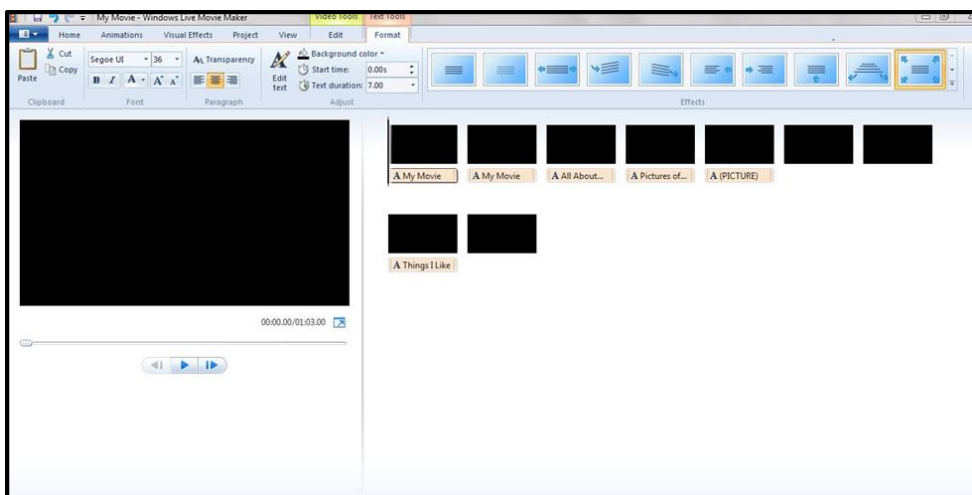
## Teacher-Created Models

In the first two weeks of the workshop, I provided multiple layers of scaffolding, including models and templates, due to most students' relative inexperience with technology. For the *All About Me* project, for instance, I uploaded MovieMaker templates on each student computer, and informed students that they could choose the template if they desired (see Figure 21). I emphasized that students had a choice in whether or not to use the structures, stating:

The goal of this project is to learn how to use the video program and to introduce yourself to the class and to me...Don't worry about following...example. Just make sure to put in the pictures you took yesterday...You choose whether to include the captions or not.

As the workshop progressed, and students grew more familiar with the digital tools and projects, I tended to include fewer supports and guidelines.

Figure 21. MovieMaker template provided to students for the *All About Me* project



**Eric.** While the use of teacher-created models and templates was entirely optional, Eric consistently referred to these structures throughout the workshop. For example, during the *All About Me* project, Eric was extremely concerned with ensuring that he followed all directions and instructions closely. After sharing a first draft of his project with me, he asked, “Does it look

right? I want mine to have all of the right ones.” While most other students ended up adding only pictures of themselves and their interests, while excluding the other sections, Eric included every element present in the model. He even added information about himself as a reader, using a picture of Michael Jordan from Google Images in order to represent his desire to read more books about sports. He also changed the caption to read “Things I Love” instead of “Things I Like”—as the model video contained—and included the exact same number of pictures of his interests as the model contained (see Appendix E for a multimodal transcript of Eric’s project and Appendix K, for screenshots from the model).

Further, during class discussions of projects and the presentations of models, he asked numerous questions pertaining to the specific instructions and “required” elements. In later projects, such as the *Westlake Poems*, I provided only basic guidelines for content and composing style. However, Eric would often ask, “How many do I need to put in?” (referring to poetic elements), or, “Can I use more than one device in a stanza?” When I informed him that he could include “as many as he wanted to,” he often composed additional responses or poems. For example, after he and Davonte had created their *Visual Haiku*, Davonte left to take additional photographs of other GROW students taking an African drumming class. Eric instead stayed at his computer and composed an additional haiku.

**Davonte.** Unlike Eric, Davonte chose to largely ignore the teacher-created models and scaffolds, such as the recorded tutorials. Further, his compositions show little evidence of being influenced by the teacher-created models. For instance, for the *All About Me* project, Davonte included no captions, and he only added pictures of his interests (i.e., the frames containing graffiti pictures of music) after I encouraged him to do so. Without intervention, he might have only included the photographs that he captured. In fact, he resisted using any of the teacher-



provided templates, even when he had trouble beginning to compose. During the *All About Me* project, for instance, he spent long minutes staring at his computer after returning from the photo shoot. When I offered the template for his use, he resisted: “I don’t like it. I want my own.” This pattern continued throughout the workshop; across all of the individually-composed projects, Davonte only referred once to a tutorial—using Microsoft Paint to color on images—and never used the templates.

### **Student-Created Models**

As previous research, particularly in art education (Boyatzis & Albertini, 2000), has pointed out, many student composers appropriate various elements, such as subject matter, artistic styles, technical forms, themes, and meanings, from their peers. This was the case throughout the workshop as well; as students presented their work and collaborated with each other on different projects, students, including both Davonte and Eric, turned to the models their peers had created in order to shape their own work.

**Davonte.** Davonte, who had longstanding friendships with many of the other students in the workshop as a result of his participation in a number of previous Westlake programs, was particularly apt to reach out to his peers. Throughout the workshop, he relied upon his observations of other students and their composing techniques and subject matter. In using student-created models, he engaged in both direct and indirect appropriation of his peers’ composing techniques and choices of subject matter.

At times, Davonte’s use of peer models was direct—and intentional. By the last two days of the workshop, during which students composed their *Westlake Poems*, Eric and Davonte had worked on a number of projects together and were accustomed to collaborating during composing time. So, at a number of different points throughout the planning, filming,

composing, and revising processes for this “individual” project, the two boys had the opportunity to influence each other’s work. Davonte was particularly interested in the way Eric used image filters. Specifically, he admired the “fade to white” MovieMaker technique, which outlines a photograph in muted colors and bleaches out the remainder of the image. After pronouncing it “cool,” Davonte used the technique repeatedly in his own *Westlake Poem*. Unlike his reflections on his *Fireworks Poem*, Davonte indicated in interviews that he was well aware that his work appeared similar to Eric’s: “Eric had the white one in his poem and I liked it so I used it in mine.”

However, at other points, he seemed unaware that he was using other students’ work as models for his own. As Davonte composed his *Fireworks Poem*, even though he planned to take his own pictures at a local fireworks show to include in his poem the following day, I encouraged him to use online images to get a jump start on his work. Initially, he resisted, saying that he would be able to finish “real quick” the following day. However, after observing all of the other students working on their poems, he began talking with Tiana and Terrell and watched them as they began to construct their poem, which included an image of an eagle and the Statue of Liberty. After a few minutes, Davonte returned to his computer, where he too found an image of an eagle and a picture of the Statue of Liberty with fireworks in the background (see Figure 22 for a comparison of the images from the two poems). While all of the other students used some form of traditional American iconography (i.e., flags, the White House, Washington Monument) in their 4<sup>th</sup> of July *Fireworks Poems*, no other students included both of those specific icons. In addition, Davonte also used the exact same word as Tiana and Terrell as a caption for his Statue of Liberty fireworks image: “pop.” Davonte’s appropriation of the subject matter was seemingly unintentional; when I asked him if any other students may have influenced his choices,

specifically referencing the eagle, Davonte said, “I thought...it [the eagle] would be good. You see eagles on TV during the... fireworks.”

Figure 22. Images from Davonte’s and Tiana and Terrell’s *Fireworks Poems*

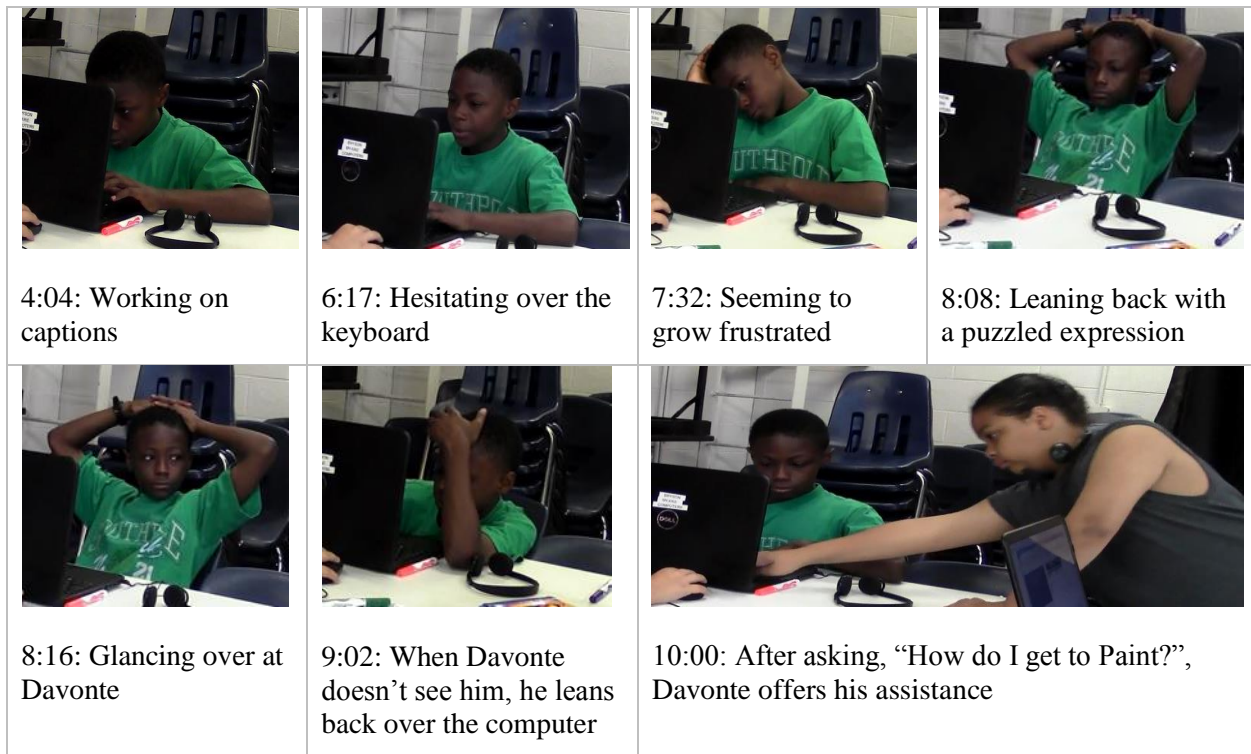


**Eric.** Unlike Davonte, Eric seemed hesitant to rely upon his peers. Although he did seek out “expert” advice, such as when he asked Tiana to help him with the appearance of a particular PowerPoint background, these occasions were fairly rare and occurred mostly in the latter stages of the workshop. However, there were times that he turned to other students, including Davonte, for assistance. For example, during the first composing day for the *Westlake Poem*, Eric completed a rough draft, focusing mostly on getting the images in the right order and adding text and music. On Day 2, he began the revision process and spent a few minutes reviewing his images, replacing one, adding captions to two others, and adding a special effect filter to an

additional image. After adding the first filter, he appeared to get stuck and exercised his frustration by scratching his head, crossing his arms over his head, leaning backwards, and repeatedly glancing towards Davonte, who was seated on the end of the table. When Davonte failed to notice his frustration, Eric tapped the desk and looked toward him as he spoke (see Figure 23 for the physical manifestation of Eric’s growing frustration and the attempts to capture Davonte’s attention).

Eric: How...do I get to that (Pause=3s) Paint?  
 Davonte: I don’t know. Wait. (Pause=15s as he locates the icon on the bottom of his own computer screen). Oh, I see it, Eric.  
 Eric: [Where?]  
 Davonte: [Here.] (Gets up and out of his seat and leans over M’s computer to point to an image on the screen.)

Figure 23. Eric grows frustrated with finding image manipulation software and asks Davonte for help.



On a number of other occasions throughout the workshop, Eric asked for Davonte's help with photographs. For example, as students composed their *Fireworks Poems*, Eric asked Davonte to explain how to use a particular image filter that he had admired on a VoiceThread reflection. However, it's worth noting that during his final interview, Eric failed to acknowledge Davonte's assistance with image manipulation: "I didn't need help...I mean, he would have...but I didn't need it." Chapter 5, which focuses specifically on the processes Eric and Davonte used to compose collaboratively-created products, discusses additional ways in which they influenced each other's processes and products throughout the workshop.

## **Discussion**

The findings related to Eric and Davonte's use of teacher- and student-created models suggest that individual students' roles within the workshop setting and their prior experiences with composing played a role in the types of models they gravitated towards, in addition to the degree to which those models influenced their composing processes and products. For Eric, whose role within the workshop was closely tied to his identity as a "good student," teacher-created models were of primary importance. In fact, his work was sometimes constrained by his desire to include all of the "required" elements (i.e., all of the elements present within a given teacher-created model). On the other hand, Davonte, who had long-standing relationships with many of the other students in the workshop, was far more likely to use student-created models. Further, many of Davonte's individually-created products demonstrate the influence of his peers; he tended to choose elements that he found interesting, gather information on the tools that his peers used to create them, and then imitate the selected elements in his own work, either directly or indirectly.

One of the open debates surrounding multimodal composition for academic purposes is how to appropriately structure instruction to meet the needs of learners with differing levels of technological expertise. Providing too few scaffolds, such as teacher-provided models, can cause frustration with digital tools and composing process. However, researchers (Dalton, 2012) have found that the use of too much structure can actually restrict students' creativity and cause problems with engagement. For Eric, the teacher-created models, particularly at the outset of the workshop, were somewhat constraining. After being presented with an example, he felt that he needed to include all of the component parts, even when explicitly told that it was unnecessary. Even as the workshop progressed and I attempted to remove and/or scale back the number of teacher-created examples, he continued to ask questions about what was required and what I "wanted" from him. However, his reliance upon the teacher-created examples did provide one affordance; he was able to quickly dive into the composing process, which gave him additional composing time and allowed him to revisit his work through multiple drafts.

Davonte resisted using the teacher-created examples. Instead, his models came from his fellow students. So, instead of drawing largely from one particular composition, Davonte had a much greater variety to choose from. As a result, his work often incorporated a wide range of modes and ideas; instead of including copious amounts of text, for example, Davonte's compositions would often combine various modes relating to his own preferences and elements that he admired in other students' compositions. However, his desire to speak with other students and to view their work did have one key limitation, which is particularly relevant for educators who work in academic contexts under strict time constraints; Davonte usually struggled at the beginning of the composing process and often ran out of time.

It is important to note that as the workshop progressed, both students demonstrated an increasing ability to compose without the structure of models. During the *Westlake Poem* project, for example, for which no teacher-created model was provided, Eric was still able to begin his composition quickly and asked only a few questions about specific “required” elements. And, for the same project, instead of visiting all of the students before finding inspiration for starting his own work, Davonte talked with Tiana and Terrell and then began working on his poem. This indicates that perhaps a balanced instructional approach, in which multiple forms of teacher- and student-created models are offered to students, might better suit the needs of learners who rely upon different sources when crafting their multimodal compositions.

### **Implications for Collaborative Composing**

This chapter presents findings from the analysis of the multimodal composing processes and products of two focal students, Eric and Davonte. Throughout the workshop, both Davonte and Eric navigated the affordances and constraints of different modes, digital tools, and resources as they composed multimodally. However, as illustrated in this chapter, Eric and Davonte demonstrated distinct differences in their composing identities, composing pathways, and use of teacher- and student-created models. These differences had implications for their collaborative composing of five additional workshop projects: *So Much Depends Poem*, *Rhythm Poem*, *Form Poem*, *Visual Haiku*, and *Simile and Metaphor Poem*.

First, while Eric tended to emphasize text and demonstrated his new knowledge of multimodal composing techniques through the use of many modes in his compositions, Davonte preferred images, favoring fewer modes that he felt worked together to tell a story. Their composing identities also influenced the modes they emphasized within their collaboratively-created compositions, as well as each student’s contributions to the collaborative composing

process. In Chapter 5, I discuss how Eric and Davonte's preferences for using text and images, respectively, allowed each student to play an active role in the collaborative composing process.

Next, Eric generally followed a linear composing pathway: first creating a rough draft, then returning to revise and edit in a cycle that aligned with his understandings of the writing process. Davonte, on the other hand, took a much more circuitous multimodal composing route, which was often broken up by consultations with his peers and additional photography shoots. Their collaborative composing pathways, which are outlined in Chapter 5, combined both individual composing pathways; at times, Eric became more flexible, and Davonte more conventional, in the ways that they approached the composing processes.

Finally, although Eric relied upon teacher-created models as the basis for his work, Davonte tended to look to his peers for examples. As they composed collaboratively, the differences in the types of models they used and their deployment of these models sometimes led to disagreement about the goals of their collaborative work. For example, at specific points within the collaborative composing process, Eric resisted any major departure from the "official" structure provided by the teacher-created models, which caused tension within the partnership. These tensions are discussed in depth in Chapters 5 and 6.

In multimodal composing, the collaborative production of a single digital and multimodal product involves the complex navigation of different interactional patterns and roles; specifically, students must determine their new roles in relation to each other and traverse often opposing visions for the final product. As one major goal of this study is to examine the processes students use as they compose collaboratively-created multimodal products, I present findings from the microanalysis of Eric and Davonte's collaborative composing processes in



light of their “individual” work in Chapters 5 and 6. I draw upon the findings outlined here in order to illuminate some of these complex, collaborative interactions.

## CHAPTER 5

### STUDENTS' COLLABORATIVE MULTIMODAL PROCESSES AND PRODUCTS

Using illustrative examples from Davonte and Eric's collaborative composing processes and products, this chapter addresses the second research question: *What processes do students use as they compose collaborative multimodal products?* In the first section, *Davonte and Eric: A Study in Contrasts*, I describe the origin of Davonte and Eric's collaborative relationship. Then, using data from each student's in-process and final interviews, I examine their attitudes towards their partnership and reflect upon some of their concerns about collaborative composing.

In the analysis of Eric and Davonte's collaborative composing processes and products, I used the idea tracing method (see Chapter 3 for a detailed description of this process) to analyze how and from whom ideas originated, how these ideas were negotiated at different points in the composing process, and the appearance of the ideas within the final product. In order to provide in-depth descriptions of Eric and Davonte's collaborative composing processes, I selected two collaboratively-created focal projects: the *So Much Depends Poem* and the *Simile and Metaphor Poem*. These two projects were chosen because they were completed at the beginning and end of the data collection period, and I felt that, taken together, they represented different stages in the development of their collaborative partnership.

Findings are arranged into two sections, one for each focal project. At the beginning of each section, I provide contextual information and detail the pedagogical supports that were offered to students. Then, within each section, findings are divided according to four themes: (1) moments of creative tension, which often gave rise to the generation and negotiation of ideas; (2) collaborative composing pathways; (3) student's individual roles in the collaborative composing

process, and (4) obstacles students faced in collaborative composition. Within the discussion of each focal project, I pay particular attention to pedagogical structures (i.e., teacher instructions, models, and physical structures, such as the placement of cameras, chairs, and computers) that may have supported or hindered students' collaborative work. I also discuss how moments of idea generation and negotiation were manifested in the final multimodal products. Further, I highlight each student's feelings of ownership, as evidenced by interviews and process data, in relation to the completed products.

I conclude with a discussion of the processes Eric and Davonte used as they composed collaboratively-created multimodal products. Each theme—moments of creative tension, collaborative composing pathways, students' individual roles within the collaborative composing process, and obstacles to collaborative composing—is discussed across the two focal projects. This discussion is extended in Chapter 6, which presents instructional conditions which supported students' collaborative, multimodal composing.

### **Eric and Davonte: A Study in Contrasts**

*Figure 24.* Eric (left) and Davonte (right), collaboratively composing



As illustrated in Chapter 4, throughout the workshop, Eric and Davonte (see Figure 24) consistently demonstrated vastly different perspectives and tendencies—as readers, composers, and human beings. It might come as no surprise, then, that their collaboration emerged from a moment of convenience. During preparations for the first collaboratively-created project, the *So Much Depends Poem*, Eric and Davonte happened to be sitting across from each other at one of the student tables. Davonte turned to Eric, lifted his hand, and motioned to the student camera lying on the table between them: “You want to...” he asked. Eric looked around and saw that a few of the other students had already formed pairs, while the remaining students, clearly intending to work individually, had already selected cameras and begun to take photographs. Eric then turned back to Davonte, nodded, stood up, and followed him to the corner of the stage. Davonte grabbed the camera, and as had been the case during the filming of the daily vocabulary videos, took on the role of photographer.

Despite the tensions that emerged from their differences in their roles within the workshop setting; their composing identities, and their composing, editing, and revising strategies, which are detailed within this chapter, Davonte and Eric repeatedly chose to work as a team throughout the workshop. Of the seven projects for which students could choose to work either independently or collaboratively, Davonte and Eric chose to compose five collaboratively-created products, and each worked alone for two projects. While they were casual acquaintances prior to beginning the workshop, they weren’t “friends or anything,” according to Eric. However, through the course of the GROW program and the workshop, they became friendly, often eating lunch together or playing basketball with a few of the other boys during recreational time.

When I asked them about their feelings towards each other in respect to their multimodal composing work, both boys reported generally positive attitudes. “Eric’s smart,” Davonte told

me during an in-process interview. “He always know the words and what...they mean. He also got that music thing and how to get the songs in.” When I prompted him to explain what he meant when he said “the words,” Davonte picked up a copy of *Love that Dog* and said, “The words, in the book...and the words you tell us. Ono...ono...that word? [I respond: onomatopoeia]. Oh, yeah, that.” In his final interview, Eric was similarly complimentary about Davonte’s ability to take photographs: “He usually has all the pictures that we need for the project.”

However, when asked about the potential benefits and concerns with composing collaboratively in a more general sense, both Eric and Davonte pointed out numerous potential roadblocks. In fact, both expressed uncertainty about whether they would choose to work alone or collaborate with a partner on future projects. Eric’s hesitation related primarily to his expertise in navigating the features of composing tools and the relative speed of the composing process when working individually:

*I can do more. I can work really fast when I’m by myself, since I know how things work and I don’t have to slow down for anybody to catch up. Sometimes, my partner really slows me down.*

When I asked Eric specifically about the positive aspects of collaboration, he spoke in more general terms: “*They can help you if you need help.*” When I pressed him for specific examples of instances in which he needed help from his partner, Davonte, he struggled with his response. After a long pause, Eric shook his head and said, “I didn’t need help...I mean, he would have...but I didn’t need it.”

Likewise, Davonte was unsure about whether he would choose to compose with other students in the future, saying, “I don’t know. I like working by myself.” He also continuously expressed a preference for working individually throughout the in-process interviews. Unlike

Eric, whose hesitations related primarily to the composing process and the efficiency of composing alone, Davonte's responses related primarily to material objects and artifacts: "I want *my own* computer. I do more. I can...take better pictures and make *my own* stuff...the videos are better when I use *my pictures*." So, in their interviews and reflections upon the workshop, both Eric and Davonte praised their partner's relative strengths—knowledge of literary devices and photography, respectively. However, each also pointed out obstacles to collaborative composing; Eric's concerns related largely to the process, while Davonte focused on individual ownership of digital tools and composing artifacts.

### ***So Much Depends Upon...a Basketball Hoop***

The *So Much Depends Poem* was the first final multimodal project in which students were given a choice to work individually or collaboratively. The two previous projects, *All About Me* and *Family Poem*, were intended to allow students to introduce themselves to each other and to me, the instructor, so I requested that students work individually for each of those. So, on the fourth workshop day, after students had familiarized themselves with the digital tools and with the general structure for the workshop sessions, I offered an opportunity for collaborative composing—students could work either individually or with a partner, depending on their individual learning styles and needs. Of the eight students who were present for that day's workshop session, six decided to work in teams of two: Davonte and Eric, Tiana and Terrell, and Clinton and Tyrus. The final two students, Marcus and Gabriel, chose to work individually. For the most part, these partnerships continued throughout the workshop sessions; specifically, Davonte and Eric would go on to collaborate on four additional projects.

After reading a selection from *Love that Dog*, in which the main character is "forced" to read William Carlos Williams's poem "The Red Wheelbarrow," I presented a PowerPoint

containing the poem alongside an image of a red wheelbarrow. Then, we engaged in a discussion in which students offered their responses and perspectives on the poem. The central question for the day's activity was: "What does it mean to depend upon an object?" In order to prompt student thinking, I asked numerous questions about the relevance of the poem in today's modern era (i.e., Do people in the modern age still "depend upon" wheelbarrows?). Both Eric and Davonte were active participants in the discussion. Eric's questions and responses related mainly to the meaning of the poem; for example, he asked "Why is it so important?" in reference to the wheelbarrow. He also asked numerous questions about the requirements of the assignment, focusing on how many PowerPoint slides to include and what to add to the slides. Davonte's participation related to both the value of poem—"That poem is famous?"—and the length—"It's so short."

Then, after presenting and discussing a teacher-created model, I tasked students with responding to the poem by crafting multimodal *So Much Depends Poems*. Students were asked to find and photograph an object upon which "so much depended," and then to compose a multimodal poem about that object. Figure 25 contains a screenshot of the PowerPoint slides for "The Red Wheelbarrow" poem, the teacher-created model, and the response task.

Figure 25. PowerPoint slides containing *The Red Wheelbarrow* and *So Much Depends Poem* task

The Red Wheelbarrow  
By William Carlos Williams

so much depends  
upon

a red wheel  
barrow

glazed with rain  
water

beside the white  
chickens.



So much depends  
Upon

Cool splashes of ice cold  
And lukewarm

Water running  
From the steel

And over the sides  
Overflowing forever



Write Your Own "So Much Depends" Poem

- 3 minutes
- Find an object (Examples: basketball hoop, chair, sofa, counter, table, chair)
- Take pictures of your object
- When you're finished, come back to the stage and I will help you IMPORT (word of the day) into your computer



I provided just three minutes for students to select and photograph their objects. While my intention was to simplify the project by streamlining the photography session, my decision forced students to choose their poetic subjects in haste. I further exacerbated this sense of urgency by projecting a giant image of a timer on the wall and announcing, just before students were to begin shooting, “You have three minutes to do this. Three minutes.” I also offered some advice which may have restricted their choices in terms of subjects: “If I were writing a poem, I would only take a few pictures, maybe five, so I could [get] started right away. Remember, you want to pick an object that you can write about—what depends upon your object? Why is it important...to you and to other people?” So, before students even had a chance to think about how they wanted to approach the project, my verbal and visual cues indicated that they needed to make quick decisions in terms of their photographic subjects (and thus, the themes of their poems).

Unlike the *All About Me* project, which was described in Chapter 4, students were not provided with a digital template for their *So Much Depends Poems*. It was a purposeful decision on my part; in a previous workshop session, students had composed *Family Poems* using PowerPoint and had gained experience in using the various functions of that software. Given that they were all able to use PowerPoint with relative ease, I felt that I could remove the structural scaffold of the template. However, I did provide three alternative structures to support students: 1) I assisted each pair or student in uploading photographs from student cameras to the computers; 2) I provided a teacher-created model and made it easily accessible from each student computer (see Slide 2, Figure 25 for a screenshot of this model); and 3) on each computer, I opened the PowerPoint program to a blank, two-column page. I was also available to provide additional support during the composing process.

Overall, students did well with the task. Most were able to quickly adapt to the lack of a structured template, although some students, like Eric, relied heavily on the teacher-created model and consulted it numerous times throughout the composing process. Other students struggled with the concept of needing to depend upon an object. However, during their workshop presentations, which occurred at the beginning of the subsequent session, most students expressed a sense of pride in their final work and talked at length about their choices in composing their multimodal poems.

### **Moments of Creative Tension**

As Davonte and Eric collaboratively composed five final multimodal response projects, they experienced multiple moments of *creative tension*, a term used in various disciplines and industries to refer to moments in which outcomes are changed after a disagreement (Autio, 2005). Dr. Martin Luther King, Jr. even referred to the necessity of “creating tension” in his *Letter from A Birmingham Jail*: “There is a type of constructive tension that is necessary for growth... it will inevitably open the door to negotiation” (King, 1963, para 10). For the purposes of this study, I use the term *creative tension* to indicate instances in which discord among collaborators ultimately leads to the generation or negotiation of an improved outcome. In the analysis of data, I characterized moments of creative tension as instances in which one partner proposed an idea, the other partner challenged that idea, and the initial idea was discarded or modified as a result of the second partner’s suggestion. In the composing of the *So Much Depends Poem*, there were two moments of creative tension.

In this section, I describe both moments of creative tension which emerged during the composing of this particular project. The first transpired as Davonte and Eric negotiated and selected the subject of their poem, and the next happened as they determined the overall structure

of their composition. In the first moment, after Eric questioned Davonte’s original choice of subject, the boys were able to generate and agree upon a new choice—the basketball hoop. They were also able to produce a clear justification for their poem—numerous people at Westlake *depend upon* the basketball hoop because of its properties as a recreational object. In the second moment, in which Davonte insisted upon using multiple pictures of the basketball hoop, Eric initially pushed back, arguing that their composition wouldn’t look like the “one Ms. J did.” However, after discussing the merits of including additional images and asking me for advice, they eventually agreed to include multiple slides and images, leading to a more detailed and appealing poem.

**“What depends upon the mats?” Choosing a poetic subject.** By the time Davonte and Eric decided to collaborate, less than two minutes remained on the timer for the photography shoot. After glancing at the project instructions, Eric turned to where Davonte had been sitting and asked, “What do you want to do?” However, as befitting his role as the group photographer, Davonte had already picked up one of the student cameras and was shooting pictures of several different objects on the stage—a set of gym mats, a sign reading STARS with an accompanying motivational message, and the student workshop computers. Eric, who had asked several questions regarding specific choices in subject matter for the *So Much Depends Poem* during the class discussion, wanted to take a more deliberate approach:

- 1) Eric: (Eric walks over to the left corner of the stage area, where Davonte is shooting photographs of the blue gym mats. Davonte pauses briefly to look at Eric—1s—before continuing to take photographs)  
So. Um, the poem. Which thing do you want to **(3s pause)** um...pick?
- 2) Davonte: (looks at Eric briefly before taking more photographs) The mats.  
**(6s pause)**
- 3) Eric: Why **(3s pause)** Why...what depends upon the mats?
- 4) Davonte: Blue.
- 5) Eric: (moves to stand behind the camera) *Why...what’s...why* are they [important?]

- 6) Robin: [One minute], guys!
- 7) Davonte: (turns to Eric) Don't know.  
(Davonte stops shooting and looks around, eventually directing his body towards the open gym area; Eric follows his gaze and looks back and forth from the gym to the stage)  
**(5s pause)**
- 8) Eric: We could do basketball.  
(Points at basketball hoop) People depend on it, to (2s pause, hesitates) like, play and exercise. It's healthy. I mean, keeps us healthy.
- 9) Davonte: (looks down at camera) Ok.  
(Davonte runs down the steps and begins to take photographs of the basketball hoop from below the rim. Eric joins him and watches the shooting from behind. Then, Davonte looks back up at the stage)  
Ms. J? The same pictures of one thing? Or different pictures?  
**(4s pause)**
- 10) Robin: The same thing, but different angles. Get different angles of the one object you picked.

This moment of creative tension occurred at the very beginning of Davonte and Eric's collaborative partnership, before the boys had an opportunity to observe each other's individual patterns and tendencies. As a result, both students exhibited discomfort during the confrontation over the choice of subject. As Eric made the suggestion to use the basketball hoop (which was one of the teacher-provided examples) in place of the blue mats, he was clearly uncomfortable—there was a three-second pause between Davonte's response to Eric's question about which object to choose and Eric's follow-up question about why Davonte wanted to choose the mats. Further, Eric's speech included numerous pauses and hesitations—first as he questioned Davonte's choice and then as he proposed an alternative. In Line 7, for instance, as Eric probed Davonte's reasoning behind the choice of the blue mats, he stopped and started his question three different times: "*Why...what's...why...are they [important?]*." Likewise, Davonte demonstrated uncertainty in his speech and gestures. He hesitated before capitulating to Eric's idea, first offering a response to Eric's question about the mats ("Blue"), then continued to shoot pictures

as Eric asked questions and proposed his idea. Finally, after Eric produced a justification for using the basketball hoop (Line 8), Davonte agreed to the change of subject.

Ultimately, although both boys expressed discomfort, the decision to make the basketball hoop the subject of their composition led to an improved outcome—they were able to provide a justification for why so much might “depend upon” the basketball hoop, while the only justification Davonte could offer for the mats was “blue.” In addition, although Davonte capitulated to Eric’s new idea, he also took ownership over the choice of subject. As discussed in the *Students’ Individual Roles Within the Collaborative Composing Process* section in this chapter, after Davonte focused his attention (and the camera) upon the basketball hoop, he ultimately determined the perspective for the photographs and the presentation of these photographs within their final composition.

**“We need more pictures”:** **Determining poem structure.** After returning from the photo shoot, Eric and Davonte uploaded their pictures of the basketball hoop from the student camera to the computer. As I helped with the upload and Davonte attempted to position himself at the computer, Eric, who was already sitting directly in front of the screen, familiarized himself with the open windows on the desktop: the blank PowerPoint slide show, the teacher-created model PowerPoint poem, a file folder labeled “student pictures,” and Audacity, a music manipulation program. Students had previously learned to import photographs into PowerPoint during the composition of their *Family Poems*, and as Davonte looked on, Eric added an image of the basketball hoop—a view taken from beneath—to the left side of the blank, two-column PowerPoint page. Next, without consulting Davonte, Eric opened the window with the teacher-created model (see Figure 25, Slide 2), clicked on the slide, and checked the title that I had used (“So Much Depends Upon...”). Then, Eric reopened the blank PowerPoint, added the same exact

title as the teacher-created model used: “So Much Depends Upon,” complete with ellipses.

Davonte, who until this point had been excluded from the decision-making process, expressed concern about the number of pictures they planned to use:

- 1) Davonte: How do we get more? (pointing to computer screen)
- 2) Eric: (keeps eyes focused on computer) More what?
- 3) Davonte: (pointing to computer again) More of the pictures.
- 4) Eric: On the same page? (looks to his left at Davonte)
- 5) Davonte: Or a new [one.]
- 6) Eric: [But] *the one Ms. J did* only has *one page*. (looks back at screen)
- 7) Davonte: We can ask her.
- 8) Eric: About what?
- 9) Davonte: How you do it  
**(3s pause)**  
Add more. We need more pictures. (turning in his chair) [How]
- 10) Eric: [We] could do one page. Like that one. (pointing to screen)
- 11) Davonte: Then where do we put the other pictures? There’s no space on there.  
(pointing to PowerPoint).
- 12) Eric: We could leave it like this. I used the best one.
- 13) Davonte: (shakes head) It looks boring. One isn’t enough. We can make it better with more pictures.
- 14) Eric: I don’t know how.  
**(3s pause)**
- 15) Davonte: Ok. (turns around to look for me)  
How do you do it?
- 16) Robin: Hang on one second.  
**(5s pause)**  
Do you guys want to add more of your pictures?
- 17) Davonte: Yeah.

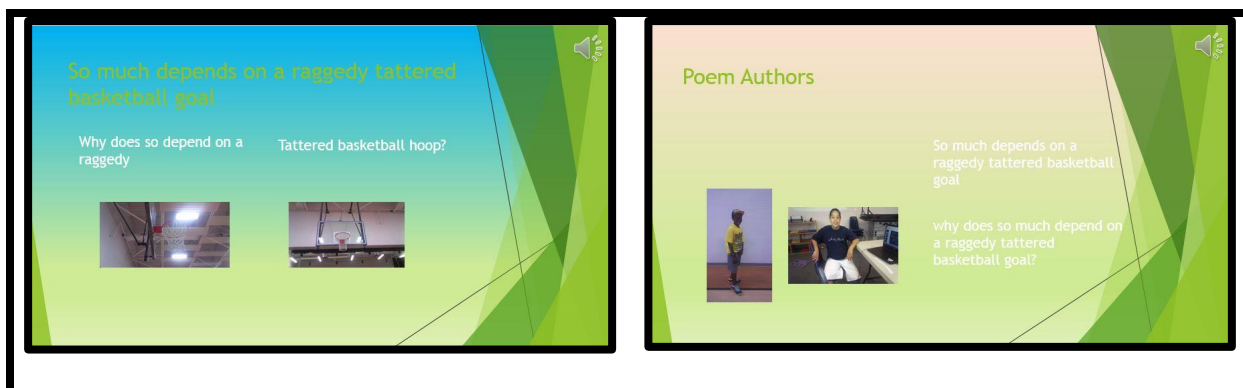
In the above discussion, which took place immediately after Eric added the first image and a title without consulting Davonte, Davonte expressed a desire to include more images from the preceding photo shoot. In Lines 1 and 3, he asked: “How do we get more...more of the pictures?” “More of the pictures.” Eric was initially resistant to the idea, arguing that adding more slides to their poem would stray from the teacher-created model: “[But] the one Ms. J did only has one page” (Line 6). In response, Davonte suggested that they could ask for my help—and possibly my permission—and even turned in his chair to search for me. Eric continued to

resist, arguing that they could simply add extra pictures to a single PowerPoint slide. It was only after Davonte offered a justification—“It looks boring. One isn’t enough. We can make it better with more pictures”—that Eric admitted that he didn’t know how to add extra slides. Then, Davonte finally completed his request for help.

After I assisted the students in adding more PowerPoint slides—and provided “official” approval to increase the number of slides—Eric and Davonte worked together to select the images for their poem. For example, after he placed the frontal view of the basketball hoop on the second slide (see Figure 26 for screenshots from their final project), Eric then asked for Davonte’s input on the second picture: “Which one do you want to put on that side?” Davonte selected another view from below the basketball hoop which was almost indistinguishable from the version on the first slide (see Figure 26). As he chose that particular image, he agreed with Eric’s earlier assessment (Line 12 in above transcript) that the view from beneath the hoop was the “best one.” The final slide, which features pictures of the two boys under the title “Poem Authors” also represented a collaborative decision. After Eric added another PowerPoint slide and the pair briefly discussed what to include, Davonte said, “And like, on the last page we could have us, the authors.” Eric quickly indicated his assent and added the title to the final slide.

Figure 26. Screenshots from Davonte and Eric’s *So Much Depends Poem*

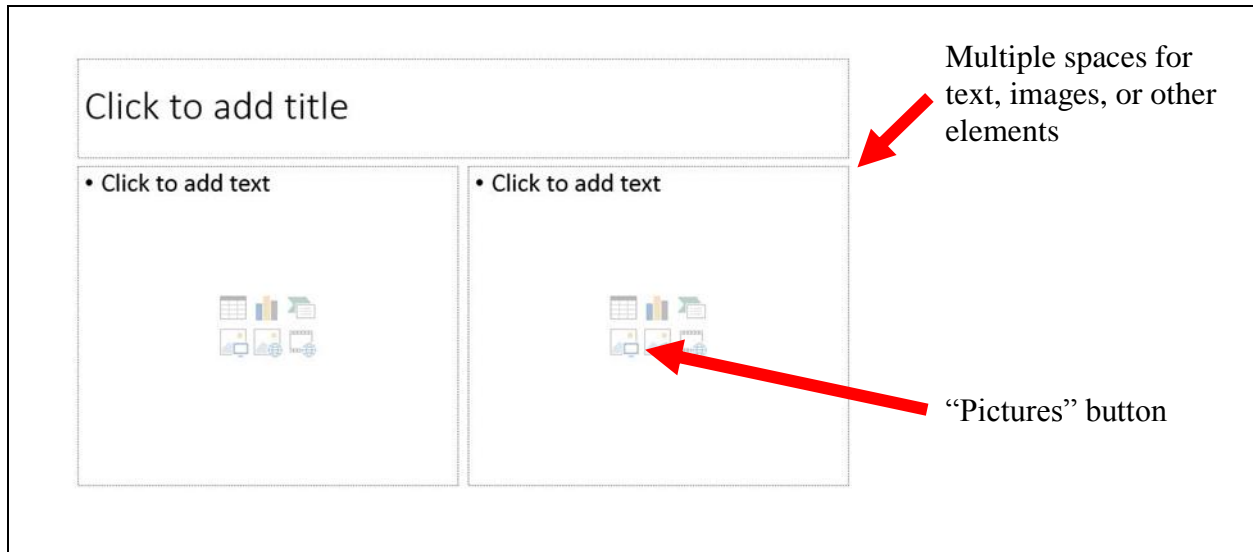




However, while the moment of creative tension between Eric and Davonte did influence the structure of their poem, there were other factors involved in their use of multiple slides and images. Specifically, teacher intervention, the specific affordances of the composing program, PowerPoint, and students' prior experiences with the composing tool all contributed to the appearance of their poem. First, when Davonte asked for my help, I assumed that Davonte and Eric wanted to add extra slides rather than adding extra images to the same slide; thus, I tailored my response and assistance towards that goal. Next, while it is possible to add additional photographs to a PowerPoint page using the "insert image" function or copy and paste, the blank slides the boys added to their composition included two dedicated spaces which included buttons to insert objects (i.e., images, video, or text). Finally, in a previous session, students had learned to upload images by clicking on the "pictures" button within those dedicated spaces (see Figure 27 for a screenshot of the blank PowerPoint page). While students eventually learned how to add numerous images using the "insert image" function and copy and paste, we hadn't yet covered how to use that tool, so it was only natural for Eric and Davonte to add elements to their poem through the dedicated buttons that they had used during the composition of their *Family Poems*.



Figure 27. Blank PowerPoint slide with “pictures” button and multiple spaces for text, images, or other elements

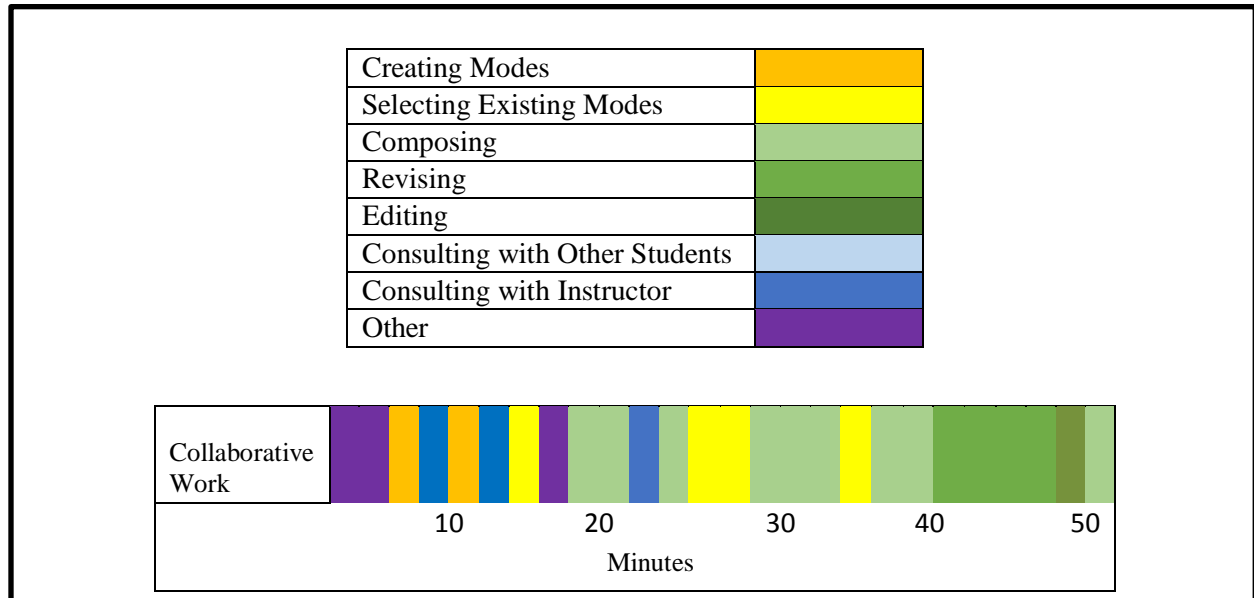


Of all of the *So Much Depends Poems*, Eric and Davonte’s was the only final product to feature multiple slides and numerous images; the other students, confined by the teacher-created model and the number and types of photographs they had taken, kept their work to one slide only. When Davonte and Eric presented their work to the class, the other students were noticeably impressed by their poem: “I didn’t know we could have more than one,” Tiana commented. Or, as Gabriel said, “I want to add more stuff to mine!” The fact that Eric and Davonte extended their poem to three additional slides allowed them to include additional images, such as the photographs of themselves. Further, they were able to emphasize certain elements of the poem through repetition of certain words and ideas, as they did with the description of the hoop as “raggedy” and “tattered.” The addition of extra slides also allowed for experimentation with background types, font colors, and multiple music clips. Both students were ultimately pleased with the structure; during the presentation, Davonte even remarked on the number of slides in the poem: “It shows all the different parts of it (the hoop). If it was shorter, you couldn’t see all of the pictures.”

## **Collaborative Composing Pathway**

For their *So Much Depends Poem*, Eric and Davonte's collaborative composing pathway, which I define as their entry into the composing process and the strategies that they used to compose, edit, and revise their work, was very similar to Eric's composing pathway for his individually-produced projects. In a process much like Eric's entry into composing, Eric and Davonte's first step—after determining the subject of their poem, taking photographs, and uploading these photographs—involved the creation of a rough draft of the entire composition. After they decided to add more slides in order to increase the number of photographs in the poem, they composed each slide in sequential order. Then, they went back to revise individual elements of their work, such as the background color of their PowerPoint, font colors, the selection and position of images, music clips, and the poem's text. See Figure 28 for a visual representation of their collaborative composing pathway, which includes the following categories: creating modes, selecting existing modes, composing, editing, revising, consulting with other students, consulting with the instructor, and other.

Figure 28. Eric and Davonte’s composing pathway for their *So Much Depends Poem*



For this particular project, Eric and Davonte’s composing pathway proceeded in a linear fashion; after the moment of creative tension in which the boys determined the structure of the poem, they chose images and inserted them on each of the first three slides, added text to each slide in order of appearance, changed the background format, changed the background and text colors, and finally added music to individual slides. The one major difference between Eric and Davonte’s collaborative composing pathway and Eric’s individual pathway was in the order of modes that they placed. Instead of adding the text first, then adding images, the pair imported all of their images to the first three slides, then returned to add the other modes, including text, to their poem.

As I analyzed the video data to analyze the development of this particular composing pathway, two interactional patterns emerged. First, the fact that Eric arrived at the computer first, and his resulting position directly in front of the keyboard, gave him more control in determining their entry into the composing process. By the time Davonte was ready to begin composing, Eric

had already added the title and images for the first slide, his typical first step in composing a rough draft. Next, the fact that each student's contributions to the product primarily focused on individual modes (Eric wrote the text, Davonte selected images), also shaped the strategies that they used to compose, revise, and edit their work. As I discuss in the following sections, these interactional patterns suggest that composing pathways are influenced by the physical properties of digital tools and the ways in which students take on specific roles in the collaborative composing process.

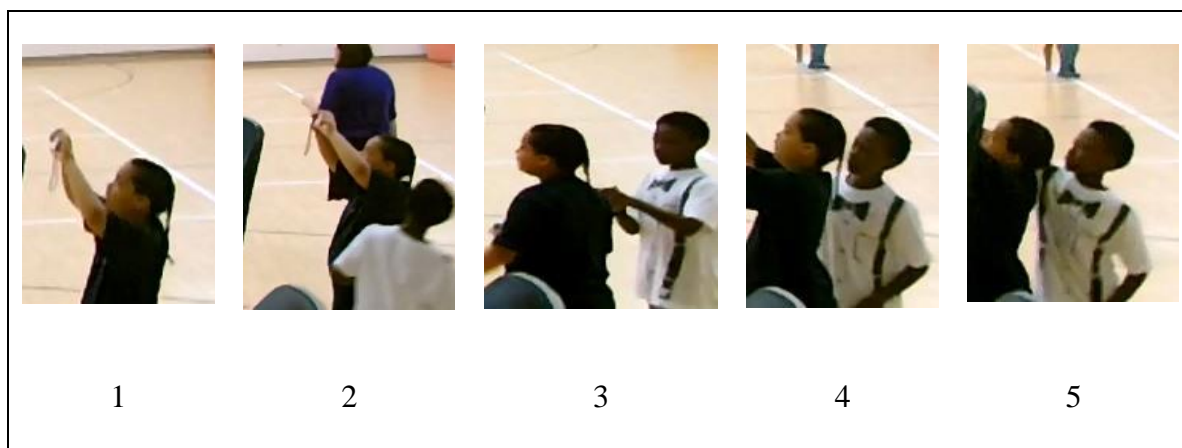
### **Students' Individual Roles Within the Collaborative Composing Process**

As illustrated in Chapter 4, before collaborating on the *So Much Depends Poem*, both Davonte and Eric had already established their respective composing identities, or sets of modal preferences and ways of deploying semiotic resources. These identities connected to their roles within the workshop setting; in documenting the environs of the Westlake Center and photographing his fellow students, Davonte often played the part of the class photographer. Eric, on the other hand, had previously established a modal preference for text, which was in alignment with his identity as a good student and his characterization of the multimodal composing process as being "like writing." As Eric and Davonte composed their *So Much Depends Poem*, their individual contributions to the product were connected to their respective composing identities. While Davonte determined the selection and placement of images, Eric shaped the content and format of the poem's text. I term this form of collaboration *modally determined composing*—Eric and Davonte's individual contributions came in the form of a specific mode or modes.

**Davonte: Framing, selecting, and shooting the basketball hoop.** After Davonte agreed to switch subjects from the blue mats to the basketball hoop, he paused briefly to ask me a

clarifying question about the types of photographs he needed to take to fulfill the requirements for the poem. After I suggested that the goal of the project was to highlight the ways in which “so much depended” on a single object, rather than multiple objects, he nodded in understanding and then approached the basketball hoop from the right side. Then, he began to experiment with different vantage points, holding the camera in different positions to capture various angles. After taking a few pictures from the right side, he moved to the left-hand side of the hoop and began the process of framing photographs from the new angle. During the initial stages of the shoot, in which Davonte approached the hoop and photographed it from the right side, Eric stood near the free throw line and watched Davonte without attempting to intervene. However, after Davonte moved to the left side of the hoop, Eric began to circle him—and the camera (see Figure 29 for photographs of Eric’s attempt to gain physical possession of the camera). Then, as Davonte looked up at the hoop (Image 2 in Figure 29), Eric tried to grasp the camera within his own hand.

*Figure 29.* Davonte maintains possession of the camera during the “Basketball Hoop” shoot



This interaction was entirely nonverbal; after offering the camera to Eric so that he could see the photographs—but maintaining physical possession of the device (Image 3)—Davonte

pulled it back into his body and began shooting additional photographs from the left-hand side of the hoop. When Eric reached up again to take the camera (Image 5), Davonte ignored the attempt. Then, when Davonte pushed away and moved underneath the hoop, Eric even followed Davonte, albeit at a slight distance. After Davonte took a shot from underneath the basketball hoop at a slight angle (see Figure 30, Image 3), he offered the camera to Eric so he could see the picture. Eric took the camera, looked at the picture, and indicated his approval of Davonte's selection of angles and photographic technique: "Aw, that's the best one." Davonte grinned and said, "Thanks." With the selection of that particular angle, which was very similar to the types of abstract shots that Eric preferred to take during individual photo shoots (see Figure 10 in Chapter 4 for examples of each student's photographs for the *All About Me* project), Davonte seemed to have gained Eric's trust in selecting and photographing subjects. As Davonte moved to take additional pictures (see Figure 30 for sample images of the basketball hoop), Eric stayed behind, allowing Davonte to take the rest of the pictures without additional interference.

Figure 30. Davonte's photographs of the basketball hoop



The selection of the basketball hoop as subject and the subsequent photo shoot represents a series of collaborative decisions regarding the photographic subject—Davonte proposed the blue mats; Eric challenged him and proposed using the basketball hoop; after hearing Eric's justification, Davonte acceded, but took ownership over the chosen subject by selecting the angles and positions while photographing the basketball hoop. Although Davonte acceded to

Eric's idea of photographing the basketball hoop, his photographs, taken from numerous angles and positions, helped to determine the format of the poem.

**Eric: Writing the text.** While Davonte was an active participant in the composition of the poem during other stages, such as the design of the overall structure and the selection of images for use in the final product, he allowed Eric to take the lead in writing the text. Although Davonte was attentive, keeping his eyes focused on the computer screen and only leaving his seat to talk to another student in one instance, the final content represents Eric's ideas only. In fact, during the initial four minute, twenty-two second period that Eric spent composing the text for all four slides, Davonte only verbally interrupted him twice, once to praise his work—"I like that"—and once to ask a question: "What does that (pointing to the word *tattered*) mean?" At no point does he question Eric's authority in determining the content of the text.

In fact, Davonte's main contribution to the text involved the placement of the words on the first PowerPoint slide. After adding text to each slide ("So much depends upon a raggedy tattered basketball hoop/Why does so much depend on a raggedy tattered basketball hoop?"), Eric returned to the first slide and paused, hesitating and moving the cursor over the words, which extended beyond the reach of the page. Davonte leaned forward in his chair and pointed to the top of the screen: "Just make it smaller," he said. "It'll fit then." Eric looked puzzled and his hand hesitated as it hovered over the mouse. Davonte, sensing an opportunity to return to a more active composing role, quickly got out of his seat and seized possession of the mouse. Clicking on the text size button at the top of the screen, he made it smaller once, then twice. "See? Like that," he said, then returning the mouse to Eric's control.

The roles that both boys had established in other facets of the workshop—Davonte as the group photographer; Eric as a good student—and their modal preferences—Davonte's propensity



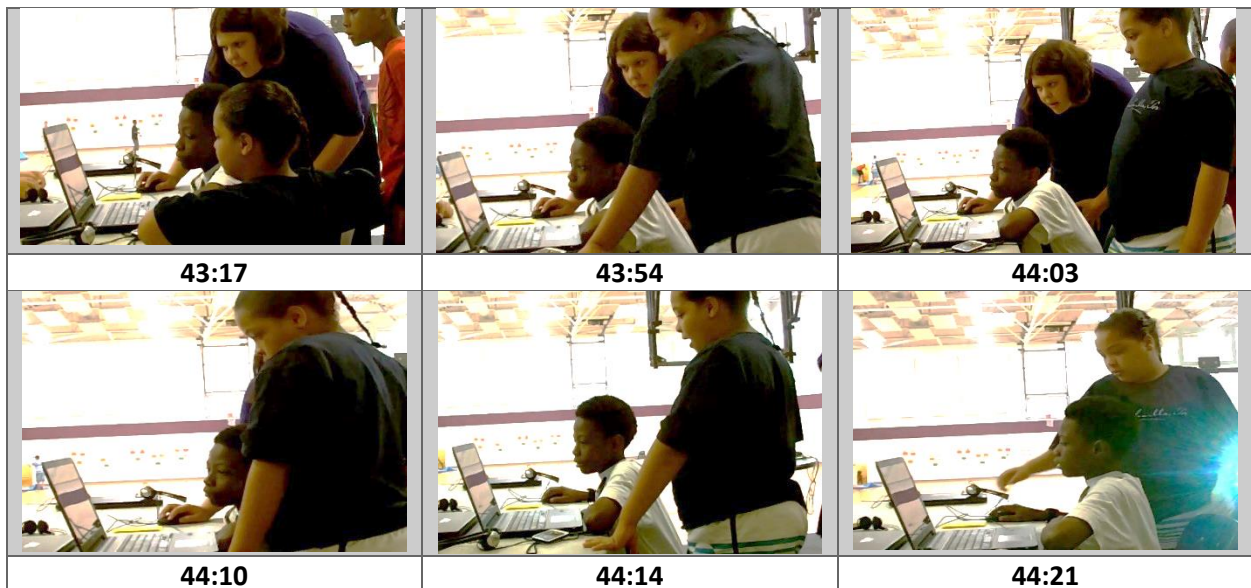
to include many visuals, and in particular, his own photographs, and Eric's tendency to include large portions of text—carried over to their first collaborative composition. While Davonte took ownership over selecting the angles and photographs, Eric largely determined the form and content of the poem's text. Therefore, the roles that Eric and Davonte took on within the collaborative composing process for the *So Much Depends Poem* were *modally determined*; each student shaped the form and content for his chosen mode with little interference from the other student.

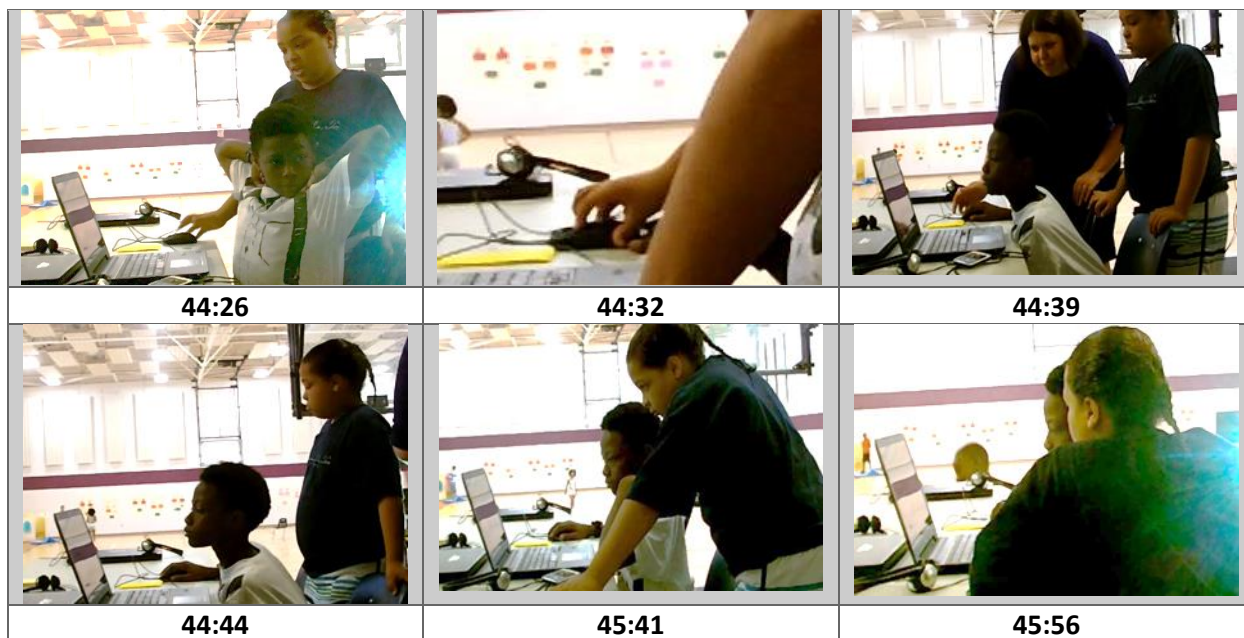
### **Obstacles to Collaborative Composing**

Davonte and Eric's composing process for the *So Much Depends Poem* had been marked by an early moment of creative tension. Ultimately, they came to a joint decision in terms of the poetic/photographic subject; while Davonte had originally wanted to use the gym mats, Eric provided a compelling rationale for using the basketball hoop instead. Although there was some additional tension over the physical possession of the camera (Eric reached for it, Davonte maintained possession), it was quickly resolved as Eric acquiesced to Davonte's desire to shoot the photographs for their collaborative work. These moments of creative tension contributed to their sense of shared ownership over the composition and led to the students' provision of justifications for their choices in their presentation of the final product. However, as the pair moved from the space of the gym to the computer area, they were limited by the fact that many of the tools involved in the composing of a PowerPoint, such as a computer and a mouse, are designed for individual, rather than collaborative, composing. In the following example, I illustrate how the specific constraints of digital tools limited the potential for collaborative composing.

When Eric and Davonte returned from the photo shoot, Eric proceeded to the computer area. After positioning his chair so that he was seated directly in front of the screen, Eric took the mouse and began to click on various open folders and tabs. Although he was able to open the PowerPoint window, he needed help accessing the teacher-created model, so he called out to me for help: “How do I get on here?” Davonte, who was standing on the periphery of the stage and perusing his photographs using the preview function on the student camera, was about thirty seconds behind Eric in approaching the computers. So, before beginning the composing process, Eric had already established his physical position directly in front of the computer screen. Davonte, on the other hand, spent the next two minutes sitting, standing, kneeling, pushing back, and hovering over the mouse, all in an effort to establish his own position (see Figure 31 for photographs documenting the progression of Davonte’s movement as he searches for a seat at the computer).

*Figure 31.* Searching for a seat: Davonte’s movement around the computer





As I assisted the boys in uploading their photographs from the student camera, Davonte first looked around for a chair, and then, because he was unable to find one, he kneeled beside the computer to get a closer look at the screen (43:17). After I left their computer area to help another student, Davonte was the first to realize that the photos were not in the specific folder. As he pushed back from the computer (44:14), he said, “Oh, they’re not in there.” As Eric leaned back, stretching and looking for me in order to get assistance (44:26), Davonte took his first opportunity to seize temporary control of the mouse. However, Davonte’s standing position put him at a disadvantage; as I approached the computer, Eric took the opportunity to slide his hand under Davonte’s (44:32) to regain control of the mouse.

After his position at the mouse had been supplanted first by Eric and then by me (44:39), Davonte disengaged from the tool. For almost a minute, he stared off into the gym (44:44) and watched Gabriel, who was working on his own poem. After Eric let out a frustrated noise and sat straight up in his chair (45:41), Davonte leaned over the desk, reentered the composing space, and finally found a more permanent position on the left-hand side of the computer (45:46).

However, he was again at a disadvantage in terms of access to the digital tools; while Eric directly faced the computer screen and maintained physical control of the mouse, Davonte was positioned at a 45-degree angle, with one arm resting on the desk and one arm resting on the back of Eric's chair. The seating position, which was established in the first moments of their joint composing process, also influenced their seating arrangement throughout the workshop. Whenever the two boys composed using computers, the majority of time was spent in the same position, with Eric sitting directly in front of the screen and Davonte sitting off to the left-hand side (for an example, see Figure 24 for an image of this seating arrangement).

In this case, the physical limitations of digital tools presented significant barriers to collaborative composing. In fact, most objects used in the collaborative composing process, such as the student cameras, computers, headphones, and mice, were designed for a single user. From the very first collaborative composing session, Eric established his position in front of the screen, taking control of the physical accoutrements of composing, a pattern that continued throughout the collaborative composing of other projects. As a result, Davonte experienced frustration and even disengaged from the tool and the project. Further, Davonte's later reflections on his concerns about collaborative composing often related directly to the limitations of digital tools, such as when he said, "I want *my own* computer. I do *more*."

### **"As Cool as a Popsicle/As Fly As a Hawk": *Simile and Metaphor Poem***

Students created their *Simile and Metaphor Poems* during the fourth week of the workshop, just as we were nearing the end of our class reading of *Love That Dog*. By this point, we had discussed, identified, and used several poetic devices, such as imagery, form, rhythm, onomatopoeia, and rhyme. As a teacher, one of the major challenges I faced in this stage of the workshop was the variance in students' knowledge of poetic devices and their skills in textual

analysis. For example, while many students had not yet learned how to identify a poem's rhyme scheme, others, like Eric, were already experimenting with using multiple (and sometimes conflicting) forms of imagery and rhythm within in their own poetry. Specifically, given the fact that many students had struggled with understanding the term metaphor during the previous week, I included several instructional scaffolds aimed at supporting students in writing their own *Simile and Metaphor Poems*, including videos, independent and group practice, sample similes and metaphors, and extensive class discussion.

Both Eric and Davonte were active participants in the class discussion and group practice activities involving similes and metaphors. While both students were able to identify similes and metaphors in poems and in our main text, *Love That Dog*, writing their own similes and metaphors was somewhat of a challenge. Davonte especially struggled with the task, saying, "This is boring," and "I don't know," repeatedly. However, after creating numerous examples with support from me and from other students, the boys were able to come up with differing similes for football; Eric argued that "Football is a battle. A war," to which Davonte responded, "No. Chess! It's like chess." Further, Eric demonstrated an understanding of one underlying purpose of the use of literacy/poetic devices; when prompted to explain the role of metaphors in composition, he said, "To put emphasis on one thing so that people can understand you more."

In terms of the multimodal composing scaffolds for the *Simile and Metaphor Poem*, students had more creative license and freedom than in previous composing projects, such as the *So Much Depends Poem*. By this point in the workshop, students who were present for all sessions had composed seven final multimodal projects, responded to literature and other students' poems in physical and digital formats, and had begun to establish proficiency using numerous tools, such as MovieMaker, PowerPoint, Microsoft Paint, and VoiceThread. So, for

the *Simile and Metaphor Poem*, I did not provide a teacher-created model. Instead, I gave students very general instructions as to what their poems should contain (e.g., two similes and one metaphor). Figure 32 contains the PowerPoint slide presented to students. I also verbally indicated that they could include three similes instead of the two similes and one metaphor.

Figure 32. *Simile and Metaphor Poem* task



The slide is titled "Similes and Metaphors" and contains three numbered instructions:

1. Create at least two similes and one metaphor
2. Remember, you want to compare two things that are unlike...
3. Feel free to add additional lines that aren't similes or metaphors.

To the right of the text is a cartoon illustration of a brown dog's head. The dog has a yellow sock on its head, a red nose, and a blue tongue. The text "My Dog is" is written above the dog's head, "as Smelly" is written in the middle, and "as Dirty Socks" is written below. At the bottom of the illustration, it says "AND OTHER FUNNY FAMILIAR PORTRAITS BY HANCOCK PIVEN".

However, because students were still relatively inexperienced with searching for and downloading pictures from online sites, I did provide a file folder with almost one hundred pre-selected images. I chose the images based on what I had learned about students and the types of information they had included in their previously created multimodal compositions, such as the *All About Me* project. I also included images that students had downloaded for previous projects, in case they wanted to use the same images again or to borrow images that they had seen in other students' work. So, students could choose to use the pre-selected images, any photographs they or other students had taken with student cameras, or they could download their own pictures from the Internet. As in other projects, they could choose to work individually or collaboratively.

In previous workshop sessions, Eric and Davonte had continued the partnership that they started with the *So Much Depends Poem* by working together to create a *Rhythm Poem* and a *Form Poem*. Unlike in previous projects, there was no negotiation as to whether they would be working individually or collaboratively for the *Simile and Metaphor Poem*. Davonte was especially eager to finish the reading and discussion activities and to begin working on the poem: “Finally,” he said, with a big sigh, sitting down next to Eric on the left-hand side of the computer. Then, without hesitation, Eric opened the folder of pre-selected images and the boys began to determine the subject of their poem.

In order to understand patterns in Eric and Davonte’s partnership across projects and moments in time, I describe their collaborative composing process for the *Simile and Metaphor Poem*, focusing on moments of creative tension, their collaborative composing pathway, students’ individual roles within the collaborative process, and the obstacles that they faced to collaborative composing. As illustrated in the following sections, although there were a number of similarities to their composing process for the *So Much Depends Poem* (i.e., digital tools continued to limit their ability to co-construct meaning, moments of creative tension led to improvements in their final product), there were also distinct differences in their composing pathway, the roles each student inhabited, and the obstacles to collaborative composing.

### **Moments of Creative Tension**

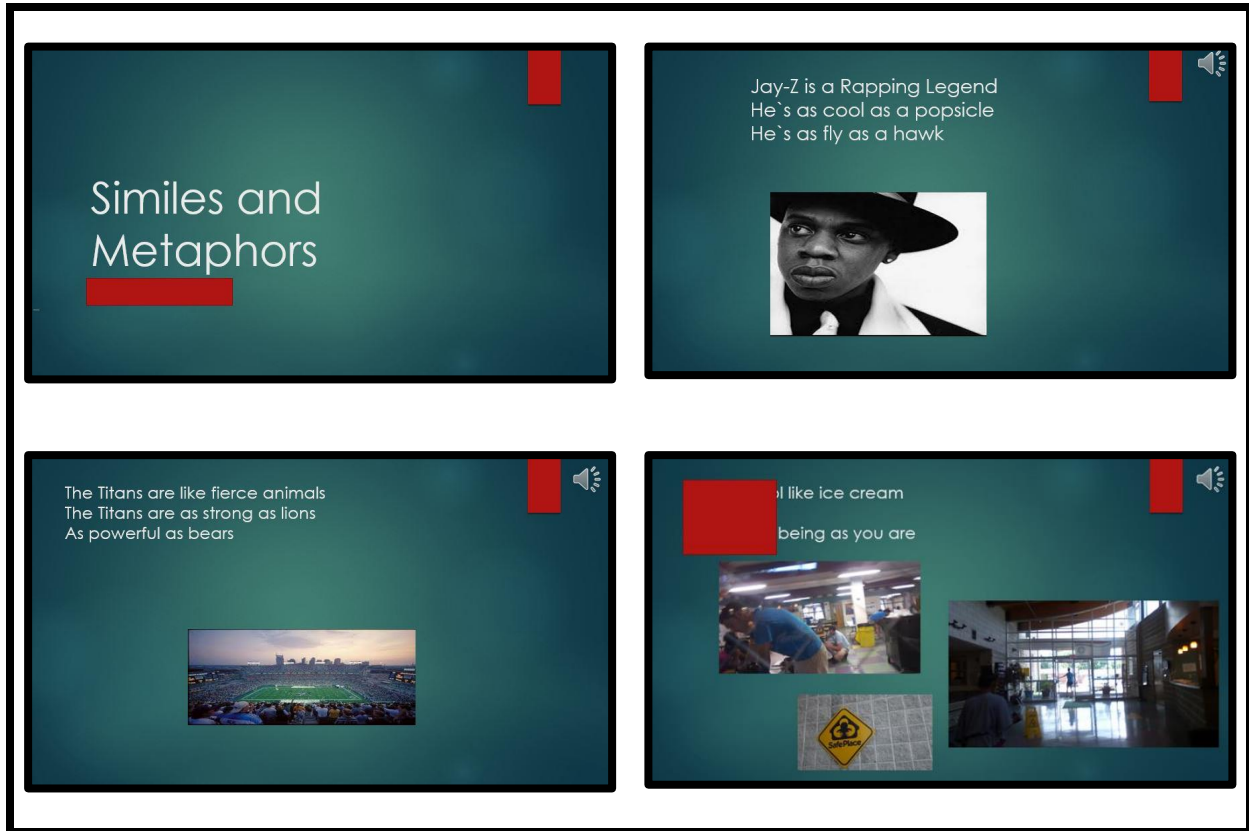
As was the case for the *So Much Depends Poem*, moments of creative tension during Eric and Davonte’s collaborative composing of their *Simile and Metaphor Poem* sparked the generation and negotiation of ideas. As the two boys grew more comfortable with their partnership and with navigating the features of various digital tools, the moments of creative tension became more frequent; both Eric and Davonte grew more willing to question each

other's decisions and to negotiate elements of their collaboratively-created work. While there were only two moments during the composing of the *So Much Depends Poem* that I characterized as moments of creative tension, there were eight during the composing of their *Simile and Metaphor Poem*.

In this section, I focus on multiple moments of creative tension within the composing process: (1) the writing of the text for the slide which included similes comparing Jay-Z to a popsicle and a hawk, and (2) the selection of the subject, the downloading of images, and the recording of the sound effect for the slide about the Tennessee Titans (see Figure 33 for screenshots from the four slides that comprised their *Simile and Metaphor Poem*). In the first moment of creative tension, which occurred as they composed the Jay-Z slide, Eric had begun to implement his ideas (i.e., typing text and importing a picture) when Davonte identified a potential problem and questioned Eric's use of simile. After listening to Davonte's concerns and editing the composition based on his suggestions, Eric asked for Davonte's input on another aspect of the poem, Davonte offered a new idea, and the boys proceeded to collaboratively compose the slide's text. In the case of the slide focusing on the Tennessee Titans, after collaboratively determining the poem's subject, Davonte selected an image of a baseball stadium, Eric questioned that decision, and they chose to expand their set of semiotic resources by searching for a downloadable image that directly corresponded to the poem's subject. In both instances, moments of creative tension led to (1) a more collaborative effort, in which both students contributed, questioned, and negotiated ideas, and (2) an improved final product which incorporated more specific, detailed, and fully executed ideas.



Figure 33. Screenshots from Eric and Davonte’s *Simile and Metaphor Poem*



“As cool as...a popsicle/As fly as a...hawk.” After Eric had chosen Jay-Z as the subject for the first slide of their poem (and consequently ignored Davonte’s suggestion to include Beyoncé, as discussed in the *Obstacles to Collaborative Composing* section of this chapter), Eric added a photograph from the folder of pre-selected images to the second PowerPoint slide. Then, after reviewing several different choices, Eric selected one of the backgrounds from the PowerPoint program and began typing the simile and metaphor text. Davonte, who had disengaged from the composing task after his suggestion of Beyoncé had been ignored, had begun talking to another student, Gabriel, about a piece of music that Gabriel was planning to use in his poem. However, Davonte rejoined the task when he glanced at the computer screen and saw Eric adding text—“Jay-Z is a Rapping Legend/Jay-Z is like Lil’ Wayne.”

- 1) Davonte: (leaning forward in chair) That's not Lil' Wayne.
- 2) Eric: I said it's (emphasizing and enunciating) **like** Lil' Wayne.
- 3) Davonte: Ohhhh.  
(Eric starts to type the beginning of the next line: "As..." while Davonte points to the computer).
- 4) Davonte: What's like Lil' Wayne?
- 5) Eric: (Stops typing, moves cursor over first part of poem, and finally shakes his head)  
Dunno.  
**(6s pause)**
- 6) Davonte: Jay-Z?
- 7) Eric: Yeah.
- 8) Davonte: How...they different? They rap. A simile is different stuff, right?
- 9) Eric: (erases text) Yeah.  
**(11s pause)**
- 10) Eric: As cool as...(turns to Davonte)  
**(3s pause)**
- 11) Davonte: A popsicle!
- Eric: (leans his head back and laughs, then hunches over the computer and adds Davonte's response: a popsicle)
- Davonte: (leans into computer)
- 12) Eric: That's good. (taps with keys and pulls off hand with a flourish)
- 13) Davonte: (leans forward in his chair, then stands up, leaning over the computer. Seeing me across the table, he calls me over, cupping his hand and directing it towards the computer)  
Come...come here.
- 14) Robin: (Holds hand up; talking to other students): What's so special about football? Um, what's something different to compare it to? Remember, two similes and one metaphor."  
**(9s pause)**  
(moves around to get a view of Eric and Davonte's screen)
- 15) Davonte: (beginning to speak before Robin arrives at the computer) Look. Look. Look. He said, As cool as a popsicle.
- 16) Robin: I love it. I love it. That's awesome.
- 17) Davonte: (grinning). Yeah, I said, As cool as a popsicle.

As Davonte turned back to the computer, his view of the screen was partially obstructed, which may have led him to misunderstand Eric's comparison and to assume that Eric had incorrectly identified Jay-Z as Lil' Wayne: "That's not Lil' Wayne" (Line 1). However, after Eric defended his choice, "I said it's **like** Lil' Wayne" (Line 2)—Davonte correctly challenged Eric's use of simile and offered his own definition of simile in the form of a question (Line 8):

“A simile is different stuff, right?” After Eric realized that Davonte had made a valid point, he erased the text that he had added to the slide and replaced it with the stem for the first simile. Then, he prompted Davonte for his input as he said, “As cool as . . .,” paused, and looked towards Davonte, who chimed in right away with his idea of “A popsicle!” Eric indicated immediate approval of the idea when he typed in Davonte’s response, said “That’s good,” leaned back in his chair, and laughed.


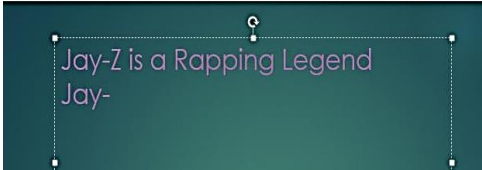





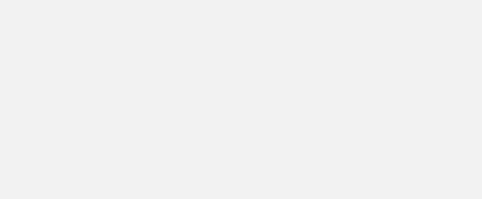
Davonte, who had previously disengaged from the composing activity after his idea to use Beyoncé as a subject was dismissed by Eric, had an immediate (and powerful) response to the use of his idea in the poem’s text. He indicated his excitement—in response to Eric’s laughter and praise—by leaning in to the computer, then rising from his chair, and finally bouncing up and down as he attempted to capture my attention. When I came to examine their work, he was so eager to present it to me that he didn’t even wait until I had reached the computer before beginning to describe the poem. As he narrated the content of the slide to me, he first recognized Eric’s contribution to the composition of the text, saying to me, “Look. Look. Look. *He* said, ‘As cool as a popsicle.’” However, Davonte then quickly revised the statement to reflect his own contribution: “Yeah, *I* said, as cool as a popsicle.”

The next line, “As fly as a hawk,” also represents a moment of collaborative composing. As with the first simile, Eric provided the stem: “He’s as fly as . . .” but then he paused to allow for Davonte’s input. Davonte leaned into the computer and repeated the first two lines: “Jay-Z is a Rapping Legend/He’s as cool as a popsicle/As fly as . . .” After Davonte completed his recitation, Eric offered a suggestion: “A bird. As fly as a bird.” Without hesitating, Eric began to type “bird,” but Davonte interrupted him by providing a more specific response: “No. A hawk. As fly as a hawk. It’s better. Hawks are better, cooler than just birds.” Eric paused, hovered the

cursor over his word, “bird,” erased it, and then added the word “hawk” instead. “Yeah, it’s better,” he agreed.

As discussed in the following section, *Collaborative Composing Pathway*, the composition of the slide about Jay-Z also represents a major departure from Davonte and Eric’s collaborative composing pathway for the *So Much Depends Poem* (and thus, also from Eric’s individual composing pathways). For other projects, such as the *Westlake Poem*, Eric wrote a complete first draft before returning to revise. In addition, when adding elements, Eric usually stuck to his initial ideas, rarely erasing and revising pieces on the screen until his second cycle of revising and editing. However, in this case, Davonte’s contributions and the subsequent production of justifications for the need to revise and rethink elements of the text (“How are they [Jay-Z and Lil’ Wayne] different? They rap. A simile is different stuff, right?”) led to the recursive revision of text. Figure 34 shows the progression of Slide 2 across different moments in time: (1) after Eric added his original text; (2) as Davonte made justified suggestions for change; (3) as Eric provided the stem and (4) as Davonte offered his suggestion for a new comparison; and (5) as the boys collaboratively composed the final simile, with Eric providing the stem, (6) adding his first word, “bird,” and then (7) erasing to include Davonte’s more specific suggestion.

Figure 34. Progression of Slide 2 across different moments in time

 <p style="text-align: center;"><b>59:12</b></p>	 <p style="text-align: center;"><b>59:33</b></p>
 <p style="text-align: center;"><b>59:42</b></p>	 <p style="text-align: center;"><b>59:59</b></p>
 <p style="text-align: center;"><b>1:00:37</b></p>	 <p style="text-align: center;"><b>1:00:45</b></p>
 <p style="text-align: center;"><b>1:00:56</b></p>	

“That’s a baseball stadium.” Although I had only tasked students with creating one slide containing an image and at least two similes and one metaphor (or three similes), Eric

looked up at me after finishing the Jay-Z slide and asked, “Can we add more?” I responded with a quick, “Of course,” and then he and Davonte reopened the folder of pre-selected images. As they clicked through the images of sports stars, such as Michael Jordan and Richard Sherman, Davonte made a suggestion: “We should do one with football.” That choice of subject was most likely influenced by one or more contextual factors—first, both students had previously offered sample football similes during the preceding class discussion—Eric suggested “a battle. A war,” while Davonte had argued, “No. Chess. It’s like chess.” In addition, right before the boys began composing their third slide, when Davonte had attempted to capture my attention so that I could come see their work on Jay-Z, both students watched me as I spoke to another group, who had also chosen football as their subject. I had even prompted the other students by asking, “What’s special about football? What’s something different to compare it to? Remember, two similes and one metaphor.”

There was a long pause of approximately ten seconds before Eric responded to Davonte’s suggestion of “football.” As Eric looked at the screen, he said, “No, everybody’s doing football. Let’s do the Titans. Yeah?” So, Eric justified his alteration of the original idea, specified a football team, and then checked for Davonte’s agreement. When Davonte nodded in response, the pair began to search for appropriate images within the folder of pre-selected images: “Like one with all the guys,” Davonte suggested. However, while the folder of pre-selected images contained numerous photographs of individual football stars, I failed to include any pictures of the Titans players. I did, however, include two images of football stadiums: (1) the Coliseum in Oakland, California, in which both baseball and football are played, and (2) the Titans stadium, although it was placed in the Nashville sub-folder, instead of the sports sub-folder. When Eric

clicked through various images in their initial search, Davonte was the first to spot the image of the Coliseum:

- 1) Davonte: That one. Stop. (points to screen)
- 2) Eric: What?
- 3) Davonte: There. (points to computer screen). In black.
- 4) Eric: (squints and looks at computer). That's a baseball stadium.
- 5) Davonte: It looks like [football].
- 6) Eric: [No]. (Eric leans in and squints at the computer screen. 5-second pause)  
I...I don't think so. See? There's a diamond. Like the place where baseball is. Right?
- 7) Davonte: (Looks closely at screen). Oh. Um. Yeah.
- 8) Eric: That's not where the Titans play and we're doing the Titans.
- 9) Davonte: Oh. (looks at screen) (inaudible) there more?
- 10) Eric: Yeah. (He clicks through various photographs, ostensibly searching for either a picture of the Titans or of a football stadium.)
- 11) Davonte: Stop. [There!] (touches computer screen with index finger)
- 12) Eric: [What?]
- 13) Davonte: The Titans play there. (pointing to picture of Titans stadium) That one.
- 14) Eric: Really?
- 15) Davonte: Yeah. Let's do that one.

So, although Davonte had in fact found a picture of a football stadium (albeit one in which baseball is played as well), Eric questioned him, stating, "That's a baseball stadium" (Line 4). Davonte then argued for his choice by pointing out the picture had characteristics that were similar to a football field, but Eric continued to push by specifying features of the image, such as a dirt-colored baseball diamond. When Davonte indicated a hesitant agreement—"Oh. Um. Yeah" (Line 7)—Eric offered another justification, this one related to the need to match the image more closely to the poem's subject—"That's not where the Titans play and we're doing the Titans" (Line 8). Finally, both students agreed to continue searching through the folder, and they eventually found the image of the Titans stadium, which they decide to use in their final composition. So, while both students were technically correct about Davonte's initial choice of the Oakland Coliseum (it is both a football and a baseball stadium), Eric's insistence on finding a

different image led the pair to choose a picture that more closely matched their poem's chosen subject.

The choice to include a sound recording of Davonte roaring like a lion was also a collaborative decision that emerged from a moment of creative tension. After Eric wrote down the line, "The Titans are as strong as lions," Davonte suggested "making" a sound effect that matched the text.

- 1) Davonte: Right there. (points to computer). We could have like, a roar. For the lions.
- 2) Eric: There's no roar in here. (inaudible) pick some music instead.
- 3) Davonte: (pause) Um. Or, um, we could make one.
- 4) Eric: How?
- 5) Davonte: I don't know. We can ask? Miss J?

Davonte then asked for my help in using the recording feature within PowerPoint. After one take, in which Davonte roared into the computer's microphone, Eric stated that it wasn't loud enough. In response, Davonte asked to listen to the clip, and after hearing a somewhat hesitant roar, he agreed with Eric's assertion. They were eventually able to capture the final audio after two additional recordings.

So, Eric and Davonte's composing process for the Tennessee Titans slide involved a series of collaborative decisions and multiple moments of creative tension—first, Eric suggested a more specific subject, but drew upon Davonte's idea of football; then, Davonte selected an image of a stadium, but Eric challenged his choice, forcing the students to continue searching for a picture of the Titans stadium, in order to make the visual representation "the same" as the subject of the poem; and finally, the pair collaboratively recorded and rerecorded the sound of Davonte roaring "like a lion" to make the sound effect more authentic. As was the case with other moments of creative tension, which occurred across their collaboratively-created projects, there were instances in which each student seemed uncomfortable criticizing the other's ideas.

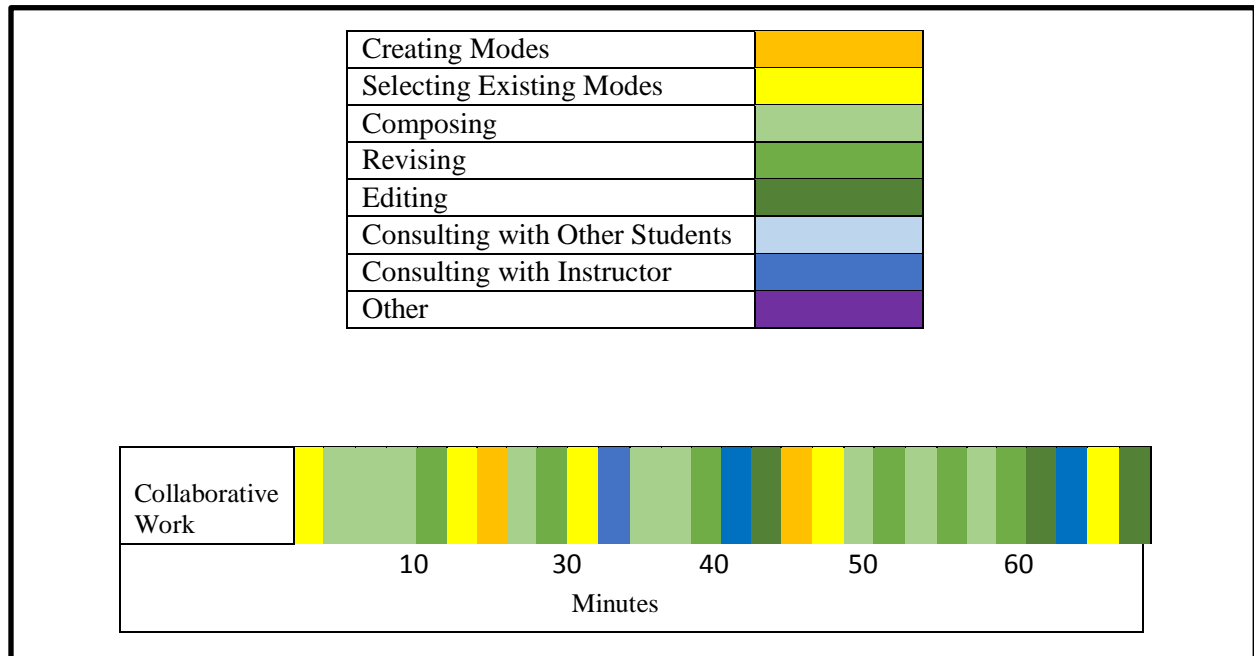


For example, Eric faltered, paused, and checked for agreement multiple times when he challenged Davonte’s identification of the Coliseum as a football stadium. At first, Davonte also hesitated when he challenged Eric about the idea of adding a sound effect to the Titans slide, but after Eric suggested that they add music instead, he continued to push and argued that they could “make” a roaring sound (Line 3). However, despite these hesitations, by this point in the workshop, both Davonte and Eric seemed much more comfortable offering suggestions and rejecting each other’s ideas, and the moments of creative tension occurred much more frequently than in earlier projects.

### **Collaborative Composing Pathway**

Eric and Davonte’s composing pathway for the *Simile and Metaphor Poem* was quite different from their composing pathway for the *So Much Depends Poem*. Although Eric began the composing process by selecting existing modes and then beginning to compose a rough draft, which bore a strong resemblance to his individual composing pathways and the way in which he and Davonte composed their *So Much Depends Poem*, Davonte took an active role in determining their process for the *Simile and Metaphor Poem*. After Davonte encouraged Eric to revise and edit the slides about Jay-Z and the Tennessee Titans, their collaborative pathway was broken down into several short periods of composing, revision, selection of existing modes, and then creation of new modes, such as the sound effect of the roaring “lion.” See Figure 35 for a visual representation of their collaborative composing pathway, which includes the following categories: creating modes, selecting existing modes, composing, editing, revising, consulting with other students, consulting with the instructor, and other.

Figure 35. Eric and Davonte’s composing pathway for their *Simile and Metaphor Poem*



So, for this particular project, their composing pathway proceeded in a nonlinear fashion. Eric and Davonte edited and revised as they composed, stopping frequently to talk to each other, to create additional modes, and to make changes to individual modes and slides. When I examined potential explanations for the differences in this composing pathway as compared to their pathway for the *So Much Depends Poem*, three distinct interactional patterns emerge. First, Eric and Davonte’s increasing familiarity with each other led to more communication and talk around modes and ideas. There was more discussion about particular composing strategies and the features of composing tools, and as a result, the process was broken down into more pieces. Next, during this project, Davonte was vocal about his ideas and overall vision, repeatedly asserting the need to make revisions to certain elements of their work as they composed. This contributed to more talk and more negotiation surrounding how and when to revise. Finally, the fact that each student took the leadership role on a particular piece of this project, instead of each

student's contribution coming in the form of a particular mode or modes, contributed to a more recursive, nonlinear composing pathway. This form of collaborative composing is discussed in the following section, *Students' Individual Roles Within the Collaborative Composing Process*.

### **Students' Individual Roles Within the Collaborative Composing Process**

As in the *So Much Depends Poem*, Eric and Davonte's contributions to the *Simile and Metaphor Poem* related largely to their modal preferences and respective roles within the larger workshop setting. However, the division of work was much different in the latter project.

Although the boys did come to collaborative decisions on a number of specific elements, such as the text for the Jay-Z slide and the image selection for the Titans slide, the overall composing was broken down to two distinct phases, with a different leader for each piece: Eric took the lead role in composing the first three slides and Davonte took over for the final slide.

The change in roles was even indicated by their physical position at the computer; after Davonte suggested creating a simile about the Westlake Center, Eric said, "You wanna type?" and the two boys switched places. As a result, the first three slides, composed as Eric sat directly in front of the screen, represent Eric's modal preferences and his role as a "good student"—each slide contain two similes and one metaphor each, alongside a single image, as I had requested in the PowerPoint poem guidelines and verbal instructions. However, the final slide, complete with multiple photographs of the Westlake Center and two lines of text, including one simile, about Westlake, is more representative of Davonte's modal preferences and his experience as a Westlake veteran. I term this form of collaboration *composing in pieces*—Eric and Davonte's individual contributions came in the form of leadership for specific slides, or pieces, of the final product.

**Eric.** As discussed in Chapter 4, Eric tended to follow the “official” guidelines and often modeled his projects after the teacher-created models. In the case of the *Simile and Metaphor Poem*, for which I didn’t provide a teacher-created model, Eric’s propensity to follow teacher cues was manifested in his use of the pre-selected images for “his” parts of the poem. Although I had emphasized that students could download images or use their own photographs, and both Davonte and Eric had demonstrated the ability to search and import images in the creation of previous projects, Eric went directly to the folder of pre-selected images. Then, after Eric had selected a photograph of Jay-Z—as illustrated in the next section, *Obstacles to Collaborative Composing*—Davonte repeatedly made the suggestion to use Beyoncé instead. Eric chose to ignore his idea, telling him that they could use Jay-Z instead because “it’s right here.” Davonte, on the other hand, often drew on his environment—the Westlake Center—when searching for his subjects. While in the process of settling next to Eric at the computer, he made a few offhand suggestions relating to objects that were present within the “classroom” space—a basketball and a computer.

Although I hadn’t provided detailed instructions or scaffolding for this particular project, I had provided some general guidelines: insert one image, two similes, and one metaphor (see Figure 32). I later verbally amended these instructions and told students that they could create an additional simile in place of the metaphor. Although many of the other *Simile and Metaphor Poems*, in addition to Slide 4 of Davonte and Eric’s poem, which Davonte took the lead role in composing, included fewer similes, both Slide 2 and Slide 3 (see Figure 33) contain the required number of similes and/or metaphors. Further, even though students were only tasked with writing one *Simile and Metaphor Poem*, Eric went above and beyond, asking me if he would “write” more poems.

So, although the boys were able to come to some collaborative decisions, specifically regarding the text for the Jay-Z slide and the image for the Titans slide, the first three poem slides largely represent Eric's leadership and creative vision. Eric, who demonstrated a tendency to stick to the "official" guidelines in his individually-composed projects, continued that pattern for the slides in which he took a leadership role. Although collaboration occurred throughout the composing of these slides, Davonte's contributions, such as the line about Jay-Z being "as cool as a popsicle," generally fit within the structures provided by Eric.

**Davonte.** Although Eric was the one who originally asked me if they could "do more" after they had finished the first slide featuring Jay-Z, Davonte also asserted his desire to create a third simile poem: "One with Westlake pictures," he told Eric. Eric, who had never before offered to give up his position at the keyboard, but was perhaps responding to a request Davonte had made of me earlier in the session to "get his own computer," offered to switch positions: "You wanna type?" Davonte eagerly agreed, and subsequently took his place directly in front of the computer screen.

Davonte began the composing process for Slide 4 by selecting images, but instead of searching through the folder of pre-selected images, he clicked immediately on the file folder labeled "Davonte and Eric's pictures." In fact, he chose three pictures—all of which he had taken himself during earlier workshop sessions—and then inserted them in the PowerPoint without consulting Eric, who was leaning back in his chair and seemingly allowing Davonte to take the lead on determining the content and structure of the poem. Davonte then proceeded to resize and place the pictures on the slide. He chose the image of the main hallway, which he pronounced, "cool," as the focal point of the composition.

Davonte even took the lead role in composing the text, which was a task that, in the individually-created projects, he normally avoided and only completed at my prompting. After adding the images, he began with a simple line: “(Westlake) is cool.” Eric then offered a suggestion—“like ice cream,” which was reminiscent of Davonte’s earlier suggestion of “as cool as a popsicle” for the Jay-Z poem. Davonte, who had already moved the cursor to the next line, paused, tilted his head, said “Ok,” and then added Eric’s contribution. In fact, if not for Eric’s input, Davonte would have been content to exclude both similes and metaphors from the poem. The next line, “(Westlake) is being as you are” doesn’t contain a metaphor or a simile at all.

The fact that the different slides represent such clear distinctions in terms of creative vision illustrates the power of physical position, as well as the differences between the two students’ composing processes and products. As Davonte moved into the seat in front of the computer screen, he took physical control of the composing devices, and, more importantly, artistic and intellectual control of the poem’s form and content. The resulting product illustrates a very different vision—more images, all student-captured photographs rather than downloaded images, and fewer lines of text. Both of these characteristics represent a departure from the teacher-provided guidelines.

### **Obstacles to Collaborative Composing**

As was the case for the *So Much Depends Poem*, Davonte and Eric’s collaborative composing process for the *Simile and Metaphor Poem* was influenced by the physical features of digital tools. In addition to the computer, keyboard, and mouse, all of which are designed for a single user, the boys used headphones in order to review and select music clips. The physical limitations of all of these objects had a significant impact on Davonte and Eric’s collaborative composing. In addition, the boys also faced other obstacles to collaborative composing: namely,

a fundamental disagreement over the role of teacher-created examples that led to the silencing of one of Davonte's ideas and his subsequent disengagement from the composing process. In the following sections, I provide illustrative examples of the objects and structures which limited the potential for collaborative composing and hindered the pair's ability to generate and negotiate ideas.

**Digital tools.** As was the case with their *So Much Depends Poem*, the student who had physical possession of the computer and mouse ultimately controlled the content of the *Simile and Metaphor Poem*. For example, for the first three slides, Eric took the leadership role in determining the subjects and content. Although he specifically asked Davonte for his input, Davonte freely offered ideas and suggestions, and the two boys discussed and negotiated various modes and elements of their poem, Eric, by virtue of having physical control of composing tools, had more authority over what was included or ignored. As the two students switched places and Davonte supplanted Eric's place at the computer, Davonte took over the leadership role in determining the form and content of the final slide.

However, other physical, digital tools that were designed for a single user influenced the nature of Eric and Davonte's collaborative work. Because there were a number of different individuals and groups composing in a small space, I asked students to use headphones as they selected music and sound clips. However, I didn't consider the ramifications for the collaborative composing process—namely, that only one student would be able to use the headphones at a time, limiting the potential for collaboration. When Eric and Davonte chose clips for the Jay-Z slide (as depicted in Figure 36, Eric listens to “Dirt Off Your Shoulder” as Davonte looks on), Eric was the first to listen to the clips, and he only gave the headphones to Davonte for his approval, not so that he could listen to other clips or offer other potential ideas. In addition, after

Davonte passed the headphones back, Eric imported his chosen clip directly, without consulting Davonte. Although Davonte had nodded his head to the beat and seemed to like the clip that was eventually chosen, he was not an active participant in the decision-making process.

*Figure 36. Eric listens to a music clip for the *Simile and Metaphor Poem**



**Teacher-created models.** By this point in the workshop, both Davonte and Eric were proficient with searching for and downloading images from Google Images. For example, during the *Fireworks Poem* project, each student was able to find and use numerous images from various websites. However, since other students had missed specific workshop sessions and got frustrated with the image search process, which led to management issues, I made the choice to provide all students with a set of over 100 images that I had selected. While I knew that this might limit some students' creative freedom in subject and image selection, I assumed that many of the students would choose to search for and select their own images. However, for the *Simile*



*and Metaphor Poem*, each student or pair began by examining the images within the folder first, although a few students, including Eric and Davonte, did eventually look online and in the folders containing student-captured photographs to find additional images for their poems.

For Eric, who had demonstrated a tendency to rely upon the guidelines and teacher-created models while composing, the folder of pre-selected images served to delimit the pool of subjects for the *Simile and Metaphor Poem*. During the initial planning stages, as students selected their images and subjects, he clicked on a picture of Jay-Z that I had copied from another student's *Rhythm Poem*. As Davonte saw the image, he grinned and said, "Ooh. Uh, Beyoncé!" Eric turned to Davonte and smiled, but he also ignored the idea and continued to click on a few additional images, none of which included Beyoncé, before returning to the image of Jay-Z. When Davonte repeated his idea, saying, "We could do Beyoncé," Eric hesitated and said, "Or we could do Jay-Z. *It's right here.*" Then, Davonte responded by saying in a quiet voice, "We could find her. Uh, a picture."

Eric, who either didn't hear or chose to ignore Davonte's follow-up response, began to import the image of Jay-Z into the PowerPoint for their poem. After Davonte spent about thirty seconds fiddling with a book that was sitting on the table, he interrupted me as I helped another student, and asked, "I could get my own computer now?" I said, "Just give me a second," but I remained occupied with another student for the next few minutes. By the time I got back to Davonte and asked him to repeat his question, he had already reengaged with Eric and the poem. In response to my question about what he needed, he told me, "It's ok."

So, eventually, Davonte rejoined Eric at the computer and the boys were able to come to collaborative decisions regarding the text for the Jay-Z slide and the image for the Titans slide. In fact, the boys engaged in a lively discussion of poetic elements and collaboratively created

detailed similes and metaphors. Further, when Davonte offered his idea of adding another slide containing similes for the Westlake Center, Eric moved from his place in front of the computer screen, allowing Davonte to take physical and intellectual leadership of creating their final slide. However, Davonte's later recollections on the project indicate that Eric's dismissal of his idea had a lasting effect. In Davonte's final interview, even though almost two weeks had passed since he had worked on the project, he said that the *Simile and Metaphor Poem* was his least favorite of all of the projects that he created or co-created, and that it could have been improved "if we had done Beyoncé."

## **Discussion**

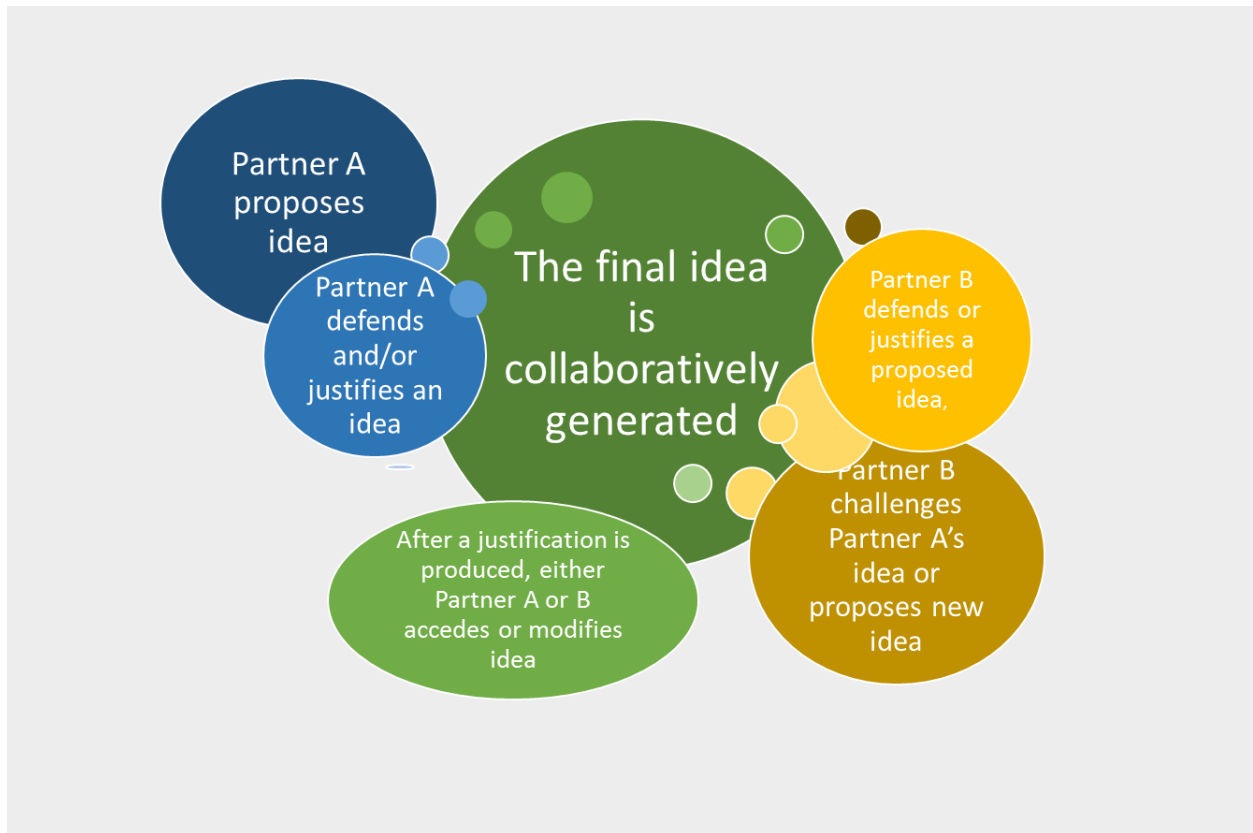
In this section, I review four themes emerging from the analysis of Eric and Davonte's collaborative composing processes: (1) moments of creative tension, (2) collaborative composing pathways, (3) students' individual roles within the collaborative composing process, and (4) obstacles to collaborative composing. I draw upon illustrative examples from within and across the two focal projects in order to highlight these patterns.

### **Moments of Creative Tension**

One theme emerging from the analysis of Eric and Davonte's collaborative composing data is the idea that moments of creative tension led to collaborative decision-making and an improved final product. Specifically, throughout the composing of both collaboratively-created projects, moments of creative tension sparked the generation and negotiation of ideas. Across projects, idea generation and negotiation generally proceeded in five, sometimes cyclical, phases: (1) Partner A proposed an idea, (2) Partner B challenged the idea and/or proposed a new idea, (3) Partner A defended and/or justified the idea or asked Partner B to defend or justify their

proposed idea, (4) after a justification was produced, either Partner A or B acceded, and (5) Partner B altered or supplemented Partner A's idea. Figure 37 provides a visual representation of this pattern.

Figure 37. Moments of creative tension: A typical progression



It's important to note that there were distinct differences across the two projects in terms of the frequency of these moments of creative tension. For example, as the boys grew more comfortable within their partnership, they were more likely to question each other's ideas and decisions, which, in turn, produced more collaborative decision-making. For example, when they composed their *So Much Depends Poem*, Eric and Davonte seemed hesitant to question each other, and there were only two distinct moments of creative tension. However, during the

composing of the *Simile and Metaphor Poem*, moments of creative tension were more frequent, which in turn led to more discussion around new ideas and more revision to existing ideas.

### **Collaborative Composing Pathways**

As described in Chapter 4, Eric and Davonte followed different composing pathways when composing their individually-created multimodal products. Eric, who viewed multimodal composing as being directly analogous to the writing process, was often concerned about “writing” a complete first draft before returning to revise individual elements. Davonte, on the other hand, would spend much more time on his initial “draft.” Further, he often experimented with individual modes on a specific slide or film frame before moving on to the next element of his composition. For example, while composing his *Westlake Poem*, Davonte tried over a dozen different image filters before eventually selecting one.

For their first project, the *So Much Depends Poem*, their collaborative composing pathway was extremely similar to Eric’s individual pathways. The entry into the composing process involved drafting each of the slides, then selecting music clips, before returning to revise and edit each individual slide in several cycles. However, in later composing projects, as Davonte and Eric began to discuss individual modes and elements in more depth, with each partner questioning and offering ideas, their composing pathway became less linear and more similar to the way in which Davonte preferred to compose. For example, in the *Simile and Metaphor Poem*, the slide featuring Jay-Z went through several rounds of in-process revision, particularly in regards to the text. So, in this case, changes in interactional patterns, such as more questioning, debate, and negotiation of composing decisions, also led to changes in the shape and form of Eric and Davonte’s collaborative composing pathway.

## Students' Individual Roles Within the Collaborative Composing Process

Across both projects, Eric and Davonte's individual roles within the collaborative composing process were determined, at least in part, by each student's personal preferences and their roles within the workshop setting. However, there were distinct differences between the two projects in terms of the forms of collaborative composing. For the *So Much Depends Poem*, Eric, who tended to include large portions of text in his individually-created compositions, took on the task of writing the text for their poem. Davonte, who had established a role as the group photographer starting from the very first day of the workshop, selected the angles for the photographs and eventually determined which photographs were used in the final product. So, for this project, each student's contribution was *modally determined*: the text and images were determined by Eric and Davonte, respectively, with little intervention by the other student.

Although each student also contributed to the *Simile and Metaphor Poem* according to his respective role and preferences, the division of work and, consequently, the final product, was quite different from the *So Much Depends Poem*. Even as the boys engaged in more collaborative decision-making (and experienced more moments of creative tension), there was a clear divide in terms of student roles for the different pieces of the composition. Eric took the lead in composing the first three slides, and as a result, these slides are representative of his composing identity and role within the workshop setting—each simile slide includes one photograph, two similes, and a metaphor, just as I had suggested in the directions. Davonte, who made the initial request to include the final simile slide, took intellectual control over the “his” slide, ultimately including three photographs that he had taken of the Westlake Center, one simile, and one additional line: “(Westlake) is being as you are.” That slide is more representative of his composing identity; it includes multiple images, limited text, and he wasn't

constrained by the teacher-provided directions. So, for this project, the boys engaged in a *composing in pieces* model of collaborative composing; as they switched physical positions, they also traded places in terms of creative control.

Both forms of collaborative composing, *modally determined composing* and *composing in pieces*, were effective in terms of achieving the goals of the project and allowing both students to participate. In the case of modally determined composing, Eric and Davonte participated according to their respective areas of specialization, and both students felt a sense of ownership over the final product. When I asked them about their roles in composing the *So Much Depends Poem*, each pointed to the specific element that they took creative control over; Davonte talked extensively about “his photographs,” while Eric spoke about his use of the words “raggedy” and “tattered” as being strong descriptors of the basketball hoop’s appearance. Likewise, for the *Simile and Metaphor Poem*, which was composed in pieces, each student pointed to “his” slide(s); Davonte explained how Westlake helped kids “be as they are,” while Eric spoke about the relative easiness of writing similes in comparison to metaphors for the Jay-Z slide.

### **Obstacles to Collaborative Composing**

Most digital pieces of hardware that students used within the workshop, such as computers, mice, headphones, and cameras, were originally designed for a single user. While Davonte and Eric engaged in discussion, debate, and collaborative decision-making, their physical position, either at the computer or beside it, or behind the camera or standing on the side, played a key role in determining who held the creative control. For example, when Davonte suggested “doing” Beyoncé for the *Simile and Metaphor Poem*, and even repeated himself multiple times, Eric was able to ignore his request, by virtue of his possession of the computer and mouse.

In addition to navigating the limitations of digital tools, Eric and Davonte also faced other challenges to collaborative composing. For example, as they determined the structure and form of their *So Much Depends Poem*, Davonte and Eric disagreed on the role of the teacher-created models. In that instance, Davonte pushed Eric to include more than one PowerPoint slide, in order to include more images within the poem. After receiving official approval from me, Eric agreed to increase the number of slides, and as a result, both boys were able to contribute to the eventual structure of the poem, leading to a shared sense of ownership. However, for the *Simile and Metaphor Poem*, Eric initially silenced Davonte's contribution, not wanting to go outside the boundaries of the images (and thus, subjects) that I had provided for students. As a result, Davonte, who had consistently demonstrated a tendency to disregard teacher-created models in favor of his peers' work, grew frustrated, expressed a desire to work on his own computer, and temporarily disengaged from Eric and the project. Although he was able to reengage and work with Eric to complete the project, the fact that his contribution was silenced had a lasting effect; weeks later, he remembered his desire to "use Beyoncé."

## CHAPTER 6

### INSTRUCTIONAL CONDITIONS SUPPORTING COLLABORATIVE, MULTIMODAL COMPOSING

In this chapter, I synthesize findings from the analysis of Eric and Davonte’s composing processes for their individually-created and collaboratively-created multimodal products in order to answer the third research question: *What instructional conditions support students’ collaborative, multimodal composing?* In addition to presenting illustrative examples from the individual focal projects, *All About Me* and *Westlake Poems*, and the collaborative focal projects, the *So Much Depends Poem* and *Simile and Metaphor Poem*, I compare themes across Eric and Davonte’s individually- and collaboratively-created multimodal projects. With the goal of providing a richer picture of the types of interactions and discussions that led to the generation and negotiation of ideas, I also describe relevant instances where one or both boys collaborated with other students in the workshop. This analysis aims to move towards a definition of what collaborative multimodal composing looks, sounds, and feels like.

The first section, *Features of Productive, Collaborative Composing*, includes a discussion of three specific patterns—justified decision-making, shared ownership of the final multimodal products, and two forms of peer feedback, open questioning and praise—that contributed to students’ generation and negotiation of ideas. The next section, *Instructional Conditions Supporting Collaborative Composing*, describes the instructional conditions which supported Eric and Davonte’s collaborative work. The final section, *Obstacles to Collaborative Composing*, presents findings related to persistent challenges that Eric and Davonte faced: collaboratively composing with digital tools designed for a single user, and tensions arising from Eric’s position as an “expert” technology user. Examples from Eric and Davonte’s processes for



their collaboratively-created multimodal projects, the daily workshop activities (i.e., vocab vids and class discussion), and students' responses to their own projects and other students' work via VoiceThread, highlight the ways in which the material features of digital tools and the positioning of one student as an "expert" may have hindered Eric and Davonte's collaborative work.

### **Features of Productive Collaborative Composing**

In this section, I describe three specific features of productive, collaborative composing: justified decision-making, shared ownership, and peer feedback in the forms of open questioning and praise. These features were consistently found across Davonte and Eric's collaboratively composed projects, which included the two focal projects, as well as the *Rhythm Poem*, *Visual Haiku*, and *Form Poem*. Examples from all five collaboratively-created multimodal projects, in addition to daily projects such as the VoiceThread responses and vocab vids, draw attention to the students' engagement in collaborative decision-making throughout multiple aspects of the workshop sessions.

#### **Justified Decision-Making**

As discussed in Chapter 5, across all of Eric and Davonte's collaboratively-created multimodal projects, moments of *creative tension*—disagreements among collaborators that lead to the generation or negotiation of an improved outcome—produced new and/or enhanced ideas, increased talk around their joint work, and collaborative decision-making. Within these moments, students' abilities to provide detailed explanations of their ideas, alongside principled justifications for why their idea would improve the product or better suit the goals of the project, played a key role in determining which ideas were taken up and which were discarded.

The use of justifications, based on students' perceptions of improvements to the final product, was a pattern that was first established during the production of Davonte and Eric's very first collaboratively-created project, the *So Much Depends Poem*. As they debated their choice of subject, Eric expressed concern about framing their poem in light of the teacher-provided guidelines. After asking Davonte to provide support for his chosen subject, the gym mats, and receiving an answer relating to the physical characteristics of the mats—"blue," Eric offered an alternative—the basketball hoop. His suggestion was accompanied by his justification for the importance of the hoop's role within the Westlake Center and the students' lives. Although Davonte was initially resistant to the change in idea, as he had already taken the photographs of the mats, he changed his mind after hearing Eric's reasoning. In this case, the justification, which targeted the goals of the project, was the catalyst for the switch in subject.

As both students became more comfortable with each other, they overcame some of their initial trepidation to challenging each other's decisions—as evidenced by hesitations in speech, gesture, and physical movement—and engaged in more frequent discussion and debate. For example, as they were determining the subject for their *Visual Haiku*, Eric initially suggested taking pictures of the empty cafeteria. Davonte offered an alternative—they could capture various trees and flowers around the Westlake parking lot. When Eric questioned this idea, Davonte used information from that day's class discussion to support his thinking; he argued that the poems that we had read earlier that day were all about "trees and stuff." For Eric, this was a convincing argument; we had just discussed the importance of nature in haikus. Without any further debate, Eric praised Davonte's idea. Then, after proceeding to take photographs outside, the pair made collaborative decisions regarding the specific photographs—Davonte, who seemed

appealed by Eric's praise, consulted his partner as to the selection of photographic subjects and angles (see Figure 38 for a screenshot from their final PowerPoint product).

Figure 38. Davonte and Eric's *Visual Haiku*



In some instances, Eric and Davonte solicited the opinions of other workshop students in order to obtain additional support for a given idea. For example, as they composed their *Rhythm Poem*, a moment of creative tension emerged as they debated the best way to establish rhythm in poetry. In accord with his composing identity, Eric suggested beginning the composing process by “writing” a few lines of rhyming text. Davonte, who had provided numerous examples from popular music during the preceding class discussion about rhythm, felt that music was more important: “But we can let the music start the rhythm and add our poem later.” Eric responded by providing a justification based on my PowerPoint presentation for that day: “Look up there,” he told Davonte, pointing towards the projected screen showing a list of elements of rhythm in

poetry. “It’s one of the four ways we talked about.” When Davonte didn’t respond, Eric asked another student, Tiana, to provide her opinion: “Tiana, do you think we need rhyme?” When Tiana finally agreed, saying that “rhyme is good,” Davonte conceded that they would create the text for the poem first, and then add music later in the composing process.

In other cases, when an idea was challenged by one student, the other was unable to produce a principled justification. For example, when Davonte responded with “blue” to Eric’s question about the mats, Eric continued to press for a more detailed justification. When Davonte was unable to produce one, they changed the poem’s subject. There were also a number of occasions in which Davonte questioned Eric’s decisions. For example, during the composition of their *Form Poem*, for which students created concrete poems using the Concrete Poetry Maker, which allowed them to choose a digitally fabricated object or animal from a set list, Eric originally proposed a concrete “turtle” poem. When Davonte asked him about what they might write about a turtle, Eric struggled to produce a coherent response: “Um. Like, he’s slow. Yeah.” Davonte, who wanted to choose a fox, was able to provide concrete suggestions for the poem’s text: “We could do the eating stuff. Like a predator. And the things he eats.” So, across workshop projects, the production of a justification often meant the difference in whether an idea was taken up or discarded. One student’s struggle with providing a principled justification generally led to additional idea negotiation, with the other partner providing suggestions and/or revisions.

### **Shared Ownership of Final Products**

Opportunities for both students to take ownership of the final multimodal product were also key to productive, collaborative composing. Eric and Davonte employed two different overarching structures for composing, *modally determined composing* and *composing in pieces*,

and while form each offered its own affordances and constraints, both allowed for shared ownership of the final product.

For the first focal project, the *So Much Depends Poem*, students employed the *modally determined composing* model, in which each student took primary responsibility for a particular set of modes. Davonte, who had previously established a role as the group photographer, maintained that role during the collaborative composing process—capturing, selecting, and placing photographs on the PowerPoint slides. Eric, who had demonstrated a prowess for composing and manipulating poetic text in his individual work, wrote the text, with little interference from Davonte. In interviews and presentations of their work, both Eric and Davonte demonstrated a sense of pride in their final product; however, their reflections focused solely on their specific contributions. Eric, for instance, mentioned the text, and said that while it didn't rhyme, it communicated the main idea that the basketball hoop kept students healthy. Davonte, on the other hand, referred to the use of multiple slides and emphasized the role of the images: “It shows all the different parts of it [the hoop]. If it was shorter, you couldn't see all of the pictures.”

The other focal project, the *Simile and Metaphor Poem*, was composed via *composing in pieces*—Eric was the primary composer for the first three slides, and Davonte completed the poem by taking the lead composing role on the final slide. Their differing composing identities, which were described in Chapter 4, are apparent in the final *Simile and Metaphor Poem*; while “Eric's slides” include one image each, along with the exact number of similes and metaphors I presented in the project guidelines, “Davonte's slide” contains three images and only one simile (see Figure 27 in Chapter 5).

Both composing models, *modally determined composing* and *composing in pieces*, allowed students to take responsibility for the final product. This sense of shared ownership played an important role in the boys' reflections on their collaboration and the workshop as a whole. Although there were numerous instances in which both Davonte and Eric encountered problems within their partnership (see the *Obstacles to Collaborative Composing* section in this chapter for detailed examples), each student still expressed a sense of pride in their collaborative products. When Eric and Davonte talked about their work—in in-process interviews, workshop presentations, and the final interview—even as they focused most of their comments on their individual contributions—they did occasionally refer to collaborative decisions, speaking about “our” choices (in Eric’s case) and “the way we made the music” (in Davonte’s case).

### **Peer Feedback: Open Questioning and Praise**

Throughout the workshop, two specific types of peer feedback—open questioning and praise—led to improved communication between Eric and Davonte, more positive feelings towards their final products, and in the case of their collaborative work, more discussion around the use of ideas, modes, and digital tools. *Open questions* allow the respondent freedom in the type and format of response (i.e., “Why did you pick that song?”); *closed questions*, which include yes-no questions, restrict respondents to a specific type of response (i.e., “Do you want to do music or pictures?”) (Lazarsfeld, 1944; Schuman & Presser, 1996). In previous research, open questions have been shown to encourage talk, thought, and discussion (Fairclough, 1995). As Eric and Davonte collaboratively composed, open questions related to content, modes, tools, and project themes were most likely to spark additional negotiation and discussion. Likewise, as previous research has demonstrated (Greenleaf & Freedman, 1993), praise, or affirmative

responses (i.e., “That’s the best one”), provided the foundation for the development of open communication around new ideas.

As Eric and Davonte composed their *Rhythm Poem*, for instance, Eric’s questions about the digital video software, MovieMaker, led to the joint exploration of new features of the tool and a discussion about the “best” ways to enhance the visuals of their composition. His questions—“How does that look? What do you think?”—encouraged Davonte to ask others in response, such as, “How do we get those white outlines?” The boys then used their knowledge of the image manipulation feature to try out several different image filters; they even asked other students for their opinions.

In the composition of other projects, open questions led to engagement in debate and experimentation. For example, as they created their *Visual Haiku*, Davonte asked Eric a number of questions pertaining to the role of syllables in the poem structure and the content of their poem: “Do you know any good words?” “Does it have to be nature?” “Can we have an extra [syllable] in the middle one [line]?” The final query, in which Davonte questions whether stepping outside the traditional 5-7-5 syllable structure would be acceptable, sparked a debate in which Davonte praised Eric’s use of the word “floating” in the line, “Around the wall floating away.” As a result, Eric, who was normally hesitant to stray from the teacher-provided guidelines, agreed to include eight syllables instead of seven in the second line.

Another form of peer feedback, praise, was an important component of productive collaborative composing. Specific instances in which either Davonte or Eric praised each other’s work encouraged more talk and seemed to support students in feeling an increased sense of pride in their work. For example, as discussed in Chapter 5, during the photography session for their first collaborative project, the *So Much Depends Poem*, there was a moment in which both

students attempted to take physical control of the camera. Although Davonte maintained possession of the device, he was hesitant to allow Eric to participate in the photography shoot. Conversely, Eric hovered over the camera, offering suggestions and attempting to view the pictures that Davonte had taken. However, after Davonte shared an abstracted shot of the basketball hoop from the below the net, Eric praised his partner: “Oh, yeah, that’s the best one.” Davonte later selected that particular image for multiple uses in the final product and restated Eric’s words by referring to the shot as “the best one.”

Eric’s comment also seemed to have a positive influence on their emerging collaborative partnership; although Davonte seemed initially hesitant about Eric’s participation in the photo shoot and kept his physical distance from Eric in order to maintain possession of the camera, after hearing the praise, he freely offered the camera and the pictures for his partner’s inspection. Then, as they composed their *Simile and Metaphor Poem*, Eric’s praise of Davonte’s contribution to the poem (“As cool as a popsicle”) led Davonte to express pride in their joint work. His excitement was immediately visible in both his physical movements and verbal utterances; after bouncing up and down to capture my attention, he referred to his contribution and praised Eric’s contributions to the product.

There were also instances in which Davonte’s praise of Eric’s contributions led to more talk, discussion, and a shared sense of ownership. For example, during the composing process for their *Rhythm Poem*, Eric chose music from a folder of pre-selected clips. One of his choices, a clip entitled “Dark Times,” included a heavy bass beat playing under a group of string instruments and set a melancholy tone. Eric inserted a “Dark Times” clip just before a picture of the workshop students attacking the camera “like zombies” appeared. Davonte offered the following comment: “It sounds like they’re coming to get you...just the way I thought it would



be.” When they presented their project, Eric talked about how the music sounded like “someone was coming to get you.” Further, both students used the “Dark Times” clip in other individual and collaborative projects, such as their *Westlake Poems*.

Although the research on collaborative writing and composing is extremely limited, one study of collaborative writing processes in the context of ESL education (Storch, 2005) specifically describes the role of peer feedback in the composing process. This study demonstrated that among students who shared responsibility over content creation, positive peer feedback encouraged the joint discovery of ideas and new viewpoints. In Eric and Davonte’s case, two specific types of feedback, open questioning and praise, supported the generation of new ideas and encouraged collaborative talk within the partnership.

### **Instructional Conditions Supporting Collaborative Composing**

While existing research into adolescents’ multimodal composing practices has highlighted a wide variety of possibilities for teaching and learning literacy, print-based texts and well-established curricular practices (often, reading, writing, and interpreting these texts) are still dominant in most secondary English Language Arts classrooms (Beach, 2012; Moje, 2009). In fact, one of the major debates still surrounding multimodal composing is its place within the classroom; while some researchers believe in its potential for transforming academic spaces (Alvermann, 2008; Vasudevan et al., 2010), others have expressed concern about the dilution of students’ thoughts and ideas as students compose in official spaces in which teachers and other adults often hold power (Hull & Zacher, 2010; Leander & Boldt, 2013).

In order to address some of these concerns, and to begin thinking about ways to support collaborative multimodal composing for academic purposes, I analyzed multimodal process and product data from across the 10 final multimodal projects, as well as data from the daily

workshop activities (vocab vids and VoiceThread responses), to identify instructional conditions that shaped Eric and Davonte's composing interactions. In the following sections, I discuss five specific instructional conditions which supported students' collaborative, multimodal composing: (1) pairing students with different composing identities; (2) offering opportunities for student partnerships to develop over time; (3) providing a variety of composing projects; (4) utilizing online and in-person forums for collaboration; and (5) employing a gradual reduction in scaffolding as students become more experienced multimodal composers.

### **Pairing Students with Different Composing Identities**

As discussed in Chapter 5, Eric and Davonte's roles within the collaborative composing process were closely linked to their roles within the workshop setting and their individual composing identities. In terms of modal preferences, Eric often used substantial portions of text within his work, while Davonte preferred using images to convey meaning. Also, each student demonstrated particular tendencies in their respective deployments of semiotic resources; as the workshop progressed, Eric incorporated more and more modes as he demonstrated his burgeoning skills as a multimodal composer, while Davonte included fewer modes and provided more detailed justifications for the use of each particular mode. As they composed together, they were able to draw upon their respective composing identities to make individual contributions to their joint work.

In the early stages of the workshop, students' contributions to their collaboratively-created products related largely to their modal preferences. For example, Eric wrote the text for the *So Much Depends Poem*; Davonte took and selected the photographs. At this point, although Eric had much more experience in working with digital tools to compose, Davonte was able to carve out his own role within the collaborative composing process by building upon his

knowledge of photographic subjects and techniques. This suggests that as students share their knowledge of a specific mode, tool, or composing strategy with their peers, even less experienced technology users can engage in the multimodal composition process.

Further, the ways in which Eric and Davonte deployed sets of semiotic resources reflected a combination of both students' composing identities. In his individual work, Davonte was often concerned about making all of the different modes "match" each other, and he continued to demonstrate this tendency in the pair's collaborative work. For example, during the composition of the *Simile and Metaphor Poem*, Davonte suggested creating a sound effect of a lion's roar, in order to better match the poem's text and images: "Or, um, we could make one." Eric, who wanted to "show" off his new skills as a multimodal composer, and thus experimented with including a number of modes within a given composition or slide, successfully argued for the inclusion of more transitions within their *Simile and Metaphor Poem*: "We could use these three so that they can see all the new kinds."

So, the differences in Eric and Davonte's composing identities enabled each student to make important contributions to their collaborative work. In the case of the *So Much Depends Poem*, each student determined the selection and presentation of the modes that aligned with their individual composing identities. Then, in composing the *So Much Depends Poem*, Eric and Davonte offered ideas relating to their individual preferences in the deployment of semiotic resources. These findings suggest that there may be a number of affordances in pairing students with differing composing identities—students have opportunities to contribute according to their modal preferences and deployment of semiotic resources, and even less experienced technology users can offer valuable insight into composing ideas and techniques.

## Offering Opportunities for Student Partnerships to Develop Over Time

Although Eric and Davonte had a casual friendship before the workshop began, they were completely unfamiliar with the other's multimodal composing processes and tendencies. As a result, in the early stages of their collaborative work, they were hesitant to engage in prolonged debates about choices in terms of subject matter, modes, and composing techniques. For example, during the composing of the *So Much Depends Poem*, there were only two distinct moments of creative tension. However, as the boys grew more comfortable within their partnership, they were more likely to question each other's ideas and decisions, leading to more frequent moments of creative tension and more collaborative decision-making.

Eric and Davonte's growing familiarity with each other was also manifested in the ways in which their collaborative composing pathways changed over time. For instance, while their composing pathway for the *So Much Depends Poem* was reminiscent of Eric's composing pathway for his individual work (i.e., composing an entire first draft before returning to revise), the boys used a more collaborative, recursive process for the *Simile and Metaphor Poem*, working together to delete, change, and revise individual modes before moving on to another mode or element of the poem. This process drew upon elements of each student's individual composing pathway: from Eric, the use of several rounds of revision, and from Davonte, extensive consultation and debate over the use of particular modes. So, in the case of the *Simile and Metaphor Poem*, students' familiarity with each other allowed both Eric and Davonte to experiment with new strategies for composing, editing, and revising multimodal work.

As their partnership developed, Eric and Davonte's growing propensity to negotiate and offer new ideas also had an impact on their final multimodal products. Compositions completed later in the workshop, such as the *Simile and Metaphor Poem*, demonstrated the use of more

varied and complementary modes. For example, as they composed their *Simile and Metaphor Poem*, they engaged in debate over whether the Oakland Coliseum was a baseball or football stadium. Ultimately, after much discussion, they chose to use a photograph of the Titans stadium, which much more closely matched the actual subject of their poem—the Tennessee Titans. Also, both partners felt a sense of ownership over their poem, as evidenced by Davonte’s eagerness to share their work with me and with other students. This suggests that creating opportunities for students to engage in sustained partnerships, which allow students to develop a growing familiarity with each other, may help to support collaborative, multimodal composing.

### **Providing a Variety of Multimodal Composing Projects**

Throughout the workshop, students composed ten final projects, as well as a series of daily responses. They also used a number of different composing tools—PowerPoint, MovieMaker, Concrete Poetry Maker, Audacity, and Microsoft Paint, for starters. This variety in terms of composing tool and response type allowed students to share knowledge of the features of composing tools, to collaborate across venues, and to build relationships with each other across time and composing projects.

Across the ten final multimodal projects, students composed with number of different composing tools. Eric and Davonte, who had individual strengths and weaknesses in terms of knowledge and experience with the features of these tools, shared their expertise with each other. For example, Eric, who had more previous experience in using PowerPoint, took the leadership role in composing their *So Much Depends Poem*. He relied upon his prior knowledge to experiment with specific features, and showed Davonte how to make numerous changes to the background color and font. Davonte then transferred these skills to his individual work. In the composition of their *Rhythm Poem*, however, the pair drew upon Davonte’s experience with

image manipulation to transform their images using white outlines, a filter each student later used in their *Westlake Poems*. So, as Eric and Davonte learned to navigate the features of different composing tools and forms, they shared their newfound knowledge with each other.

Eric and Davonte's partnership was also strengthened through their collaborations on the daily response projects, such as vocab vids. For example, during the composing of their video for the word "diligent," Eric's original idea was to film a scene in which a student labors over an exam. After filming one take in which Eric scribbled away on a piece of paper for almost a full minute, Davonte, who seemed concerned that the video didn't truly reveal the meaning of the word diligent, stopped shooting to interrupt with a series of open questions about the video's content: "How do we show that he's...uh, working hard? What else can we do?" After watching the footage of the first take, the group, which included Eric, Davonte, and Gabriel, brainstormed revisions to their video. When Eric suggested that he could break his pencil and get a new one as he worked on the exam, Davonte responded with approval of the idea and a slight modification: "A few times, you could get up and be like mad and stuff." The final video includes both of their ideas: after working on the "test," Eric broke his pencil, expressed frustration, and got up to retrieve a new pencil. After breaking it twice more and getting two new pencils, he continued to work away, demonstrating his "diligence." These collaborative composing experiences, which occurred regularly throughout the workshop, reinforced and supported students' collaborative composing for the ten final projects.

### **Utilizing Online and In-Person Forums for Collaboration**

Eric and Davonte's engagements in collaborative composing activities often occurred across venues and outside of the typical "composing time" or "presenting time." I found that two specific strategies—asking students to engage in paper-and-pencil brainstorming and having

them provide individual feedback on collaborative work using digital tools—did show promise for encouraging talk, thought, and more negotiation of ideas. For example, during the *Form Poem* project, I asked students to brainstorm ideas for the shape and subject of their poems before turning on their computers and beginning to compose. Without the distraction of the computer screen, Davonte and Eric spent more time discussing and negotiating ideas than they did for other projects, like the *So Much Depends Poem*. I also observed a similar pattern in the composition of the daily vocab vids across student groups. Before beginning to film, students always brainstormed for two minutes (as measured by a timer), and during these miniature brainstorming sessions, students freely shared ideas for words, subjects, props, actors, and so on, and often engaged in lively debate.

Further, the use of online tools for giving peer feedback provided new avenues for collaborative interactions; some students were more comfortable voicing dissenting opinions in online forums. For example, after students presented their *Rhythm Poems*, I asked each individual to respond to others' work using VoiceThread. While I didn't originally intend for students to respond to their own poems, a few students, including Davonte, did add comments to the "threads" for their own collaboratively-created projects. Davonte's comments—"the music in this one doesn't sound good like the others"—allowed him to critique Eric's idea in an alternative forum and revealed previously unvoiced dissent. This type of feedback, in which students' thoughts and opinions are posted online for their peers to see and comment upon, was a powerful tool within the workshop setting—after Eric saw the comments on the thread, he went back and changed the music, even though the project had already been completed and students had moved on to another poem.

## Employing a Gradual Reduction in Scaffolding

In the current study, I incorporated varying degrees of teacher scaffolding. In the early stages of the workshop, as students were introduced to new technologies and composing tools, I provided many different scaffolds, such as step-by-step instructional guidelines and teacher-created models. Then, as students became more experienced multimodal composers, I took a more student-directed approach, allowing students to determine the form and content of their work with limited teacher guidance. This gradual reduction in scaffolding allowed student pairs, like Eric and Davonte, who had demonstrated different preferences for using or discarding teacher-created supports, to develop new forms of collaborative composing.

Eric was more comfortable than Davonte in working with teacher-created scaffolds. Even in collaborative projects like the *So Much Depends Poem*, Eric referred frequently to the teacher-created models to provide support for his ideas. As described in the *Obstacles to Collaborative Composing* section of this chapter, Eric and Davonte's use of teacher-created models for their work sometimes caused tension within their partnership. However, the fact that Eric was determined to include every "required" element within each collaborative composition, provided Davonte, who often chose to ignore these elements in his individual composing projects, with new experiences in using different poetic forms and structures.

Throughout the workshop, Davonte also pushed Eric to experiment with composing techniques. For example, as they composed their *So Much Depends Poem*, Davonte argued that in order to make their work more visually interesting, they needed to include more slides. Eric, who had countered this idea by stating that their work would no longer reflect the teacher-created model, eventually acquiesced to Davonte's idea—after the pair received approval from me to include additional slides. As the workshop progressed, and teacher-created scaffolds were



removed, Davonte suggested that they turn to other students to provide models for their work. This suggests that a gradual reduction in scaffolding may allow students with differing composing styles, and varying degrees of reliance upon teacher-provided supports, to engage fully in the collaborative composing process.

### **Obstacles to Collaborative Composing**

Previous research on multimodal composition in academic settings has emphasized many potential benefits of collaborative composing: sharing expertise in both technology and meaning-making (Brass, 2008; Ranker 2008), developing skills in using technology to communicate with others (Black, 2009; Smythe & Neufield, 2010), and offering new and often divergent viewpoints for collaborators (Jewitt, 2008). Further, national curriculum standards in literacy (NCTE/IRA, 1996) and technology (ISTE, 2014; Partnership for 21<sup>st</sup> Century Skills, 2008) focus specifically on the value of collaborative work, particularly in the composition of digital and multimodal products. In fact, one of the anchor Common Core State Standards (2010) suggests that students must “participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas” (CCSS.ELA-LITERACY.CCRA.SL.1).

However, across research, policy, and practice documents, there is a lack of clarity about what this collaborative composing should look like; for example, what venues (i.e., online, in person), make-up of student collaborators (i.e., pairs, small group, student-chosen, teacher-determined), and structures (i.e., shared leadership, role-driven) can best support the co-construction of meaning and the negotiation of ideas? Given researchers' and policy-makers emphasis on the benefits of collaborative composing, often with little or no attention to potential structures, challenges, or limitations, I wanted to highlight some of the material, instructional, and interpersonal impediments that emerged from the analysis of data in this study. So, in the

following sections, I discuss how the properties of specific digital tools and the positioning of one student, Eric, as an “expert,” presented obstacles to Eric and Davonte’s collaborative composing.

## **Digital Tools**

Researchers have raised a number of concerns relating to the use of digital tools for academic purposes: issues with access and equity in and out of school settings (Warschauer & Matuchniak, 2010); concerns with providing instruction in the use of specific digital tools when technology is ever-changing (Miller & McVee, 2013); and the implications for instruction arising from differences in students’ levels of technical expertise (Bruce, 2009). Some of these concerns did present instructional and interactional challenges within the workshop. Specifically, substantial differences in students’ previous experiences with technology and the ways in which this expertise with digital tools was utilized did present unexpected obstacles to collaborative composing (see the *Expert Leadership* section in this chapter for examples).

However, as discussed in Chapter 5, the most pressing and enduring obstacle related to technology was students’ negotiation of digital tools originally designed for a single operator. Before beginning the workshop, I did consider the potential problems with asking two or more students to share a single computer during the collaborative composing process. In order to alleviate some of my concerns, I specifically purchased laptops with larger-than-average screens (15-inch) and bought enough student cameras so that each student would have their own—I even labeled each camera with a student name, in order to hopefully substantiate their sense of ownership over that particular tool. However, as I microanalyzed Eric and Davonte’s interactions, it became increasingly clear that although I accounted for ways in which hardware

and software can shape the form of the multimodal products, I underestimated the extent to which digital tools can determine the shape of collaborative interactions.

For Davonte and Eric, gaining physical control of the computer (or the camera, the mouse, or the headphones) usually meant grasping creative and intellectual control over a particular aspect of a project. For example, during the composition of the *Simile and Metaphor Poem*, when Davonte supplanted Eric's position in front of the computer screen, the form and content of the project shifted. Ultimately, each section represented the respective composing identity of the student who had physical control of the mouse and computer. This was the case across projects; for example, when Eric composed his "parts" of the *Rhythm Poem*, he used much more text than Davonte, who devoted his time and energy to selecting and editing the images, special effects, and sound. These modal preferences were representative of each student's individual composing identities, which were described in Chapter 4.

In some cases, the student with physical control of a particular tool also exerted interactional control as well, which created tension within the partnership. Davonte, who was the partner most often positioned to the side of the computer, and who often lacked control of the mouse and thus, of the content, centered his critique of collaborative composing around digital tools; as he said in his final interview, "I want my own computer. I do more." In some instances, Eric even positioned Davonte as an assistant, rather than a collaborator. For example, when Davonte asserted his desire to be involved with creating responses to other students' work via VoiceThread, offering a suggestion to comment on Gabriel's use of images in his *Family Poem*, Eric quickly shut down his idea by saying, "You can help me," placing himself in the role of the leader and Davonte in the role of his assistant. Davonte, whose idea had been summarily dismissed, temporarily disengaged from the composing process.

So, the physical features and design of certain digital tools, such as headphones, computers, mice, and cameras, presented a number of challenges for students' collaborative composing processes. In some cases, the properties of these tools shaped the types of semiotic resources available to students. However, more importantly, the material limitations of digital tools often circumscribed the roles students took on in the collaborative composing interactions. For example, when one student, by virtue of holding physical control of the tool, also took creative control of a given project, the other often experienced disengagement and frustration.

### **Students as “Experts”**

Previous research on multimodal composition in academic settings, and specifically, research focusing on the connections between students' out-of-school and in-school literacies, has argued that students' prior expertise in using technology can and should be leveraged in classroom settings (Bailey, 2009; Bruce, 2008; Ito et al., 2010). Scholars (Alvermann, 2008) have argued that as students' previously acquired skills with technology are utilized in academic environments, and as literacy achievement is redefined to encompass the critique, creation, and manipulation of representations in digital contexts, new opportunities exist for students to experience academic success. So, in order to maximize opportunities for students to engage the knowledge and skills that they previously developed in other settings and to relieve some of the instructional burden from the teacher, some studies (Chavez & Soep, 2005; Oldaker, 2010) have suggested that students with sophisticated knowledge of digital tools can serve as “experts.”

At various points throughout the workshop, particularly in the early weeks, Eric took on just such a role as an “expert.” This role developed through reflexive (the positioning of the self) and interactive (the positioning of others) processes (Davies and Harré, 1990). For example, on the first day of the workshop, when I asked students about their previous experiences with

technology, Eric described himself as “great with computers.” Then, in offering advice to other students and referring to his prior knowledge throughout the composing process, he reflexively positioned himself as an expert. After observing students as they composed their first project, the *All About Me* videos, I confirmed his assertions and interactively positioned him as a teacher’s assistant—passing student questions along to him, asking him to help with setting up computers, and even referring to him as “our video expert.”

Eric’s assistance, which included helping other students import pictures from their cameras, finding file folders, opening files, and demonstrating the features of the MovieMaker and PowerPoint software, helped to make the workshop more efficient and reduced student waiting times. In accord with my prior experiences and with previous research findings about the value of leveraging students’ experiences with technology in multimodal composing (Bruce, 2008; Oldaker, 2010), I also hoped to encourage student self-sufficiency and to increase student talk around modes, tools, and ideas. In many ways, asking particular students with more prior experience with technology, like Eric, to serve as “experts,” did foster collaboration. As students navigated the complexities of multimodal composing using digital tools, particularly in the early sessions, student talk and questions largely related to issues with hardware and software. Eric was often engaged in these conversations and his assistance reduced the frequency of teacher intervention and increased the volume of student-to-student talk.

However, my analysis of data also revealed several unintended challenges of Eric’s role as an “expert” within his partnership with Davonte. First, Eric, who was accustomed to sitting down at other students’ computers and taking over the keyboard in order to import pictures or demonstrate a feature of a tool, automatically assumed a position in front of the computer screen during the first collaboratively-created project, the *So Much Depends Poem*. This physical

position gave him a distinct advantage in taking interactional control of the composing process. Next, Eric's position as an "expert" allowed him to silence Davonte's ideas on a few distinct occasions, which are discussed in the following paragraphs. As outlined in Chapter 5, in their final and in-process interviews, both students' reflections on their partnership revealed some frustrations with the imbalance of power and their respective workshop roles.

Within other students' collaborative partnerships, specific and ongoing negotiations resulted in flexible seating arrangements and control over digital tools. For example, Terrell and Tiana, another student pair who composed multiple collaboratively-created products, discussed composing roles and how they wanted to share of the digital tools at the onset of their first collaborative project. Together, they decided that Tiana would take the first "shift" at the keyboard and Terrell would take over once they finished "adding some color to it [the PowerPoint]." In contrast, in Eric and Davonte's partnership, Eric always took the primary place at the keyboard at the beginning of composing time. For the most part, he maintained this position throughout their other collaborative projects—occasionally switching places with Davonte for short time periods—which often allowed him to assert more creative control.

As students completed daily tasks, like their VoiceThread responses and vocab vids, Eric usually assumed the leadership role, often without consulting Davonte. For example, before students composed their *Form Poems*, I asked everyone to log into VoiceThread to provide feedback on other students' *Family Poems*, which they had completed the previous week. After taking his customary place at the keyboard and in front of the computer screen, Eric entered the VoiceThread program and logged in under his screen name. Davonte, who hadn't been asked about whose account they would use, picked up a pair of headphones and fiddled with them as he

rocked back and forth in his chair. When Eric started typing comments on Clinton’s poem, Davonte finally interrupted, suggesting that he wanted to participate in the response process.

- 1) Davonte: What...are you  
**(3s pause)** [doing?]
- 2) Eric: [Saying] that he needs to add a song.
- 3) Davonte: What do I do?
- 4) Eric: You can help me.  
**(4s pause)**
- 5) Davonte: What about those pictures?
- 6) Eric: What?
- 7) Davonte: There. (points to screen)  
**(6s pause)** (Eric looks at screen)  
Yeah?
- 8) Eric: (looks at Davonte and curls lip) Those pictures aren’t for this.  
**(3s pause)**
- 9) Davonte: Oh.

Although Eric suggested that Davonte could “help” him (Line 4), he also silenced his partner’s idea on what to provide feedback on, stating, “Those pictures aren’t for this,” furrowing his brow, and curling his lip (see Figure 41). In previous sessions, I had emphasized that students had complete freedom in determining which elements of others’ work they wanted to respond to. In fact, the next time Davonte used VoiceThread—this time without Eric—his comments related entirely to other students’ use of pictures. However, in this instance, Davonte didn’t challenge Eric; he simply said, “Oh,” deferred to his partner’s “expert” judgment, and disengaged from the process, sitting quietly and playing with the headphones as Eric added other comments.

Figure 39. Davonte attempts to “help” Eric compose



Davonte and Eric’s reflections on the composing process further revealed that Eric’s role as an expert caused a strain on their collaborative partnership. While Davonte admired Eric’s expertise and even said, “He’s the best with how the computer works, like that music thing and how to get the songs in,” he also expressed frustration with playing the role of the assistant in their collaborative composing. For example, when Davonte’s ideas were ignored by Eric during the composing of the *Simile and Metaphor Poem*, as well as the *Form Poem*, he asked me for his “own” computer. Although he was able to reengage with both tasks and ended up contributing and negotiating ideas for the final projects, Eric’s dismissal of his ideas had lingering effects. During one of his in-process interviews, Davonte revealed that he would have preferred a more equitable distribution of work, but Eric had more knowledge of the digital tools: “I want to [select music clips] but he knows the PowerPoint stuff better than me.” For his part, Eric suggested that Davonte’s contributions weren’t necessarily essential to the collaborative composing process: “I didn’t need help...I mean, he would have...but I didn’t need it.”



The findings presented in this chapter, and specifically, findings regarding the challenges to collaborative composing, contribute a new perspective on how to position students' prior technological expertise in order to support collaborative composing. While there is a great deal of value in allowing students to learn from each other, and in asking students to explicitly share their expertise, positioning one student as the leader due to technological skill alone can produce unintended challenges. Specifically, for students with disparate levels of experience with digital tools (and in all partnerships, there will be some degree of difference in prior knowledge), the expert/novice dynamic can create an imbalance of power, which is consequential in terms of students' feelings towards each other and their collaboratively-produced work.

## CHAPTER 7

### DISCUSSION

Just as I was completing the initial stages of data analysis for this study, I observed a teacher candidate during a lesson in which he asked students to collaboratively create digital, multimodal blog entries in the style of the main character from *The Absolutely True Diary of a Part-Time Indian*. Although the teacher candidate had given thought and consideration to the selection of the student pairs, spent a great deal of time planning and creating models for the project, and provided explicit and detailed instructions, students struggled mightily with the task. At the end of a ninety-minute block, after numerous student arguments about composing roles and technological issues, the classroom was in chaos. After the students had left, he turned to me and said, “Collaboration sounds fantastic when we talk about it in class. But I’ll tell you what—group work is hell.”

His reflection has remained with me throughout the dissertation process, and has been a constant reminder of what I hoped to achieve with this study—first, an understanding of the processes students use as they compose individually-created multimodal products; second, an account of students’ collaborative multimodal composing processes; and finally, the identification of instructional conditions that can support collaborative, multimodal composing. In this chapter, I revisit each of my research questions and provide a summary of findings. Next, I discuss the study’s contributions to the collective knowledge base surrounding young adolescents’ digital, multimodal composing processes and products. Then, I provide directions for future research. I conclude with a brief review of the study’s goals and objectives.

## Research Question Summary

With the goal of exploring young adolescents' individual and collaborative multimodal composing processes and products, this study was guided by three research questions:

1. *What processes do students use as they compose individual multimodal products?*
2. *What processes do students use as they compose collaborative multimodal products?*
3. *What instructional conditions support students' collaborative, multimodal composing?*

In order to answer these questions, I analyzed data from a six-week workshop in which a group of urban fifth-graders read and created multimodal literature responses using digital tools. The following sections contain a summary of the findings.

### **RQ1: What processes do students use as they compose individual multimodal products?**

Three key findings emerged from my analysis of two young adolescents' composing processes for their individually-created, multimodal responses to literature—students formed persistent *composing identities*, even as their use of modes grew more sophisticated and nuanced; students followed distinct *composing pathways* as they entered the composing process and then composed, revised, and edited their work; and, in alignment with their roles within the workshop setting and their personal preferences, students chose to rely primarily upon either teacher- or student-created models while composing.

First, within the workshop, each student established a *composing identity*, or a set of modal preferences and ways of deploying and/or withholding semiotic resources. While Eric generally included substantial pieces of text in every frame or slide of his work, Davonte rarely used text and instead used images to convey the bulk of the meaning. Also, as Davonte became a more experienced multimodal composer, he began to scale back his use of transitions and special

effects in order to emphasize specific ideas. Eric, on the other hand, used more and more modes as the workshop progressed, in order to demonstrate his new skills in using digital tools to compose.

I also found that students' multifaceted composing histories—their experiences with digital tools, writing, art, music, and other forms of composition—resulted in different *composing pathways*, or entries into the multimodal composing process and the strategies that they used to compose, revise, and edit their work. Eric, whose idea of the multimodal composing process was intricately tied to his understanding of the writing process, “drafted” his work by creating a complete composition before returning to revise. Davonte's composing pathway was more circuitous and broken up into smaller bits of activity—consulting with his peers, reviewing several iterations of a given mode before choosing a final version, and taking additional trips to capture photographs.

Finally, the ways in which each student used teacher- and student-created models differed. Eric tended to closely mirror the form and content of teacher-created models, while Davonte was more likely to directly and indirectly imitate his peers. Their choices in models connected to their previous experience and identities. For example, Eric referred repeatedly to including all of the required components and making his work “like” the teacher-created models and examples, while Davonte, who had long-standing relationships with other students in the workshop, preferred to draw on his peers' work when composing.

## **RQ2: What processes do students use as they compose collaborative multimodal products?**

Four major patterns emerged from the analysis of data in relation to the second research question—(1) moments of *creative tension* produced the collaborative negotiation of ideas, modes, and digital tools; (2) students followed collaborative *composing pathways* in entering the

composing process and then composing, revising, and editing their collaboratively-created products; (3) across projects, students used two different forms of collaborative composing—*modally determined composing* and *composing in pieces*; and (4), students faced persistent obstacles to collaborative composing.

First, as they collaboratively composed, Eric and Davonte experienced numerous moments of *creative tension*, or instances in which discord among collaborators ultimately leads to the generation or negotiation of an improved outcome. While these disagreements caused discomfort for both students, they were productive in terms of encouraging talk and thought. In expressing concerns, offering new or altered ideas, and negotiating composing elements, Eric and Davonte produced more detailed, complex, and coherent projects. Also, after working together on several projects, they grew more comfortable within the partnership, which led to a more collaborative decision-making process and more instances of creative tension.

Next, Eric and Davonte used two distinct *collaborative composing pathways* across the two focal projects. In their first project, the *So Much Depends Poem*, their collaborative composing pathway was extremely similar to Eric's individual pathways—composing proceeded in a linear fashion; after creating a “rough” draft, they completed several rounds of cyclical revision. However, in later composing projects, as Davonte and Eric began to discuss individual modes and elements in more depth, with each partner questioning and offering ideas, their composing pathway became less linear and more similar to the way in which Davonte preferred to compose. For example, for their *Simile and Metaphor Poem*, the slide featuring Jay-Z went through several rounds of in-process revision, particularly in regards to the text. So, as Eric and Davonte engaged in more questioning, debate, and negotiation of composing decisions, their

collaborative composing pathway began to reflect both students' individual composing pathways.

Davonte and Eric also employed two different collaborative structures across the two focal projects. In the *So Much Depends Poem*, composing was *modally determined*, meaning that the text and images were chosen by Eric and Davonte, respectively, with little intervention from the other student. The second focal project, the *Simile and Metaphor Poem*, was created using the *composing in pieces* model, in which each student took responsibility for a specific piece of the project; they traded creative control as they switched physical places. Both forms of collaborative composing were effective; Davonte and Eric drew upon their composing identities and personal interests to fulfill the project goals. Further, in their interviews and presentations to the other students in the workshop, both students demonstrated a sense of ownership over the final product.

Finally, Eric and Davonte faced a number of challenges to the collaborative composing process. The material features of digital tools, such as cameras and computers, often limited opportunities for collaborative decision-making. The fact that one student or the other had control of the tool meant that student with physical possession usually determined the content as well; it took deliberate and persistent intervention on the part of the other student to be a full and active participant in the composing process. In addition, pedagogical structures, such as the provision of teacher-created models, provided the basis for ideological disagreements. For example, while Eric was often limited by the availability of teacher-provided models and examples, Davonte often pushed against these structures. These disagreements led to discord and even temporary disengagement from the composing process.

### **RQ3: What instructional conditions support students' collaborative, multimodal composing?**

In looking across Eric and Davonte's individual and collaborative composing processes, I identified three key features of productive collaborative composing: justified decision-making, shared ownership, and two kinds of peer feedback—open questioning and praise. First, students' detailed explanations of their ideas, alongside one or more justifications for why a given idea would produce a better outcome, played a key role in encouraging talk and the negotiation of ideas. Next, the two overarching composing patterns employed by Davonte and Eric, *modally determined composing* and *composing in pieces*, each provided opportunities for shared ownership of the final product. Finally, two types of peer feedback—open questioning and praise—led Eric and Davonte to express positive feelings towards their joint work and encouraged more talk and thought surrounding ideas for poetic subjects, themes, and mode use.

Next, the analysis of multimodal composing process and product data from across all of the workshop projects allowed me to identify a set of instructional conditions which supported Eric and Davonte's collaborative composing. These instructional conditions, which included pairing students with different composing identities, offering opportunities for collaborative partnerships to develop over time, providing a variety of composing projects, utilizing online and in-person forums for collaboration, and employing a gradual reduction in scaffolding, allowed students to engage fully in the collaborative multimodal composing process.

Finally, in an effort to provide a complete portrait of collaborative composing processes within the study, and as a response to policy-makers and researchers' emphasis on the benefits of collaborative composing with little attention to potential constraints, I also presented some of the material, instructional, and interpersonal impediments that emerged from the analysis of data. Specifically, the material features of digital tools and the reflexive and interactive positioning of

one student as an “expert” limited the potential for collaborative composing. These obstacles served to undermine one student’s contributions, which caused disengagement from the composing process and lasting effects on the partnership. Taken together, these features of and challenges to multimodal composing provide a portrait of what collaborative composing within the workshop looked, sounded, and felt like.

### **Contributions**

Through an in-depth examination of focal students’ individual and collaborative multimodal composing processes and products, the current study provides new and needed insights into how young adolescents use digital tools to compose. This section outlines the study’s unique contributions to the literature. I conclude with a discussion of the limitations of this work.

In connection with the first research question, the current study builds upon existing research by discussing how two focal students’ roles within an academic setting influenced their *composing identities*—their modal preferences and deployment of semiotic resources. I examine how, as these students became more experienced multimodal composers and experimented with different composing tools, their individual composing identities both persisted and changed. I also discuss how students’ *composing pathways* were shaped by their previous experiences with composing, digital tools, and pedagogical supports, and in doing so, I contribute new insights into how young adolescents use different strategies to compose, edit, and revise their multimodal work. Finally, while previous research has identified pedagogical supports for multimodal composing (Dalton & Smith, 2012; Mills, 2010b; Selfe & Selfe, 2008), this study specifically examines the impact of these supports on students’ collaborative composing processes.



Next, while collaboration is repeatedly cited as a crucial component of digital and multimodal pedagogies (Mills, 2010a; Voogt & Roblin, 2012), there is little research which specifically examines what collaborative composing looks, sounds, and feels like. Through the in-depth analysis of two focal students' individual and collaborative composing processes and products, this study traces the material, personal, and interactional resources that students bring to collaborative, multimodal composing—and presents a description of how two very different students navigate new interactional roles in the creation of their joint work. I also outline potentially productive forms of collaborative composing and discuss how students faced numerous obstacles in the generation and negotiation of ideas.

Finally, this study presents an initial set of instructional conditions for supporting collaborative multimodal composing. I identify specific patterns which led to collaborative decision-making and the shared ownership of final products, which can hopefully be utilized and expanded in future research and practice. Also, while previous research has focused almost exclusively on the benefits of collaborative composing (Gall & Breeze, 2008; Ranker, 2008; Smith, 2013; Smythe & Neufield, 2010), this study takes a more critical look, examining how some forms of collaboration can actually lead to frustration and disengagement from the composing process.

It is important to note that this study highlights the composing processes and interactions of a small group of nine young adolescents, with the primary focus on two focal students. While the sample size was specifically chosen to allow in-depth analysis of the data in response to the research questions, participants' behaviors may not be representative of other young adolescents. Further, as is the nature of qualitative research, these findings are situated in a particular social, cultural, and institutional context—an academic enrichment program in an out-of-school setting.

In some ways, the collaborative construction of the digital and multimodal response projects subverted and disrupted typical dynamics of more traditional academic settings, like schools—for instance, students often controlled the negotiations for the design and enactment of the final products. However, unlike previous studies which have examined students’ multimodal composing in out-of-school settings (Hull & Nelson, 2005; Vasudevan, 2006a), students composed in response to literature, and were often tasked with fulfilling specific project goals. So, while the findings offer insight into multimodal composing for academic purposes, the ways in which this particular setting shaped students’ processes and products could serve to limit the application of these findings to other settings.

### **Directions for Future Research**

Previous research on multimodal composition has emphasized the potential for engaging and motivating adolescents (Selfe, 2009; Smythe & Neufield, 2010), the possibilities for composing and combining modes in an intertextual landscape (Curwood, 2012; Ranker, 2008), and the benefits of allowing children and adolescents to engage with the range of communicative material that they will need to navigate in the 21<sup>st</sup> century world (Clark, 2010; Kress, 1998). While the current study illuminates several vital aspects of students’ collaborative composing processes and offers new insight into students’ negotiation and generation of ideas, it also raises more questions: What role do digital tools, often originally designed for a single user, play in the collaborative composing process? How do students’ positions as “experts” in the use of technology affect the collaborative composing process? How do pedagogical scaffolds, such as teacher-created models, both support and limit students as they compose multimodally? And finally, what does the combined analysis of product and process data reveal about young adolescents’ collaborative composing processes?

A growing body of recent research has addressed the ways in which spaces (Ehret & Hollett, 2013; Leander, Phillips, & Taylor, 2010) and material objects and tools (Ehret, Hollett, Jocius, and Wood, 2014; Leander & Lovvorn, 2006) constrain and enable the making of new media. However, more work is specifically needed on how the material features of digital tools can impact students' collaborative processes. In this study, many of the tools used in the collaborative composing process, such as computers, headphones, cameras, and mice, were originally designed for a single user, which presented a series of challenges to the discussion and negotiation of ideas. In most cases, the person with physical control of the digital tool—such as when Eric sat directly in front of the computer screen or Davonte maintained possession of the camera—ultimately controlled the form and content of that portion of the composition. New means of sharing these tools and of maximizing opportunities for all collaborators to participate in the composing process need to be explored and tested.

Next, much has been written about the expert/novice dynamic in the academic use of technology, encompassing concerns with teacher (Bonk & Cunningham, 1998; Cuban, Kirkpatrick, & Peck, 2001; Judson, 2006) and student (Sadik, 2008) expertise. Researchers have even begun to study the influence of students' technological expertise on multimodal composition specifically (Ryan, Scott, & Walsh, 2010), and found that positioning select students as technological experts can relieve some of the instructional burden from teachers and even allow students with less experience in using digital tools to participate in the multimodal composition process. The fact that the two focal participants in this study entered the workshop with such vastly different levels of previous experience with digital tools presented a unique opportunity to examine the ways in which expertise affected the nature of students' interactions. The data from this study shows that for students with disparate levels of experience with

technology and digital tools (and in all partnerships, there will be some degree of difference in expertise), positioning one student as the leader due to technological skill alone can have unintended challenges. The fact both Davonte and Eric made valuable contributions to their collaborative multimodal compositions, despite these vast differences in their relative technological skill sets, suggests that engagement and participation in the composing process isn't necessarily related to previous experiences with technology. Given the differences in composing experience existing within all partnerships, exploring students' relative positions as "experts" across settings and types of collaborative partnerships would add new insights to our understandings of collaborative composing.

This study's findings also raise new questions about how different instructional conditions can support students' collaborative, multimodal composing. Some conditions, such as pairing students with differing composing identities and allowing students to develop familiarity with each other across a set of collaborative composing interactions, helped students to develop new techniques for composing and collaboration. Other strategies, such as providing a variety of composing projects, utilizing online and in-person forums for collaboration, and employing a gradual reduction in scaffolding, helped support students as they developed new skills as collaborative multimodal composers. Future research that continues to identify, develop, and test pedagogical strategies, particularly involving collaborative composing practices, would make a major contribution to the existing literature. As schools and teachers continue to slowly adopt multimodal composing practices, determining the most productive and least restrictive means of scaffolding multimodal instruction and supporting students will remain an important consideration.

Finally, researchers interested in multimodal composition have noted the limitations of recording, analyzing, and representing complex, multimodal practices in primarily print-based formats and venues (Hull & Nelson, 2005). Recent innovations in data collection and analysis, such as screen capture recordings (Dalton, 2013; Halverson, 2010) and the documentation of patterns in mode use (Phillips & Smith, 2013; Smith, 2013), have begun to illuminate the intricacies of students' multimodal composing processes. However, children and adolescents' multimodal products and the means for dissemination of these products remain an important consideration for researchers and practitioners, particularly when considered in light of the numerous web-based venues for the publication and presentation of children and adolescents' work. So, in order to capture the multi-faceted nature of students' multimodal composing practices, we need better forms of collecting, analyzing, and presenting data that allow for the combination of both product **and** process. Qualitative analysis methods used in this study, such as idea tracing, can continue to be tested and refined in future work that aims to better represent the complexities of the multimodal composing process.

### **Conclusion**

A growing body of previous research suggests that multimodal composing is a complicated and multifaceted process, involving the coordination of semiotic, material, and interactional resources (Ehret, Hollett, Jocius, & Wood, 2014; Miller & McVee, 2013; Selfe, 2007; Smith, 2013). In accord with this work, this study shows that two focal participants, Davonte and Eric, navigated a complex set of tools, including a variety of modes, digital devices, pedagogical structures, and personal resources, as they composed multimodally. Across a series of composing experiences, students developed more sophisticated and nuanced ways of

interacting with each other, and with modal and digital resources, in order to produce work that communicated ideas, expressed meaning, and responded to literature and the world around them.

This study moves beyond reporting how adolescent students interact with technology and multiple modes to illuminate their collaborative interactions. Specifically, findings show that students navigated different composing identities, composing pathways, moments of creative tension, and numerous obstacles as they composed collaboratively-created multimodal products. My analytic focus on students' composing processes and their final multimodal products also allowed me to identify instructional conditions which supported collaborative multimodal composing. It is my hope that future research can examine, refine, and expand these conditions so that they can be shaped into pedagogical structures that can support students as they create, compose, and interact with digital, multimodal tools.

## Appendix A

### Proposed Course Outline

#### **Digital, Multimodal Literature Responses: Sites for Literacy Learning, Identity Construction, and Engagement**

5<sup>th</sup> Grade Summer Curriculum

Robin Jocius, Vanderbilt University

#### **Project Goals**

- Engage students in responding to literature using technology and multimodal forms
- Help students make personal, critical, and social connections to literature
- Develop skills in reading, technology use, and composition
- Foster a life-long love of reading
- Understand how students use digital media to respond to literature

#### **Common Core Connections**

- CCSS.ELA-Literacy.RL.5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently.
- CCSS.ELA-Literacy.RL.5.6 Describe how a narrator’s or speaker’s point of view influences how events are described.
- CCSS.ELA-Literacy.W.5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- CCSS.ELA-Literacy.W.5.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.
- CCSS.ELA-Literacy.SL.5.4 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- CCSS.ELA-Literacy.SL.5.5 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.

#### **Learning Progression**

*Week 1:* Building a Community of Learners; Finding a Multimodal Identity

Week 2: Developing 21<sup>st</sup> Century Skills and Reading Skills through Collaborative Discussion

Week 3: Poetry, Identity, and Reader Response

Week 4: Extending the Discussion: Changing the Form and Function of Literature Response

Week 5: Extending the Discussion: Connecting Characters, Identities, and Communities

Week 6: Putting it All Together: Digital, Multimodal Responses to Literature

### Project Calendar

Weeks/Texts	Monday	Tuesday	Wednesday	Thursday	Product(s)
Week 1 Coat of Arms		Introduction Modeling Vocab Vids		All About Me Vocab Vids	All About Me Coat of Arms
Week 2 Love That Dog		<i>Poetry</i> Acrostics		<i>Love That Dog</i> VoiceThread	Acrostics VoiceThread
Week 3 Love That Dog		<i>Love That Dog</i> VoiceThread		<i>Love That Dog</i> MM Poems (Photostory)	Message Board MM Poems
Week 4 Love That Dog		<i>Love That Dog</i> Message Board		<i>Love That Dog</i> Message Board	Message Board
Week 5 Videos		Video Planning		Videos	Videos
Week 6 Videos		Work on Video		Presentations	

### Texts

*Love That Dog*, Sharon Creech

### Multimodal Projects

Coat of Arms

VoiceThread Responses

Numerous Multimodal Poems

Video Responses to Texts



## Appendix B

### Final Curriculum Map

- *Vocab Vids*: Students filmed 30-second videos in which they revealed the meaning of a chosen vocabulary word. These were generally completed as a warm-up activity to introduce students to new vocabulary words found in their reading. I provided each group with three choices; they selected the word that they were most interested in, then designed and filmed their skit. We viewed the previous day's vocab vids during the following class session.
- *All About Me* was an introductory project designed to introduce students to the hardware and software that they would use throughout the workshop. As this was a focal project, see Chapter 4 for a detailed description of the different elements of this work.
- *Family Poems* were created after students read a series of poems in which they authors wrote about their families. Students were asked to take photographs of family members and objects which were personally meaningful to them, and then they crafted multimodal poems that included multiple forms of imagery.
- *So Much Depends Poems* were created after students read William Carlos Williams's "The Red Wheelbarrow." Students were asked to take a photograph of an object upon which "so much depends" and then they created PowerPoint poems about their photograph. As this was a focal project, see Chapter 5 for a detailed description of the different elements of this work.
- *Rhythm Poems* were created after students studied different ways authors could create rhythms in poetry. Students were asked to use PowerPoint to compose poems about the unseen and unheard rhythms of a chosen person, object, or place.
- *Form Poems*, or Concrete Poems, were created using an online tool, Concrete Poetry Maker. After studying the concrete poems in *Love That Dog*, students learned about how the shape of words can affect the reader of a poem, and they were tasked with creating their own versions.
- *Fireworks Poems* were created after students read a series of Shel Silverstein poems which included onomatopoeia. As part of a 4<sup>th</sup> of July celebration, students then composed digital videos which included descriptions of fireworks using onomatopoeia.
- *Neighborhood Poems* were designed to encourage students to think critically about their own experiences and autobiographies in relation to literature. In creating multimodal poems about previously unseen and unheard aspects of their neighborhood, students examined and counteracted stereotypes of their communities.
- *Simile and Metaphor Poems* were created after students studied ways in which to read and write with similes and metaphors. As this was a focal project, see Chapter 5 for a detailed description of the different elements of this work.
- *Visual Haikus* were designed to give students practice with a specific type of poetry, the haiku. After reading and practicing several haikus, students used PowerPoint to create their own.
- *Westlake Poems* was the culminating project for the workshop and were designed to give students the opportunity to demonstrate their new knowledge. As this was a focal project, see Chapter 4 for a detailed description of the different elements of this work.

Week	Session	Poetry Emphasis	Student Products	Technology	Literature	Student Response to Literature	Response to Student Work
1	1		Vocab Vids	Cameras, MovieMaker			
	2		All About Me	Cameras, MovieMaker, Paint			
	3		All About Me, Vocab Vids	Cameras, MovieMaker, Paint, Audacity			
	4		All About Me				All About Me Presentations
2	5	Imagery	Family Poems, Graphic Organizer, Vocab Vids	Cameras, MovieMaker, FreeMind	Maya Angelou, "Still I Rise" Margaret Walker, "Lineage" Gwendolyn Brooks, "My Grandmother is Waiting for Me to Come Home"	Family Poems	Family Poems Presentation
	6	Imagery	"Depends" Poems, Vocab Vids	Cameras, PowerPoint, Moviemaker, Paint	William Carlos Williams, "The Red Wheelbarrow" Sharon Creech, <i>Love That Dog</i>	"Depends" Poems	
	7	Rhythm	Vocab Vids	Cameras, MovieMaker, VoiceThread	Robert Frost, "Stopping by Woods on a Snowy Evening" Valerie Worth, "Dog" Lewis Carroll, "Jabberwocky" Gwendolyn Brooks, "We Real Cool" Shel Silverstein, "Smart" William Blake, "Tyger"	"Red Wheelbarrow" VoiceThread "We Real Cool" VoiceThread "Dog" VoiceThread	"Depends" Poems VoiceThread

	8	Rhythm	Rhythm Poems	Cameras, PowerPoint, MovieMaker, VoiceThread	<i>Love That Dog</i>	Rhythm Poems	Rhythm Poems VoiceThread
3	9	Form	Vocab Vids	Cameras, MovieMaker, VoiceThread	<i>Love That Dog</i> Shel Silverstein, "Colors"	<i>Love That Dog</i> VoiceThread "The Apple" VoiceThread Rhythm VoiceThread	Rhythm Poems VoiceThread
	10	Form	Form Poems, Vocab Vids	UK Learning Centre Concrete Poem Creator	<i>Love That Dog</i> Concrete Poems: "Sparkle," "Apple," "Slow Ride," "The Kite"	Form Poems	
	11	Sound, Onomatopoeia	Fireworks Poems, Vocab Vids	Cameras, Google Images, Paint, MovieMaker, VoiceThread, Audacity	Shel Silverstein, "4th of July"	Fireworks Poems	Form Poems VoiceThread, Fireworks Poems Presentation
4	12	Metaphor, Imagery	Vocab Vids, Neighborhood Poems	Cameras, MovieMaker, VoiceThread, Freemind	<i>Love That Dog</i> Tupac Shakur, "A Rose Grows in Concrete" Michael Harper, "Makin Jump Shots"	<i>Love That Dog</i> VoiceThread "The Apple" VoiceThread Rhythm VoiceThread Neighborhood Poems Draft	
	13	Metaphor, Imagery	Neighborhood Poems	Cameras, Paint, MovieMaker, Audacity	<i>Love That Dog</i>	Neighborhood Poems	
	14	Simile and Metaphor	Simile Poems, Vocab Vids	Cameras, MovieMaker, PowerPoint, Paint, VoiceThread	<i>Love That Dog</i> Walter Dean Myers, "Love That Boy"	Simile Poems	Neighborhood Poems Presentations, VoiceThread

	15	Tone and Mood	Visual Haikus, Vocab Vids	Cameras, MovieMaker, PowerPoint	Various haikus	Visual Haikus	Simile Poems VoiceThread, Visual Haiku Presentations
5	16	Perspective	Vocab Vids, MOB pictures	Cameras, MovieMaker	<i>Love That Dog</i>	MOB Poems Draft	
	17	Perspective	Vocab Vids, MOB Poems	Cameras, MovieMaker, Paint, Audacity	<i>Love That Dog</i>	MOB Poems Draft	
	18	Perspective	MOB Poems	Cameras, MovieMaker, Paint, Audacity, VoiceThread		MOB Poems	MOB Poems Presentations, VoiceThread
6	19	Reflection: Interviews					Interviews

Appendix C

Final Student Survey

**MOB Summer Survey!**

Name \_\_\_\_\_

Birth date \_\_\_\_\_

Place a check in the box by your race.

American Indian or Alaska Native  Asian  Black or African American  Hispanic or Latino  Native Hawaiian or Other Pacific Islander  White  Other \_\_\_\_\_

What is your native language? \_\_\_\_\_

Does your family speak another language at home? (Circle) Yes No

If so, what language? \_\_\_\_\_

Does your family have a computer at home? (Circle) Yes No

Does your family own another device that has internet access? (Circle) Yes No

If so, what kind? (iPad or other tablet, Smartphone, etc.) \_\_\_\_\_

Does your family have internet access at home? (Circle) Yes No

How many minutes or hours do you spend online each day? \_\_\_\_\_ minutes \_\_\_\_\_ hours

Before this summer, had you ever made a PowerPoint before? (Circle) Yes No

Before this summer, had you ever made a digital video? (Circle) Yes No

**Part 1: Agree or Disagree?**

1. I like using technology to write, create, and respond to books.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree

2. I wish my English teachers would use technology more.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree

3. I would rather read and write on paper than use the computer.

Strongly Agree

Agree

Neutral

Disagree

Strongly Disagree

## Part 2: Likes and Dislikes

1. What was your **favorite** project? (Circle one)

All about Me Videos

Depends Poems

Rhythm Poems

Form Poems

Fireworks Onomatopoeia Poems

Neighborhood Poems

Simile Poems

Visual Haikus

Westlake Poems

Vocab Vids

VoiceThread

2. What was your **LEAST favorite** project? (Circle one)

All about Me Videos

Depends Poems

Rhythm Poems

Form Poems

Fireworks Onomatopoeia Poems

Neighborhood Poems

Simile Poems

Visual Haikus

Westlake Poems

Vocab Vids

VoiceThread

3. If I wanted to do this project with another group of kids, what advice would you give me?

4. When working with technology to create a project, do you like working with a partner, with group, or by yourself best? Why?

5. What kinds of technology do you use in school?

## Appendix D

### Student Interview Questions

#### **Note:**

Individual interviews were conducted during the final session of the course.

#### **Procedure:**

I used a semi-structured, in-depth interview format to learn about young adolescents' 1) learning with digital media 2) composing processes with digital media, and 3) collaborative production with digital media. The questions provided below were used to initiate conversation on the bolded topics, while follow-up questions were used to probe further on the topics/examples provided by the students. I did not use all of the questions for any one student; these just provided a roadmap to get started with the interview. All follow-up questions applied to the three broad topics listed above.

I interviewed participants individually. Interviews were conducted at the Westlake Center. These interview sessions lasted approximately 15-20 minutes, but some ran longer, because some students were enthusiastic and wished to discuss their work more with me.

#### **Initial Questions: Learning with digital media**

- What do you like most about your work? What's your favorite part? Why?
- Is there anything you found difficult?
- What suggestions would give other students responding to books using technology?
- What did you learn from this course?
- What do you want to learn more about?
- How did this compare to other experiences you have had making media (or using computers)?
- How did this compare to other experiences you have had making media (or using computers)?

#### **Collaboration**

- What help do you think you need from teachers or other adults when composing?
- Did you like working with other students on this project? Why or why not?
- What were some of the best parts about working with (your partner)?
- What were some of the hardest things about working with (your partner)?

#### **Product-Based Questions: Composing process (Individual Questions)**





- What was your role in the project? How does that relate to your personal interests?
- How did you choose scenes or passages from the book for your project?





- Why did you choose that music? To use that sound effect?
- Why did you choose that camera angle? To use that graphic?
- How did you choose when do make this transition?
- How did you decide what to cut out and what to leave in?
- What idea of yours didn't get heard? What would you have included?
- (Show video): What were you thinking at this moment?
- How does this final product align with what you have envisioned?




Appendix E

Multimodal Transcript, Eric's *All About Me* Project


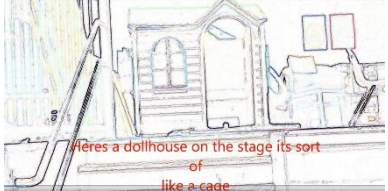

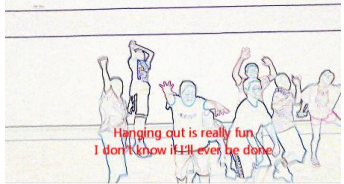
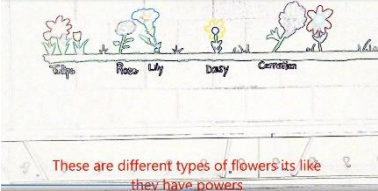

<b>Time</b>	<b>0:00-0:04</b>	<b>0:04-0:10</b>
Image	Eric All About Me	 Shoes at slight diagonal
Text	Eric All About Me (White)	
Music		Start at :04 DJ beat (thump thump thump thump thump), layered with a scratching noise, like on a record player
Transitions	1. Text flies in on a diagonal	1. Fade Out
Background Color	Black	
<b>Time</b>	<b>0:10-0:12</b>	<b>0:13-0:19</b>
Image	 Pictures of Me	 Davonte took the picture of Eric.
Text	Pictures of Me	
Music	Ctn.	Ctn.
Transitions	Text blinks and disappears into the background	
Background Color	Black	
<b>Time</b>	<b>0:20-:26</b>	<b>0:27-0:28</b>
Image	 Again, a picture that Davonte took, this time of Eric and Clinton	 Things I Love
Text		Things I Love (White)
Music	Ctn.	Ctn.

Transitions	1. Picture blinks once	1. Text flies in on diagonal
Background Color		Black
<b>Time</b>	<b>0:20-:26</b>	<b>0:27-0:43</b>
Image	 Note: From folder of images that I provided students to get started	 Again, an image Davonte took of Eric leaning on the stage.
Text		
Music	Ctnd.	Ctnd.
Transitions	1. Picture blinks once	
Background Color		
<b>Time</b>	<b>0:44-0:51</b>	<b>0:51-0:58</b>
Image	 Note: From folder of images that I provided students to get started	
Text		Music=life (with heart shape)
Music	Ctnd.	Ctnd.
Transitions	1. Picture separates into hexagon shape	Hexagon shape filters into background
Background Color		
<b>Time</b>	<b>0:58-1:01</b>	<b>1:01-1:08</b>
Image		
Text	As a Reader... (white)	
Music	Ctnd.	As the original music begins to fade away, a new beat enters. It sounds like a buzzing noise under the other beat.
Transitions	Text fades into background	
Background	Black	

Color		
Time	<b>1:09-1:16</b>	
Image		
Text		
Music	Ctnd. (original music all faded out)	
Transitions		
Background Color		

Appendix F

Multimodal Transcript, Eric's *Westlake Poem*

Time	1: 0:00-0:03	2: 0:03-0:10
Image	The _____ By: Eric 	
Text	The _____ By: Eric	Here's a dollhouse on the stage its sort Of Like a cage
Music	Upbeat, jazzy tune starts as soon as the words appear (at 0:02)	Ctnd.
Transitions	1. Text fades in from a distance	
Color	Black background with white text	Red text
Special Effect		Picture is almost completely faded to white, with outlines and a faint hint of color (FTW)
Sound Effect		
Time	3: 0:10-0:15	4: 0:15-0:20
Image		
Text	Here at Westlake we play all kinds of sports	Hanging out is really fun I don't know if I'll ever be done
Music	Ctnd; moving into thumping beat at end of slide	Fade from jazzy tune to hip hop beat; low strings play under a pulsing tone
Transitions	Text blinks and disappears into the background	Thick Outline
Color	Red text	Red text
Special Effect	Crayon effect	FTW
Sound Effect		Thud (:15)
Time	5: 0:21-:26	6: 0:27-0:34
Image		

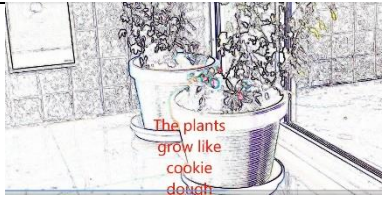
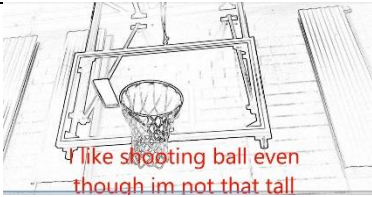

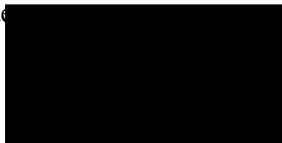
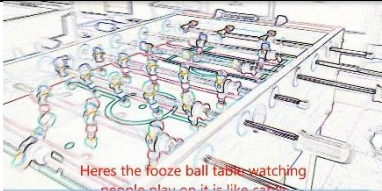




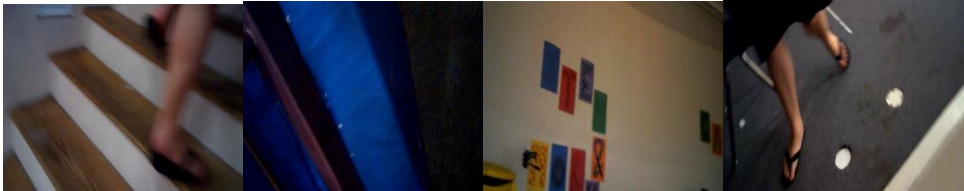

Text	These are different types off flowers its like they have powers	Heres the front door pertaining to _____ its like the core
Music	Ctnd.	Ctnd.
Transitions		1. Text flies in on diagonal
Color	Red text	Red text
Special Effect	FTW	Thick Outline
Sound Effect		
<b>Time</b>	<b>7: 0:34-41</b>	<b>8: 0:41-0:43</b>
Image		
Text	The plants grow like cookie dough	I like shooting ball even though im not that tall
Music	Ctnd; changing into "dark times," which is a low bass beat	Ctnd.
Transitions	1. Picture blinks once	
Color	Red text	Red text
Special Effect	Crayon effect	FTW
Sound Effect		
<b>Time</b>	<b>9: 0:44-0:51</b>	<b>10: 0:51-0:58</b>
Image		Here's ___ license plate on a Scale of 1-10 I will give him an eight and thatsmy rate 
Text	Heres my friend Josh in basketball he Thinks hes like Chris Bosh	See above
Music	Ctnd.	Ctnd.
Transitions		
Color	Red text	Red text
Special Effect	Crayon effect	Crayon effect
Sound Effect		
<b>Time</b>	<b>11: 0:58-1:01</b>	

Image		
Text	Heres the foose ball table Watching people play on it is like watching cable	
Music	Loud base noise, compounded with thudding sound effect (see below) and a bright, ringing beat	
Transitions	Image flies in from right	
Color		
Special Effect	Crayon effect	
Sound Effect	Thud (1:03)	

Appendix G

Multimodal Transcript, Davonte's *All About Me* Project


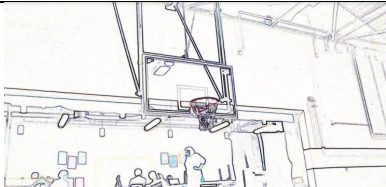
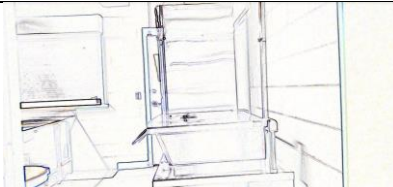
<b>Time</b>	<b>1: 0:00-0:06</b>		<b>2: 0:07-0:12</b>	
Image				
Film Frame				
Music	Hip hop beat (“Just a little hip hop”) with a fair amount of base		Ctnd.	
Transitions	Images slides in from right			
<b>Time</b>	<b>3: 0:13-0:19</b>		<b>4: 0:20-0:30</b>	
Image				
Film Frame				
Music	Ctnd.		Ctnd.	
Transitions			Slow fade into movie	
<b>Time</b>	<b>5, 6, 7, 8: 0:31-:46</b>			
Image				
Film Frame	 <p>The students play in the background; a basketball is being dribbled and an instruction is leading a class (the students chant after and make noise, but it's unintelligible)</p>			
Music				
Transitions				
<b>Time</b>	<b>9, 10, 11: 0:47-:57</b>			
Image				
Film Frame	 <p>Terrell: “Davonte, come here. Take my picture.”</p>			

Music		
Transitions		
<b>Time</b>	<b>12: 0:57-1:03</b>	<b>13: 1:03-1:10</b>
Image		
Film Frame		
Music	Upbeat, pop number (“Behind the Haze”) with bright, melodic tunes	Ctnd.
Transitions		
<b>Time</b>	<b>14: 1:10-1:16</b>	<b>15: 1:16-1:23</b>
Image		
Film Frame		
Music	Ctnd.	Ctnd.
Transitions		Picture flies in from right
<b>Time</b>	<b>16: 1:23-1:30</b>	
Image		
Film Frame		
Music	Ctnd.	
Transitions	Slow fade to black	



## Appendix H

### Multimodal Transcript, Davonte's *Westlake Poem*

Time	1: 0:00-0:06	2: 0:06-0:12
Image	The _____ by Davonte	Image of Westlake Center sign in full color is centered on the screen; the view is direct, so that the sign appears in its entirety
Text	The ____ by Davonte	[Name of Center]
Music	“Adventurous” music; fading in and then coming on strong, loud and beating throughout the poem (at 0:00)	Ctnd.
Transitions	Text fades in from a distance	
Color	Green background with black text	
Special Effect		
Sound Effect		
Time	3: 0:13-0:19	4: 0:20-0:26
Image	Image of Center sign from a different angle, diagonal looking up to the right	
Text		
Music	Ctnd.	Fade from jazzy tune to hip hop beat; low strings play under a pulsing tone
Transitions		Image flies in from right
Color	Green outline	
Special Effect	Picture is almost completely faded to white, with outlines and a faint hint of color (FTW)	FTW
Sound Effect	Loud banging noise as the other beat enters (:13)	Booming thunder (:20)
Time	5: 0:27-:34	6: 0:35-0:42
Image		

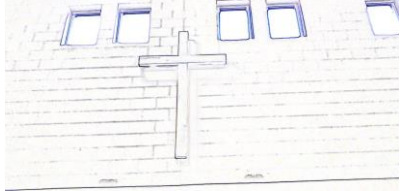


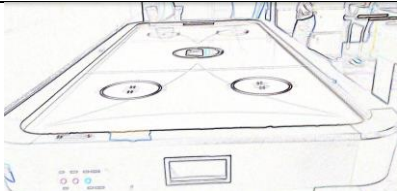


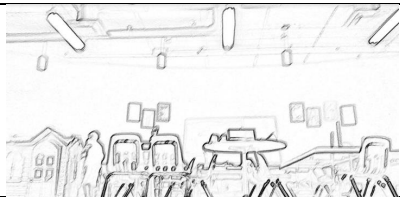


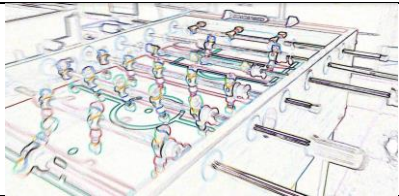

Text		
Music	The added beat fades away and the original music returns	Ctnd.
Transitions		
Color		
Special Effect	“Crayon” effect	“Crayon” effect
Sound Effect		Batman effect (:38)
<b>Time</b>	<b>7: 0:43-50</b>	<b>8: 0:50-0:55</b>
Image		
Text		
Music	Music fades almost entirely, returning in a softer tone	
Transitions	Slow fade	
Color		
Special Effect	FTW	Texturized effects
Sound Effect		
<b>Time</b>	<b>9: 0:44-0:51</b>	<b>10: 0:51-0:58</b>
Image		
Text		
Music	Ctnd.	Ctnd.
Transitions		
Color	Red text	Red text
Special Effect	Crayon effect	FTW
Sound Effect		
<b>Time</b>	<b>11: 0:58-1:02</b>	<b>12: 1:03-1:09</b>

Image		
Text		
Music	Ctnd.	Ctnd.
Transitions		Image flies in from right
Color		
Special Effect	Texturized	FTW
Sound Effect	Whistling noise	
<b>Time</b>	<b>13: 1:10-1:30</b>	<b>14: 1:30-1:37</b>
Image		
Text		
Music	A new “adventure music” begins; sound similar to the first clip, but with a faster pace	Ctnd.
Transitions		Diagonal fade out
Color		
Special Effect	FTW	Texturized
Sound Effect		
<b>Time</b>	<b>15: 1:37-1:44</b>	<b>16: 1:45-1:52</b>
Image		
Text		
Music	Ctnd	Ctnd
Transitions		
Color		
Special Effect	Crayon effect	Crayon effect
Sound Effect		Chiming Noise

Time	<b>17: 1:53-1:59</b>	<b>18: 2:00-2:06</b>
Image		(Image of poem including Center name)
Text		Wow! _____ is more fun than the sun It criss-cross around the Park. Dogs are barking in the park. All of my friends are around me. The people I see It's like the best Better than the rest. _____ will be All around me.
Music	Ctnd	Ctnd
Transitions		
Color		Green background with white text
Special Effect	Crayon effect	
Sound Effect		Chiming Noise

Appendix I


Idea Tracing Analysis, Eric and Davonte's *So Much Depends Poem*

**Slide 1, *So Much Depends Poem* (Eric and Davonte)**


Mode: title text  
Content: So Much  
Depends Upon  
Appearance: lime green  
Program: PowerPoint  
Notes: used in Slide 1 only

Mode: music  
Appearance: upbeat, pop  
number mixed with "Dark  
Times"  
Program: Audacity  
Notes: used in Slides 1-3

**So Much Depends  
Upon...**



So much depends upon a  
raggedy tattered basketball  
hoop  
Why does so much depend on a  
raggedy tattered basketball  
hoop?  
We play  
Run  
Jump  
So we can be healthy



Mode: student-captured  
image  
Appearance: basketball  
hoop from below  
Program: imported  
directly  
Notes: taken by Davonte

Mode: background  
format  
Appearance: diagonal  
green slices; dark color  
Program: PowerPoint  
Notes: used in all slides;  
color changes for each

Mode: written text  
Content: So much depends upon  
a raggedy tattered basketball  
hoop  
Why does so much depend on a  
raggedy tattered basketball  
hoop?  
We play  
Run  
jump  
So we can be healthy  
Appearance: light red  
Notes: Used in Slide 1

<b>Idea Units</b> A. Slide B. Idea	<b>Generation of Idea</b> A. Point of Origination (All from RC3_62013) B. Participants C. Notes	<b>Enactment of Idea</b> A. Point of Enactment (All from RC3_62013) B. Participants C. Notes	<b>Additional Noticings</b> (Researcher Notes)
<p>A. 1  B. Title Content:  So Much Depends  Upon...</p> <p>A. 1  B. Text Content:  “So much  depends upon a  raggedy tattered  basketball hoop  Why does so  much depend on  a raggedy  tattered  basketball hoop?  We play  Run  jump  So we can be  healthy”</p>	<p>A. 0: 44:16  B. Eric  C. As Davonte looked on,  Eric clicked to the open  teacher-created model,  checked the title that I used  (“So Much Depends Upon”),  and added the “So Much  Depends Upon” title to  their poem.</p> <p>A. 0: 47:10-0:51:32  B. Davonte, Eric  C. Eric, who is facing the  screen directly, takes on the  bulk of the responsibility for  crafting the text. He  proceeds to compose in a  linear fashion, working on  the first three slides, and  then returning to the first  one, in which the text ran  over the side of the screen.  Davonte is mostly attentive,  only leaving to speak with  Gabriel once.</p> <p>Davonte has two moments  where he contributes:  (Question) 0:48:15: “What  does tattered mean?  (Praise) 0:49:32: “I like that”</p>	<p>A. 0:59:13  B. Eric, Davonte  C. After adding text to  each slide (“So much  depends upon a raggedy  tattered basketball  hoop/Why does so much  depend on a raggedy  tattered basketball  hoop?”), Eric returned to  the first slide and paused,  hesitating and moving the  cursor over the words,  which extended beyond  the reach of the page.  Davonte leaned forward  in his chair and pointed to  the top of the screen:  “Just make it smaller,” he  said. “It’ll fit then.” Eric  looked puzzled and his  hand hesitated on the  mouse. Davonte, sensing  an opportunity to return  to a more active  composing role, quickly  got out of his seat and  seized possession of the  mouse. Clicking on the  text size button at the top  of the screen, he made it  smaller once, then twice.  “See? Like that,” he said,  returning the mouse to  Eric’s control.</p>	<p>Although Davonte is an active  participant in the composing  of other elements, like the  pictures and the music, he  allows Eric to take the lead  here. This is consistent with  Davonte’s other individually-  created projects—he used  only minimal text and didn’t  make it a priority mode.</p> <p><b>Other Modes Not Described in  Detail for Any Slide:</b>  Title Color: Lime Green  Text Color: White  Text Placement: Side  Text Size and Font: Calibri  (Note: These are not marked  as separate idea units,  because there was no  negotiation among students)</p>
<p>A. 1  B. Image: view  from below the  basketball hoop</p>	<p>A. 0:44:52  B. Eric  C. After having some  difficulties with the image  fodler, Eric makes a beeline  for the image of the hoop  from below, which he had  praised during the shoot:  “Aw, that’s the best one.”</p>	<p>No change from original  idea generation.</p>	<p>Immediately after Eric adds  the first image, Davonte jumps  into the composing, offering  his opinion on the necessity of  adding more pictures (listed  under Structure, 1-4 on this  slide). He seems to take it as  an affront that Eric has  attempted to hijack his role as  the photo “expert.”</p>

<p>A. 1 B. Background Format</p>	<p>A. 0: 53:26--55:17 B. Davonte, Eric C. The boys try out different backgrounds, first choosing one with red horizontal stripes, and then selecting one with blue star-like objects. “Try that one,” Davonte suggests, pointing to the green background with diagonal slices that they ultimately choose to use.</p>	<p>A. 0:55:17 B. Eric, Davonte C. Although the boys eventually experiment with different hues in the third and fourth slides (after I make the suggestion to them), the first slide stays in the classic format.</p>	<p>The changes in background color represent another moment of teacher intervention; after seeing the background that the boys chose (1:02:37), I offer my advice: You could change the color on different slides...so that it looks different.” They make no comment, but I take physical control of the mouse to show them how to alter hues using the color function. Then, they change the colors on slides two, three, and four.</p>
<p>A. 1-3 B. Music: upbeat, pop number mixed with “Dark Times”</p>	<p>A. 1:10:34-1:22:14 B. Davonte, Eric, Gabriel C. Gabriel, who is listening to clips on his headphones, calls out, “ Oh, yeah that’s my song right here.” Eric and Davonte turn to each other, and Eric looks back down at the computer. Eric: You wanna...look for music? Davonte indicates assent, and the boys immediately begin to listen to the various clips available in the Audacity program.</p>	<p>A. 1:13:11-1:22:14 B. Davonte, Eric, Robin C. After listening to numerous clips, Davonte points to “Dark times.” Davonte: That one. Eric points to another clip. “Let’s do these.” He clicks on Dark times, then the second clip, and puts one on top of the other one. Then, he plays the layered clip for Davonte, who nods his head at the beginning and then stands up and begins to move his body back and forth to the music. Eventually, Davonte indicates approval. Davonte: Oh, yeah, that’s good. Eric smiles, and imports the clip into PowerPoint after spending about forty seconds looking for the insert music tool.</p>	<p>Music seems to be a passion of both students, although by this point in the workshop, Eric had already developed a reputation for having the “best music.” The choices that they make for both this slide and the final slide seem to be collaborative.</p>
<p>A. 1-4 B. Structure: 4 slides, a departure from the teacher-created model</p>	<p>A. 0:45:01 B. Eric, Davonte, Robin Eric adds the first image without consulting Davonte, who immediately jumps into the conversation: B: How do we get more? Eric: More what? Davonte: More of the pictures.</p>	<p>After receiving my assistance in adding PowerPoint slide—and “official” approval to extend the poem beyond the teacher-created model—Eric and Davonte worked together to select the images for their poem. For example, after</p>	<p>Eric is reluctant to depart from the teacher-created model, which is similar to his individual work. Whenever teacher-created models are provided, he tended to refer often to the content and layout of the model, forcing his to “match” the appearance of the ones I provided.</p>

	<p>Eric: On the same page?  Davonte: Or a new one.  Eric: The one Ms. J did only has one page.  Davonte: We can ask her.  Eric: About what?  Davonte: Add more. We need more pictures  Eric: We could do one page. Like that one.  Davonte: Then where do we put the other pictures?  There's no space on there (pointing to PowerPoint).  Eric: We could leave it like this. I used the best one.  Davonte: It looks boring. One isn't enough. We can make it better with more pictures.  Eric: I don't know how.  Davonte: Ok. (turns around to look for me) How do you do it?  Robin: Hang on one second. Do you guys want to add more of your pictures?  Davonte: Yeah.</p>	<p>placing the frontal version of the basketball hoop on the first slide, Eric then asks for Davonte's input: "Which one do you want to put on that side?"  Davonte selects another view from below the basketball hoop, almost indistinguishable from the version on the first slide, agreeing with Eric's earlier assessment that "it's the best one."</p>	
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## Slide 2, *So Much Depends Poem* (Eric and Davonte)

Mode: title text  
Content: Why does so much depend on a raggedy tattered basketball hoop?  
Appearance: dark green in white box with light green border  
Program: PowerPoint  
Notes: used in Slide 2 only

Mode: music  
Appearance: upbeat, pop number mixed with "Dark Times"  
Program: Audacity  
Notes: Used in Slides 1-3

Why does so much depend on a raggedy tattered basketball hoop?

Raggedy



Tattered



Mode: student-captured images  
Appearance: Basketball hoop from below; slight angle  
Program: imported directly  
Notes: taken by Davonte

Mode: background format  
Appearance: diagonal green slices; light color  
Program: PowerPoint  
Notes: used in all Slides; color changes for each

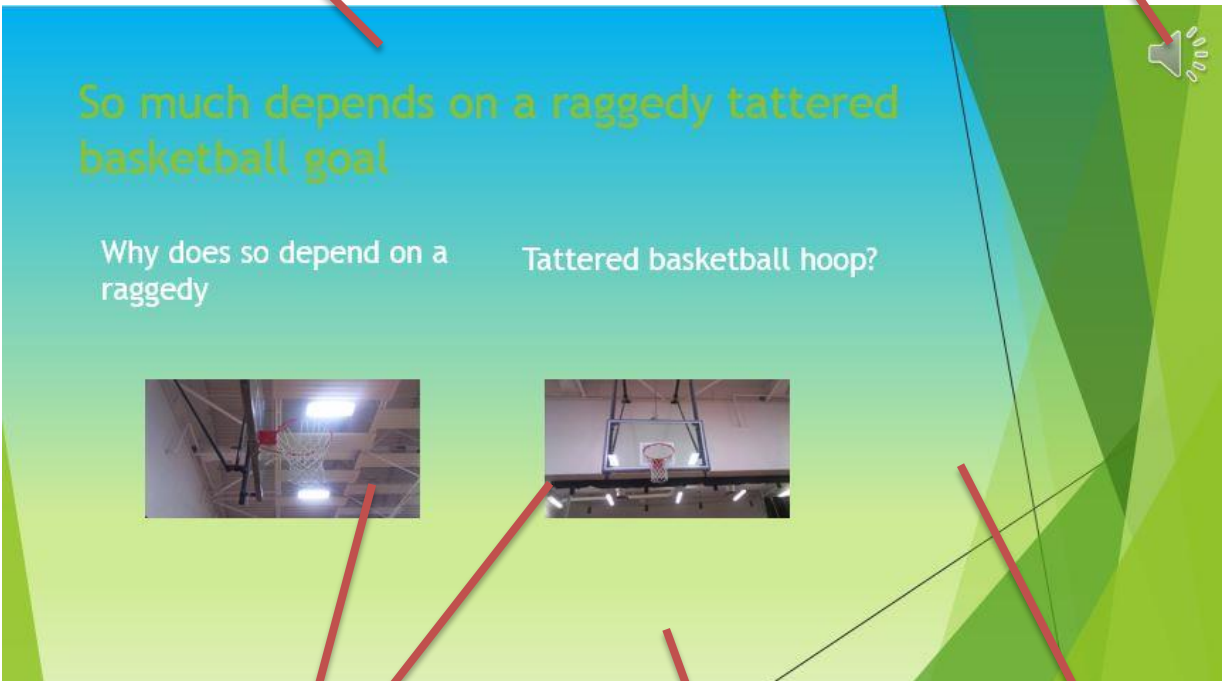
Mode: written text  
Content: Raggedy tattered  
Appearance: bold white  
Notes: used in Slide 2

<b>Idea Units</b> A. Slide B. Idea	<b>Generation of Idea</b> A. Point of Origination (All from RC3_62013) B. Participants C. Notes	<b>Enactment of Idea</b> A. Point of Enactment (All from RC3_62013) B. Participants C. Notes	<b>Additional Noticings</b> (Researcher Notes)
A. 2 B. Images: frontal view of basketball hoop and view from below hoop	A. 0:45:32 B. Davonte, Eric C. After placing the frontal version of the basketball hoop on the first slide without asking for Davonte’s help (although Davonte interrupts him), Eric then asks for Davonte’s input: Which one do you want to put on that side? Davonte selects another view from below the basketball hoop, almost indistinguishable from the version on the first slide, agreeing with Eric’s earlier assessment that “it’s the best one.”	A.1:10:11 B. Eric C. Eric resizes the image to make it smaller (it looks like it’s running off the side of the screen). Davonte sees what he is doing and stops him by putting a hand out to the screen. Davonte: Hey, why are you doing that? Eric: It’s too big. Davonte: Oh, ok.	Davonte seems hyper- sensitive to any changes in the visuals—even though Eric is only changing the size so that the image fits better on the slide, he immediately jumps in to ensure that Eric isn’t drastically changing the poem’s visuals.
A. 2 B. Background Format: Light green color	A. 1:02:37-1:03:01 B. Davonte, Eric C. Before reaching the color hue button that I had just showed them, Davonte stops Eric: Make it lighter. Eric clicks on the light green color and asks: That? Davonte: Yeah.	No change from original idea generation.	Eric seems to be deferring to Davonte’s choices in all things visual, including the background color.

### Slide 3, *So Much Depends Poem* (Eric and Davonte)

Mode: title text  
Content: So much depends on a raggedy tattered basketball goal  
Appearance: light green  
Program: PowerPoint  
Notes: used in Slide 3 only

Mode: music  
Appearance: upbeat, pop number mixed with "Dark Times"  
Program: Audacity  
Notes: used in Slides 1-3



Mode: student-captured images  
Appearance: Basketball hoop from below; slight angle  
Program: imported directly  
Notes: Taken by Davonte

Mode: background format  
Appearance: diagonal green slices; blue hue  
Program: PowerPoint  
Notes: Used in all Slides; color changes for each

Mode: written text  
Content: Why does so much depend on a raggedy tattered basketball hoop?  
Appearance: white  
Notes: used in Slide 3

<b>Idea Units</b> A. Slide B. Idea	<b>Generation of Idea</b> A. Point of Origination (All from RC3_62013) B. Participants C. Notes	<b>Enactment of Idea</b> A. Point of Enactment (All from RC3_62013) B. Participants C. Notes	<b>Additional Noticings</b> (Researcher Notes)
A. 3 B. Images: views of basketball hoop from the side and the front	A. 44:45-44:56 B. Davonte, Eric C. Eric turns silently to Davonte, who points to two of the images. Eric then clicks on the images and adds them to the PowerPoint before returning to the first slide in order to begin composing the text.	No change from original idea generation	After selecting the image for the first slide without consulting Davonte, Eric seems to recognize Davonte’s authority over the photographs; he doesn’t question his choices for either the second or third slides and makes only minimal changes (size change in Slide 2) during the revision process.
A. 3 B. Blue Background	A. 1:03:01-1:04:06 B. Davonte, Eric, Robin C. After I offer advice on changing the hue and show the boys how to do it, they experiment with different colors, using a lighter green first, then red, and then changing the overall background to a lighter color. Eventually, Davonte intervenes: “Do blue.” Eric picks a blue hue, Davonte nods, and they move on to Slide 4.	No change from original idea generation	The changes in background color represent a moment of teacher intervention; after seeing the background that the boys chose (1:02:37), I offer my advice: You could change the color on different slides...so that it looks different.” They make no comment, but I take physical control of the mouse to show them how to alter hues using the color function. Then, they change the colors on slides three and four.

## Slide 4, *So Much Depends Poem* (Eric and Davonte)

Mode: title text  
Content: Poem Authors  
Appearance: light green  
Program: PowerPoint  
Notes: used in Slide 4

Mode: music  
Appearance: hip-hop;  
mixed beat  
Program: Audacity  
Notes: used in Scene 4  
only

Poem Authors

So much depends on a  
raggedy tattered basketball  
goal

why does so much depend on  
a raggedy tattered  
basketball hoop?

The slide features a light green background with a diagonal green and red pattern on the right side. A speaker icon is in the top right corner. Two red arrows point from the metadata boxes to the slide: one to the title and one to the music icon. Two more red arrows point from the slide to the bottom metadata boxes: one to the student photos and one to the poem text.

Mode: student-captured  
images  
Appearance: Eric,  
Davonte at computer  
Program: imported  
directly  
Notes: Taken by Davonte  
and Eric respectively

Mode: background  
format  
Appearance: diagonal  
green slices; red hue  
Program: PowerPoint  
Notes: Used in all Slides;  
color changes for each

Mode: written text  
Content:  
So much depends on a  
raggedy tattered  
basketball goal

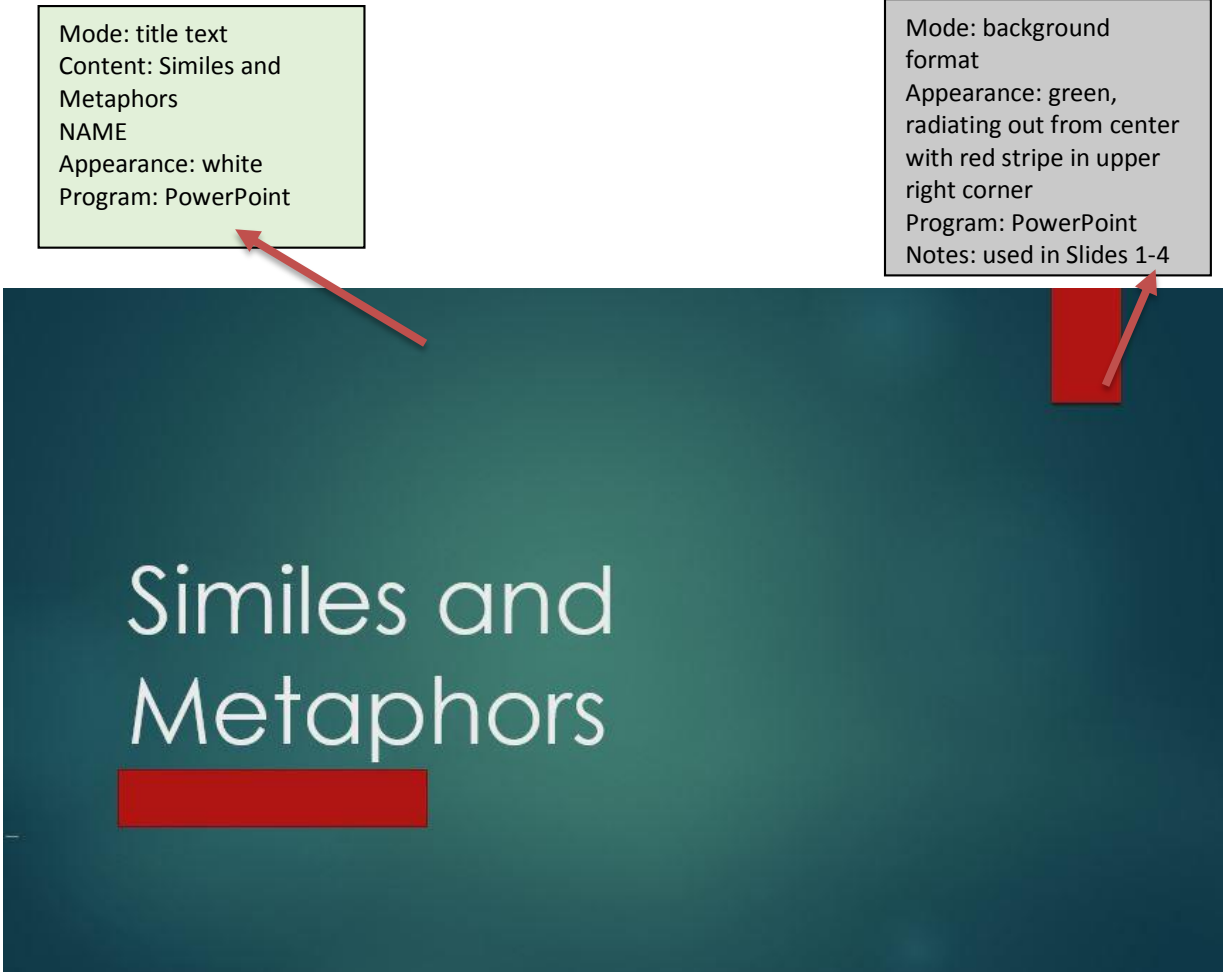
Why does so much  
depend on a raggedy  
tattered basketball hoop?  
Appearance: white  
Notes: Used in Slide 4

<b>Idea Units</b> A. Slide B. Idea	<b>Generation of Idea</b> A. Point of Origination (All from RC3_62013) B. Participants C. Notes	<b>Enactment of Idea</b> A. Point of Enactment (All from RC3_62013) B. Participants C. Notes	<b>Additional Noticings</b> (Researcher Notes)
A. 4 B. Images: Eric standing in the gym; Davonte sitting at the computer	A. 1:07:33-1:08:11 B. Eric, Davonte C. After deciding to add an author page, Eric quickly picks his picture from the file folder. Davonte doesn't offer any input. When it comes time to pick an image for Davonte, Eric turns to him, and Davonte shakes his head. Davonte: I don't have any. Eric: Ok. I can take one.	A. 1:08:11-1:09:51 B. Davonte, Eric C. Eric takes a picture of Davonte, offers it to him for his approval. Eric: Yeah? Davonte: Ok. Eric: I think...we put it like this. The boys, who have been practicing how to upload photographs, are able to add Davonte's image to the PowerPoint through the open image folder.	Davonte is hesitant to hand the camera to Eric, even so he can get his picture taken for the author page, again, indicating a reluctance to relinquish any control over the visual appearance of the poem.
A. 4 B. Title Text Content: Poem Authors	A. 1:06:46-1:07:12 B. Eric, Davonte C. Eric adds another PowerPoint slide., Davonte said, "And like, on the last page we could have us, the authors." Eric quickly indicated his assent and added the title to the final slide.	No change from original idea generation.	The idea of poem authors is continued in later works as well—both Davonte and Eric tend to include extra "credits" after the poem is over. It might be related to the first All About Me project, where I encouraged students to use their names and pictures of themselves as much as possible.
A. 4 B. Background Color (reddish pink)	A. 1:04:06-1:04:31 B. Eric C. Davonte, whose attention is captured by Gabriel, who is sitting at the end of the table, looks briefly at the computer and says, "red." Eric tries three different colors, ultimately choosing a light reddish pink.	No change from original idea generation.	Davonte seems displeased with the color when they present, making a face at the screen. He's distracted by Gabriel when Eric makes the final choice, although it was his idea to use red.
A. 4 B. Music appearance—hip hop beat	A. 1:22:14-1:24:11 B. Eric and Davonte C. After layering two clips together for the first three slides, Eric clicks on "Just a little hip hop," and Davonte is immediately impressed. Davonte: Oh, yeah.	No change from original idea generation.	The last slide seems like a total departure from the others; the boys don't even consider using the same music throughout; it seems like a given that they would change it for the "credits." I wonder if the "credits" are their own genre of multimodal composition;

	<p>Eric: That one? Davonte: Yeah, just that one. On the last one. Eric: The author page? Davonte: Yeah.</p>		<p>we saw this with the Holes book trailer and I saw it with my Kite Runner work—students are eager to celebrate their own work and to place labels on their contributions. In this case, both boys are listed as equal “authors.”</p>
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Appendix J

Idea Tracing Analysis, Eric and Davonte's *Simile and Metaphor Poem*

Slide 1, <i>Simile and Metaphor Poem</i> (Eric and Davonte)			
<div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 5px; width: 30%; background-color: #e0f0e0;"> <p>Mode: title text Content: Similes and Metaphors NAME Appearance: white Program: PowerPoint</p> </div> <div style="border: 1px solid black; padding: 5px; width: 30%; background-color: #cccccc;"> <p>Mode: background format Appearance: green, radiating out from center with red stripe in upper right corner Program: PowerPoint Notes: used in Slides 1-4</p> </div> </div> 			
<p><b>Idea Units</b> A. Slide B. Idea</p>	<p><b>Generation of Idea</b> A. Point of Origination (All from RC1_7913) B. Participants C. Notes</p>	<p><b>Enactment of Idea</b> A. Point of Enactment (All from RC1_7913) B. Participants C. Notes</p>	<p><b>Additional Noticings</b> (Researcher Notes)</p>
<p>A. 1 B. Title Content: Similes and Metaphors</p>	<p>A. 53:05-53:40 B. Davonte, Eric C. Eric attempts to delete the first title slide, intending to eliminate everything but the slide for the poem. 53:05</p>	<p>No change from original generation of idea.</p>	<p><b>Other Modes Not Described in Detail for Any Slide:</b> <b>Title Color: Purple</b> <b>Text Color: White</b> <b>Text Placement: Side</b> <b>Text Size and Font: Calibri</b></p>



	<p>Davonte: "It should be 'Simile and Metaphor.'  Eric: On this one?  Davonte: Yeah.  Eric then types in "Similes and Metaphors"</p>		<p><b>(Note: These are not marked as separate idea units, because there was no negotiation among students)</b></p>
<p>A. 1  B. Background Format</p>	<p>A. 0: 57:13-0:58:00  B. Eric  C. After Eric had chosen Jay-Z as the subject for the first slide of their poem (and consequently ignored Davonte's suggestion to include Beyonce, he added the picture of Jay-Z from the folder of pre-selected images to the PowerPoint slide. Then, after reviewing several different choices, including the same one that the pair had used in their So Much Depends Poem, Eric selected the one with the green background. He opened the color palette and seemed to hesitate before thinking about changing the color. Ultimately, while the cursor hovered over the palette, he kept the color as a dark green. Then, Eric began typing the text for the similes and metaphors on Slide 2. Davonte, who had disengaged from the task after his suggestion of Beyonce had been ignored, had begun talking to another student, Gabriel, about a piece of music that Gabriel was planning to use in his poem.</p>		<p>The changes in background color represent another moment of teacher intervention; after seeing the background that the boys chose (1:02:37), I offer my advice: You could change the color on different slides...so that it looks different." They make no comment, but I take physical control of the mouse to show them how to alter hues using the color function. Then, they change the colors on slides two, three, and four.</p> <p><b>Note: There is no negotiation regarding the background for the other slides.</b></p>

## Slide 2, Simile and Metaphor Poem (Eric and Davonte)

Mode: text  
Content: Jay-Z is a Rapping Legend  
He's as cool as a popsicle  
He's as fly as a hawk  
Appearance: white  
Program: PowerPoint

Mode: music  
Appearance: Jay-Z; "Take that dirt off your shoulder"  
Program: Download  
Notes: Slide 2 only

Jay-Z is a Rapping Legend  
He`s as cool as a popsicle  
He`s as fly as a hawk

Mode: Image  
Appearance: Jay-Z  
Program: imported directly from pre-downloaded image folder

Mode: background format  
Appearance: green, radiating out from center with red stripe in upper right corner

<b>Idea Units</b> A. Slide B. Idea	<b>Generation of Idea</b> A. Point of Origination B. Participants C. Notes	<b>Enactment of Idea</b> A. Point of Enactment B. Participants C. Notes	<b>Additional Noticings</b> (Researcher Notes)
A. 2 B. Images: Picture of Jay--Z	A. 0:55:13-0:56:17 B. Davonte, Eric C. Erice clicked on a picture of Jay-Z that I had copied from another student, Marcus's, Rhythm Poem. As Davonte saw the image, he grinned and said, "Ooh. Uh, Beyonce!" Eric turned to him and smiled, but he continued to click on a few additional images, none of which included Beyonce, before going back to Jay-Z. When Davonte repeated his idea, saying, "We could do Beyonce," Eric hesitated and said, "Or we could do Jay-Z. It's right here." Davonte responded by saying in a quiet voice, "We could find her. Uh, a picture." Eric, who either didn't hear or chose to ignore Davonte's response, began to import the image of Jay-Z into the PowerPoint for their poem.	No change from original idea generation	Eric's silencing of Davonte's idea had major implications for his participation--After fiddling with a book that was sitting on the table for about thirty seconds before eventually standing up and pushing back from the computer, Davonte interrupted me as I helped another student who was sitting across the table, asking, "I could get my own computer now?" I responded by saying, "Just give me a second," because I was occupied with another student for the next few minutes. By the time I got back to Davonte and asked him to repeat his question, he had already reengaged with Eric and the poem, telling me, "It's ok."
A. 2 B. Text: Jay-Z is a Rapping Legend He's as cool as a popsicle He's as fly as a hawk	A. 59:12-1:00:26 B. As Davonte turned back to the computer from speaking with Gabriel, his view of the screen was partially obstructed, leading him to misunderstand Eric's comparison and assume that Eric had incorrectly identified Jay-Z as Lil' Wayne: "That's not Lil' Wayne." However, after Eric defends his choice, "I said it's like Lil' Wayne"—	A. 59:12-1:01:43 B. Eric, Davonte C. As he realized that Davonte had made a valid point, Eric erased the text that he had already added to the slide and replaced it with the stem for the first simile. Then, he prompted Davonte for his input, by saying "As cool as ...," pausing, and looking towards Davonte, who chimed in right away, saying, "A popsicle!" Eric indicated immediate approval of the idea as he	Davonte, who had previously disengaged from the composing activity after his idea to use Beyonce was dismissed, had an immediate (and powerful) response to the use of his idea in the poem's text. He indicated his excitement—in response to Eric's laughter and his praise of the idea—by leaning in to the computer, then rising from his chair, and finally bouncing up and down as he attempted to capture my attention. When

	<p>Davonte correctly challenges Eric’s use of simile, stating that both artists “rap,” and defining simile by saying “A simile is different stuff, right?”</p> <p>A. 1:00:26-1:01:43  B. Davonte, Eric  C. As with the first simile, Eric provided the stem: “He’s as fly as…” Davonte leaned into the computer and repeated the first two lines: “Jay-Z is a Rapping Legend/He’s as cool as a popsicle/As fly as…” After Davonte completed his reading, Eric offered a suggestion: “A bird. As fly as a bird.”</p>	<p>typed in Davonte’s response, saying “That’s good,” leaned back in his chair and laughed.</p> <p>A. 1:00:26-1:01:43  B. Davonte, Eric  C. Without hesitating, Eric began to type in his own response, but Davonte interrupted him by providing a more specific response: “No. A hawk. As fly as a hawk. It’s better. Hawks are better.” Eric paused, hovered the cursor over his word, “bird,” erased it, and then added the word “hawk” instead. “Yeah, it’s better,” he agreed.</p>	<p>I came to examine their work, he was so eager to present it to me that he didn’t even wait until I had reached the computer before beginning to describe the poem. As he narrated the content of the slide to me, he seemed to recognize Eric’s role as the leader in terms of the text-based elements of the composition, saying to me, “Look. Look. Look. He said, ‘As cool as a popsicle’”, but then revised the statement to reflect his own contribution: “Yeah, I said, As cool as a popsicle.”</p>
<p>A. 2  B. Music: Jay-z, “Niggaz is crazy baby, don't forget that boy told you "Get that dirt off your shoulder" You gotta get that dirt off your shoulder You gotta get that dirt off your shoulder You gotta get that dirt off your shoulder You gotta get that dirt off your shoulder You gotta get that dirt off your shoulder”</p>	<p>A. 1:21:47-1:23:42  B. Eric. Davonte  C. Davonte: Let’s do a Jay-Z song.  Eric: Yeah...thought that, too.  After a few seconds of hesitation, in which Eric appears to be trying to remember how to download music, he goes onto Google and types in Jay-Z. After listening to a few different clips, “Dirt off Your Shoulder” t comes up, and just as I yell, “Three minutes” and ask for volunteers to help with cleaning up, he says, “I like this one,” and hands the headphones to Davonte.  After a few seconds, he takes the headphones back, downloads the clip without asking for Davonte’s opinion, and imports it into</p>	<p>No change from original idea generation.</p>	<p>Time constraints played a huge factor here. In other projects, both boys spent much more time listening to and selecting music. Here, Eric seemed to choose his clip hastily, without gathering input from Davonte on different choices. Also, Davonte left the computer to help me put away objects, so Eric was ultimately responsible for inserting the clip.</p>


	PowerPoint, with minimal assistance from Gabriel.		
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### Slide 3, Simile and Metaphor Poem (Eric and Davonte)

Mode: Poem text  
Content: The Titans are like fierce animals  
The Titans are as strong as lions  
As powerful as bears  
Appearance: white

Mode: Sound clip  
Appearance: Lion roaring  
Program: Davonte made the noise, using PowerPoint  
Notes: Slide 2 only

The Titans are like fierce animals  
The Titans are as strong as lions  
As powerful as bears



Mode: Images  
Appearance: Football stadium  
Program: downloaded from Google images  
Notes: They started the image-searching process by looking in the pre-selected folder (see below), but then went to Google images and downloaded this image instead

Mode: background format  
Appearance: green, radiating out from center with red stripe in upper right corner  
Program: PowerPoint  
Notes: used in Slides 1-4

<b>Idea Units</b> A. Slide B. Idea	<b>Generation of Idea</b> A. Point of Origination B. Participants C. Notes	<b>Enactment of Idea</b> A. Point of Enactment B. Participants C. Notes	<b>Additional Noticings</b> (Researcher Notes)
A. 3 B. Images: Titans stadium	A. 1:03:04-1:06:52 B. Davonte, Eric C. Although I had only tasked students with creating one slide containing an image and at least two similes, Eric looked up at me after finishing the Jay-Z slide and asked, “Can we add more?” I responded with a quick, “Of course,” and then he and Davonte reopened the folder of pre-selected images. As they clicked through the images of sports stars, like Michael Jordan and Richard Sherman, Davonte made a suggestion: “We should do one with football.” About 10 seconds pass. As he looked at the screen, he said “No, everybody’s doing football. Let’s do the Titans. Yeah?”, justifying his alteration of the original idea—specifying a football team instead of writing a simile poem about general football—and then checking for Davonte’s agreement.	A. 1:03:04-1:06:52 B. Davonte, Eric C. When Davonte nodded in response, the pair began to search for appropriate images within the folder of pre-selected images: “Like one with all the guys,” Davonte suggested. When Eric clicked through various images in their initial search, Davonte was the first to spot the image of the Coliseum: Davonte: That one. Stop. Eric: What? Davonte: There. (points to computer screen). In black. The arena. Eric: (squints and looks at computer). That’s a baseball stadium. Davonte: It looks like [football]. Eric: [No]. (Eric leans in and squints at the computer screen. 5-second pause) I...I don’t think so. See? There’s a diamond. Like the place where baseball is. Right? Davonte: (Looks closely at screen). Oh. Um. Yeah. Eric: That’s not where the Titans play and we’re doing the Titans. Davonte: Oh. (looks at screen) (inaudible) there more? Eric: Yeah. (Eric clicks through various photographs, ostensibly searching for either a picture of the Titans or of a football stadium.) Davonte: Stop. [There!] (touches computer screen with index finger)	The choice of subject was most likely influenced by one or more environmental factors—both students had already offered sample football similes during the preceding class discussion; Eric suggested “a battle. A war,” and Davonte had argued, “No. Chess. It’s like chess.” In addition, right before the boys began composing their third slide, when Davonte had attempted to capture my attention so that I could come see their work on Jay-Z, they watched me as I spoke to another group, who had also chosen football as their subject, by saying: “What’s special about football? What’s something different to compare it to? Remember, two similes and one metaphor.”

		<p>Eric: [What?]</p> <p>Davonte: The Titans play there. (pointing to picture of Titans stadium) That one.</p> <p>Eric: Really?</p> <p>Davonte: Yeah. Let's do that one.</p>	
<p>A. 3</p> <p>B. Text: The Titans are like fierce animals The Titans are as strong as lions As powerful as bears</p>	<p>A. 1:04:52-1:08:01</p> <p>B. Eric, Davonte</p> <p>C. Eric takes the lead in typing the text, as Davonte attempts to talk with Gabriel:</p> <p>Davonte: Hey. This one, with Jay-Z. (Eric types on the computer.)</p> <p>Davonte turns back to Eric and the computer.</p> <p>Davonte: The Titans are like fierce animals (reading from computer)</p> <p>Eric: As powerful as bears? (seeming to ask for Davonte's opinion.)</p> <p>Davonte: Yeah!</p>	<p>No change from original idea generation.</p>	<p>Davonte seemed more interested in sharing the slide about Jay-Z with other students than completing an additional slide. As he tries to capture Gabriel's attention (who is listening to choices in music clips on the headphones and largely ignores Davonte), Eric types away. This is more typical of the roles that the boys took on for their other projects, at least in terms of the text. While Davonte contributed to the first simile poem by offering his ideas and collaboratively composing, they revert to old roles here.</p>
<p>A. 3</p> <p>B. Sound effect: student-recorded lion roaring</p>	<p>A. 1:08:01-1:09:06</p> <p>B. Davonte, Eric, Robin</p> <p>C. The choice of sound effect is directly related to the text. After Eric writes down the line about lions, Davonte suggests a sound effect.</p> <p>Davonte: Right there. (points to computer). We could have like, a roar. For the lions.</p> <p>Eric: There's no roar in here. (inaudible) pick some music instead.</p> <p>Davonte: No. We could make one.</p> <p>Eric: How?</p> <p>Davonte: I don't know. Want to ask?</p>	<p>A. 1:08:42-1:10:15</p> <p>B. Davonte, Eric, Robin</p> <p>C. Eric: Hey, Ms. J? Can we record in here?</p> <p>Me: I don't know. (I come over to help the boys with the audio feature and we collectively discover the audio recording. Davonte eagerly jumps in, volunteering to be "the lion" and after Eric clicks the record button, Davonte makes a roaring noise.)</p> <p>Eric: That's not loud enough.</p> <p>Davonte: Play it.</p> <p>Eric clicks play. (The noise can be heard faintly in the background).</p> <p>Eric: See?</p> <p>Davonte: Ok. I'm ready.</p> <p>Eric clicks the record feature.</p> <p>Davonte again roars, this time much louder.</p>	<p>This is another example of a difference in the composing process from Eric's individual work and the pair's earlier collaborations. Instead of adding all of the sound at the end, as was the normal modus operandi, Davonte made a suggestion to add the roaring sound, Eric discovered the recording feature as I came over to help, and they enacted the addition of sound as they composed the slide, not as a separate and distinct mode.</p>



## Slide 4, Simile and Metaphor Poem (Eric and Davonte)

Mode: Poem text  
Content: (Westlake) is  
cool like ice cream  
(Westlake)  
is being as you are  
Appearance: white  
Program: PowerPoint

Mode: music  
Appearance: "Dark times"  
Program: pre-  
downloaded clip  
Notes: used in Slides 4  
only

(Westlake) is cool like ice cream  
(Westlake) is being as you are

SafePlace

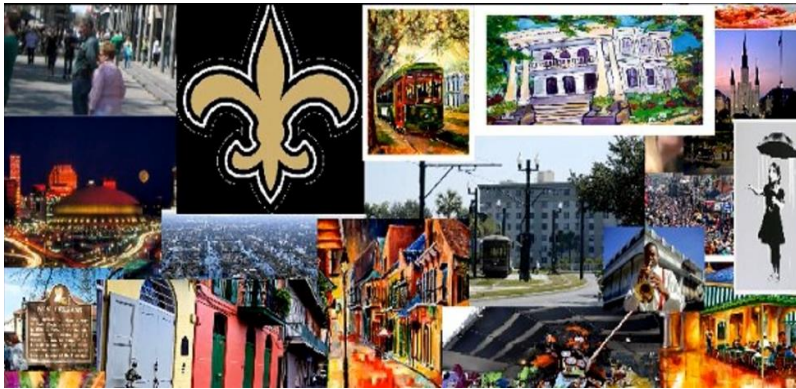
Mode: student-captured  
images  
Appearance: (1) cafeteria  
(2) Safe place sign on  
outside of building  
(3) main hallway  
Program: imported  
directly  
Notes: Taken by Davonte

Mode: background  
format  
Appearance: green,  
radiating out from center  
with red stripe in upper  
right corner  
Program: PowerPoint  
Notes: used in Slides 1-4

<b>Idea Units</b> A. Slide B. Idea	<b>Generation of Idea</b> A. Point of Origination B. Participants C. Notes	<b>Enactment of Idea</b> A. Point of Enactment B. Participants C. Notes	<b>Additional Noticings</b> (Researcher Notes)  <b>Note: The music and images are not included as moments of negotiation, because Davonte determined both modes for this slide.</b>
A. 4 B. Text: (Westlake) is cool like ice cream (Westlake) is being as you are	A. 1:16:48-1:18:16 B. Davonte, Eric C. Davonte took the lead role in composing the text, which was a task that, in the individually-created projects, he normally avoided and only completed at my prompting. After adding the images, he began with a simple line: “(Westlake) is cool.” Eric then offered a suggestion—“like ice cream,” which was reminiscent of Davonte’s earlier suggestion for the Jay-Z poem. Davonte, who had already moved the cursor to the next line, paused, tilted his head, said “Ok,” and then added Eric’s contribution. If not for Eric’s input, Davonte would have been content to exclude both similes and metaphors from the poem. In fact, the next line, “(Westlake) is being as you are” doesn’t contain a metaphor or a simile at all.	No change from original idea generation	Davonte’s leadership on this slide may have come about because of the earlier confrontation over Beyonce. Eric, who had never before offered to give up his position in front of the screen and at the keyboard, but was perhaps responding to Davonte’s earlier request that he “get his own computer,” offered to switch positions: “You wanna type?” Davonte eagerly agreed, and subsequently took his place at the keyboard.  If not for Eric’s input, Davonte would have been content to exclude both similes and metaphors from the poem. It’s only after Eric suggests including a simile: “like ice cream” that Davonte adds the text.

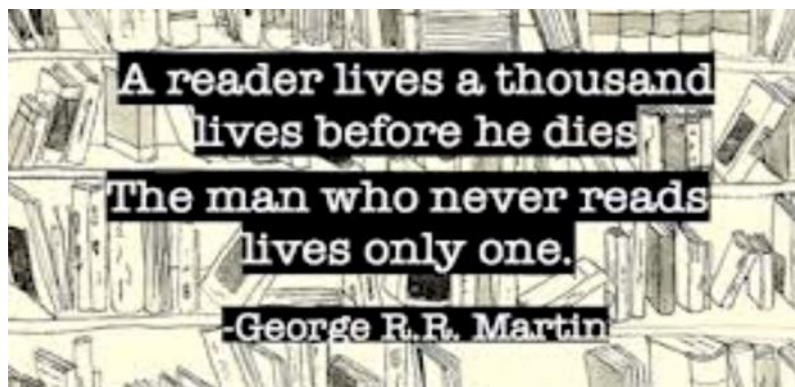
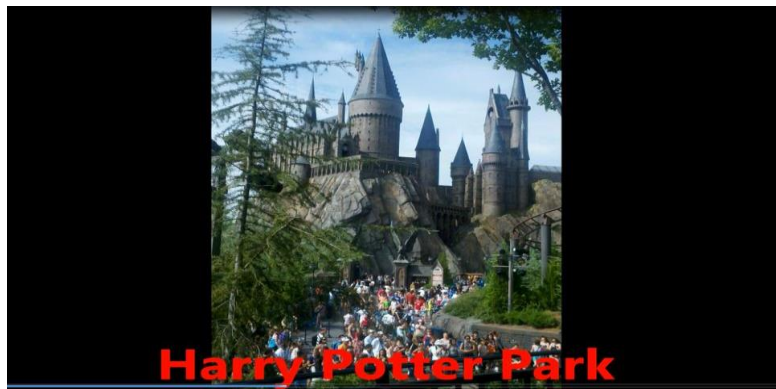
Appendix K

*All About Me* Model Video





**Stuff I Love**

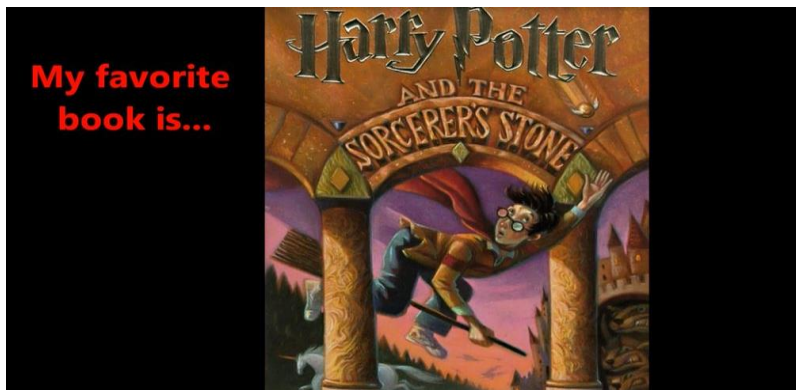


**As a reader....**

**I like to read...mysteries**



**My favorite  
book is...**



## Appendix L


### Instructional Materials for *All About Me* Video Project, Day 2

**ALL ABOUT ME VIDEOS**  
Day 2

**Glow and Grows**

- A glow is...something you all did that is **AWESOME**
- A grow is...a goal for today's session

**Glow** 

**You are tech wizards!** 

- What you did in 45 minutes:
  - 1. Watched vocabulary videos
  - 2. Talked about what you needed in your "All About Me" Videos
  - 3. Took pictures
  - 4. Shot Videos
  - 5. Opened MovieMaker
  - 6. Added pictures and video
  - 7. Picked music
  - 8. Saved files
  - PLUS—Learned how to use cameras, learned how to watch video, learned how to open files!!!!

## Grow



### •Ask 3 Before Me!

- I wish I could answer everyone's questions right away! But that's not always possible.
- Since you are all tech wizards, I want you to help each other
- Ask the other people at your table to help you first, then the counselors, then me!

## Camera Reminders



## Energizer!

- Vocab Vids
- 10 Minute Time Limit!
- B-Words ☺
  
- Tuesday's Time: 12 minutes, 43 seconds
- Today's Goal: 10 minutes!



## All About Me Videos

- Parts You Need:
  - 1. Title Slide With Your Name (Insert Picture if You Would Like)
  - 2. Pictures of You
  - 3. Things You Like
  - 4. You As a Reader

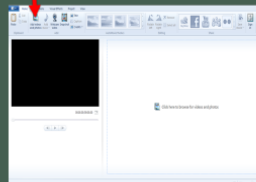
## Steps for All About Me Videos

- 1. Take/Select Pictures (Already Finished)
  - 2. Add/Arrange Pictures (Mostly Finished)
  - 3. Add Captions/Text
  - 4. Add Animations
  - 5. Change Color/Font for Title Slides
  - 6. Add/change music
  - 7. Add "About Me As a Reader"
- Save File! (Let Ms. J Help you do this!!!!)

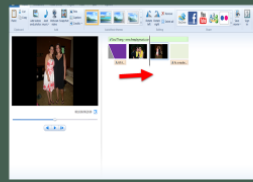
## Step 2: Add/Arrange Pictures

- On Desktop: Open All About Me\_YourName

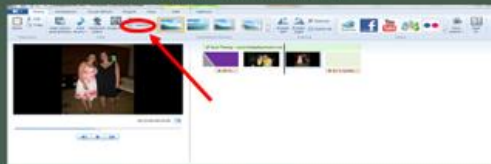
To Add Pictures



To Move Pictures

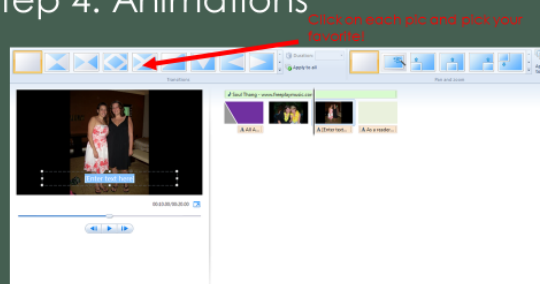


## Step 3: Add Captions

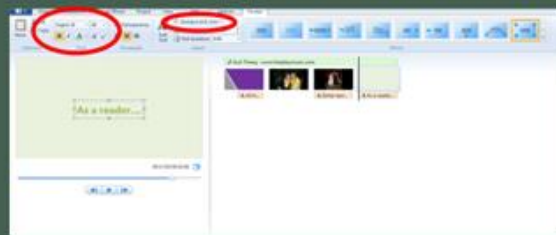


1. Click on picture you want to add caption to
2. Enter Text

## Step 4: Animations

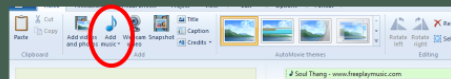


## Step 5: Change Color/Font (Click on Text First)



## Step 6: Add Music

- There are music clips in the "Music Clips" folder on your desktop
- Put on headphones and find a good one!
- Then, go into iMovie and add the clip (Ask Ms. J if you need help!)



## Step 7: You as a Reader!

- Click "Add Photos and Video"
- Click on Images, then "Books I Like" folder
- Pick the one you like best!
- On the next page, click on "add title"
- Write your favorite book/magazine/story title (I'll find a picture of the cover for you!)

## Appendix M

### Instructional Materials for *Westlake Poem Project*

Center Poems  
Session 14

Warm-Up: Review

- Imagery
- Rhyme
- Rhythm
- Simile
- Metaphor
- Form
- Onomatopoeia

Warm-Up: Review

There's a polar bear  
In our Frigidaire—  
He likes it 'cause it's cold in there.  
With his seat in the meat  
And his face in the fish  
And his big hairy paws  
In the buttery dish,  
He's nibbling the noodles,  
He's munching the rice,  
He's slurping the soda,  
He's licking the ice,  
And he lets out a roar  
If you open the door.  
And it gives me a scare  
To know he's in there—  
That polar bear  
In our Frigitydaire.



## VoiceThread Form Responses

- Make a comment on everyone's Simile/Metaphor poem!
- Make sure to say something you like about it—it can be a word that they used, the way the words fit together, the way it looks



## On Your Paper...

- Using your Tuesday brainstorm, write down for ideas for your poem about \_\_\_\_\_
- This is just a rough draft; you will finish writing it in MovieMaker or whatever tool you chose



## Open "\_\_\_\_Pictures" File

- Look through your pictures and the other pictures
- Find inspiration for your poem!



## Goals

- Use at least five of the following:
- Imagery
- Rhythm
- Mood
- Tone
- Onomatopoeia
- Rhyme
- Repetition
- Simile
- Metaphor

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