Family literacy and digital literacies: a redefined approach to examining social practices of an African-American family

Tisha Yvette Lewis

University at Albany, State University of New York, tlewisellison@gmail.com

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FAMILY LITERACY AND DIGITAL LITERACIES:
A REDEFINED APPROACH TO EXAMINING SOCIAL PRACTICES
OF AN AFRICAN-AMERICAN FAMILY

By

Tisha Y. Lewis

A Dissertation
Submitted to the University at Albany,
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the Requirements for the Degree of
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This dissertation examines the digital literacy practices of an urban African-American family. Using an ethnographic case study approach (Stake, 2000), this qualitative study explores the multiple ways a mother (Larnee) and son (Gerard) interacted with digital literacies in the home. Situated within the framework of sociocultural traditions from New Literacy Studies, which views literacy as a social and semiotic practice, and multimodality, which highlights multiple modes of meaning, this research asked how an African-American family in poverty enacted digital literacies in the home, how digital literacies shaped family relational practices, and how a mother and her children interchangeably apprenticed one another when engaging in digital literacies.

Interviews and audio- and videotaped participant observations were conducted. Document collection, digital walks, and digital photos, along with discussions around a digital literacy timeline, were carried out. Data analysis involved using qualitative coding procedures informed by grounded theory (Strauss, 1987) and ATLAS.ti, a qualitative coding software to code transcripts. Activity Theory was used to examine the structure of human activity in the home via the seven activity systems.

Mediated discourse analysis was used to identify and interpret the Alis’ moment-to-moment discursive and multimodal practices to focus on how Larnee and Gerard made sense of their practices (Norris & Jones, 2005; Scollon 2001a; 2001b). Multimodal discourse analysis was used to explore the multimodality of mediated actions (Kress & van Leeuwen, 2001; van Leeuwen, 2004), that is, how multiple modes of communication (e.g., visuals, gestures, sounds, etc.) outside of the spoken language
carry meaning. This analysis focused on the unnoticed nuances that were present in Larnee’s and Gerard’s lives.

Themes such as agency, identity, and power through family relational practices emerged that address how Larnee and Gerard engaged in digital literacy practices (e.g., texting and IMing, taking apart a computer, creating blogs, or designing comic strips) as mediating tools to help them make sense of their lives. Participants demonstrated new ways in which digital literacies shaped and reshaped how they communicated, interacted and identified with one another; constructed new semiotic tools to make sense of on- and offline identities in multimodal spaces; and illustrated how asymmetrical and symmetrical relationships emerged and enhanced communication between a mother and son, changing the dynamics of family structures in literacy research and in the home (Stuve, 2003).
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First, I thank my Lord and Savior Jesus Christ for showing me that “I can do all things through Christ who strengthens me.” It is because of my faith and confidence in Him that this good work has been perfected and brought to full completion.

I thank the Alis for opening their home to me and sharing intimate stories about their unique digital literacy practices. I learned that Larnee’s and Gerard’s literacy practices debunk research that states that low-income families lack involvement and discourse with their children. In fact, Larnee’s resiliency and determination to manage her household while raising four sons on her own motivate me to never quit. I am indebted to them, and I am honored to continue my scholarly work on their behalf.

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CHAPTER 1

Introduction

Family literacy practices are always in process, constantly moving and subject to complex crossings. The sites where family literacy takes place are found to be multiple. As children travel between sites—such as home, school and playspaces—and experience these crossings, their narratives and literacy practices travel with them. (Pahl, 2006, p. 254)

Family literacy research has described the traditional ways families have used language and literacy in the home and in their communities. Literacy practices, such as reading bedtime stories, conversations during dinnertime, and reading recipes, were important to the evolution of family literacy. However, literacy is not the same in all contexts. As a result, researchers have employed a redefined approach to literacy as social practices (Barton & Hamilton, 1998; Heath, 1983; Street, 1995). These practices employ new technologies that are interwoven in individuals’ lives on a daily basis so that a large amount of families’ time is now mediated through the Internet (Bruce, 2002). These new technologies include semiotic systems (signs and symbols) such as the Internet, music, and written/oral languages that are significant in families’ environments and cultural experiences (Anstey & Bull, 2006; Cowan & Albers, 2006).

The epigraph by Pahl (2006), at the beginning of this chapter, alludes to the ways family literacy practices are “multiple and travel between sites” and are constantly evolving, shifting, and weaving families’ identities, values, languages, and experiences that extend over time (p. 1). However, these areas of attention not only address
technologies in broader terms but point to specific changes and ways that social practices are related to digital literacies. Lewis and Fabos (2005) explain how digital literacies are “interactive, lateral and multimodal” (p. 474) involving linguistic, visual, auditory, spatial, and gestural modes of meaning (Kist, 2006; Kress, 2000; Kress & Jewitt, 2003; Kress & van Leeuwen, 2001; New London Group, 1996; Pahl & Rowsell, 2006). By multimodal, I mean that there are multiple modes going on at the same time that are equally important for communication and meaning. While language is usually considered as the central part of communication, there are also other modes that draw on individuals’ verbal and nonverbal gestures, images, and tone of voice that represent significant meanings in various practices (Kress & Jewitt, 2003). Thus, digital literacies are defined as multiple and interactive practices, mediated by technological tools such as the Internet, cell phones, instant messaging (IMing), and video games that involve reading, writing, language, and exchanging information in online environments.

Emerging literacy research has explored individuals’ multiple literacy practices for various purposes that extend the New Literacy Studies tradition, which views literacy as social and semiotic practices (Barton & Hamilton, 1998, 2000; Barton, Hamilton, & Ivanič, 2000; New London Group, 1996; Street, 1995). For instance, researchers have documented how and why adolescent boys and girls engage in and are mediated and shaped by multiple forms of digital literacies in their daily lives such as IMing, Web sites, video games, and text messaging (Bruce, 2002; Chandler-Olcott & Mahar, 2003; Goldman, Booker, & McDermott, 2008; Guzzetti, 2006; Jacobs, 2006; Lewis & Fabos, 2005). These studies have raised awareness about the proliferation of adolescents’ multiple literacy practices involving digital literacies; however, there is still an absence of
studies on family literacy, particularly studying digital literacy practices among African-American families. One objective of my research project is to rectify that omission. Therefore, in order to move forward in the discussion of digital literacy in family literacy studies and its contribution to the theories of New Literacy Studies, it is important to highlight how digital literacies influenced one particular African-American family’s relational practices in the home.

Because previous research has overlooked and neglected the many voices, practices, and experiences of diverse cultures, this study of an African-American family’s digital literacy practices is significant. This culture is composed of 40.2 million people in the United States. Seventy-one percent of African-American homes have computers, while 65% of low-income families own computers. There are a plethora of Web sites and online spaces that African-American families engage in and relate to in which they are taking “black technology use seriously” (Banks, 2006, p. 68) in culturally relevant and meaningful ways (see www.myblackinfo.com, www.blackvoices.com and www.blackrefer.com).

In this dissertation, I argue that the void in the research concerning digital literacy practices among African-American families is problematic. It is problematic because it suggests that the practices, knowledge, and experiences of African-American families are not valued in today’s research. It also suggests that because of the digital divide, urban families do not have access to or know how to use the Internet (Banks, 2006). In light of a digitally mediated world in which families constantly use and reuse digital literacies to help them make sense of themselves, their world, and their experiences, these literacy practices among African-American families not only will trigger further examinations for
literacy research but will open new claims for how research needs to further examine
digital literacy practices.

**Purpose of the Study**

This study examines the Ali family’s digital literacy practices in the home. Focusing primarily on Larnee, an African-American divorced mother of four children, and Gerard, her 10-year-old son, this dissertation analyzes how they use digital literacy practices as mediating tools to help make sense of their lives and how these digital literacies transform their possibilities in the process.

Using an ethnographic case study approach (Stake, 2000), this study explores the multiple ways a mother and son interact with digital literacies that involve shaping new social practices and reshaping their family’s culture, values, languages, apprenticeships, meaning making, and identities to extend the ways they think about literacy and the world around them (Barton, 1994, 2001; Barton & Hamilton, 1998, 2000; Barton et al., 2000; Gee, 1996, 2000c; Heath, 1983; Lankshear & Knobel, 2003; Lewis & Fabos, 2005; New London Group, 1996; Pahl & Rowsell, 2006; Street, 1995). My study addresses the following research questions:

1. In what ways does a family enact “digital literacies” in the home?
2. How might digital literacies shape a family’s relational practices, and how do these relational practices reshape how the family members relate to each other?
3. In what ways did this mother and her children interchangeably apprentice one another when engaging in digital literacies?
Organization of the Dissertation

There are seven chapters in this dissertation. Chapter 1 acknowledges how digital literacies are popular among adolescents and some adults but that there is a void in the research within the context of family literacy studies, in particular among African-American families. I argue that in order for researchers to provide an authentic portrayal of digital literacies, it is imperative for them to acknowledge the relevance of this culture and its contribution to literacy research as a whole.

Chapter 2 situates this study between the boundaries of relevant theoretical frameworks of New Literacy Studies (Barton & Hamilton, 1998, 2000; Barton et al., 2000) and multimodalities (Kress, 1997; Kress & van Leeuwen, 2001). I include a review of current theories of literacy practices and literacy events, family literacy and digital literacies, apprenticeships, and meaning making and identities as key components that are vital to examining family literacy and digital literacy practices in the 21st century. I describe through relevant research studies how these contemporary issues relate to and are constructed in the lives of adolescents and families’ everyday social practices.

Chapter 3 lays out the theoretical and methodological procedures of an ethnographic case study approach to literacy research. Three overlapping phases for data collection and data analysis are introduced to describe specific techniques and the associated analytic methods used within this study to document what families “do” with digital literacies in the home. This chapter describes the participants, the procedures for collecting data, and the data analysis procedures. Qualitative coding methods (e.g., color coding and open coding) reflect the intentions of the three research questions and highlight certain concepts and themes that emerged from the data (Merriam, 2001; Miles
& Huberman, 1994). In addition, chapter 3 describes the analytical procedures of conducting mediated discourse analysis (MDA). MDA provides an understanding of how objects, languages, and actions along with mediational means intersect with the multiple social practices and multiple histories that produce and reproduce individuals’ identities and social groups (Norris & Jones, 2005; Scollon, 2001a, 2001b). Multimodal discourse analysis (MMDA) was used to look closely at the multimodality of mediated actions outside of the spoken language that carry meaning (e.g., gestures, visuals, sounds, etc.) (Kress & Jewitt, 2003).

Chapters 4, 5, and 6 describe the pertinent findings, as documented from interviews and participant observations of the Ali family. Chapter 4 introduces the social and digital world of Larnee Ali, a divorced mother of four living in an urban community, unemployed with no high school diploma, and coping with a painful illness, epidermolysis bullosa (EB). The research describes how digital literacies play a significant role in Larnee’s personal and public life. She exhibits her multiple digital selves with the following: taking apart a computer; chatting with her global friends on her EB Yahoo chat room; playing games on her favorite Web site, www.pogo.com; texting and IMing with her son Gerard and creating a Family blog. This chapter focuses on how she enacts these digital literacy practices to “fill those empty gaps” (interview, 7/24/07). The study also describes how her allegiance to digital literacies comes from a past of physical, emotional, psychological, and sexual abuse, so that she views digital literacies as a friend that “doesn’t let her down” (interview, 12/13/07). Through various social and cultural themes that emerged through my interactions with Larnee, I describe how she
embodies and personifies digital literacies as being a part of herself as a result of these everyday digital literacy practices.

Chapter 5 introduces Gerard Ali’s digital world in on- and offline spaces through comic strip designing. Here, I link this practice to Pahl’s epigraph at the beginning of this chapter to imply how children like Gerard travel between home and school sites and take their narratives and literacy practices with them. I interpret how Gerard’s comics display how he makes meaning of texts in compelling ways with verbal narratives and pictorial images. I show how this practice contributes to his understanding and shaping of his digital literacy practices. I demonstrate how his engagement of designing online Sims with his cousin Jake forced them to construct new semiotic tools to make sense of their online and offline identities in complex digital spaces. Last, this chapter focuses on the intergenerational meaning-making exchanges between Gerard and Larnee through unconscious visual cues, gestures, and actions that occur when they interact in activities with digital literacies.

Chapter 6 focuses on the Ali family collectively. I represent how Larnee and her sons dismiss traditional apprenticeship and instead share reciprocal apprenticeships through verbal and nonverbal interactions. These interactions, in digital spaces, have played a significant role in transforming this family’s life. I describe how digital literacy practices such as texting and IMing, troubleshooting on the computer, and blogging are identified by this family’s social practices as a means of interacting with one another for a common purpose in their household. I show how Larnee and her son’s interactions are valuable in that they engage in shared mentoring, scaffolding collaborations, and
reciprocal learner-centered strategies (Dennen, 2004). I document what these effective learning situations can look like in home environments (Rogoff, 1990).

In chapter 7, I argue that digital literacies have changed what we might expect of family literacies and that they change the nature of family life. In particular, I present how Larnee’s digital literacy practices transfer to and transform her sons in a safe space outside of school where knowledge and learning are not constrained. However, I also acknowledge a tension between Larnee and digital literacies. She allows her consumption of digital technologies to often override the financial needs of the family. This concern is a major constraint that not only affects the family but also affects Larnee’s choice to either pay for more digital technologies or pay for her GED classes.

In addition, Gerard has been labeled as having attention deficit/hyperactivity disorder, which positions him as being inattentive in school. At home, however, he customizes his learning experiences and identities when he designs and creates various modes of meaning through comic strips and video games. Through these affordances and constraints, this chapter emphasizes the unique ways digital literacies change and impact families’ lives on a daily basis for various purposes.
CHAPTER 2

Overview of Relevant Literature: Theories of New Literacy Studies

My research is situated within a framework of sociocultural traditions. Drawing on New Literacy Studies (NLS) and Multimodality as frameworks for this study, I introduce NLS as a major theoretical framework in qualitative literacy research that views literacy as social and semiotic practices (Barton & Hamilton, 1998, 2000; Barton et al., 2000; New London Group, 1996; Street, 1995). NLS draws on the notion that reading and writing make most sense when studied in the context of sociocultural, political and historical practices (Gee, 2000a). This line of research has introduced a need to examine literacy outside of school environments (Barton, 1994; Barton & Hamilton, 1998; Barton et al., 2000; Gee, 1996; New London Group, 1996; Street, 1995).

In the past, literacy was viewed as a narrow, autonomous model (Street, 1995), as a set of skills relating only to reading and writing. Now, we live in a demanding world where the ways we used to define and examine literacy no longer fit the social practices at home. All literacies exist as part of broader social practices (Barton & Hamilton, 1998, 2000). Our understanding of these technologies requires certain modalities (e.g., images, movement, gestures, and sound) to help us make sense of individuals’ daily social practices (Lankshear & Knobel, 2003).

New Literacy Studies opens questions of what counts as literacy and what it means to think of literacy as a social practice. More specifically, it questions “whose literacies” are dominant, marginalized, and resisted (Street, 2003) and theorizes about the ways individuals relate to, respond to, reinterpret and resist one another and their
surroundings. NLS is vital to the discussion of family literacy and digital literacies, as digital literacies shape and influence what families do and how they use literacy practices in different contexts for different purposes on a daily basis (Pahl & Rowsell, 2006). NLS suggests that families’ interactions through digital literacies display multiple, uniquely complex literacies in practice that vary from one culture to another in different social spaces (Barton & Hamilton, 2000).

New Literacy Studies researchers are trying to explore and understand what individuals do with everyday social practices; researchers interested in multimodalities are exploring the “tools” and modes of meaning that these individuals are using in these everyday social practices (Kress & Street, 2006). As researchers, our role is to find the answers to these questions and find the link to what individuals do in their everyday practices that produce and reproduce digital literacies in the home. This research study applies NLS and Multimodality when thinking about social practices in literacy and is significant in generating further inquiries about digital literacy in family literacy studies.

**Theories of Multimodalities**

Discussions about multimodality have involved visual, linguistic, oral, gestural, and spatial modes of meaning (Bruce, 2002; Davies, 2006; Kress, 1997; Kress & van Leeuwen, 2001; New London Group, 1996; Pahl & Rowsell, 2006). These modes present ways in which individuals incorporate communicative systems with social practices to make meaning. Sociocultural researchers acknowledge that all literacies are multimodal because all texts rely on some element of linguistic, visual, or spatial “Design” that involves various modes of meaning and representation (Kress, 1997; Kress & van
Leeuwen, 2001; New London Group, 1996). That is, in order to make meaning, individuals need to have access to the available resources for designs (e.g., reading, seeing, listening) [New London Group, 1996, 2000]). The diagram in Figure 2.1 represents the five semiotic systems of Design that make up multimodality (see Appendix A).

--- Insert Figure 2.1.Five Semiotic Systems of Design here ---

The five systems of Design identify that there are multiple literacies and modes of meaning going on at the same time. Digital technologies/literacies have an impact on individuals’ everyday lives, in particular, how definitions of texts have extended our thinking. These technologies/literacies have become a focal point in how individuals communicate with one another in and out of homes. According to Anstey and Bull (2006), a text expresses different meanings to individuals and delivers them in various modes: electronically (adolescents’ texting friends), as demonstrated by Lewis and Fabos (2005); live (telling stories in different languages), as emphasized by Stein and Slonimsky (2006); or through paper (children’s drawing), as noted by Pahl (2003). As some researchers are thinking about the systems of Design in relation to texts, there are others in the field who have also been formulating their research to be consistent in utilizing these modes of meaning.

Chandler-Olcott and Mahar (2003) have examined adolescent girls’ use of digital technologies in their daily literacy practices. They consider how the girls used these technologies for literate purposes in communities of practice but also address how issues
of identity and gender play a role in their practices and choices (Gee, 2004). The social relationships developed online, from school, and then at home, are deemed to be more relevant to how the girls increased proficiency when using the digital technologies. The study implies that the same kind of pedagogy that takes place in the online community will match that of the school literacies. This study is significant, in that it describes how Internet-based technologies motivated the girls to improve as designers, writers and artists in their everyday lives. For instance, there were disparities in how Rhiannon engaged in high-tech Web design of anime characters at home but in-school activities became dormant; therefore, her home literacies went unnoticed by her teachers. What is missing from this study is the girls’ interaction with parents and other siblings, and how this contributed to their learning and practices. In addition, while the participants were all female and European-American but varied in socioeconomic status and so on, the study could be more telling if participants were from multiple cultures to provide a broader lens of digital literacy practices among often neglected groups of children of color.

New Literacy Studies and Multimodality are explored in Stein and Slonimsky’s (2006) research in which they offer a theoretical lens to examine multimodality in home contexts from an international perspective. They examine how Johannesburg adults use, teach, and are shaped and reshaped by the “stuff” of literacy (Kress, 2003) surrounding three girls’ multiple modes of literacy practices involving images, speech, and movements around text. The results suggest that the practice of literacy is not neutral but, rather, encompasses ways the participants talk, look at and tell stories, and produce writing, drawing on a wide range of multimodal practices based on the resources available to them (Stein & Slonimsky, 2006). This study did not engage in digital
literacies, as I define them in this study, but investigating these practices in the area of digital literacies may yield new insights in the field by extending our knowledge of the ways individuals interact with digital technologies. The research studies above highlight reasons for considering multimodality as a means of understanding how meaning is situated in practices.

In the next sections, I will present the origins of digital literacy and the shift to digital literacies, followed by theories of relevant literature on the following topics: literacy practices/literacy events, family literacy and digital literacy practices, apprenticeships, meaning making and identities. These topics reflect my understanding of the most important constructs detailed in the study. First, I will describe the emergence of digital literacy and its integration into a myriad of social practices around digital technologies. Second, I present the ways literacy practices and literacy events are defined and examined by sociocultural researchers. Third, I explore how digital literacy practices influence the ways families talk about and identify themselves in the home. Fourth, I discuss how individuals relate to and learn from one another through various types of apprenticeships. Finally, I examine how individuals use text to make meaning and how they take on certain identities when learning a new literacy, both of which were displayed through this study.

**Origins of Digital Literacies**

Digital literacy has been referred to as information literacy (Bawden, 2008), computer literacy, media literacy, network literacy, and e-literate. Paul Gilster (1997)
introduced “digital literacy” as “the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computer” (p. 1).

Meanwhile sociocultural theorists realize that because digital literacies consist of a “myriad of social practices and conceptions of engaging in meaning making mediated by texts that are produced, received, distributed, exchanged, etc” (Lankshear & Knobel, 2008, p. 5), the ways we engage in situated practices and make meaning when relating to texts, must be understood as digital literacies. The social practices take multiple forms as relating to blogs, video games, text messages, online social network pages, discussion forums, Internet memes, and so on. In this context it makes more sense to refer to digital literacies not as a singular social practice, but as a multiplicity of social practices. This shift encourages researchers to analyze unique social practices—including families’ everyday practices and popular culture sites that have become an increasingly significant part of how individuals learn and make meaning in on- and offline environments (Lankshear & Knobel, 2008).

**Literacy Practices/Literacy Events**

Sociocultural researchers remind us that literacy is embedded in the socialization of cultural practices and involves how practices influence what we do and do not do with literacy. *Literacy practices* and *literacy events* are distinct models in this research study (Barton & Hamilton, 1998; Street, 1995). *Literacy practices* are what people “do” with literacy, as well as how people “talk” about and “make sense” of literacy (Barton & Hamilton, 2000). As a result, “[literacy] practices are *not* observable units of behavior because they involve values, attitudes, feelings and social relationships” (Barton &
In other words, literacy practices arise within social and cultural models (Barton & Hamilton, 1998, 2000; Street, 1995). In terms of examining a social theory of literacy, Barton and Hamilton (2000) explain that literacy is a social practice. Through this notion, they believe that “literacy has a role” (p. 7). This role distinguishes a link between the activities of reading and writing along with the social structures in which they are embedded (Barton & Hamilton, 1998, 2000). Literacy events are described as “observable episodes that arise from practices and are shaped by them” (Barton & Hamilton, 2000, p. 8) and explore how “written texts or talk-around texts” have a central role (Rogers, 2003, p. 26).

Sociocultural researchers have examined social practices in various ways. Lemke (1995) argues that social practices are linked to culture. Knobel (1999) has defined social practice as “shared purposes, values, beliefs and so forth of those people participating—and not participating—in it” (p. 16). Knobel further argues that language, culture, and political, moral, and economic interests are all associated with social practices whether individuals participate in them or not. In other words, an individual can be in the same room participating in a social practice or in the same room not actively participating and still be involved in the practice. As cited in the foreword of C. Lewis’s (2001) Literacy Practices as Social Acts, Gee concludes that there are a “myriad of home and community based literacy-related social practices” (p. xvii). These practices include how individuals talk, act, interact, feel, think, and value, as well as use forms of symbols and tools.

Social practices involve the ways people use literacy, what they do and do not do with literacy, where they do literacy, and how everyday events and practices shape how they make sense of and accomplish things through literacy (Barton, 1994; Barton &
Hamilton, 1998; Gee, 1996; Heath, 1982, 1983; Street, 1995). Adhering to the New Literacy Studies’ concept of “literacy as a social practice,” suggests that individuals’ literacy practices are based on the social, cultural, and political contexts of literacy that are shaped by digital technologies/literacies (Kress, 2003; Lankshear & Knobel, 2003; Lewis & Fabos, 2005).

**Family Literacies and Digital Literacy Practices**

For over the past two decades, the field of family literacy has offered significant insight into family literacy practices in the home (Cairney & Ruge, 1998; Heath, 1983; Taylor, 1983; Taylor & Dorsey-Gaines, 1988). These studies examine the emergence of children’s understanding of the nature and functions of literacy practices. Family literacy researchers have identified discursive patterns and unique literacy patterns among families and barriers between home and school, especially for children from lower various socioeconomic backgrounds (Compton-Lilly, 2003; Lareau, 1989; McCarthey, 1997; Purcell-Gates, 1995; Shockley-Bisplinghoff, 1995). While these studies have raised awareness of how families understand literacy, family literacy is changing and research must focus on the new ways that families interact with one another and engage in complex literacy practices through digital technologies.

A number of researchers have explored digital literacies or media-related literacy practices (Bruce, 2002; Cairney & Ruge, 1998; Cammack, 2002; Chandler-Olcott & Mahar, 2003; Jacobs, 2006; Lewis & Fabos, 2005; Mahar, 2002; Marsh, 2006; Marsh & Thompson, 2001; Stein & Slonimsky, 2006). These studies examine issues such as pop culture, instant messaging, and the digital literacies and multimodalities that individuals
practice on a daily basis in online communities (Hagood, 2000; Marsh, 2006). However, there is still a limited amount of research that focuses on family literacy and digital literacy practices, in particular how they contribute to the increasing technological demands of the home and world and influence how families talk, think, value, and identify themselves when engaging in technologies.

Family literacy research has only recently begun to address the significance of digital literacies. Through the lens of New Literacy Studies, Marsh (2006) recently examined three studies that involved young children’s engagement in digital literacy practices in the home (Marsh & Thompson, 2001). Marsh draws from Cairney and Ruge’s (1998) framework of four distinct purposes for literacy in the homes of 27 Australian families: (1) “literacy for establishing or maintaining relationships,” (2) “literacy for accessing or displaying information,” (3) “literacy for pleasure or self-expression,” and (4) “literacy for skills development.” Marsh focuses on popular culture, media, and new technologies and how these tools have affected the literacy experiences of young children in the home. In each study, young children were engaged in some sort of “communicative practice” (Street, 1995) that relates to “the range of multimodal meaning-making in which young children engage” (Marsh, 2006, pp. 19–20). Marsh identifies that the young children’s literacy practices evolved over time and were no longer isolated social practices but were embedded in communicative practices that specifically related to popular culture, media, and new technologies in the home.

For instance, children took on the identities of television characters and facilitated other family members’ playing along. They also engaged in various practices to access information from television, Web sites and so on. Children’s lives were absorbed with
digital technologies that were special to them, and they utilized the range of media-related communicative practices to promote skills such as playing phonics games, puzzles, and interactive games to broaden language, academic, and social development (Marsh, 2006). As a result, Marsh notes how most children’s homes focus on popular culture, media, and new technologies, which refutes the notion of exploring the literacy practices of young children as an isolated set of social practices.

In addition, Cammack (2002) has examined the literacy practices of adolescent girls in online environments. As part of a larger study, she examined what adolescent girls do on the online Web sites, www.smartgirl.com and www.razzberry.com. The girls used the online space to “design” new modes that developed from conventional and digital literacies (Cammack, 2002; New London Group, 1996). These practices provide interesting implications for how language and literacy are construed, as well as how online dialogues shape meaning.

Hawisher and Selfe (2004) have explored the literacy narratives of two women, one an African-American and the other a European born in different cultures and generational times. The authors highlight how the women came to acquire and develop the literacies of technology, using contexts as the cultural ecology of literacy, focusing on how the relationships between individuals and technology evolved.

These researchers analyzed digital literacies or media-related literacy practices in relation to popular culture, media, and new technologies. Under the auspices of New Literacy Studies and Multimodality they examined the ways families and adolescents engaged in literacy practices. Each of these studies incorporates these two strands of
literacy research that reveal how social practices in family spaces are uniquely complex based on their resources, interest, and purpose (Marsh, 2006).

Apprenticeship in Family Literacies

Children [are] apprentices in thinking, active in their efforts to learn from observing and participating with peers and more skilled members of their society, developing skills to handle culturally defined problems with available tools and building from these given to construct new solutions within the context of sociocultural activity (Rogoff, 1990, p. 7).

Apprenticeship occurs when children are engaged in activities that involve learning and/or understanding a particular cultural practice with the assistance of a more experienced other (Vygotsky, 1978). Apprenticeship challenges and expands a learner’s participation in a skill and/or activity (Rogoff, 1990). In other words, the role of apprenticeship is for the more knowledgeable person to involve the child in a sociocultural activity. The child, in turn, learns the skill through observation and participation. The child develops skills using the tools available that will enable him or her to construct new solutions within the context of the activity (Rogoff, 1990).

There are other ways that people participate in and learn through apprenticeships. Gee (2004) introduces the construct affinity spaces. Affinity spaces are defined as on- and offline interactive spaces of shared activities, interests, and goals, such as a video game or a chat room (Gee, 2004). Gee (2003) mentions that people in these spaces “talk about the typical ways of thinking, acting, interacting, valuing, and believing as well as the typical sorts of social practices associated with a given semiotic domain” (p. 27). I
consider affinity spaces as a new dimension of apprenticeship in digital literacy practices. For instance, in Chandler-Olcott and Mahar’s (2003) study, adolescents Eileen and Rhiannon belonged to affinity groups to seek and provide mentorship to members of their online communities. Affinity groups are also learning spaces though which expertise is distributed among the members. This is a context in which a different kind of apprenticeship is possible, such as reciprocal apprenticeship.

I introduce Reciprocal Apprenticeships (RA) as “progressive interactions [between] two groups of people who have different areas of expertise that are needed by the other” (Stuve, 2003, p. 3862). This type of apprenticeship model is demonstrated in Stuve’s study of preservice and practicing teachers. Pre-service teachers needed expertise in teaching, while practicing teachers needed assistance developing methods for technology integration. Each of the groups positioned itself in an independent relationship and gained adequate expertise in its areas of need and in shaping its uses of technology and digital media. While the research is helpful in addressing the RA models in interactions between preservice and practicing teachers, RA also might apply to family relationships between parent and children, and between siblings.

Here I highlight the differences between traditional apprenticeship and reciprocal apprenticeships. A traditional apprenticeship involves an expert who models a particular task to the novice. Over time, the novice becomes proficient in accomplishing the task without the aid of the expert. RA involves individuals who have different areas of expertise, so that each can benefit from the other. Similarly, Mahar (2002) explores complex interrelationships between students and their teachers in out-of-school settings that intersected with in-class instruction and expectations. For example, Noah, a seventh
grader, utilized his “out-of-school digital knowledge and expertise” by taking an HTML course with his grandfather in order to design Web sites. Known as a technology guru within in-school-centered literacy tasks, he refused to position himself as a “tech expert” in school noting the awkwardness of knowing more than his teacher. This research suggests that the roles of a mentor and apprentice hold new connotations in the field of digital literacies (Mahar, 2002, p. 294; Stuve, 2003).

Stuve’s and Mahar’s research suggests how significant it is to examine the new knowledge and practices students bring with them to school and how they can privilege students in the classroom when they assist their teachers and peers. Their research explores the possibilities these roles have for students’ identities in and out of school. Their identities may overlap. Identities created via digital literacy practices at home may be called into use as needed in school settings; however, identities fostered by school literacies cannot compete with the agency afforded by home digital literacies. Schools might want to alter their approach to include reciprocal apprenticeships in the classrooms, where students’ and teacher’s digital-literate selves can use this space to help other students perform new literacy practices and formulate identities when they participate in digital literacies from online and in-school communities (Chandler-Olcott, K., & Mahar, 2003).

Apprenticeships within families are significant and crucial to the learning process in online and offline spaces (Chandler-Olcott & Mahar, 2003; Gee, 2004). In addition, apprenticeships can also occur when people are not engaged in face-to-face interactions but, rather, interacting through digital literacies; and apprenticeship is encouraged with
each transaction, in order to continue engagement in more affinity spaces (Chandler-Olcott & Mahar, 2003; Gee, 2004).

Meaning Making and Identities

Meaning making may be interpreted as focusing on the relationship between the reader and the text. The interpretation highly depends on what the individual brings to the text, what the reader takes from the text, and how he or she makes sense of it (Anstey & Bull, 2006).

Pahl (2003), for example, suggests that meaning making in the home tends to be less visible. Practices such as eating, watching television, sleeping, playing, telling stories, and cooking, create and co-create meaning built over time (Pahl, 2003). She argues that much of children's textual meaning making is recognized as ephemera (e.g., mess and miscellaneous piles), which creates a different perception of how families communicate in the homes. Her study focuses on how children’s texts were produced in the home, in particular through conceptions of “mess,” “tidiness” and identity. She examines how Sam, a 6-year-old, transformed meaning across modalities, how his choice of mode affected meaning, and how modes affect identity construction.

For example, Sam made meaning from artifacts in his home by reconfiguring multimodal texts such as his Pokemon cards. Pahl tracked Sam’s meaning of giving each card a new name, inserting his own narrative into the Pokemon story, and even cutting out pictures from a magazine and integrating them onto the cards. He drew on popular culture and other artifacts that supported his own “figured world” (fantasy play) (Holland, Lachicotte, Skinner, & Cain, 1998). Pahl found that through meaning making
and remaking of the Pokemon cards, Sam’s identity was also being transformed through text making.

Another study provides ways in which children take control of their identity constructions. Norton-Meier (2004) examines how children negotiated and created rules in innovative ways online. She studied how four adolescent girls participated in chat room discussions. She found that the girls created rules for communicating and identifying themselves when online, for example, when discussing popular culture such as music, television, books, and games. These rules are vital to the discussion of family literacy and digital literacies, especially what students do with these literacies that influence them when they use technology. As a result, the girls created a Female Technology User’s Bill of Rights. Some of the “rights” included the following:

• “I have the right to make meaning as I personally invent myself as a language user”;
• “I have the right to play with language, technology and what it means to be female”;
• “I have the right to question gender issues, technology and the world around me” (pp. 606-608).

These rights suggest ways in which these girls identified themselves as ‘females,’ and as “a language user,” and questioned “gender issues” that relate to them and the world around them when they interacted in online communities. The girls created power, voice, choice, rules, and community to make meaning in a safe environment as females. It would be useful to consider how the girls were apprenticed into, or how they learned to create, their “Bills of Rights” and how they decided which rules were important or not.
Gee (2003) suggests that when we play video games, we take on certain identities, just as when we are learning a new literacy. We can create the characters that we want in video games to fit our culture, appearance, and gender. When we play video games or interact in digital literacy practices, we rely on semiotic domains to help us understand how things take on meaning. These domains can refer to “images, sounds, gestures, movements, graphs, diagrams, equations, objects, even people like babies, midwives and mothers and not just words” (p. 17).

Gee (2003) examines semiotic domains as identities that we create consciously and unconsciously in our embodied habitus (Bourdieu, 1990) that can adjust, shift and transform at any time. Examining semiotic domains as identities opens up the discussion of learning and literacy concerning video games as well as how identity changes within digital literacy practices at home. For example, we might explore how family members interact with video games that position them such that their identities consciously or unconsciously shift while playing the game or creating characters. In fact, individuals might even take on the identities of the characters for themselves.

For example, consider Lewis and Fabos’s (2005) study of adolescents who engaged in instant messaging. Lewis and Fabos (2005) examine how seven adolescents engaged in IMing and how their social identities shaped and were shaped by this digital literacy. By IMing, adolescents had a higher level of control over their interactions with peers to answer or block communication. However, the authors explore how the adolescents formed identities around their IM use. For instance, these youths operated in “performative and multivoiced” forms of IMing (p. 493) in which they had to carry out a version of their selves and shift among different voices to various audiences.
simultaneously. This example supports Hall’s (1996) argument that identities are “points of temporary attachment to the subject positions which discursive practices construct for us” (p. 6). Lewis and Fabos’s study explores new theoretical trends in how youths learn in school. They describe how IMing drew on practices that shaped the adolescents’ relationships to knowledge and identities, as well as literacy learning and the potential these practices have in the home and at school. It was through the youths’ interactions with IMing that they became different kinds of learners who are able to “remake” the materials in which they engage (Kress, 2000).

The studies mentioned above demonstrate Web 2.0 learning. Learning in this way means fluidity, collaboration and participation (Lankshear & Knobel, 2007). It allows relationships to develop and affinity spaces to form that create a mind-set that there are new ways to be literate. In contrast, Web 1.0 is restricted, purposive and predictable. Consider literacy learning in today’s schools. Learning confines students’ abilities to collaborate or use tools and technologies to gain widely dispersed knowledge (Gee, 2004). In the present study, I examine how these threads play out in the ways one African-American family enacts “digital literacies” in the home, how digital literacies shape a family’s relational practices, and how a mother and her children interchangeably apprentice one another when engaging in digital literacies.
CHAPTER 3

Methodology

Ethnography allows us to view multimodality within a larger, broader context of patterned practices. By using ethnography, authors account for personhood and identities working within spaces, which carry histories and power issues on local and global levels. (Pahl & Rowsell, 2006, p. 9)

Introduction

This study is an ethnographic case study of one African-American family’s digital literacy practices. An ethnographic case study approach (Merriam, 2001; Schensul, Schensul & LeCompte, 1999) allowed me to investigate the social and cultural patterns, beliefs, behaviors and value systems of the Ali family as they interacted with digital literacies as part of the daily routines of their lives. Drawing on an integration of activity theory, mediated discourse analysis, and multimodal discourse analysis, set within rich ethnographic context, provides analytic and conceptual insight into the complexities of the Alis’ literate lives.

Over the course of three months, I shared in the literate lives of the Ali family as a participant observer. Aligned with the research in New Literacy Studies (Barton, 1994; Gee, 1996; Heath, 1983; Street, 1984, 1995), I take the perspective in this study that literacy practices are what people “do” with literacy, as well as how people “talk about” and “make sense” of literacy (Barton & Hamilton, 2000). Additionally, I take the stance that all literacy practices are multimodal and include the values, feelings, and
perspectives of the people engaged with literacy practices. Thus, the family context becomes a critical site for examining the ways in which digital literacies are used within the normally occurring routines of life in the home. In this chapter, I share the details of my research design.

**Research Design**

*Participant Selections.* I chose one African-American family for this study through purposive sampling (Patton, 1990). This sampling strategy implies that “the investigator wants to discover, understand and gain insight and therefore must select a sample from which the most can be learned” (Merriam, 2001, p. 61). I identified the Alis based on the following criteria: (1) the family members were avid digital literacy users and had access to digital literacies on a daily basis, and (2) there was a substantial amount of rapport already established between me and the family. I chose the Ali family because of the ways in which digital literacy practices were embedded within their literate lives. I theorized that an in-depth understanding of the digital literacies of one family would provide a unique and complex portrait of family literacy practices.

My research design required me to spend an extensive amount of time in the family’s home, in their personal space, observing the multiple practices and behaviors that were embodied as a part of their digital literacy practices. My point of entry to this family was through Gerard, a 9-year-old boy who was one of the focal participants in my study. Gerard and I met at an after-school program in an urban community. He was a student in my reading class that met twice a week for 35 minutes. Gerard was chosen
based on our in-class and out-of-class discussions about his access to and usage of digital
literacies. His mother, Larnee Ali, also became a participant in this study.

The Alis. The Alis are a low-income African-American family living in an urban
gentrified community in Washington, D.C. Larnee, a native Washingtonian, and her
husband, Peter, met when she was 17 years old. They have two biological sons, Gerard,
age 9, and Lil Jay, age 7. Romeo, 11, and David, 17 are Larnee’s stepsons.

Larnee’s Story. Larnee does not have her high school diploma, but she did attend
school until the ninth grade. She started school at age 12 after her mother was reported to
the authorities for child neglect for not enrolling her in school. She recalls that “scary”
day when two men, one in a black suit and the other in a gray suit, came to their house to
take her mother and her downtown to the judge for questioning. Two weeks later, she
enrolled in school: “When I think about my first day of school, I always think about what
I had to go through to have one, and the lesson I learned before I got there; you never
give up and don’t take no for an answer” (Larnee’s Introduction to Composition essay,
5/5/07).

While in school, Larnee remembers her teachers telling her that she was the
smartest in the class, making As and Bs. Her peers would befriend her to help them cheat.
She would never comply and enjoyed learning. Through a change of events at home,
Larnee was later taken out of school by her mother in the ninth grade. Still adamant to
continue her learning and obtain her high school diploma, she later took classes at a
business school and a computer repair course at a university in downtown D.C. During
the inception of the study, Larnee was enrolled in an online GED class. She took English
and math classes, reading books for her class such as George Orwell’s *Animal Farm,* that she would, at times, read to her sons for enjoyment.

Larnee is adamant about obtaining her degree one day. She feels that this is the important barrier in her life. She stated, “My academic skills are always a problem for me” (e-mail correspondence, 2/27/08). She feels that she is at a standstill because she does not have the necessary resources to go back to school at her age and she cannot obtain a job because she does not have the necessary credentials.

Larnee is one of 19 siblings. Ten children were born between her mother and father jointly, and nine were born from her father, and there were three deaths. Larnee’s parents were married for 21 years before getting a divorce. Larnee and Peter were married for 11 years. Peter’s extensive drinking caused him to get fired from his job, which made Larnee attempt to find a job: “I had to do what any real mother would do to keep her family together, I got a job” (Larnee’s Introduction to Composition essay, 6/15/07). Meanwhile, Larnee found odd jobs to make ends meet, doing clerical work or at a hotel, but she had to take off many days and eventually stop working because of her illness, epidermolysis bullosa, and because she needed more time to care for her children. As a result, the family had to live in a shelter and “start from the ground up.”

Larnee learned that because of her illness, she was eligible for government assistance, which allowed the family to leave the shelter in about nine months. Peter’s alcohol addiction worsened, and his extramarital affairs led to divorce. After the divorce, Romeo continued to live with Larnee, while David lived with his grandmother. From then up to the time of my study, Larnee has received assistance from the following government programs: Temporary Assistance for Needy Families, Supplemental Security
Income, and the Social Security Death Index. She receives funding from the government because her disability prevents her from working outside of her home. Although she would rather have a job and not rely on government assistance, she is grateful to the workers whom she says help her. She told them, “THANK YOU for helping me feel like a responsible parent even though I can’t work an 80 hour week because of you I can continue to give my children one less thing to worry about!” (Larnee, e-mail correspondence, 11/19/07). While the family’s financial situation has improved, Larnee’s health has always been a struggle.

EB shows visible scars, like burn marks, on Larnee’s body. She admitted that she is flamboyant when it comes to going out in public. That is, she does not willingly cover up her chest or arms, where the scars are easy to see. She is comfortable with the illness, which makes her comfortable with herself. She acknowledges the discrimination she encounters with people every day. People stare and automatically assume that she has other types of diseases or that she is not smart. At times, she will inform people about her illness in an attempt to eliminate the stares. She constantly finds herself telling people, “I didn’t get burned; I was born like this” (Larnee, e-mail correspondence, 2/27/08). Despite this constant discrimination, Larnee finds herself embracing a world that is filled by the love she has for her sons and her digital literacy practices (see chapter 4).

Gerard’s Story. Gerard was born in a two-parent household. He is the middle child to siblings David, Romeo, and Lil Jay. He attends a public school with Romeo and Lil Jay. Gerard and his siblings were left with their father when Gerard was 5 years old, due to marital difficulties between Larnee and Gerard’s father. Soon after, Larnee began receiving disturbing calls from the school that suggested that Gerard’s home life was
affecting his school life, including implications that Gerard’s physical appearance was unkempt. She took the boys from their father’s house, and they began living with her in their current home. Gerard completed standard academic and psychological testing in 2005 that diagnosed him with attention deficit hyperactivity disorder. He is taking medication that directly addresses his inattentive behavior of not focusing or concentrating on tasks at home and at school.

Gerard and his brothers are picked up from school every day by the after-school program and stay at the center until 7 p.m. Gerard has made As and Bs since he began school but has had difficulties with math fractions. Currently, he receives one-on-one tutoring at the after-school program. He enjoys reading and asking thought-provoking questions to get to the main idea of a story. In a classroom setting, he might be overlooked because of his quiet and calm demeanor, but as my student in the reading class at the after-school program, Gerard was called on a lot and offered to share his thoughts or views on the readings. He loved books like The Empty Pot by Demi, Captain Underpants by Dav Pilkey, and especially Mama Don’t Allow by Thacher Hurd because it was a book on tape that allowed him to use various modalities (e.g., auditory, visual, linguistic) to listen to the story while reading.

At the after-school reading class, Gerard offered to share his thoughts or views about the readings and encouraged his peers to do the same. He introduced the class to reading with expression. His funny but appropriate country accents made other students seek out their own ways of expressing themselves when reading. It was apparent that Gerard enjoyed reading, as I would often see him either reading or drawing alone. Each book that he took from the shelf was an engaging event. The way he flipped the book
over to read the summary or the delicate motion of turning each page signified what reading meant to him. He was comfortable in this space, amid the frequent sounds of talking, laughing, and unrecognizable noises from children playing in the background.

At times, Gerard’s in-class work would conflict with his out-of-class behavior. Gerard was the victim of frequent bullying attacks at the public school. He would get into physical and verbal fights: “Gerard would tell me that the kids would pick on him because of my EB scars. They did not understand me, and they did not like having me around. Gerard told me that. I would come to the school sometimes to pick them up and talk to my kids’ teachers. I was very involved” (unstructured interview, 11/08). Some children called Gerard “gay” because of his quiet demeanor, which also led to lots of gang jumping and fights. When Gerard fought back and questioned his accusers about the whereabouts of their parents, the fights slowly discontinued. Eventually, with assistance from the after-school program, Larnee found another school for Gerard, and eventually, all of the boys attended the same private school.

During spring 2007, while most of the children were outside running around, laughing, and engaged in multiple activities, I observed Gerard in the multipurpose room at the after-school program, involved in discussions about a comic strip that both he and his friend Charlie were illustrating. I watched in amazement how this activity superseded all of the other outside practices. I was intrigued by how they spoke about their comics in a cooperative manner. I saw how their interactions went beyond just language but produced forms of actions pertaining to their comic strip. The boys’ comments about the sketches, their laughter about the characters, the heavy marks and erasing on the tablet or the “too-deep” back-and-forth conversations, agreeing and disagreeing about the comic
strip layouts, intrigued me about Gerard’s literate life. When I spoke to Larnee, she told me that he had been developing two sets of comic strips on- and offline (i.e., via computer and hand) for months in his black-and-white composition notebook. In addition, his interactions with his 10-year-old cousin Jake were fascinating to watch.

Because Gerard was such an avid user of digital literacies, I wondered about the ways in which digital literacies were encouraged (or not) within the context of his family. I was interested in understanding the ways in which digital literacies were a part of his family’s literate life.

**Neighborhood Context.** The Alis live in an urban community in Washington, DC. Three distinct neighborhoods surround their place of residence: Trinidad, the H Street Corridor, and Benning Heights (see Figure 3.1, Appendix B).

--- Insert Figure 3.1: DC Neighborhood Map here ---

These areas are predominately African-American, with a large deaf population from Gallaudet University. Known as one of Washington, D.C.’s crime hot spots for heavy drug trafficking and violence in the 1980s and 1990s, parts of this area were infamous for decrepit housing. With evidence of gentrification, tearing down and rebuilding the neighborhood to displace poor residents, certain areas are now more diverse in terms of ethnicity and socioeconomic status, especially on Larnee’s street.

**Data Collection Procedures.** Merriam (2001) argues, “Data are not ‘out there’ waiting collection, like so many rubbish bags on the pavement. For a start they have to be noticed by the researcher, and treated as data for the purposes of his or her research” (p.
My data collection was an ongoing process as a researcher and participant observer who was participatory to varying degrees in the study environment. At the beginning, I introduced the language of digital literacies to the family. From July to November 2007, I collected data in the Ali household in three overlapping phases (see Appendix C).

--- Insert Table 3.1: Three Phases of Data Collection here ---

*Phase I* consisted of a broad, descriptive phase in which my intent was to thickly describe the activities in the home. This phase included interviews, participant observations, a guided digital walk through the home, and digital photos. *Phase II* became more focused and grounded in the ongoing analysis and included targeted interviews, dialogues with the family about the digital walks, and continued structured observations in the family setting. *Phase III* included aspects of the first two phases, such as more focused semi-structured and unstructured interviews, participant observations, and video- and audio tapings. As I continued to gather more focused and grounded data, the roles from Phases I to III changed. The guided digital walk and photos were used in Phase I to offset the remaining data collection. This helped me to directly describe the activities in the home and communities that would generate more questions and reasons for further interviews and observations. I wanted to set up a different type of interaction with the participants by sharing my digital literacy timeline during Phase III. I wanted to make sure that I did not taint the research in any way by imposing my digital literacy practices upon Larnee and Gerard in the beginning stages of data collection without knowing about their practices. Gathering data in this way helped me to prepare to analyze
my personal data thereafter. Below, I describe each data collection tool used in this study in great detail.

*Interviews.* I conducted three kinds of interview for this study: structured, semi-structured and unstructured. Structured interviews consisted of a set of prepared open-ended questions. These questions asked general information and were based on the prior knowledge I had about Larnee and Gerard from my relationship with them at the after-school program. All structured interviews were conducted as face-to-face interactions at the participants’ home. The purpose was to elicit responses that would be relevant to my study. For instance, my questions related to their uses of digital literacies/technologies in the home (e.g., time spent on the computer or other types of digital literacies, parent/child involvement with digital literacies, how the family members troubleshoot when there are problems with the digital literacies). (see Appendix D)

--- Insert Figure 3.2. Protocol for Structured Interview ---

I composed structured questions that would assist me to generate information about their digital literacies. Initially, I used the same interview protocol with Larnee and Gerard to look for similarities and differences. However, understanding “why” and “how” digital literacies influenced their personal lives required more responsive, semi-structured interviews. These were flexible open-ended interviews based on observable behaviors between Larnee and Gerard. The purpose of semi-structured interviews was to ask the family to describe their experiences and feelings about an observation.
For instance, after the observations, I noticed identifiable themes and categories from structured interviews and my observations that prompted further questioning (e.g., describing their engagement with specific digital literacies determining the order of computer use in the home, how digital literacies affect their social lives). I used some examples and guidelines of semi-structured interviews from Lewis and Fabos (2005), study, Merriam (2001), and Schensul et al. (1999) to fit the specific needs of my study (e.g., the length of time allotted before answering a text or IM; restrictions placed on the computer; difference between communicating by phone, e-mail, and face-to-face). Semi-structured interviews were conducted by face-to-face interactions, by phone, and by emails.

As I asked questions and communicated with Larnee and Gerard, new ideas continued to emerge that demanded further questioning in the moment. Therefore, I also used unstructured, informal interviews. Unstructured interviews consisted of flexible, open-ended questions that occurred in the moment, similar to a conversation. Questions were not predetermined but exploratory (Merriam, 2001). As in the semi-structured interviews, I asked questions based on previous interviews and participant observations. The purpose of this method was to ask Larnee and Gerard to share their roles as avid digital users in the home to help me determine how digital literacies shaped their lives. This interview style allowed me to ask questions freely, treating my participants as active participants. For instance, I was able to gain access into aspects of Larnee’s personal life that initiated her passion for engaging in digital literacies. Unstructured interviews were conducted by face-to-face interactions, and by phone, e-mails and texting and IMing.
Structured and semi-structured interviews were audio taped. Unstructured interviews from IMs were saved in an email account and on flash drives, while texts were stored on the cell phone. I interviewed Larnee and Gerard separately at the beginning and at the end of the study. Interviews were conducted once a week for one hour, 30 minutes for the mother and 20 minutes for the child. On certain occasions, interviews with Larnee lasted for two hours, while the interview with Gerard lasted over 30 minutes with multiple breaks when needed. Interview questions were modified based on their responses and consisted of general to specific questions (see above). In addition, I also conducted ongoing interviews with Larnee and Gerard about things they might do or say concerning digital literacies that were useful to the study.

**Participant Observations.** For over 12 weeks, I became a participant observer in the Alis’ home once a week for an hour. Occasionally, I asked to visit Larnee’s home twice a week to obtain further data that were useful for my study. All observations took place in Larnee’s bedroom, where the only computer in the home was located. Observations appeared to be “routine and largely unconscious,” and they gave me the opportunity to learn about the family’s behaviors and practices that made sense in their world (Merriam, 2001, p. 94). This status was significant to my study, as I spent a great deal of time in the participants’ home even beyond the designated three months. After developing a high level of trust with the participants, the goals of the observations were to find, examine, and explore patterns, themes, similarities, and differences across participants and events (Glesne, 1999).

I captured pertinent information that provided significance to my study relating to (1) the context of the study, (2) the participants’ behaviors, and (3) my behavior as
researcher. For instance, I observed how Larnee and Gerard utilized one computer, where they positioned the computer and the television, and how Larnee’s bed and the television were focal points of attraction and attention in this context. I could identify how their spatial cues may have been attributed to their behaviors (e.g., Gerard standing over Larnee’s shoulder as a cue to use the computer where video game remote controls were positioned for easy access when all family members assembled together in Larnee’s bedroom to play video games or watch television).

I also observed the participants’ behaviors and individual roles when they engaged in digital literacy practices. I identified how the individuals interacted with the digital literacies and with one another, and how their roles shifted, as well as the duration of time engaging in the activity. In addition, I listened to the family’s conversations. I listened to how they communicated with one another, who spoke first and who listened. I also noticed nonverbal gestures and behaviors (e.g., laughing, silence, coughing, belching) that added to the meaning of each exchange (Merriam, 2001).

Last, I acknowledged my behavior documenting the family’s digital literacy practices. I identified similarities and differences in how I would engage in particular situations with certain family members. I recognized ways to address sensitive questions and practices that I observed in the home that became important in conjunction with my field notes.

I utilized ethnographic methods of participant observations: field notes and audio and video recording totaling about 18 hours. These methods were used simultaneously. I would take field notes of the observations that corresponded with the interview questions. Field notes were recorded during and after observations. My field notes were written in
my journal, where I collected notes based on the observations. As I reread the notes, I continued to analyze and reanalyze the data, marking my notes to draw from one point to another throughout the data collection process.

*Digital Walks.* Similar to Orellana and Hernandez’s “literacy walks” (1999, p. 613), I introduced a “digital walk” through the Alis’ home. The goal of the digital walk was to create opportunities for the Alis to teach me about their everyday digital literacies. It allowed me to consider the “digital world” from their vantage to initiate interaction and provide insight on how they perceived digital literacies in their home. On separate occasions, Larnee and Gerard guided me through the digital walk while I asked questions that sparked my interest during the walk. I found that the individual tours in the home were important so that other family members’ answers and beliefs would not override or impose upon others. I encouraged the participants to start from any room to provide as much information as they could about the digital technologies/literacies that existed in their home. In this way, they gave me a sense of what digital literacies they most valued.

Throughout the walk, I asked family members to point out the digital technologies/literacies that existed in the home, and I posed questions about their choices. My probes included: “Can you tell me why you chose this digital literacy?” and “Describe how this digital technology is used in your home.”\(^1\) I audio and video recorded the walk which allowed the participant to have free range of unstructured dialogues. Conducting the digital walk became an anchor point later in my data collection. It helped me to collect a baseline for the data, as well as to develop a common language of how Larnee and Gerard spoke about a particular digital technology, why they chose the

\(^1\) Throughout the study, I used the constructs “digital literacy,” “digital technologies,” and “digital tools” interchangeably.
technology for this walk, and what it meant to them. Afterward, I gathered notes and identified similarities and differences between Larnee’s and Gerard’s digital walks, which allowed me to refer back to the data, if needed, for clarification to ask follow-up questions.

**Document Collection.** I paid attention to collecting documents and artifacts that derived from interviews, participant observations, and discussions that occurred in the home (e.g., Gerard’s drawings, report cards and teacher evaluations, photos, information printed from the Internet). For example, collecting documentation became pertinent during conversations with Larnee about her children’s grades. She showed me documentation of her sons’ report cards, teacher notes, and other information she thought was helpful to provide me with a clearer picture of their educational achievement. When she spoke more specifically about Gerard’s grades and some of the conversations they had about his difficulties with math fractions, I asked for his report card as I wrote Gerard’s chapter.

My process for collecting documents with Larnee was minimal; that is, most times, I did not have to ask Larnee for documentation. For example, we would talk about her educational background, and she would tell me that she would gladly send me an e-mail of the composition essays she wrote for her online GED course. The documentation was meaningful and relevant to the study. I was able to explore and think about further questions to ask that would assist me in interpreting the data.

On days when I did not conduct participant observations in the home, Larnee and, at times, Gerard and I participated in various ongoing e-mail discussions, texting, IMing, and talking on the phone, based on questions or concerns that needed further clarification
after my visit in their home. Sending e-mail messages was very useful because it provided me with relevant information in a timely fashion. On some occasions, Larnee and I would text each other to set up additional dates for revisits. She would also text quick updates about the family and when she needed me to assist her with her children’s school administrators.

Digital Photos. I chose to use digital images in this study to understand Larnee and Gerard’s digital literacies. I loaned Larnee and Gerard a digital camera, on separate occasions, to become more participatory in this study by capturing their digital literacies in various contexts of their lives (e.g. school, home, community; see Appendices). Upon providing them with the digital camera, I stated the guidelines of this activity. I asked them to take photos of digital literacy/technology in their lives. At the beginning and throughout the study, I constantly defined what I meant about “digital literacies,” but we often used constructs such as “digital literacies” and “technologies” simultaneously until they felt that they had an understanding of the construct. During the study, I noticed how Larnee and Gerard would no longer use the term technologies but rather digital literacies. They took photos around their community, at the doctor’s office, of products in stores, and of cars to describe their digital literacies, as I did not tell them what pictures they should take. The dialogues about the photos were shared among the three of us to facilitate engagement in each picture.

By using this method, (1) it allowed them to take ownership of viewing digital literacies from a digital lens, thus changing their digital literacy practices; and (2) it provided an authenticity about what digital literacies were important to their lifestyle. For example, Larnee’s picture of the JumboTron at a hockey game identifies one of her
favorite sports: hockey. \(^2\) She was fascinated with the JumboTron because of its function to feature close-up shots of the events and provide scores and ways to elicit audience participation. In addition, she stated that she would love to have a job responsible for working on the technical side of previewing the JumboTron to large audiences (see Appendix E).

--- Insert Figure 3.3. Digital Photo of JumboTron here ---

Images can be interpreted in many ways. They carry individual meaning that creates a larger effect. Viewers create meaning beyond just the viewer and the gaze; images are always “read” within a cultural context (Kress, 2004; Neckyfarow & Saks, 2007). In fact, Mitchell (2005) has argued that images act as “go-betweens in social transactions that structure our encounters” (p. 175) as cultures are displayed in everyday life practices. Mitchell describes how pictures have a culture, a voice and personhood, and speak to us in many ways. For instance, I identified how Larnee’s and Gerard’s digital photos reveal how they view digital literacies in their community and life. When Larnee took photos of her sons at the doctor’s office with digital thermometers in their mouths, she conveyed practices that come with being a mother and how even at the doctor’s office, their lives are influenced by digital literacies to make sure they are healthy (see Appendix F).

--- Insert Figure 3.4. Digital Photo of Gerard getting his temperature taken here ---

\(^2\) This is a large-screen television used to feature close-up shots at an event.
During the sharing process, distinctions were made on how they viewed, interpreted, understood, and supported digital literacies in their communities and everyday lives (Freire & Macedo, 1987; Hamilton, 2000; Moss, 2001; Orellana & Hernandez, 1999; Spielman, 2001). This activity not only encouraged interactions between Larnee and me, but it also enhanced the parent/child interactions that already occurred through the sharing process that extended from the family’s “funds of knowledge” in the home (Moll, Amanti, Neff, & Gonzalez, 1992; Orellana & Hernandez, 1999).

**Data Analysis**

I analyzed the data continually and recursively across the three phases of the study, focusing on my research questions. Using ethnographic data from this research study, I illustrate the Alis’ digital literacy practices in the home (see Appendix G).

--- Insert Table 3.2: Three Phases of Data Analysis here ---

Analysis in *Phase I* aimed at providing a thick description of the digital literacies and activity systems in the home. During this phase, I began with a grounded theory analysis of transcripts, field notes, videotapes, and audiotapes to develop categories, themes, and patterns that reflect the intentions of the three research questions (Creswell, 1998; Merriam, 2001; Miles & Huberman, 1994). For instance, I read and reread through transcripts with and without the audiotapes, made margin notes and questions and developed codes to help make sense of the data.
For Phase II, I continued transcribing audio- and videotapes and color coding the data of ongoing interviews, and I participated in dialogues with the family about my interviews, observations, the digital walks, and other questions that had formed. I began to develop inferences from the data to provide structure to my interpretations (Creswell, 1998). Finally, I used Activity Theory to analyze the structure of some of the activity that occurred in the participants’ home (e.g., Larnee and Gerard texting and IMing).

During Phase III, I invited the family members to co-analyze and “member check” my developing interpretations (Creswell, 1998). Meanwhile, after perusing through videos, I began to capture salient video components of sophisticated context in the home. I used mediated discourse analysis, along with multimodal discourse analysis, to see how meanings were created in texts and interactions between Larnee and Gerard (e.g., designing comic strips, texting and IMing). This approach allowed me to see the shift between telling, showing, and doing (see chapter 5). I recorded and identified provocative interactions to formulate themes from the family’s observations that illustrated engaging, provocative, and useful data and applied them in the transcript analysis. In addition, I compiled video footage using Windows Movie Maker to sift through sophisticated interactions for further inquiry to answer my intended research questions.

**Analytic Procedures**

**Coding.** To identify themes and patterns from the data, I established an “open coding” scheme to code transcripts (Miles & Huberman, 1994). I generated codes after close readings of the interviews with Larnee and Gerard. I identified about 10 themes
based on what and how Larnee and Gerard reported and demonstrated their use of digital literacy practices and family interactions (e.g., digital literacy as information, as emotionalism, as leisure, as literacies, etc.). I called these themes “red flags” and defined them as purposes for using digital literacies. For instance, when I isolated Larnee talking about how she would use the computer to go on Google.com or on a Web site to find alternative nutritious school lunch menus for her sons, I defined this theme as “digital literacy as information.” In addition, these themes also generated further questions and thoughts that I wanted to revisit.

I also used color coding to reflect my three research questions (see Appendix H).

--- Insert Table 3.3 Key of Color-Coded Transcripts here ---

Colors were assigned to each research question and inquiry, making it easy to identify and trace its relevancy to the study by underlining words or phrases closely related to the topic at hand from the original transcript. I color coded instances in which these categories captured the interaction (Merriam, 2001).

Using the color-coded categories alongside the transcripts, I looked for situations in which the family enacted digital literacies in the home. For instance, I chose what I understood to be significant excerpts from interviews I conducted with Gerard, Larnee, and David and color coded instances in which they assisted me to focus on the three research questions. For instance, to answer question one, I reviewed Gerard’s interview and noticed phrases such as, “playing video games,” “going online,” and “playing PlayStation.” I colored his phrases green. To answer question two, I analyzed an
interview with Larnee and located instances that addressed ways in which she was being shaped by digital literacies. Phrases expressing how Larnee became a confidante or how she engages in digital literacies as “a tiny bit of an addiction” were categorized with the color blue. Last, revisiting a transcript of an observation between Larnee and David, I sought phrases that provided evidence of discourse that would demonstrate one or both as having a dominant role or a reciprocal apprenticeship (e.g., “you gotta open it up”; “wait, wait click keep as new”; “keep go down right there”) and colored them purple (see Appendix I).

--- Insert Figure 3.5: Color-coding Process here ---

I then used ATLAS.ti, a qualitative coding software, to broadly code the transcripts based on categories that emerged from the data. As earlier stated, after developing a running list of all of the codes, I generated codes into defined categories (e.g., digital literacy as literacies etc.). Using the ATLAS.ti workbench window, transcripts were located on the left side and the codes were placed in the margin area next to the desired text. Transcripts were coded to describe instances and counter-instances of the categories in the data. Merriam (2001) provides helpful analytic techniques in analyzing and managing data and theory building. Coding assisted me in identifying notations to easily develop, assess, and modify as needed during the collection and analysis simultaneously (Merriam, 2001; Miles & Huberman, 1994).

I determined which practices were important to my study by first introducing a thick description of all of the practices I observed for at least the first two weeks of data
collection. Next, I checked hunches, theories, and patterns after rereading my transcripts. Meanwhile, I chose those instances that were provocative and significant to my study. I referred to Lewis and Fabos (2005), who recorded participants’ voices, when video recording, as they explained their actions and choices, as well as any unique and complex exchanges that occurred while participants were on the computer.

*Analyzing Activity Systems.* I used Activity Theory (Engeström, 1987, 1999; Vygotsky, 1978) as a theoretical model to examine the structure of human activity in the home. Activity theorists conclude that research on technology use is based on the perspective that learning should be viewed as an “activity situated within communities of practice or activity systems” (Chandler-Olcott & Mahar, 2003, p. 361). In fact, Wenger (1998) argues that, “Having a tool to perform an activity changes the nature of that activity,” and that “participating in the changed activity always changes the members of the community” (p. 59). For initial analysis, I explored and charted how this family utilized digital literacies in the home and how those tools were used in seven activity systems (subject, artifacts/tools, object, rules, community, division of labor, and outcome [see Appendix J]).

--- Insert Figure 3.6. Seven Activity Systems here ---

Figure 3.6 illustrates an extended model of the seven activity systems. The *subject* (human agent) is the one for whom the activity is created or the one who is undertaking the activity; thus, the subject is usually the point of focus in the analysis. The *object* (problem or purpose) refers to the “raw material” or “problem space” where the activity
is motivated, directed, or gives shape to the activity “that meets a human need,” which plays a role in the outcome (Center for Activity Theory and Developmental Work Research, 2003–2004). The activities are mediated by the artifacts (instruments/tools) that have a profound impact on how we think and our experience during the activity. The activity is also mediated in the context of the community, where the activity is carried out (Lloyd & Cronin, 2002). In any activity, there may be constraints based on what an individual can or is permitted to do that determines what rules are made and what division of labor (roles) should be taken up that mediate the interaction of the individual in the activity system.

I took two occurrences, Larnee taking apart the computer and Larnee and Gerard texting and IMing, to code using the activity systems. Specifically, in Larnee and Gerard’s interaction, I categorized who initiated the activity the nonverbal and verbal gestures and interactions, the lack of time constraints to answer a text or IM, and how Larnee socialized Gerard with text acronyms to interact with one another without interfering in each other’s space. Larnee initiating the activity was categorized as division of labor; nonverbal and verbal gestures were categorized as the mediating artifacts/tools; and the limitless time constraints to answer or IM were categorized as rules. These activity-setting dimensions inform and shape home literacy events and practices. This analysis was an interesting way to understand the “complex and multiple dimensions of literacy practice…congruent with the ideological model and sociocultural approach to literacy” (Orellana Reynolds, Dorner, & Meza, 2003, p. 20 [see Appendix K]).

--- Insert Figure 3.7: Larnee and Gerard: Texting and IMing here ---

3 See Chapters 4 and 6
Mediated Discourse Analysis. I used tools from mediated discourse analysis to identify and interpret the Alis’ relevant moment-to-moment discursive and multimodal practices. MDA allowed me to capture how the Alis make sense of their practices in the meaning-making process (Norris & Jones, 2005; Scollon, 2001a, 2001b). This method of analysis was chosen because MDA widely focuses on the social actions/literacy practices that individuals produce and reproduce in their everyday lives. MDA’s primary focus is on social action broadly, rather than only on language (Scollon, 2001a). The task of MDA is to explain how the “broad discourses of our social life are engaged (or not) in the moment-by-moment social actions of social actors in real time activity” (Scollon, 2001a, p. 140). Since the focus of this research study was to examine what this family does with digital literacies in the home, MDA’s six central concepts were used to provide a window into multiple modes of meaning, talk, learning, and action (Scollon, 2001a, 2001b).

I documented and transcribed the Alis’ moment-to-moment interactions through digital literacies in the home. For instance, to answer my second research question, “How might digital literacies shape this family’s relational practices, and vice versa?” I located ways and developed questions on how Larnee engaged in a myriad of activities (e.g., Larnee taking apart the computer motherboard [see Appendix L]). MDA begins with a social action; therefore, I reviewed the videotape and listened to Larnee talk about the components of the motherboard. I asked a series of questions to gain an understanding of this action:

- “What was the action [that] took place?”
- “How does Discourse figure into this social action?” (Scollon, 2001a, p. 143).
- What kinds of actions are relevant in this practice?
What are the underlying meanings in this image?

The action was Larnee opening the computer to take out the equipment, mediated by language and her nonverbal gestures. However, I moved past her talk to explore her nonverbal interactions with the unit. I observed how she gently took out the bus line or pointed to the motherboard and the effect it had on this practice and on Larnee.

I completed a four-column table to describe and analyze the verbal and nonverbal data to illustrate how Larnee uses talk and action in this activity (Table 3.4). The left side of the table reveals how much time was allotted for Larnee to do a particular action. The time stamp would range anywhere from 4 seconds to 6 minutes. The next column features the MDA concepts. Each concept is followed by Scollon’s definition of the concept and an example of what MDA might look like. The third column demonstrates a video still showing Larnee, from her stomach down, making her actions as the central focus of the activity. The fourth column combines the verbal and nonverbal interactions. This column describes who is speaking with overlapping interactions in italics. This table helps me to describe the scene more clearly, making it possible to identity each movement.

For instance, I use the label, *Nexus of Practice* to demonstrate how Larnee’s construction of identities and roles takes up in this practice. I looked at this practice as a set of mediated actions made up Larnee explaining the terminology and functions of the CPU while taking out other parts of the unit simultaneously (see Appendix L).

--- Insert Table 3.4: Larnee Taking Apart the Computer here ---
I drew from Scollon’s (2001a) example of using MDA to analyze the practice of having a cup of coffee. According to Scollon, when ordering coffee, there are multiple mediated actions that transpire from giving the cashier the order to the exchange of money. For Larnee, she links the verbal and nonverbal practices of talking about the terminology of the computer unit, to the functions of the CPU, and the motherboard as an extension of herself. MDA allowed me to focus on how Larnee makes choices with her actions (e.g., positioning herself as the motherboard). By using MDA, I was able to understand Larnee’s and Gerard’s actions before discourse, as well as the potential of their everyday actions that allow them to use digital literacies as mediating tools to make sense of themselves.

*Multimodal Discourse Analysis*. I used multimodal discourse analysis (MMDA) to look more closely at the multimodality of mediated actions (Kress & van Leeuwen, 2001; Scollon & Levine, 2004). That is, there are multiple modes of communication outside of the spoken language that carry meaning (e.g., gestures, visuals, sounds, etc.). van Leeuwen (2004) has argued that face-to-face communication conveys “multilayered communicative acts” that involve components of semiotic modalities (p. 7). I used MMDA based on the assumption that meaning is made, interpreted, distributed, and received through many representational and communicative modes (Kress & Jewitt, 2003). Each of the practices that Larnee and Gerard engaged in recruited multiple modalities that communicate unique kinds of meaning. I argue that one cannot fully understand a practice (e.g., playing videogames, IMing, texting) unless one is able to read the signs of how meaning making is construed. Therefore, using MMDA allowed me to
think about the other significant at times unnoticeable nuances that are present beyond language that are carried out in Larnee’s and Gerard’s lives.

Similar to the table I constructed for Larnee’s demonstration of taking apart a computer unit using mediated discourse analysis concepts, I used MMDA to describe Gerard’s comic strip, “Team Destiny TD1” (see chapter 5, Appendix V). For instance, I created two columns to shed light on how Gerard made meaning with his conventional comic strips. In the first column, I included pictures of certain comic frames and Gerard’s involvement in that practice. While Gerard narrated his comic strip to me, I captured how he would point, circle, or drag his fingers across the text to provide a visual image of how Gerard makes meaning through the comic he created. Column two showed how he attended to these modes to represent and communicate various modalities. For instance, I demonstrated Gerard’s verbal narrative of TD1. In seven frames, I labeled narratives of each frame with overlapping modes that corresponded to the pictures in column one. Such modes included Gerard holding his notebook tightly, tracing an imaginary line, and circling, pointing, or tapping the frame with his finger.

In addition, I used the same format to chart Gerard and his cousin Jake playing *The Sims 2* video game. Using two columns to capture this interaction, I located numerous modalities working together at the same time that made their interactions significant. I also described and explained, visually, how Gerard and Jake designed their practices as videogame creators and designers to say and show relevant things about their world. Therefore, through this table, I demonstrated how they made use of the resources that were available to them at that moment to make meaning of this text (Kress & Jewitt, 2003). I labeled multiple ways that Gerard and Jake designed texts, including how they
quickly pressed the remote controls to create their animated figure, how they both kept their eyes on the television screen throughout the interaction, and how Gerard would occasionally jump up and down on the bed to point to the figure on the screen. Using this method with this table, I identified and analyzed ways that Gerard and Jake represented how they use digital literacies to make sense of their lives. Therefore, using MMDA allowed me to understand the multiple modes they use to express the meanings they wish to make in their interactions.

I created the tables to map out the design of multiple modes in a given set of interactions. In chapter 5, I have charted how Larnee and Gerard engaged in intergenerational meaning making in trying to download a video clip. I chose to illustrate four columns to describe how modes such as gazing and touching play significant roles in intergenerational learning with activities (Kenner, Ruby, Jessel, Gregory, & Arju, 2008). I did not include photos as previously selected in my other tables. I wanted to highlight the ways Larnee and Gerard used these modes to communicate and represent meaning through touch. Since this is a typical way for them to communicate with one another, applying MMDA was beneficial in analyzing their interactions.

Finally, in chapter 6, I have used a table to demonstrate Larnee and Gerard’s texting and IMing from beginning to end (see Appendix EE). Using tools from MMDA, I modified Wohlwend’s (2007a, 2009) table to describe how Larnee and Gerard used the practice of texting and IMing as a means for social interaction through the use of a cell phone and computer. I selected five out of nine columns of transcripts. I chose relevant data to document how the use of texting and IMing, less than 2 feet apart from each other, was significant and influenced their relational practices. I labeled column one,
Scene to allow the view to follow along with each line. The second column was Time, to show the quick turn of events that occurred with each activity (e.g., the time it takes for Gerard to read the IM while Larnee texts).

I labeled column three Moment-to-Moment Action/Context to describe the action that occurred when they texted and IMed (e.g., Larnee texting with one hand and drinking with another hand). The fourth column highlighted the Talk at Each Turn/Verbal Discourse (e.g., “This is pretty much an average day right here”). I labeled the fifth column Effect on Action/Practice, which described the ways Larnee’s and Gerard’s digital literacy practices made an impact on each other (e.g., vocabulary skills are enacted, Larnee initiates and apprentices Gerard into the practice). Describing Larnee and Gerard’s texting and IMing practices through MMDA allowed me many ways to think about, understand, and analyze their relationship as mother and son and also how they used multiple modes, along with discourse, to answer my intended questions.

Multimodal Transcripts. After I conducted preliminary interviews with Larnee and Gerard, I listened, by headphone, to transcribe the audio taped interviews. Using landscape view to display the page layout of each transcript, I listened, re-listened, and wrote down word for word, each question and answer in bold and single spaced, using line numbers on the left with minimal spacing on the right for notes.

Turn taking was established from current speaker to next speaker by asking a question or looking at my participants. I often spoke more to Gerard while his turn was delayed, as there were never overlaps in conversation. Instead, he would take his time to answer and would very rarely ask a question and when he did, he would speak softly and slowly. However, I moved beyond language which allowed me to focus on his nonverbal
gestures through observations and conversations with him. This interaction included movement, gaze, and gestures on the computer or video game (mouse, keys, screen) and talk. I saw how Gerard used each gesture to create meaning while playing video games (Jewitt, 2006). While some face-to-face communication was limited, various gazes and gestures gave significant signals of turn taking.

In contrast, Larnee did most of the talking while I listened intensely. At times, our conversations overlapped when I needed to cut her off to shift the topic (Sacks, Schegloff, & Jefferson, 1974) or go back to an original comment she made earlier. She would also cut me off while or before I asked my next question. Similar to Gerard’s, Larnee’s nonverbal gestures were telling, as I attended to all modes during each activity. I transcribed all audible language in great detail, including indications of delayed speech, overlapping dialogues and nonverbal gestures and so on (see Appendix M).

For instance, during my initial interview with Larnee, she stood up for the entire 2-hour interview. From folding clothes to standing next to the bed, she answered my questions and shared her interest in digital literacies. However, it was not until I videotaped and audio taped the content and nonverbal interactions that I began to notice distinct behaviors of Larnee and Gerard. After transcribing the interactions, I would re-listen to the audiotape while reading the transcripts for clarity and organization. Often times, I would watch the videotape while reading the transcripts to make sure that I had captured a full scope of Larnee’s and Gerard’s interactions with digital literacies. (see Appendix M)

--- Insert Figure 3.8 Transcription Key here ---
I developed tables to outline how Larnee and Gerard made sense of digital literacies and how these influenced what they said and did individually and collectively. I have described how my tables were used to capture distinct footage of Larnee and Gerard engaging in digital literacies. The tables were significant to this research because it was important for me to display Larnee’s and Gerard’s meaning-making process when they engaged in digital literacies. Because the relationship between discourse and action is dynamic, I demonstrated overlapping utterances in Larnee’s and Gerard’s transcripts. I used brackets to indicate how their speech overlapped with their action as accurately as possible. I wanted my analysis to clearly display the positioning of the participants’ speech along with their action. This “discourse as action” perspective corresponds with MDA in that it “sees discourse as ‘cycling’ through social actions: verbal and textual tools working their way into practices, material objects, and the built environments in which we interact” (Jones & Norris, 2005, p. 9). Therefore, I wanted my transcripts to represent the questions, “What is/are the action/s that is/are being taken here? What is the role of discourse in this/those action/s?” (p. 9). Throughout each chapter, I demonstrate the value of representing MDA in this study, which provided me with ways to understand discourse with other “mediational means, reproduces and transforms Discourses and how Discourse create, produce and transform the actions that individual social actors can take at any given moment” (p. 10).
Establishing Trustworthiness in the Research Process

Validity. I used three of the eight verification procedures to establish validity in my qualitative study: (1) member checking, (2) prolonged engagement and persistent observation, and (3) peer debriefing (Creswell, 1998; Lincoln & Guba, 1985). I shared my findings and other pertinent interpretations with the participants throughout the study to gain further understanding (Merriam, 2001; Miles & Huberman, 1994; Pahl, 2004). For example, when I reminded Larnee about completing the timeline she expressed that she felt the timeline was repetitious for her to complete. When taking the data back to Larnee for plausibility, she was honest with me that this method was not as useful as I had originally planned.

Meanwhile, I relied on “prolonged engagement and persistent observation” to spend additional time with the participants in order to continue building a level of trust, as well as to learn the culture of the home (Lincoln & Guba, 1985, as cited in Glesne, 1999, p. 151). Larnee would allow me to stay for an extended amount of time to discuss issues salient to the study, and in addition, she freely made herself available for me to set up appointments for further interviews and observations. For instance, I observed Larnee’s and Gerard’s interactions on the computer, collectively and on separate occasions, for an extended time. This engagement could have only been achieved through a previously established relationship with them.

In addition, I relied on “peer debriefing” (Cresswell, 1998; Lincoln & Guba, 1985) from a dissertation discussion group, to edit and reedit drafts, color code, and share interview transcripts. I was able to engage in analytical thought processing that held me accountable for representing the data in a clear and concise manner (Glesne, 1999;
Merriam, 2001). I provided this group with the same data set to code separately and review their results with me (Miles & Huberman, 1994). Members of this group were either doctoral candidates currently writing their dissertations or had recently received their Ph.D.s; therefore, human subjects training had been completed at their respective universities. The three procedures used in this study presented clear implications for effective validity and trustworthiness.

**Reflexivity.** Qualitative research is a process. It involves a variety of different labels including theory, method, and analysis. My role as the researcher, too, was a process, in which I had to decide what information was needed to best address the intended research questions, methods, and analysis for my data (Merriam, 2001).

Before the inception of data collection, I began to question who I am as an avid digital literacy user. I thought about my readings of Florio-Ruane (2001). She challenged my thoughts on knowing how important my personal literacy histories are in order to be an effective teacher and student. As a researcher, I wanted to know the roles that digital literacies play in my participants’ everyday lives, as well as how these literacies influence and shape their practices. I found a timeline of literate practices in Anstey and Bull’s (2006) *Teaching and learning multiliteracies: Changing times, changing literacies.* This timeline illustrates literate practices across decades in the life of a literacy learner (see Appendix N).

--- Insert Table 3.5. Digital Literacy Timeline here ---
The timeline helped me identify and answer questions about my own literate practices that I would eventually ask of my participants. For example, the timeline has three columns: *Literate Practices, Purpose and Context*, and *Technology Used* (Anstey & Bull, 2006). For over an hour, I compiled data reflecting on the following questions: Why did I engage in the practice? What was I trying to achieve? Where did the practice take place? What kinds of technologies were used (e.g., computer, cell phone)? One of the things that I found interesting in completing my timeline was the tools that I used. For each decade, my practices changed over time. For instance, during the 1970s, I would read the comics section of the Sunday newspaper in my basement to be alone. My purpose for doing this was to go to a place away from my family to read the comics in total solitude. However, in this millennium, I no longer read the Sunday comics, but I do a lot of my reading online because it is quicker. This example showed me that as we continue to learn new literate practices, our technologies/literacy practices change.

First I changed the name from “Timeline of Literate Practices” to “Digital Literacy Timeline.” I wanted to make sure that the constructs were consistent with my study. Second, I planned to share my digital literacy timeline with Larnee and Gerard after the series of interviews and observations were conducted. I wanted them to know more about me other than being just a researcher documenting information about their lives, and I wanted to introduce my practices as contributing to their rich lives. Third, my plan was to distribute the timelines, on separate occasions, to Larnee and Gerard with the likelihood that they would compare their similarities and differences. The goal of implementing this procedure was to create spaces in which we would all discuss our
digital literacy practices in an effort to find the purpose and context for engaging in
digital literacy practices in the home.

My experience as a reading teacher at Larnee’s sons’ afternoon program and as a
researcher for this study provided me with great access into their academic and personal
lives. I found that there is a thin line between the researcher and the researched. Glesne
(1999) argues, “What you know about your research—reflected in your interpretations—is
intertwined with what you know about yourself” (p. 176).

Being an African-American woman afforded me the opportunity to gather
information and knowledge about the Alis that may not have been accessible to a
researcher from a different culture or ethnicity. Thus, the culture of the researcher was a
vital component, as Larnee shared with me that she would not have trusted another
researcher outside of her culture to write her story. As a result of our
researcher/participant relationship, I know that my presence in their home did affect the
nature of Larnee’s interactions and discourses. Larnee was comfortable expressing the
details of her past with me. She commented that she could not wait to meet with me to
share more facts at our next observation appointment. Since we had unlimited phone, e-
mail, and texting/IMing discussions, she called on me to advocate for her and her sons on
school-related matters or to ask for advice about letters she had written to employers and
people in the medical profession.

There are obvious differences between Larnee and me. For instance, our
education backgrounds differ, as I am completing my PhD, while Larnee is attempting to
complete her GED. Larnee is divorced with four sons, while I am not married and have
no children. Larnee’s health is also a significant difference between us. However,
Larnee’s digital literacy skills juxtapose with my digital literacy skills. At times, I consider myself a novice-expert, that is, there are some practices that I feel inexperienced in and some that I feel experienced with. I might feel intimidated taking apart and rebuilding a computer but less intimidated operating functions on a cell phone. I feel that Larnee is more inclined to take risks with digital literacies than I would. If she needs to troubleshoot, she has the luxury of having her sons present, even if it is just to watch, to assist her if needed so that it is a joint interaction.

In contrast, my mother is computer illiterate and asks me to download information or check search engines like Google.com or mapquest.com; meanwhile my father has the latest technology (e.g., Blackberry, laptops) as gifts from his job but relies on me to assist him with minuscule activities such as opening an e-mail. Thus, my interactions with my father and mother are based on obtaining information for quick purposes, which makes our home digital literacy practices limited.

Larnee’s digital literacy practices of texting and IMing, blogging and her intergenerational meaning making practices with Gerard (chapters 4 and 5) are similar to yet different from my own practices with my mother and my late grandmother. Larnee’s digital literacy practices may be attributed to her past history, of purchasing technologies at a young age. I noticed how this practice was intergenerational, passed down from her eldest son, 17-year-old David, to her 7-year-old son, Lil Jay, as each child texts, gets online, or uses a cell phone. My late grandmother’s literacy practices of talking while cooking and sitting at the dinner table to have lengthy discussions with the family have passed down as well. It is these practices that become a meaningful event during Sunday
dinner with our entire family, whereas Larnee and her sons might eat in separate rooms or with the boys in front of the television.

I started this study having previously examined my nephews’ multiple digital literacy practices. Overtime, I maintained informal data on them, asking questions and offering suggestions about their digital use via phone or television, as well as allowing them to show me how to play certain video games. I observed how digital literacies played a crucial role throughout my nephews’ affinity spaces, which helped me to understand how digital literacies act as a “normal” taken-for-granted practice, as ways of being in the world, with an “everybody does it” mentality (Lewis & Fabos, 2005, p. 470). I noticed how their identities and roles shifted from when they played their PlayStation to when they played their Wii games. They became the characters or the animated figures, often making sounds or movements or speaking like the characters. I realized that my nephews’ behavior describes how they interpret, create meaning from, explain, and control their place in the world. As a result, they developed a greater sense of agency as Designers and users of digital literacy tools within their affinity spaces.

Because of my working relationship at the after-school program, I had already gained entry into Larnee’s home and life. Although we shared many commonalities, we also differed in many of our life experiences. When I began collecting data, I noticed practices that were more distinct in their home, as one unique family. I was adamant about understanding the worldview of my participants. That meant involving them in the structure of the research. I explained concepts and terminologies (e.g., digital literacies, division of labor) and returned with my Activity Theory chart to show Larnee what I was thinking about in analyzing her and Gerard’s texting and IMing. I asked her if anything
should be eliminated to represent her and Gerard with accuracy and integrity. When I presented at national conferences, highlighting Larnee’s story about the “motherboard,” I shared with her some of the feedback from the attendees that might help her in her quest for digital literacy practices.

Throughout this dissertation, I make the point that an urban African-American family’s digital literacy practices are relevant and do make contributions to the field of literacy. For example, how they make choices in consuming digital literacies versus allocating the necessary resources for Larnee to obtain a GED says a lot about issues of power relationships and agentic roles. In some ways, I sense that because Larnee’s story has reached a national audience, she recognizes that her digital literacy practices are significant to this society; she sees her sons progressing educationally and is still committed to get her GED and continuing her schooling as a full-fledged global citizen.

**Summary**

The methodological approaches described above assisted me in finding the links and sequences among the practices that were recognizable and relevant in descriptions of Larnee’s and Gerard’s activities. The analysis of this data led me to understand the ways the Alis engage in digital literacy practices in the home, how their relational practices are being shaped because of these digital literacies, and how they make meaning. In the next chapter, I highlight how Larnee discusses how the “motherboard” of a computer acts as a symbol of her life. In addition, I document how issues of agency, and structure, and consumerism play a vital role in the affordances and constraints of families and the economy.
CHAPTER 4

Larnee’s Social and Digital World

Digital literacy has always been there for me. From the time I learned how to talk and comprehend, digital literacy (DL) has been there to help me learn how to read, kept me company when I was lonely, made me smile when I was sad, kept me alive when I was sick! (Larnee, e-mail transcript, 11/19/07)

Introduction

This quote comes from Larnee Ali, a mid-30-year-old African-American divorced woman with four sons. This determined, resilient, and caring woman lives in an urban neighborhood where visible and invisible representations of gentrification, poverty, and stereotypes surrounding race, class, and gender dominate her community every day. Her world is full of the pains and struggles of being unemployed, receiving government assistance, and living with a painful rare skin disease called, epidermolysis bullosa (EB), the same disease that took the life of her younger sister many years ago. However, Larnee exhibits traits of self-determination, morality, and independence in her everyday conversations and practices. On a daily basis, she shifts her attention to the digital world through gaming, instant messaging, texting and talking on her cell phone. These digital literacy practices guide and influence her decisions on a daily basis. She creates a virtual space where she is not judged by her appearance, race, education, or social status but is

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4 Epidermolysis bullosa is a rare skin disease that causes painful blisters to the skin. See http://www.niams.nih.gov/Health_Info/Epidermolysis_Bullosa/epidermolysis_bullosa_ff.asp
known and is acknowledged, through her online social networks, as a mother, friend and counselor, each having a meaningful commonality: acceptance.

Obtaining acceptance comes at the expense of being 1 out of 16 siblings who was responsible for taking care of the physical needs of the family by washing clothes, cooking, and cleaning for the entire family as early as 5-years-old. Larnee felt the residue from her past when she remembered the emotional, physical, and verbal abuse from her mother and from being banned from attending school until she was 12-years-old. For instance, on the day of what would have been her first day of school, she recalled her mother’s harsh conversation that morning. She wrote a reflective piece for her Introduction to Composition class while enrolled in GED.\textsuperscript{5} studies online (see Appendix O).

--- Insert Excerpt 4.1. Composition Class Essay here ---

Larnee remembered being told to return to her room for the rest of the evening. She explained the psychological and emotional separation she experienced how she repeatedly asked herself questions such as why she “couldn't go to school” and why she “wasn't able to learn anything” (semi-structured interview, 12/13/07). She mentioned her younger sister coming home telling her about her day at school, having learned how to spell new words and write her first name. She recalled the stroke of jealousy and bitterness that was too overwhelming for her to grasp (fieldnotes, 12/13/07).

Though she was situated in oppressed and unequal circumstances by her family, these pressures empowered her to “take back her education” (Collins, 1990). She refused

\textsuperscript{5} “General Educational Development” or normally referred to as “General Equivalency Diploma”
to allow the fact that she was wronged unjustly by not being allowed to attend school at an earlier age to stop her from obtaining education elsewhere. While at home, she watched children’s programs, such as *Sesame Street*, *Reading Rainbow*, *New Zoo Review*, and *Romper Room* to acquire and learn independently what her siblings were learning in school. Larnee explained, “I started picking up on so many things and I realized that having to do so many adult things and not being allowed to go to school to learn, were abusing me” (e-mail correspondence, 11/19/07). Larnee was socialized and apprenticed as a child to function in manual labor roles at home, but she did not formally learn how to read, except for what she acquired from watching educational television programs.

Larnee would later enter elementary school after a neighbor reported her mother to the authorities; her mother was charged with child abuse for not sending Larnee to public school. Some weeks later, she was admitted to one of the neighborhood schools performing at a 2nd grade developmental level at age 12 only to be picked on at school and tormented by relentless stares and name-calling due to the visible scars of her illness. However, she remained focused on the quality education she desired: “I was not going to let anything or anyone stop me from doing the only thing that I wanted more than anything in the world, and that was to learn” (e-mail correspondence, 11/19/07). This story shows how determined Larnee was to make learning a daily practice.

**Agency, the Body, and Digital Literacies**

Agency might be thought of as the strategic making and remaking of selves, identities, activities, relationships, cultural tools and resources and histories, as embedded within relations of power. (Moje & Lewis, 2007, p.
Larnee is a prime example of someone who does not have to have “academic credentials” to survive. Her intellects are not contingent on how much she knows in an institutionalized setting but, rather come from her everyday ideas and practices that are shared in her home and community. Collins (1990, 2002) argues that there is much to learn from an African-American woman’s knowledge. Collins (1990) has acknowledged that “African-American women not commonly certified as ‘intellectuals’ by academic institutions have long functioned as intellectuals by representing the interests of Black women as a group and fostering Black feminist thought” (p. 15). For instance, during my first interview with Larnee, she expressed her comfort with computers as “a little more than a novice” (semi-structured interview, 7/24/07). In the transcript below, I record my conversation with Larnee about her fascination with taking apart and rebuilding computers:

Excerpt. 4.2. Conversation with Larnee about building computers

1 T: Who teaches you?

2 L: Self-taught. I can build them, but the software is a little more
3 harder to navigate. I can build one.

4 T: When you say you “can build one”…

5 L: I CAN BUILD a computer. I actually took some classes for
6 computer repair…

7 T: …Really?

8 L: …and it teaches you how to BUILD computers.
T: How long ago was that?
L: (Silently) Uh. Um. I’ll say about 5 years ago.
T: Really?
L: Yeah.
T: So, you still know how to do it even to…
L: …It’s so easy. It’s way easier than…(Interruption at the door)
T: So you can take apart the CPU?
L: Yes!
T: REALLY!
L: Yes (laughs)
T: I find that fascinating.
L: (Laughs) Yep.
T: That’s what I would like to know how to do.
L: It is the easiest thing. Let me tell you. It’s much easier than
learning the software. (semi-structured interview, 7/24/07)

This activity demonstrated Larnee’s sense of agency. She was “remaking” and redefining parts of herself, through taking apart a computer, to show that she has other skills and strengths that give her a sense of self (Matlow, 2000; Moje & Lewis, 2007). As part of a free, government-funded program, she took a computer repair course at a local university. The program allowed adults to take the class for 8 months while earning $50.00/week. At that time Larnee was living in a shelter with her sons. For hours, she and two other students would meet and work in the computer lab. On other days, Larnee
would practice working and building parts of a computer, teaching herself, analyzing, sharing with her peers, manipulating each tool and connecting gadgets into their proper places. The computer lab became an oasis for learning about the parts that make the “computer tick” and to see “how each [piece of] equipment has a role,” as well as engaging with her peers in a common practice (face-to-face, unstructured interview, 3/3/08). Larnee received a great deal of joy and sense of accomplishment from the class. She reflected, “I actually built my own computer from scratch” (video taped, unstructured interview, 3/3/08).

The joy ended during the last week of the program when the instructor stopped attending the class and in fact, left the area, leaving Larnee and the rest of her classmates in limbo, without the certification and credentials promised to them: “We were so mad. One of the guys in the program and I were looking forward to this certification. We were going to use it to get jobs” (face-to-face, unstructured interview, 3/3/08). She and her peers even called the police and lawyers. She was able to learn that the address the instructor previously provided was incorrect. Larnee found the correct address and went to her instructor’s apartment complex, where she met the landlord. The landlord was also swindled by the instructor, who moved without paying rent. As I listened to Larnee, I thought about her persistence to go to such lengths for a sheet of paper—a sheet of paper that may have opened up multiple doors of opportunity for her to have something of worth with her name on it.

This scenario of being swindled out of her schooling was all too reminiscent to Larnee of starting school late only to be taken out of school again by her mother. Her high school diploma was supposed to serve as a gateway to further her education; instead,
it was taken from her. Now engaging in digital literacy practices in her home with her sons is a therapeutic ritual for her that takes her mind off her current struggles and past hurts.

Larnee uses digital literacies as a way of “connecting” with herself and others. She views digital literacies as cells working together in a body, similar to the way cells connect to parts of the body to function (semi-structured interview, 12/13/07). She suggested, “My life is shaped around digital literacies [and] what they go through to function” (semi-structured interview, 12/13/07). In other words, she allows the digital tools to take over parts of her internal and external world. This example corresponds to Turkle (2004), who argues that we should “look at the computer not as a tool, but as part of our social and psychological lives” (p. 1). She argues that individuals’ experiences with computers change the ways they think, function, and act in the world. Turkle believes that we should look beyond what the computer can do for us to how it changes what we do and also how we think. These issues became more apparent when Larnee demonstrated taking apart a computer.

On March 3, 2008, I met with Larnee to observe her taking apart a computer. This demonstration was possible through a donation from the Computer Hill Center, a technology program for students and adults. In Table 4.1 I reveal how Larnee interacted with the computer using mediated discourse analysis (MDA) (Scollon, 2001a). (see Appendix P)
The table captures MDA concepts, a video still, both talk and action and a time stamp of the course of the activity. This shows how actions and utterances overlap and co-occur and also how we look at the body in visually compelling way, how Larnee’s body is read, and how we can view digital literacies through the body. As stated earlier in this section, the body has different meanings. To Larnee, the computer has functions that operate just like the body. Calling the bus line “the spinal cord” or the C drive, “the brain” suggests how Larnee views the body in conjunction with the computer. When she demonstrated taking apart the computer unit, she was extremely gentle with each part, as a doctor in an emergency room would be, even though the computer was not operational.

Table 4.1 shows how Larnee described and took apart the computer unit and used various modalities (e.g., balling and shaking her fists, touching her chest) to emphasize her meaning in unique ways to describe the equipment that she uses to make sense of her past and present histories. For instance, in Table 4.1, row 5 of the transcript, Larnee introduces the “Motherboard,” the primary functional unit of the computer, to show how other pieces of the computer work in conjunction with it (e.g., bus line, CPU). Larnee attributes other functions to the motherboard, as a mother of four sons, a provider, a consumer, and an agent for change. Matlow (2000) argues that the computer “embodies our ideas and expresses our diversity and in this sense may be regarded as an extension of the self” (p. 168). Table 4.1 illustrates Larnee’s fascination with the motherboard and how her explanation of how the motherboard relates to and is symbolic of Larnee’s role.
as a mother has a strong presence in her life and experiences (Scollon, 2001b; video-recorded, unstructured interview, field notes, 3/3/08).

Larnee views the motherboard as a metaphor for her life. However, she calls the capacitor parts that resemble AA batteries on the Motherboard “roadblocks,” as being major forces that have hindered her from finishing school (video-recorded, unstructured interview, 3/3/08). Larnee provided a thorough description of how she represents the motherboard as a symbol of herself, multimodality, and the body. For instance, Larnee trusts, relies on and feels more at peace when she engages in taking apart and rebuilding the computer. I documented that it is not only “what” the computer does to Larnee that evokes the embodiment of the technology but also “how” the digital literacy is defined and what this means for the identity work Larnee performs.

Larnee’s verbal and nonverbal descriptions force us to seriously consider the modes of communication and representation that are translated and transferred whenever she talks about the computer (Kress, 2000). There were multiple occasions during which her bodily movements described how her engagement with the computer has shaped her. For instance, Larnee’s nonverbal modes were telling when she talked about her past and present history with the computer (e.g., balling her hands into fists and shaking them or using them in circular motions when she spoke about her fascination with the motherboard, touching her chest and gently resting her hands on the computer unit when she talked about the comparisons between her and the motherboard ([see Table 4.1]) and in how she talked with her hands, as well as in how she chose to stand up for the entire 2-hour demonstration of this practice. In addition, the intonation of her voice calmed down when portions of this activity reminded her of the “roadblocks” of not completing school.
Jewitt (2006) argues that when individuals use “multimodal computer applications they are engaged with a range of resources and they work with all the modes present on the screen and around it not only from written words and speech” (p. 76). Kress (2000) highlights how the use of the body describes much more than just the engagement or interaction with the computer by sight. If we consider the actual engagement of how Larnee holds the “bus line” of the computer unit or the way that she digs deep into the unit to explain each feature and its functions, we see that there is meaning behind each touch (Kress, 2000).

My analysis in this section suggests the complexities of how Larnee internalizes digital literacy practices as features and functions of herself. The way she calls digital literacies “cells” suggests four metaphors: First, the cells in her body function as significant parts in how the whole body operates. Second, cells take on different constructions of meaning and language, as the Latin word for “cell” is *cellula*, meaning “small room.” Could it be that this small room signifies how most of Larnee’s literacy learning as a child occurred within the confines of her bedroom where peace, love, and attention were evident between her and her digital literacies (e.g., television, pager, landline phone)? Even today, the majority of the digital literacies in her home take place in her bedroom, a place where all of her sons and other family members come to play video games, use the computer, watch television, text and IM and talk. Third, the metaphor “cell” can also symbolize the cell phone that Larnee considers to be an important digital literacy tool, so important that “I actually have to get on the phone at night before I go to sleep,” wanting “to feel connected to the world.” Or fourth, “cell” can be equated to a prison, in which having digital literacies may, in fact, compel Larnee to
want more and buy more, even when money is needed to take care of the needs of the family (semi-structured interview, 7/24/07). Not only does Larnee internalize digital literacies as a representation of herself, there are other ways that she copes with her illness through affinity groups.

**Agency and the Disease**

I am the one with the EB, but I have four sons and I have to do so much. I am the “black sheep” of the family. No one comes to see me. No one gets my kids, and I have a son that has ADHD and who is BIPOLAR and I have so much to do in one day I have changed the hours in a day to 48 because that’s how many hours it takes me to get it all done. When my kids have birthday parties none of my family is there ever! My family knows almost nothing about EB and the only reason I’m saying almost is because I grew up with these people and what they do know is what I told them. I was beaten by my mother, my father left was called names by my siblings and in my family’s eyes, I was or am the most laziest person in the world. When you are a person that has EB you can’t be lazy you–too busy changing bandages and cleaning up the mess from changing the bandages and going to school working and having four sons LOL…

(Larnee, post sent to EBworld chat room members, 12/5/05)

Larnee’s struggles come from a world that is foreign to many. She battles with epidermolysis bullosa, a rare skin disease that can, at times, confine her to her bed. She follows a daily ritual of constantly changing bandages, living with internal and external features that look like scars and burns upon her body. She suffers physical pain similar to
that from sickle-cell anemia. This same illness that killed her sibling at 4 years of age was a topic that was rarely discussed by her family when she was younger. Yet, Larnee finds solace through self-motivation and positive thinking by managing the disease through digital literacies such as interacting online with affinity chat rooms, for example, EB, Nabs, Ebwomen, and EBinfoworld.com (online sites specifically geared to those who have EB). Her online friends are dealing with the same illness and also seeking a confidant. She feels safe in “this virtual world” and is not judged, nor does she have to explain her scars and burns as she does when out in public. She uses this online space to vent, offer companionship, and find social support, with the intent to be heard and understood.

Larnee’s quote above reveals the anger she feels living with and handling a debilitating illness with limited help from family and friends. I documented that while there were themes of struggle, underlying themes of membership, awareness, and advocacy were prevalent in her chat room discussions:

Excerpt 4.3. EB chat room discussion

I am not a parent of someone that has EB. I have EB and I just wish all the parents that have children with EB had the same thoughts as you do. My mother never understood me as a child with EB. I was beat, kicked, burned, called names, the works and I have never known what it felt like to hear anyone feel so deeply for someone with EB. I hope there are lots of people reading this so that not only can they donate money but so that parents can become aware of the dangers in abusing a child with EB. (Larnee, e-mail EBworld chat room post, 12/6/05)
This disturbing e-mail explicitly describes how Larnee was treated in her past, but the data suggest that she still feels responsible to share her experiences with others. I document how her digital literacies are reshaping her, turning her from a victim to a victor and advocate. In fact, Larnee shared a letter she wrote to the president of the Epidermolysis Bullosa Medical Research Foundation seeking to become a voice and face for EB carriers. ⁹ (see Appendix Q)

--- Insert Figure 4.1. Larnee’s letter to the President of the Medical Research Foundation here ---

Figure 4.2 is the response that Larnee received from a representative from the foundation the following day. (see Appendix R)

--- Insert Figure 4.2. Letter to Larnee from the Medical Research Foundation here ---

While Larnee has not initiated further communication with the foundation, these letters show the lengths she would go to create an alliance with an authority from the foundation to help other EB carriers. She goes from being angry and unappreciated to being a voice of reason and awareness for EB carriers. She demonstrates that while her past exemplifies oppression, struggles, and despair, she still exhibits agency and empowerment to spread information for funding purposes. She wants those who are uninformed to know about this severe illness. Here, she creates a space for ownership and

⁹ See http://www.ebkids.org
survival (Collins, 1990). For Larnee, this world includes affinity spaces, and virtual friends for engagement.

Agency and Affinity Spaces

Affinity spaces are common in this global new capitalist world (Gee, 2000b, 2004). Gee argues that affinity spaces are not physical or geographical but virtual: There are spaces that are mixtures of the real and the virtual, such as a meeting in which some people are physically together in a room and others are interacting with the group via the Internet or over a video conferencing system (2004, p. 79).

These spaces are also common in the Ali household as a way of creating and managing Larnee’s space and identity online. Larnee often demonstrates that she is a big fan of pogo.com. During our initial interview, she confessed, “We’re big on Pogo.” She enjoys playing as well as teaching others about the features and functions of the games (semi-structured interviews, 7/24/07). In order to play, you have to create a membership sign-in sheet via e-mail or be invited by someone. With her membership, she pays money for certain features. Larnee raved about her participation in pogo.com, which allows her to acquire tokens and badges she uses to win virtual and real prizes in the games. What follows is a prime example of how Larnee exercises her agency when playing games.

One day, Larnee invited me to play Pogo and I finally sat down to play at my home. I IMed Larnee to inform her that I had signed up. She invited me to play bingo on her site. What made this game exciting is the fact that she and I were in two different contexts playing an online game and were also IMing each other in real time. I IMed her

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10 Pogo.com is a free online game site that consists of puzzles, bingo, and word games to win prizes.
quite frequently as I played bingo. Larnee apprenticed me while playing the game, and we created spaces in two different ways: content and interaction (Gee, 2004). The content suggested what the space was about, what modes/signs it has, and how it is organized. As for interaction, I explored how Larnee and I interacted with the content. For example, throughout the game I sought instructions from Larnee or made a comment when someone else in the group won the round. Our communication was constructed and expressed across various modes to articulate meanings while playing bingo. Although, I could not physically see Larnee’s nonverbal gestures, I sat erect in my chair, moving quickly and skillfully, listening to the music online, glancing at six bingo cards at the same time so that I could win a game. In these spaces, we were also involved in “multiple interactional contexts” (Leander, 2002, p. 5) in which there was a wide range of online practices that relied on negotiations, communication, sifting through the practice and navigation sites, posting and reading IMs, and playing bingo.

Larnee played bingo to create an affinity space with me to motivate me and provide assistance. This space had multiple features that not only were for the sake of playing a game but also allowed us to relate to each other with particular commonalities that produced certain goals, practices, and interests (Gee, 2004; Lave & Wenger, 1991). Interacting through this game shaped her and me in virtual ways. For instance, Larnee IM’d me about certain strategies to use while playing, explaining the instructions, commenting on the other players in the group, and sharing her experiences when playing. Her thoughts, beliefs, actions and values were being organized and shaped through our interactions but also by the content of the game. As Lewis and Fabos (2005) note, “It is not the computer or the Internet itself that is central to literacy, but the way that these
tools of technology shape social relations and practices” (p. 475). Similarly, Turkle (2005) argues against the common view that the computer is “just a tool”: “We must look beyond all the things the computer does for us to what using it does to us as people” (p. 3). This argument suggests that digital literacies are socially mediated whether people are in the same room or not. In other words, Larnee fostered many online and digital relationships through the television, cell phone, IM, chat rooms, and video games that have shaped, transformed, and sustained her through the years.

Larnee has a sense of agency in these practices. She feels competent to complete any task through on- or offline affiliations (Bruce, 2003; Johnston, 2004). Larnee’s “relationship” with the computer and other digital literacy practices empowers her, giving her the agency she never acknowledged as a child. Then there were constraints that were placed on her and in most cases were beyond her control. She was dealt a hand that resulted in major roadblocks in her life, but she deals with these constraints by engaging in digital literacy practices. As a mother, she has the responsibility of managing the safety of her children and how they will utilize digital literacies, in addition to managing familial relationships, as illustrated in the following section.

**Agency and Motherhood**

I have the computer in my room because I can’t trust people – other people. I’m so protective of my children, I can see me now going off if some IM popped up and it had some inappro uh-uh I would have a fit! When they get a little older I may get their own computer or move the computer to another room, but for right
now, I feel more comfortable because I have to be in the bed so much. I can watch them from right here. (semi-structured interview, 7/24/07)

Larnee loves being the mother of four sons. She takes great pride in managing the challenges and struggles that arise in her life on a daily basis. She engages in digital literacy practices she loves, which constructs who she is and how she feels, especially as a mother. In the home, Larnee is the “rock” for her sons. Despite her physical, financial and emotional challenges, it is apparent that she loves them and will do anything to protect them, especially from what they view on the computer, which is strategically positioned in her room. In the vignette above, she explains the reason why she has chosen to have the computer in her room, thus demonstrating overarching themes of safety, proximity, and management. Larnee keeps her sons safe by making sure that she is aware of their whereabouts at all times:

The only way I could keep an eye on my babies was to give them cell phones and talk to them all the way to school. I call my cell phone, my, my baby monitor (laughs) and it connects me to my children at ALL all the time (semi-structured interview, 7/24/07).

Her comments reveal how much she relies on the technology as a link or connection to her sons. She trusts the fact that at any time she can speak to her sons wherever they may be in the neighborhood or even at home. This is why she calls the cell phone her “baby monitor.” It confirms their location and provides her with a sense of relief knowing that she can speak to them at a moment’s notice.
Larnee uses digital literacies to manage her sons in different ways depending on the resources available to her. For instance, Larnee described how, at times, she needed to be the mother from her bed:

I know this sounds crazy, but I had to get them cell phones because I had an accident and I was on bed rest for two and a half months. I mean, no outside, practically, no going down the steps, barely could get out of bed to go to the bathroom. I mean I was in the bed and it was becoming difficult to get them to school, and by the hours their father works and because of the distance, it’s not that far but coming over here to walk them to school was killing me (semi-structured interview, 7/24/07).

Larnee will do whatever it takes to manage family relationships, using the cell phone, even when she is in pain, from her bed. Her relationship with her sons and the cell phone became a “depository of longings for a better, simpler, and more coherent life” (Turkle, 2005, p. 163).

Utilizing each mode of the cell phone, typing in or speed-dialing the number, looking at the screen and waiting for an answer from her sons could cause anxieties and struggles if there were ever complications with Larnee’s condition. Each mode, in this case, is a different way that they communicate with one another, and Larnee would often call her sons using her cell phone while they were in the house at the same time: “If they [sons] are downstairs and I need something, I’ll call them on their phone and bring me this” (semi-structured interview, 7/24/07). Larnee needs to feel that her sons are and will be safe, in close digital proximity. She is able to manage them physically and is able to easily connect with them at any time in any place. She instills in her sons the notion that
they too, can rely on digital literacies to communicate, whether under critical circumstances, for leisure, or for informational purposes.

For instance, Larnee purchased a digital landline phone for the family in an effort to “protect her sons.” She demonstrated and described to me that whenever someone picks up the phone, the computerized voice states the caller’s name and number and that determines if the boys are at liberty to pick up the phone or not. I documented the lengths she goes to protect her sons by teaching them when to use the landline phone.

Turkle (2005) has argued, “Once people actually had a computer in their home, the most interesting thing about it became the computer itself, not for what it might do, but for how it made them feel” (p. 157). The opening vignette in this section describes why the computer is not in a communal location outside of Larnee’s room. Keeping the computer in sight suggests that Larnee gets peace of mind from protecting her sons from inappropriate pop-ups, language, and visual images. She protects them from the very modalities the family uses most often and finds most appealing.

Larnee opens up her bedroom to her sons by providing them with the space to be physically connected to her and their digital literacy practices. They are in the same room at the same time, sometimes without conversation or engagement, yet they are still a part of the same social practice. In other words, the culture of the Ali household allows family members to congregate physically and digitally and share cultural interests and languages from their primary discourse.

Larnee has introduced a digital culture in which her and her sons’ connections around digital literacies are shaped by the very holds, satisfactions, and reassurances she experiences while operating in her agentic roles (Turkle, 2005). These roles continue, in
the section below, as Larnee displays how her digital literacy practices shape her and, in some instances, consume her, whether she is aware of it or not.

**Agency and Consumerism**

The changing technology is not the issue here, but the consequence the technology is having on the moral, political, and psychological aspects of our lives is. (Durgin & Sherif, 2003, p. 1)

It is evident that digital literacies exist in the Ali family. However, having access to use of these literacies can often put a financial strain on the family, which can be a struggle for Larnee to make it day to day. While she admits that her finances are a bit “shady,” she does not apologize for what she spends money on and why she spends money on digital literacies for the home. In fact, she feels that she does not “give into it” very often, that is, she does not spend as much money as one would think. Larnee uses digital literacies in the home for luxury and necessity, spawning hidden tensions that surface in unpredictable ways.

Currently, Larnee relies on many government assistance programs (e.g., Supplemental Security Income, the Social Security Death Index, Temporary Assistance for Needy Families, Strait Medicaid, and Medicare) to temporarily support her and her sons. There are warranted ramifications associated with receiving government assistance that appear to affect the family socially, financially, and emotionally. For example, due to living on a restricted budget, Larnee explained that getting around the city to get groceries is a challenge once her monthly funds have been depleted. In addition, participating in the digital photo activity for this research study was a concern for Larnee.
I received an e-mail from Larnee stating the reason that she might not be able to complete the activity:

After I took about 8 pictures with the [digital] camera the batteries went out so I couldn't take any more, the picture that I was taking was to help me learn how the camera works. Given my finances, I was unable to get any batteries for the camera. (e-mail transcript, 10/29/07)

The batteries were supplied to Larnee, but this transcript demonstrates what may often occur when there is a lack of money, especially as she is the sole adult caretaker of three young males who depend on, respect, and trust her.

Larnee is loyal to her family regardless of finances. This loyalty is attributed to being a part of the African-American *family*, “one of the strongest and most important traditions in the Black community, the very fabric of the Afro-American community” (Franklin, 1997, p. 5). In the past, the stereotypes and the indelible mark from slavery and Reconstruction placed African-Americans as an “involuntary minority.” Africans were forced to move from Africa to America. This fact opens up centuries of economic and social oppression and mental enslavement (Ogbu, 1992) for the African-American family.

Larnee also receives government disability assistance because of her illness. At times, Larnee’s illness places constraints on her ability to work a full-time job and attend classes, but having access to digital literacies is a common convenience:

By me being sick all the time, in and out of the hospital a lot, so I didn’t—I wasn’t able to finish school, going through different programs, not being able to finish. This [getting the diploma online] is the best thing since sliced bread for
me, because if I’m SICK, I can go on my own pace. (semi-structured interview, 7/24/07)

Before and during the time that Larnee participated in this study, she applied for several jobs to earn additional income but was not hired. I felt that it would be profitable for Larnee to cancel or sell unusable technologies to fix this situation; however, I have shown how taking away some of the technologies might be similar to taking away parts of herself as well.

“HAD to get one. It was the ‘in’ thing.”

My first piece of technology – stayed on the phone as a child. STAYED on the phone. Stayed on the phone. My mother– Me and my mother had it out all of the time about me and the phone. Got my first summer job and got me a phone put in my room (high pitch, laughs). My own phone. That was my first, and I had to get a pager. HAD to get one. It was the “in” thing. (semi-structured interview, 7/24/07)

Larnee’s access to technology depended on the financial priorities that impacted whether she could obtain the technology.11 This interview illustrates her need to put a phone in her room after receiving her first summer job, which presents themes of communication (being able to freely communicate with peers), isolation (placing the phone in the room, “choosing” not to be in the company of family members); control

11 The data show that Larnee was not affected by the Digital Divide, a concept introduced by the Department of Commerce to acknowledge the gaps in technology access that some African-Americans and other persons of color experience. These gaps, it is hinted, may be caused by socioeconomic status, persistent poverty, and inequalities. During the Clinton administration, policy initiatives sought to eliminate these gaps (Banks, 2006).
(having her own money to purchase the technology), and retaliation (revenge against her mother for using the same family phone, which may eliminate verbal confrontations).

These themes tend to take precedence over other social practices in Larnee’s home; however, because of Larnee’s past, engaging in new digital literacies became a stronger desire that needed to be fulfilled. Having a telephone for Larnee was immediately placed on the backburner when she was able to purchase a pager because it was the “in” thing to do at the time. This form of technology gave her “bragging rights” and social status to her peers and family members. This is not to suggest that she cannot have the best technology. But these practices and choices may often create a pattern of frequent purchasing of technologies that can take priority over filling other needs in the home. Such patterns can be very problematic, especially when the technologies will soon become obsolete, replaced with more convenient, competitive, efficient and compact digital devices (Bruce, 2003). Larnee’s choices of certain technologies demonstrate how purchasing digital literacies for necessity and/or luxury is complex and reflects a new view of learning and meaning making in a fast-paced, capitalist, global economy.

“If you have to do it, why not do it in style!”

Being the head of the household, living below the poverty line, one must make critical decisions about what gets purchased for the home versus what gets paid into the home. Many problems arising from those decisions stem from living in a digitalized global economy (Jacobs, 2006). A better name for this dilemma is fast capitalism or rapid intensity of purchasing products for consumption (Agger, 1989). Larnee relies on digital technologies on a day to day basis, and needs to purchase digital equipment because she deems it a necessity, as purchasing a digital dryer. Larnee’s comment of having to do it in
style suggests that just any dryer will not suffice, that she only wants the best. After Larnee took a picture of her digital dryer for the digital photo activity, I revisited her to find out more about her comments. I found that this dryer is not quite her very own. Instead, she is currently paying a balance of $116.00 each month to Rent-A-Center, a national chain store that allows individuals to rent furniture, appliances, and electronics. According to Larnee, she has been paying this amount for almost a year, along with the costs of her current Dell computer, a computer desk, and her printer.

I investigated the Rent-A-Center website: www.rentacenter.com. This user friendly site offers customers five simple steps to rent products with “100% Satisfaction” and a “Worry-free service Guarantee.” Rent-A-Center allows the customer to choose from a variety of home products and create a wish list. When the customer is ready to order, he or she has to complete an online form, including personal information. The information will be sent to a store nearest to the customer. I found that there were various reports on how that company and other rent-to-own centers double the initial interest rates, which keep low-income households oppressed with astronomical financial burdens to repay. Larnee agreed but stated that although she could have purchased her appliances and equipment somewhere else, she knew that places like Sears would not have allowed her to pay in installments as she is currently doing with Rent-A-Center.

Some researchers see fast capitalism as “potentially destructive to the individual” and note that the scope of this term deals with speed and being “high-tech-driven in that speed and information exchange indicate success rather than the production of physical goods or services” (Gee, 2000b; Jacobs, 2006, p. 172). In addition, Jacobs (2006) argues that the role of the individual has changed. The individual needs to “find ways to meet
the demand for speed or risk being marginalized” (p. 172). My conversations with Larnee revealed her allegiance to digital literacies and how the technologies take up her daily practices. I could see how she makes sense of technology in her world and the implications it may have for her in the future. The following section highlights Larnee’s necessity versus want for digital literacies in the home.

“I just had to get it”: Necessity versus Luxury

During a face-to-face conversation with Larnee in November 2007, she mentioned that her digital video recorder (DVR) was disconnected; she cut off the service as well as all of her sons’ cell phones (except for Gerard’s) to defray costs. Gerard attends a new school and has to travel farther than his brothers; therefore he gets to keep his cell phone to communicate with Larnee. More recently, I texted Larnee and received a returned text stating that “the customer was temporarily out of service.” In passing, I saw Larnee and asked how she was doing and wanted to check on the status of her completing her GED. She informed me that she had not returned to school as of yet. She also mentioned that she had just received her income tax refund. This announcement was before then-president Bush broadcast his tax bracket refund for Americans; however, Larne stated that she would use this refund to pay all of her bills. Meanwhile, she was excited to show me the new phone that she had purchased from Circuit City for over $100.00; she received two additional phones in the package.

She told me to call her using my cell phone. I did, in her presence, and was surprised to hear the speaker on her landline phone announce my name and phone number. I told her it was a cool system, but I asked her about her choice to purchase the phone when I thought her initial goal was to save money so she could get back in school
and pay her bills. “I just had to get it,” she stated. She justified purchasing the digital cordless landline phone as a necessity, so her sons would know who was calling, and would feel safe picking up the phone. She acknowledged that everything she purchased was digital, and while she and her sons could function manually, if she was concerned if she were to get sick, she would not want her children to struggle digitally. This situation becomes problematic when her illness (EB) affects her throat and she cannot talk or even swallow her own saliva. So she chooses to make everything accessible and easier for her sons.

Digital literacy practices affect family life and relationships in important ways. It is significant that Larnee took apart the computer and related it to the motherboard as an extension of herself. She demonstrated how certain equipment constantly reminds her how her lack of a high school diploma affects how she wants her children to complete school, which she would not have acknowledged had she not engaged in this practice of taking apart the computer. In addition, Larnee’s consumption and digital literacies reveal how choices to purchase necessary and luxury technologies for the family affect family life. Larnee’s choices can be typified as “fast capitalist,” which may place financial burdens on her and the family that shape her in ways that may be “potentially destructive.”

**Summary**

Turkle (1984, 2005) argues that something happens to us socially and psychologically when we come in contact with computers. Interacting with computers “calls up strong feelings” that affect how we think and act (Turkle, 1984, p. 19). I have
attempted to document the multiple ways that Larnee uses digital literacies in the home, as well as how digital literacies shape her in compelling ways. Agency plays an important role in Larnee’s life as she uses digital literacies to manage her disease and exert power by initiating the activities she chooses to engage in (e.g., taking apart a computer). Each of these practices reveals how digital literacy practices become embodied, material acts that shape and are shaped by digital literacies, as well as how Larnee is shaped by them. Larnee also evokes multimodality when she engages in digital literacies, as evidenced in Table 4.1 (Bruce, 2003; Cope & Kalantzis, 2000; Kress, 2000).

Larnee’s digital literacy practices have impacted the parenting process in many ways. In order to understand Larnee’s reasoning for having a strong alliance to digital literacies, one must consider her past history and its influence over her family relations as a young child. To Larnee, digital literacies were her family. They helped her to read, to connect to the world, and to construct new skills. In exploring Larnee’s digital literacies today, this chapter shows evidence of how Larnee uses digital literacies to shape and influence her relations with her sons. She will go to great lengths to make sure her sons are secure and have everything they need. It is essential not only to recognize that Larnee uses digital literacies as a parenting process with her sons but also to find connections to how families make sense of digital literacies in their daily lives.

Larnee’s digital literacy practices should cause researchers to rethink family literacy practices in the digital age. While researchers recognize how the traditional family literacy practices have shaped the ways parents and children interact with one another, Larnee’s digital literacy practices reflect changed family dynamics (e.g., calling her sons from her cell phone within the home).
Larnee’s digital literacy practices teach us that there are new ways of examining social practices in the home that involve new technologies, literacies, tools, goals, values and practices. Digital literacy practices impact the ways individuals learn, share, and connect in the home. Bruce (2003) reminds us that when we adopt new practices and new ways of representing and communicating, we will begin to change as well. If this change begins in the home where families’ cultures, social practices, and languages are acknowledged and celebrated, then there are significant implications for literacy education in schools to redefine, reexamine, and realign to how individuals are using and engaging in digital literacy practices and how they are interpreting what these practices mean to them (p. 470). Examining Larnee’s digital literacies in the home, in this way, suggests changes in the ways we learn, communicate, function, talk, and make meaning in the home and in the world (Bruce, 2003).
CHAPTER 5
Gerard’s Digital World in On- and Offline Spaces

Introduction

Ten-year-old Gerard loves creating comic strips, both on- and offline, engaging in online gaming and interacting with his mother in various digital literacy practices. In each interaction, a part of him enters into a digital environment to tell complex stories through comic strips or make meaning through verbal and nonverbal descriptions or through intergenerational threads of meaning making across modes, interactions, and participants. Gerard feels that these practices are minimal, but through his discourses, gestures and meaning, he has taught me about the intricate parts that make him an avid digital literacy player, learner, and designer. Understanding his literate identities in a digital environment meant understanding not just what he said or drew but how he chained modes together in complex ways. His world involves a layering of stories—told through images and actions as well as through language—that extends dominant social practices in his home that impact who he is and how he is viewed in on- and offline spaces.

Telling a Story Through Images and Actions: Comic Strips on Paper

On March 17, 2008, I had the privilege of meeting Gerard in his home. He sat on his bed holding his black-and-white composition notebook, while I sat in a chair in front of him. Gerard explained his comic strip, “Team Destiny 1,” which he worked on with his best friend Charlie. He was quick to tell me, “These are the people I made up.” He explained the details of the story characters, Yumi and Max, in an instructional and rapid
tone. He created the character Max. Gerard used Yumi, a character from *Ape Escape 3*, an online video game, as one of the protagonist characters in his comic. 12 “Team Destiny 1” starts off as a series of 10 consecutive frames that are held together by Yumi and Max. Gerard created a mixture of illustrations without words, drawn with slightly crooked lines to connect each frame. He emphasized certain objects shaded dark in pencil. Other sections show indications of earlier drafts that were erased, as well as a dried-up water stain at the right-hand corner of the page.

Characters were illustrated with large heads and round bodies and placed in unique areas in each frame (e.g., in the air on the floor). It appears as though he used manga as a model for his comic, as manga illustrations are known for their large heads and small bodies. Through Gerard’s explanation Max and Yumi’s narrative unfolded on paper as he described his use of space, placement of the figures in each frame, and the size and density of certain aspects of the image (e.g. body). Gerard included lines, special effects, and movements suspended in time (e.g., showing where the rock was thrown and where it landed) that reveal the complexities and conflicts among the relationships in the story. While most comic designers may have challenges finding the appropriate places to insert the text, Gerard made Yumi and Max large enough to take up the entire frame. He explained that he would add the words to the images when he was done with the design.

As Gerard interwove his verbal rendition alongside of the pictorial images, he held his notebook tightly, showing ownership and protection of his comics (frames 1-7). While Gerard was protective of his comics, he also wanted to show them off to share his skills and talents as a comic strip designer. When I began to compliment his illustrations

12 See [www.us.playstation.com/apeescape3/](http://www.us.playstation.com/apeescape3/)
and asked to see his notebook, he then granted me access to his notebook and to his world of storytelling.

Gerard’s comics showed me how he made meaning of the text in visually compelling ways with verbal narratives and pictorial images. While these still images communicate meaning to the reader, the nonverbal channels (e.g., gestures, proximity, and posture) also carry meaning in social interactions (Norris, 2004). Gerard used these narratives and images to create multilayered stories that provide us insight into his literate identities. His narrative of TD1 included an engaging opening, details, complexities and an unresolved action in the final frame (see Appendix S).

--- Insert Table 5.1. Conventional Comic Strip: “Team Destiny” TD1 here ---

In frame 1, Gerard invites his readers into the comic through the action of the two characters running. His use of the present progressive verb “running” made it unclear to the reader where or why they are running; this action creates suspense and drama in the opening frame. Pointing at the characters in the frame, Gerard made artistic choices to (1) make Max run in front of Yumi (2) make each character either tall (Yumi) or short (Max), and (3) make Yumi run up in the air while Max did not.

Gerard created an interesting gap in frame 2. He illustrated a rock, but his visual representation did not correspond with his telling of the story. As he said, “The second frame is Yumi just tripped on a rock,” he simultaneously circled the frame four times; however, I noticed that Yumi was not illustrated in the frame. This demonstrates how gestures and the spoken language, in a comic, do not always depict the same message (Moura, 2006; Norris, 2004). In the third frame, Gerard showed Yumi grabbing Max’s
hand, which accidentally made Max fall. Like most comic designers, Gerard became quite expressive with his illustrations. He designed persuasive movements to make the characters appear in different motions, such as Yumi tripping over a rock and Max falling down, while dragging his finger from left to right. This example showed the characters using anger and physical force with an object. His explanation of this frame included both verbal and nonverbal movements, overlapping his verbal “and he fell” with his nonverbal points to Max. These descriptions are important because they explain how Gerard took each activity seriously as a needed component to make his comics come to life. By doing this, he demonstrated how he understands and makes meaning of TD1 and brings his everyday knowledge into the other comic frames.

Gerard’s gestures were modally dense as he signified the action verbs in each frame. For instance, in frame 4, as Gerard said, “he gets mad,” his finger circled around Yumi four times. This repetitive gesture drew attention and reinforced Gerard’s verbal description of Yumi’s emotional state of being “mad.” It is as if he wanted his viewers to notice the protruding picture of Yumi, with his eyebrows dented in and a frown on his face that corresponded with Gerard telling the story. He chose to use Yumi with the same facial expression but in a smaller form in frame 5. Here, Gerard said, “Yumi throws a rock, and [Max] falls down,” overlapping by using his finger to trace an imaginary line from left to right. By dragging his finger from left to right, showing where the rock was thrown to where the rock landed was an excellent choice in assisting viewers’ eyes to formulate his story. This example suggests how Gerard expects his readers to follow the interaction set by the designer and to read the comics from left to right and top to bottom which may be different than with manga.
In frame 6, Gerard used distinct visuals to show Yumi’s force in throwing the rock, with curved lines and arrows (\(\bigcirc\), \(\bigtriangledown\)) showing how Max fell and hit the dirt, overlapping with his narrative “his head hits the dirt” as he tapped the frame with his finger. This frame also displays erased marks above Yumi showing Gerard’s repeated attempts at creating the design. This scene shows how Gerard read conflict into this story of using physical objects to harm one of the characters, as he intensified the physical tone of the comic. Meanwhile, Gerard’s telling of frame 7, like in frame 2, did not correspond with the visual representation of the comic.

For instance, Gerard said, “Max fell down on the ground, and Yumi fell down on the ground and Yumi wanted to go with him,” but Gerard drew Max behind Yumi, who was on a box about to push a button. When Gerard said, “they found this button and Yumi pressed the button,” overlapping with points at the button, this scene signified a “cooperative overlap” in which Gerard spoke without interruption (Norris, 2004, p. 18). Cleverly, Gerard used the button in frame 7 to set up the scene of an explosion in frame 8, which he called “an effect,” overlapping by circling with his finger six times, making an emphasis on the word “Boom.”

He ends the story with a cliff-hanger. It is common in the genre of comic strips for designers to end the story in complicated and sophisticated ways. By doing this, he captures the readers’ curiosity to want to find out what happens to Yumi and Max in the next round (see Appendix T). Gerard’s explanation of TD1 is interpreted as design that is how he uses the resources available to him to make meaning of his comic through various modes, which is what most designers do when designing a comic strip or game (Jewitt, 2003).
Nine months after designing TD1, I asked Gerard to revisit his comic, explaining his choices as a comic strip designer. This time, through Instant Messaging, when asked about his nonverbal gestures and aspects of sign systems (e.g., circling, pointing, and tapping of characters/frame), comments such as, “I did not know I always did that” and signified that his multimodal choices and artistic preferences were unconscious. It appeared that he had more awareness of some sign systems and not others. However, after each comment, he included the emoticon 😑 (e.g., scratching chin) as a sign of him thinking out the process. This example represents the ways he made meaning through visual images.

Gerard displays his strength as a designer by creating multilayered stories that include linguistic and pictorial elements. He learned the main lesson of comic strip designing: what you do not tell the reader is as important as what you reveal (Nilsen & Donelson, 2009). Ormerod and Ivanič (2000) argue that individuals not only carry meaning through visual, physical, and verbal features when designing comics but also reveal how the comic came to be and is expected to be handled. For instance, Yumi’s and Max’s actions each transfer meaning through how they are portrayed by Gerard. With this in mind, he allowed this literacy practice to shape him in how he represented and defined the culture and interactions of the characters, as well as how he created a larger story for readers to follow and imagine.

--- Insert Figure 5.1.Gerard’s Ten Frame Comic Strip of TD1 here ---

13 This is a system of hand movements meant to support the use and understanding of spoken language.
Jewitt (2003, 2006) reminds us that students work with multimodal texts in different ways. Some may rely on the visual modes and images rather than the writing to make sense of their representations or movements. The author argues that students in this situation tend to “trust” their visual modes. This example shows how comics are complex textual forms that can be read easily in many ways. Gerard’s “ways of designing” are complex because comics are not meant to be read in the same way each time but, rather, in ways that suit the individual reader or creator. That is, as individuals look at the modes on paper, how they link each mode and representation together will display multiple ways of examining meaning. This explanation is vital because it justifies how certain modes, conversations, and actions are more significant than others, and why certain modalities are preferred over others. Furthermore, designing comic strips helps bring attention to the simple transmission of meaning to create a social relationship between the reader and the text (Barker, 1989). From observing Gerard’s offline literacy practice of designing comics on paper I could see how he still engages in the traditional modes, such as reading, writing, and drawing to assist him when he engages in online video game designing.

**Online Sims: Collaborative Meaning Making in a Digital Environment**

Gerard often engaged in online gaming with his 10-year-old cousin, Jake. Gerard and Jake show that designing characters and story worlds in *The Sims 2*, an online life simulation game, teaches us about meaning-making experiences, through verbal and nonverbal analytic details and descriptions in the digital environment. They engage in highly valued, schooled literacy practices of character development and analysis in the
online environment. In doing so they draw on and design social practices that help them make sense of their own lives as well.

On August 14, 2007, Gerard and Jake played *The Sims 2* video game for hours. They created, from scratch, artificial life-forms or *A-life*, with personalities, feelings, and emotions that developed over time (Rollings & Adams, 2003). I refer to this process as designing digital identities, that is, identities that come to life when merged with on- and offline worlds. Gerard and Jake used these characters to create fictitious lifewords that imitate real life. However, Sims identities cannot materialize unless controlled by players inserting their own identity. Just as in real life, *the Sims* have several life stages of development (e.g., baby, toddler, child, teen, adult, elder). Gerard and Jake’s most commonly played life stage is the “adult.” They enjoyed creating characters and placing them into pre-made neighborhoods. In this interaction, Gerard and Jake’s purpose was to create an adult character’s lifestyle by obtaining employment, receiving money, and building a home from scratch while maintaining friendships in the community. Typically, Sims can marry, attend school, engage in relationships, and even die. Their speech, known as “Simlish,” is an unrecognizable language that consists of gibberish words that only carry meaning to the actual Sims characters; however, laughter is identifiable.

Meanwhile, the characters are driven by their needs which are similar to those of adults. Sims have various needs or motives (e.g., energy, sleep, bladder, social, environment, hunger), whereby their online worlds imitate real life. Each Sim has a meter that appears on the screen that will indicate its need from green (satisfied) to red (desperation), which insists on an action to fulfill that need. For instance, during Gerard
and Jake’s game playing, their character needed social interaction, so eventually they both chose to supply a female character as his friend.

Gerard and Jake created a character named Jake. Jake’s lifestyle included problems and relationships similar to those in real life. They took turns as the leader and worked together to develop ideas, generate choices, and make changes to their characters. With the remote controls in their hands, they made fast and slow choices regarding whether to change Jake’s gender, skin tone, hair type, color, clothes, and shoes. It was evident that they used this game as a space to create for fun and play to see how Jake would be represented. They got a kick out of making sure their characters had the appropriate style and look, which reflected what Gerard and Jake would wear.

Gerard and Jake took on identities and transformed old ones that made their story complex. These identities helped them make sense of their own. Their choices spoke to how their personal and fictitious characters’ identities were constructed during this interaction. They sat elbow to elbow when they played the video game. Both offered quick choices of movements when changing Jake’s body parts, and Gerard would occasionally move around to point to the television screen to show Jake a command. Gerard and Jake taught me how they manipulate texts, images and colors and use these elements to create and understand meaning in their online exchanges.

Gerard’s and Jake’s conversations, social interactions, and cultural models played a significant role in their construction of identities and development of characters. The more Gerard and Jake spoke about, positioned, and created their characters, the more the way they spoke to one another changed. The various modes they chose to use changed
their understanding of the game. Often overlapping in dialogues, Gerard and Jake explained how they created and designed their fictitious character from scratch.

Gerard explained that the game “starts out with nobody,” with included six diamond-shaped tops and a seventh top spinning in the middle of the screen that transformed into a character (see Appendix U).

--- Insert Table 5.2.Gerard and Jake playing The Sims 2 videogame here ---

A generic white adult male emerged onto the screen. He wore a dingy brown T-shirt, a black belt with blue jeans, and a dull brunette rock star’s hairstyle. On the left side of the character were options for the boys to choose from to change Jake’s physique and clothing. With his eyes focused on the screen, holding the remote control, Gerard informed me of the “body morphing stuff” that players can use to create certain features for the character. Like a real person, Jake moved around, looking at his clothes as Jake chose numerous outfits. At that time, Jake also expressed himself by raising his eyebrow or blinking his eyes.

Like most gamers, Gerard and Jake made strategic choices in creating the characters on which they agreed. Jake exclaimed, “I’m going to change him. He needs to exercise” (Table 5.2, frame 1, 1e). Immediately, Jake made the character’s muscles in his arms, stomach, and legs bigger and added a six-pack. Unlike in comic strips in which the designer can think of characters to create from scratch using a pencil to erase and restart again creating, characters online gave Gerard and Jake quicker and sharper choices and movements to choose from. As represented in Table 5.2, frame 1, Gerard and Jake made
quick overlapping verbal and nonverbal changes throughout this interaction, showing (1) how comfortable they were with the remote control (e.g., scanning, shifting items to create characters); (2) how Jake made more visual changes (e.g., changing Jake’s clothes), while Gerard directed the designing with verbal commands (e.g., “No. All the way to there. All the way to there. Down…Down like that [line li]) and (3) how both compromised and worked together to make choices (e.g., one holding the remote control, one giving instructions).

In this observation, Gerard and Jake were processing meaning made and remade by each other. They were thinking about what movement goes first and what modes are used, as well as how to interact with one another and make use of the available resources. This pattern tends to appear when Gerard and Jake have to work across or translate between modes. If we ask how Gerard and Jake’s digital literacy practices influence their relational practices, the evidence indicates how they problem solved ways to create their Sims character, manipulated the digital tools (i.e., remote controls, on-screen devices), and produced and distributed information on-screen. Their communication skills were enhanced because they both found a communal affinity to playing and creating Sims characters. This is not to conclude that Gerard and Jake’s relational practices would not be substantial outside of the video game; however, it was this digital literacy practice that improved their relational practices.

Feeling comfortable with the remote control is significant for game designers and players. It explains how Gerard and Jake could choose to move or design characters in an instant. For example, the remote controls have two handles and buttons that make it easy to maneuver and navigate by the pushing and shifting of thumbs. As shown in Table 5.2,
Gerard and Jake never took their eyes off the screen to look at which handle or button to use. They relied on their knowledge and skills of manipulating and maneuvering through each scene to actively and critically engage in creating a character to situate meaning in this multimodal space. Having practiced playing *The Sims* alone and with one another, Gerard and Jake were knowledgeable in knowing which button was affiliated with which action or which choices would be suitable for the character.

Each worked as a team member and compromised to create a character they liked. This example corresponds with Gee’s (2003) active and critical learning. To be an active learner one has to experience the world in new ways, create affinity groups with like-minded people, and use these elements to prepare for future learning. Playing *The Sims 2* gave Gerard and Jake the freedom to create a character using special effects, designs and colors. Their choices were made through a collaboration of sorts (e.g., Gerard *telling* and Jake *doing*).

Consider Table 5.2, frame 1, lines 1e–1i. Gerard and Jake took on a mutual responsibility when creating Jake. Jake made modally dense choices by quickly clicking the buttons or scanning the upper and lower parts of Jake’s body to choose the clothes to put on his body, while Gerard watched. Even when Jake approved of his creation by saying, “That’s better” (line 1g), Gerard recognized how and where certain parts should be emphasized and sought to change the design. Saying, “No. All the way to there. All the way to there. Down…Down” (lines 1h–1i), Gerard identified certain flaws in the character that needed reshaping (e.g., getting up to point to the character on the screen). Here, instead of manipulating a character that was “ready to go,” someone else’s production, Gerard and Jake created and produced their own character, one that they
imagined together. This proactive way of playing and learning to make meaning through design is self-motivated, the task intrinsically compelling and engaging for them. Similar to Gee’s (2003) model, Gerard and Jake became active learners to make choices through affinity groups. By interacting with like-minded individuals they created comic strips together within the context of digital literacies.

Critical learning involves how individuals use “semiotic domains as design spaces that manipulate us in certain ways and that we can manipulate in certain ways” (Gee, 2003, p. 43). For example, when Gerard and Jake created and designed *The Sims 2* character, it did something to them as well. It allowed them to think, feel, act, and value learning differently, in ways that recruited new identities. These identities emerged when the players took on the life of an artificial life-form. Formulating relationships with a character created tensions through activities and practices similar to those that real-life individuals engage in everyday.

Jake and Gerard continued to create their character, and as seen in the following interactions, Jake became deeply connected to the identity of his character, *Jake*. Instead of taking on the identity of the virtual *A-life* world, he attempted to make *Jake* look similar to him, intersecting the online and offline worlds (see Appendix V).

--- Insert Table 5.3 Jake changes Jake’s hair color to blonde here ---

I was taken aback by Jake’s comment, “I’m blonde so I’ll make him like ME!” (line 1a); therefore, I asked him, “You’re blonde? You want him to look just like you?” to hear his response. Jake has a light skin complexion with light brown hair, and his
comment suggests, how he thought of and saw himself as a boy with blonde hair. He moved away from his racial identity as an African-American and neglected to change Jake’s race to African-American, yet he chose to create and design the character using other perspectives and identities that made sense to him.

As Gee (2003) has argued, Jake made connections between his identity and Jake’s identity as a white blonde adult. He had the authority to customize Jake’s identity, as most game designers do to highlight his own racial/ethnic construction. When designing The Sims, the boys were excited about the whole notion of creating and designing characters different from or similar to themselves. They were interested in placing characters into a community and letting them become adults and do “adult stuff.” As I listened to Jake and watched their interactions, I recalled, similar to Gee’s (2003) research findings that video games with advanced programming and design potential cross all racial and ethnic backgrounds and boundaries. As a result, video game playing has an influence on children’s identity development. In fact, playing games such as The Sims and Avatars can allow African-American children to formulate images that strongly impact their African-American children’s personal and racial identities (Neville, Tynes, & Utsey, 2008).

This notion causes some children to question who they are and who they want/hope to become (Tynes, 2007). Discussing the ways children learn about their racial identity in online settings, Tynes (2007) suggests that children’s skills improve “as a result of computer-mediated interaction with people from different backgrounds” (p. 579). While Gerard and Jake interacted with Jake to design and introduce their character to social relationships, Jake continued to shape and reshape his identity whenever he entered
SimCity. Since Jake already has experiences living as an African-American, perhaps it was necessary to move beyond the familiar to explore new identities to experience new ways of learning and looking at life, much like Gee’s (2003) active and critical learners. The excerpt below provides a clear indication of how constructing identities was important to Gerard and Jake, showing how they recruited identities in many ways (Gee, 2003; [see Appendix W]).

--- Insert Excerpt 5.1 here ---

Here, Jake clearly “talks himself into being,” which is what most gamers do. While The Sims character is not an inventor in this interaction, Jake has already created Jake as one. Since the purpose is for players to create characters as adults with jobs, homes, and a lifestyles. Jake saw this as an opportunity to choose to make Jake a character that he desired, as he and Gerard took turns to collaborate during the practice. This practice shows how Gerard and Jake were able to collectively bring in their everyday knowledge of playing The Sims 2, which is a common practice of designing video game characters with peers (Jewitt, 2003).

Meanwhile, making the character’s name his own is an example of what Gee (2003) calls, “projective identity,” that is, “projecting one’s values and desires onto the virtual character” (p. 55). For instance, Gerard and Jake created Jake, but Jake was the one who mastered the remote control during this interaction. He took designing to another level of creating meaning and digital identities from on- and offline worlds between himself and Jake. He created Jake, unconsciously and consciously, to reflect the
kind of person he wants to be, such as an inventor (e.g., Excerpt 5.1, line 6), who does not have limitations as Jake does in the real world. The examples in frames 5.3 and Excerpt 5.1 demonstrate online relationships between the player and the character, where the player acts as or attempts to be the virtual character.

While Jake actively did the maneuvering and managing of the remote control, Gerard’s role as designer was not minimal, and, in fact, he acted as a reflector. He participated in this interaction to actively identify and make choices about the importance of the character’s features and offer critiques of how he understood what and how Jake should be represented in the video game. Gerard and Jake relied on strategies such as teamwork, problem solving, and reflexivity to design characters. Their designs allowed them to emphasize the real and imagined relationships between the player and the character to make meaning through verbal and nonverbal descriptions in a multimodal space.

Gerard and Jake rely on digital literacy practices that allow them to be motivated, construct complex digital spaces and opportunities, maintain social networks, and experience personal achievement. In the process, they make sense of their online and offline identities and become more digitally literate through their collaborative interactions. Gerard and Jake came into this interaction one way and left with a creation of characters and newly formed digital literacy practices. They can draw from these practices and continue to make meaning collaboratively in digital environments.

The next section examines intergenerational meaning making between Gerard and Larnee. Through verbal and nonverbal interactions, they unconsciously used similar gestures (e.g., pointing and circling) when engaging in their individual digital literacy
practices. When Gerard designs conventional and digital comic strips, it illustrates how an intergenerational thread of meaning making is formulated across modes, interactions and participants.

**Intergenerational Meaning Making Between Mother and Son in Digital Spaces**

When Gerard designed his comic strips, my attention was drawn to how he expressed himself in spatial, modal, and linguistic cues. He pointed to and circled characters in print offline and maneuvered the scroll wheel while making constant switches among various windows online. I discovered how he used these cues to make meaning. During another literacy event, I observed how comfortable Gerard was at the computer designing a comic strip online with Larnee nearby. Gerard would spend hours at the computer looking up sprites online, creating the background or making character choices for his comic. During this time, Larnee was never far away. At times, she would sit in a chair turning to Gerard as the expert to explain his designs to her. At other times, she guided him in his practice, asking critical questions, or observed his next choices. The interactions in this digital environment were modally dense (Norris, 2004) and point to the second-by-second unfolding of meanings that were made in a digital environment. For instance, Gerard would shift through multiple screens at once. He was quick at cutting and pasting blocks or parts of the background from various screens into the comic frame. He took his time to plan which background to use and why. In addition, Gerard strategically reshaped the background to fit objects into the frame perfectly.

The more I observed Gerard, the more I recognized the significance that semiotic modes played not only when designing but also when communicating and interacting
with Larnee (Kress, Jewitt, Ogborn, & Tsatsarelis, 2001). Their interaction demonstrated evidence of an intergenerational thread of learning and multimodality taking place between the two generations. The semiotic potentials of how Gerard and Larnee communicate with one another with gestures, and occasionally let the other sit in front of the computer contribute, to how they and Larnee are being shaped in this interaction (Jewitt, 2003). For instance, close proximity, gazing at one another or at the screen, and even touching might play a significant role in intergenerational learning activities (Kenner, et al., 2008). At times, Larnee would lean behind Gerard holding onto the chair while pointing to the screen, or sit down across from him, or even bend down to stand by his side to understand his designs. She also guided their interaction and encouraged his design choices, which challenged him in this multimodal space (see Excerpt 5.2, [see Appendix X]).

--- Insert Excerpt 5.2 here ---

During my observation on August 1, 2007, I noted how Gerard was designing his digital comic strip. He had multiple screens open to go back and forth to choose sprites and objects for the background to cut and paste into his comic frame. With Larnee standing to his right, she went over his comic with him, questioning his design choices (see Appendix X). Larnee pointed at and circled the frame, in the same way that Gerard pointed at and circled his conventional and digital comic strips, to read the meaning of the comic. She recognized him as a knowledgeable participant in this interaction and pointed out actions that she saw (e.g., “I see that he…,” “I see where it says…”). Yet with
a high-pitched tone and puzzled look on her face, she questioned, “But 5 minutes later what?! What happened 5 minutes later?”(lines 3–4). Gerard, who appeared to be unsure of his rationale, shook his head and explained, “I’m not that good at doing this” (line 5). Larnee provided support by reassuring him with, “Yes you are! This is great!” while she balled her fist and softly hit the table simultaneously (line 6). The subtle gestures, close proximity and interactions between mother and son allowed them to create social spaces to tend to each other’s needs and show companionship (Kenner et al., 2008).

In another interaction, Gerard attempted to download a video on his site, using Easy Edit. Gerard became frustrated and at the suggestion of his mother, called his 12-year-old brother Romeo to assist them with the activity (see Appendix Y). In the exchange in Table 5.4, Larnee attempts to assist Gerard to download a video clip. Notice how Gerard does not speak during this portion of the interaction, but, rather, interacts with gestures.

--- Insert Table 5.4.Gerard and Larnee seeking assistance to download a video clip here ---

Two things are evident: (1) Larnee uses touch and proximity to interact with Gerard (frame 3): and (2) Gerard and Larnee use similar gestures when looking at the computer screen (frames 2 and 4). While Larnee was on the phone with Romeo, she chose to tap Gerard’s back to get him to move out of the chair so that they could switch places. Larnee would stand next to Gerard during their interactions on the computer. At times, she stood next to him for support, to assist him with a problem, or through her
curiosity to see his next move. Each gaze was jointly focused on the screen as they verbally interacted with one another. The nonverbal gestures are significant in that Larnee and Gerard’s interactions are part of how they establish joint attention while together creating more complex understandings.

Gerard and Larnee used the same gestures of leaning on the arm chair with their left hand to look at the computer. It is clear that this nonverbal gesture assisted Gerard and Larnee to see the computer screen, but I argue that this intergenerational gestural pattern makes their interaction useful for various types of learning to take place, providing another way to communicate. Gestures, designs, and social practices around digital literacies shaped how they interact, talk about, and function in multimodal spaces. Larnee mentioned in our first interview how Gerard is the only one in the home who is a replica of herself because she and Gerard share a virtual bond that connects them to numerous digital literacy practices for hours. Her other sons also share a bond in other spaces, but Gerard and Larnee’s relationship is more defined because of the digital literacy practices that they engage in together and separately in the same room. The intergenerational exchanges across modes, interactions, and participants demonstrate how visual and spatial elements and even touching can play a significant role in designing comic strips and meaning making in digital environments, as well as how family literacy and family learning are facilitated through digital literacy practices.

**Summary**

I have examined how Gerard designed comic strips on paper that tell a story through images and actions; how Gerard and his cousin Jake created online Sims and
made meaning through verbal and nonverbal descriptions in a digital environment; and how intergenerational meaning-making exchanges between Gerard and Larnee were formulated across modes, interactions, and participants that play a significant role in today’s digital literacy practices at home. My findings suggest how Gerard made meaning of the text in visually compelling ways through verbal narratives and pictorial images that represent how designers, like Gerard, create multilayered stories and multiple literate identities. In addition, my findings indicate how creating online Sims, forced the boys to make sense of and reconstruct their online and offline identities in the home. Last, Gerard and Larnee engaged in intergenerational meaning-making exchanges through unconscious visuals, gestures, and actions that occur when families interact in activities with the computer. These findings are significant because they demonstrate how modes are patterned together to create meaning in on and offline multimodal spaces in the home beyond language, which reinforces Jewitt’s (2003) argument that “multimodality offers a way of exploring the re-mediating effect of computer mediated learning and, in turn, re-thinking learning beyond language” (p. 54).

Digital literacies are tools of both empowerment and oppression in and out of the home. The case of Larnee and Gerard and their family literacy practices provides the potential for us to more deeply understand the complexity of meaning making, across generations, within the context of digital literacy environments. Their case raises important questions about the limits of our understanding of the literacy practices occurring within the context of homes that are now technologically rich and continually changing. The case study also provides a new synthesis of the related but often separate fields of New Literacy Studies and family literacy studies.
CHAPTER 6

Family’s Digital Literacy Practices as Reciprocal Apprenticeships

We are a hands-on family. We have to do the task to really, really know it, and by having to do this, it’s causing us to work more and more together, which allows our moods to intertwine, interact, and join one another and become unified as one. (Larnee, e-mail correspondence, 8/25/07)

Introduction

The above excerpt suggests how Larnee defined “family,” “learning” and “community.” Raising three young men in an urban neighborhood, she is the epitome of what makes this family function on a daily basis. Larnee’s job as a mother, manager, provider, and teacher in the home is a meaningful experience. She rewrites her past histories of abuse, neglect, and isolation by allowing her sons to attend school and express learning through digital literacy practices. She viewed these practices as significant skills and talents for the entire family.

There are other intersections that develop among their practices. Issues of power dominate certain practices and relationships in the home. Barton and Hamilton (2000) argue, “Literacy practices are patterned by social institutions and power relations, and some literacies are more dominant, visible and influential than others” (p. 8). Power is “produced and enacted in and through discourses, relationships, activities, spaces and times by people as they compete for access to control of resources, tools and identities” (Lewis, Enciso, & Moje, 2007, p. 17). In other words, as Foucault (1984) observes,
power is “productive” that is developed from interactions and relationships. However, as in most relationships, there is one who is more dominant than the other, which is maintained in various spaces.

The Ali family shows configurations of reciprocal apprenticeships that involve power relationships embedded in their everyday social practices that were less visible and less supported. For this study, I examine reciprocal apprenticeships (RAs) as “progressive interactions” between “two groups of people who have different areas of expertise that are needed by the other” (Stuve, 2003, p. 3862).

Larnee’s management of her family’s physical and digital spaces is evidenced by having the computer in her bedroom to supervise her sons’ time on the computer. Here is where the homework activities, playtime, lively discussions, and creativity were enacted and valued. The bedroom had many associations with Larnee’s bedroom as a child. As mentioned in chapter 4, the bedroom was an important room to Larnee. In one respect, it was used as punishment, where she was forced to spend most of her time as a child; in other ways, it was a place of security, driving her away from the confines of an abusive parent. Larnee used her time in her bedroom engaging in technologies and digital tools which became an oasis. As an adult, Larnee turned her bedroom into a space for fun, learning, discussions, and playing with digital literacies. Larnee’s sons would casually unwind on her bed, on the floor, or in her chair to watch television, get on the computer, talk, eat, or play video games.

I illustrated the blueprint of her room to display specific areas where literacies exist and emerge. I highlight this illustration because of the significance of the practices
and community in which digital literacies, power relationships, and apprenticeships took
place (see Appendix Z).

--- Insert Figure 6.1.Design of Lannee’s Bedroom here ---

Lannee made use of this confined bedroom to accommodate her sons and other
family members to be entertained, to solve problems, or to learn. Problem solving and
learning were primary acts that constantly occurred in Lannee’s bedroom, especially
surrounding digital literacies. On different occasions, Lannee engaged in activities with
her children that involved the maintenance of the computer (Internet), Xbox, cell phone,
or DVR.14 At times, Lannee provided guidance, and support or brought her own skill to
an activity, but her sons also brought expertise to the problem solving. Consequently,
Lannee’s learning relationship with her sons involved symmetrical and asymmetrical
power structures.

These power structures show us how their relationships have influenced digital
literacies and how digital literacies have influenced the family relationships, changing
and challenging them over time. The next section below describes specific examples of
reciprocal apprenticeships that involved symmetrical and asymmetrical power
relationships between Lannee and her son David to troubleshoot on the computer.

**Digital Literacies, Reciprocal Apprenticeships, and Power Relationships**

On August 14, 2007, Lannee enlisted the help of her oldest son, a 17-year-old, to
transfer a file from her computer to my e-mail account, to be used for this study, and

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14 Digital Video Recorder (DVR) records video in a digital format.
experienced some difficulties. During Larnee and David’s interaction, they engaged in symmetrical and asymmetrical power relationships. The discourse appeared to be tense at times as Larnee related her frustration to David when she was unable to make the tool work. David remained calm and attempted to assist Larnee step by step. The back-and-forth verbal and nonverbal gestures showed how their roles shifted throughout the interaction.

David appeared to be the dominant one in knowing how to troubleshoot the computer. He provided directives to guide Larnee through the process as a teacher would do to a student (e.g., “you can just do . . . yeah hold on, go to AOL”). David’s gentle informal lessons and explanations of how to send attachments through AOL to my Yahoo account challenged, guided, and supported Larnee’s skills in this valued activity. David sat in Larnee’s chair with his back hunched forward and turned to the side. He was not sitting directly in front of the computer, but his position was inviting as he faced Larnee.

Larnee demonstrated dominance in discourse. Her tone was stern and dominant with linguistic expressions (e.g., “NO! I’m not trying send mail”). Standing to his right, while David simultaneously worked on the computer, Larnee moved around and tilted over David to point to the computer screen. Larnee’s language and body movements became authoritative when pointing to the screen, leaning over and shifting one arm to both arms behind her back, placing her hands on her waist, or folding her arms across her chest. Commands such as “Wait,” “Do,” “Here,” “Open up the mail,” and “Close that up” positioned Larnee as the authoritative one and coached David throughout the activity, as a teacher would with a student (see Table 6.1). Larnee would also lift her hands in surrender mode, saying a comment like “I did that . . . but I didn’t know” and putting her
hands on her hips, showing her frustrations openly. Larnee’s nonverbal gestures revealed her frustration with troubleshooting on the computer. Her comments differed from those in our previous conversations and during her demonstrations around taking apart and rebuilding a computer discussed in chapter 4. (See Appendix AA; Table 6.1).

--- Insert Table 6.1. Reciprocal Apprenticeship between Larnee and David here ---

Their interactions revealed symmetrical power relationships where both individuals felt that they were offering assistance in the correct way by instructing and showing the other how to find a file, what to expect, or what to do next. Larnee and David reciprocally apprenticed one another. Their apprenticeship is not the traditional asymmetrical relationship in which an expert apprentices a novice, as described by Vygotsky (1978) and Rogoff (1990), where one person knows more than the other and literally teaches and helps the apprentice become a more skilled partner. Larnee became the initiator of digital literacies in the home, who first began to adopt the apprentice role of learner in an attempt to solve problems with David. However, once Larnee learned how to send the attachment, she immediately switched roles from student to teacher. After certain commands, Larnee would stand back, look at Gerard watching television and step back into the activity with David. At one time, she gave him time to work on the computer without any talking. There was only the multiple clicking and scrolling of the mouse. During one moment in this activity, she said, “Let me see something real quick,” and took the mouse while standing over David. With the mouse in her hand, there was a level of comfort as she stood with her right leg out, leaning over with her left arm behind...
her back. In this practice, mother and son reciprocally positioned themselves and each other as knowledgeable or as engaged in a collaborative practice or inquiry in a symmetrical power relationship. This type of apprenticeship was possible because of the digital literacies.

Taking an Activity Theory perspective on the data, I highlighted the concepts division of labor and community to examine how these actors were situated in this practice. The two roles constantly seesawed in symmetrical and asymmetrical power relationships. Both mother and son did an equal amount of work to troubleshoot on the computer. At first, Larnee became the teacher to David by adequately giving commands and setting the tone on how to troubleshoot. Meanwhile, Larnee conceded authority to David to provide assistance in showing her different strategies to send a document from her computer through e-mail.

Viewing the data through a “multiliteracies framework” (Chandler-Olcott & Mahar, 2003, p. 370; Cope & Kalantzis, 2000; New London Group, 1996), we can see not only “what” is going on in this practice but what kinds of learning took place or needed to take place. Rogoff (1990) would refer to this model as “joint involvement with more experienced people in culturally important activities” (p. 133). The present case study renders this unidirectional view of apprenticeship as problematic.

Gerard’s presence in the interaction between his mother and older brother is also relevant. Gerard, who was in the bedroom during the entire interaction between Larnee and David, would occasionally step in and out of the activity (see Table 6.1). Gerard was also being apprenticed into this practice. Although he moved around the room he later got up and stood in between his mother and David, looking at the computer screen and
occasionally sharing comments about their exchange (e.g., asking questions). Here, Gerard became a member of the practice by paying close attention and sliding into the role of participant observer in the interaction between his mother and brother. Knobel (1999) defines social practice as “shared purposes, values, beliefs, and so forth of those people participating—and not participating—in it” (p. 16). Knobel argues that cultural, political, moral, and economic interests and language are all associated with social practices whether individuals participate in them or not. Gerard was also a part of the interaction; although his conversation was limited he was still impacted by this social practice.

**Texting and IMing: Same Place, Same Time**

I text because it is a way for me to be with my mom. (Gerard, semi-structured interview, 3/17/08)

We text to stay connected to and spend time with Gerard without us interfering in each other’s space. (Larnee, face-to-face conversation, 2/14/08)

This section describes another symmetrical relationship between Gerard and Larnee texting and IMing in close proximities. Texting is defined as sending short messages (e.g., using up to 160 characters) from a mobile cell phone using the Short Message Service. Instant messaging is defined as real-time communication, of typed text, between two individuals via the Internet. Through nonverbal practices, Gerard and Larnee show how a mother and child’s engagement around digital literacies have become more complex. The way they chose to communicate with one another through various
modalities is unique and describes how family dynamics have changed across digital spaces.

Texting and IMing was a “normal” practice for Larnee and Gerard. In fact, they would often text and IM in the same room when Larnee was bedridden and Gerard was on the computer. In some cases, there was a need for her to text for quick responses or if she was ill. In addition, Larnee admitted her passion for texting as “personal and emotional.” She explained this need:

“Ooh, texting is personal. I think it’s more personal than an IM because, um, not too many people use your phone to view your text messages only to make a phone call. Text messages are something that people normally do to get nasty or very, you know, emotional with the person” (semi-structured interview, 7/24/07).

In chapter 4, I explained the many layers from Larnee’s past how she used this digital literacy practice as a mediating tool to make sense of her life. She mentioned that she can get emotional with the tool itself. She used this tool as a means for surviving from her past; therefore, as a child she exchanged the digital literacies for her family. She stated how texting is more personal than IMing because “computers are more hackable and people worry about what they say a little more online that on the cell phones” (semi-structured interview, 7/24/07; see Appendix BB).

--- Insert Excerpt 6.1 here ---
Larnee described her need to use digital literacies to communicate with Gerard in online spaces even when she needed to rest. Larnee had emotional and physical ties to and a dependence on this and other digital literacy practices. She shared how texting and IMing help[ed] Gerard with his reading and spelling:

Then I started doing it because I didn’t want to disturb him from his peaceful state. Then I started asking him questions to test his knowledge of the computer. Then we have the #1 reason, bed rest. I am always on bed rest [due] to my illness and I wanted to have a way to communicate with him that would make it fun (e-mail, 1/16/08).

Larnee expressed how this practice shaped and motivated Gerard, with his literacy skills, and helped her to interact with him without invading his space. This example helps to illustrate the ways families like the Alis produce, learn, and consume knowledge.

On August 14, 2007, I observed Larnee sending miscellaneous messages to Gerard from her bed for about 10 minutes. They were less than 2 feet from each other. As told by Larnee, “This is pretty much an average day right here, for real. After we get the formalities out the way, this is what we do. We can do this for hours.” Larnee initiated communication with Gerard from her bed via her cell phone. She would send him a text message that appeared as an IM on the computer. Gerard would type his response and send it back to Larnee. As soon as Gerard pressed “Enter” on the keyboard, Larnee immediately received his IM; however, it took longer for her to respond because, Larnee explained, “it’s not like a computer. Each number is a letter,” (observation, 8/14/07). For
instance, there was the in-between time of sending, receiving and waiting for a text/IM when both simultaneously typed. Gerard would become consumed with the television program when waiting for Larnee to send him an IM. I observed Larnee eating, drinking, and watching the television program while texting Gerard with her right hand. I have attempted to show Larnee and Gerard’s interaction of texting and IMing, which may suggest how face-to-face interaction can be displaced by digital tools (see Appendix CC).

I asked Larnee questions such as “How did you initiate the texting/IM discussion online?” “Did you tell Gerard that you were about to IM him?” “Did Gerard have any difficulties understanding the IM acronyms?” “Was there any hesitation in his answering?” “What does this practice do for you?” Prior to Larnee and Gerard texting and IMing, Gerard would occasionally stand next to his mother and watch her IM. He would ask her what certain acronyms were (e.g., ttyl = talk to you later, LOL = laughing out loud). Gerard remembered the acronyms, and when Larnee decided to text him one day, Gerard responded.

Excerpt 6.2. Larnee and Gerard Texting and IMing

L: You know what I wanted to ask you. How did you figure... how did you start figuring out how to, um, figure out the IMs that I send? I don’t spell the words out... How did you start putting them together?

G: All I did was just look... Look and think. (observation, 8/14/07)

This practice became automated. Gerard was able to understand the practice and communicate with his mother in the proximity of Larnee’s bedroom. They took the

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15 See Appendix ? Figure 6.2
complexity out of digital literacies and naturalized texting and IMing as a normal part of their engagement and communication (Lewis & Fabos, 2005). Larnee initiated this activity for the sole purpose of “staying connected to each other without interfering with each other’s space” (fieldnotes, 2/14/08). After this observation, I asked for a copy of the IM. At the time, Larnee was not able to save it, so it was most likely deleted; however, the content was geared toward miscellaneous communication, such as, “what are you doing,” “looking for sprites,” and Larnee’s occasional acronyms to try to throw Gerard off in her usual playful manner.

Gerard would neatly position himself in front of the computer, hands on the keyboard, maneuvering the screen back and forth from being on the Internet, collecting and transporting sprites (e.g., computer graphics), to his digital comic strip, as well as pulling up his mother’s text from AOL to Yahoo to IM. At times, I would only hear Gerard fidgeting with the mouse scroll wheel, up and down, or hear the short beeping sounds when Larnee typed or the beep to inform Gerard when he received an IM, with very little talk. In this family, digital literacies were central to the relational bond between mother and children. Unlike the uneven relational power of shared storybook reading in families, with digital literacies, this family’s relationships could become more symmetrical in terms of expertise.

Apprenticeship and guided participation were evident when Larnee guided Gerard through locating sprites for his digital comic strip. Rogoff (1990) reminds us that apprenticeship occurs when individuals are involved in a social activity that supports a child’s “understanding of [a] skill [by] using the tools of culture” (p. vii). Gerard shifted into guided participation mode when he was already involved in another practice,
creating his digital comic strip. When he received an IM from his mother, he would respond to her in the midst of completing his digital comic strip. Since Larnee highly supports her children’s learning, she allowed Gerard the responsibility to use the computer on his own, but she also recruited Gerard to join and manage his participation in IMing, as he was apprenticed into these engagements for communication and social transformation (Tierney, Bond, & Bresler, 2006). Maneuvering back and forth between texting and IMing gave them authority and agency at home.

In addition, I also applied perspectives from Activity Theory as a means to understand what texting and IMing practices look like, as well as to illustrate how these practices shaped Larnee and Gerard. I focused on the division of labor, or the roles that were taken up by Gerard and Larnee in this engagement. This representation will provide researchers with ways to explore how the tools of digital literacies can shape human experience and relationships, and the tools and sign systems we use to obtain a desired outcome (Vygotsky, 1978; see Appendix CC).

--- Insert Table 6.2.Texting and IMing from Beginning to End here ---

In Table 6.2, I illustrate this process from beginning to end, using an MDA Transcript Chart detailing the moment-to-moment action/practice of texting and IMing. I use five columns addressing the following concepts: Scene, Time, Action/Context, Talk at Each Turn/Verbal Discourse, and Effect on Action/Practice (Wohlwend, 2007b). I employ these concepts to examine the multiple specific practices that intersect in sites of engagement that produce a mediated action (Scollon, 2001b). These actions/practices
were identified through observations and questioning based on Larnee and Gerard’s interaction. The chart illustrates how digital literacy practices created a symmetrical relationship in Larnee and Gerard’s texting and IMing interaction that extended the ways this mother and son moved, talked and acted, and influenced family relations at home.

**Blogging in Family Spaces**

Larnee created a blog for herself and Gerard but invited me to join in on their discussions on www.blogger.com. Larnee initiated the blog on August 23, 2007. In addition, she set up a Yahoo account for the three of us to compose e-mails and discuss about this study, as well as other information that was of interest to us that extended our discussions about digital literacies in and outside of the home. She provided me with the log-in names and passwords to interact equally with her and Gerard. She felt that this would be an added bonus for the three of us to communicate, share, engage, and openly address our thoughts about the technologies/digital literacies we use on a daily basis. This was a great venture for us to talk about and display our *digital selves* at any time. Larnee was extremely excited about creating the blog, which was another way for her to express herself about these literacies that enhanced her learning and involvement with Gerard.

Larnee took the lead, in a gentle way, by making rules suitable for us to utilize the blog. For instance, she informed Gerard and me via e-mail, that (1) we were encouraged to post as frequently as we could, (2) we should respond to each other’s comments and thoughts and (3) no one was allowed to edit any of the posts without permission from the group. Rule number three was quite important to Larnee, as she frequently shared with me during our first interview how using the computer is significant to her because this
virtual space is where she is “safe, not judged, and respected” (transcript, 7/24/07).

Norton-Meier (2004) uses this same format to interpret how children took control of their identity constructions when they negotiated rules in innovative ways online. Larnee’s rules, like those reported by Norton-Meier, reveal how she used the activity of blogging as a way of creating affinity spaces for online communication with regulations and a sense of community.

Blogging is different for the learner in an ever-changing digital environment. Since the inception of the blog, we would log on at various times, especially Larnee and Gerard, who share a computer, to find out who wrote the next comment and to check to see if someone responded to our own original messages. On the first day of blogging, there were seven postings among the three of us, some posted from six minutes to an hour apart. I noticed that no one had to remind the others to check the blogs because this was a social practice in which we were frequently engaged. If the Alis had an additional computer, the blogs would likely be more frequent. Even when I went out of town, I would check and respond to Larnee’s and Gerard’s comments or compose my own. One blog (see Appendix EE) in particular sparked my interest because it explains how family literacy practices surrounding digital literacies became a participatory practice that involved a shared purpose or activity with others (Lankshear & Knobel, 2006).

Since it was summertime, Gerard had more leniency to stay up later either to comment on our blog or to work on his digital comic strip and so on. Below are excerpts of what Gerard and Larnee call “Two Days and a Night” (see Appendix DD).

--- Insert Figure 6.2. “Two Days and a Night” Gerard’s Blog here ---
Gerard’s late-night digital literacy practices display a daily routine of getting on the computer to either write a comment or create a comic with his characters while he shared the computer with his mom. Below, I consider another reason why Larnee favored blogging more than going to sleep (see Appendix EE).

--- Insert Figure 6.3. “Two Days and a Night” Larnee’s blog here ---

Larnee’s blog reveals multiple practices going on that involve not only Gerard but her then 11-year-old son, Romeo, who apprenticed Larnee to “navigate the technology for the post.” Most important, Larnee demonstrates how this study opened up visible spaces where the digital literacy practices that she engaged in also accounted for the “amount of interaction” she had with her sons. For instance, Larnee highlights how the blog brought her and Gerard closer, how this digital literacy shaped her and her family, and how she shaped her family using digital literacies.

During a blogging activity between the two, Larnee admitted that Gerard “had to show me many things on the computer. I learned from him how to change the colors on the blog site and how to add the different swipes [what she and Gerard called ‘the way a picture comes in or goes out of a video,’ though they were not ‘really sure if this is what they are called’]. They worked on the blog together as well as on their own time. Larnee took me through how Gerard taught her how to use a “swipe” or wipe, for each video they put on the site. In the excerpt below, Larnee spoke more about how the activity
positioned them as students who worked well together and loved to learn (see Appendix FF).

--- Insert Excerpt 6.3 here ---

Here the traditional roles of novice and expert become problematic because Larnee and Gerard’s ways of participating, learning, and negotiating were constantly changing from teacher/apprenticeship roles to symmetrical, reciprocal apprenticeship roles. Larnee and Gerard became independent and collaborative problem solvers, communicators, negotiators and learners in this practice and used what they learned in other activities.

Reciprocal apprenticeships exist in the Alis’ household. Digital literacy practices such as troubleshooting on the computer, texting and IMing and blogging defined their social practices in compelling ways. These practices involved the family in a range of relationships. Larnee and David and Larnee and Gerard share symmetrical power relationships in their digital worlds, switching from dominant roles to proportioned roles, whereby each family member is “hands on” and “works together”…to “intertwine, interact and join one another and become unified as one” surrounding digital literacies. In her bedroom, Larnee brought creativity, learning, and community into each activity (e.g., troubleshooting on the computer, texting, and IMing and blogging), which makes the traditional concepts of apprenticeship problematic.

Larnee’s interactions with her sons demonstrate how they interchangeably apprenticed one another when they engaged in digital literacy practices. The shared mentoring, scaffolding, collaboration, and reciprocity in their interactions make them
highly valuable (Dennen, 2004). As a result, we can begin to reconceptualize how 21st century learners learn, solve problems, and participate differently in online and offline learning spaces as the demands for and of digital literacies constantly change.
Questions about how new technologies reshape our relations with one another and our identities do not yield simple answers. As we use these technologies, we start with familiar goals—to learn, to share, to commiserate, to have fun—but we accomplish these goals in new ways. Moreover, as we adopt new practices, or ways of communicating and representing ourselves, we begin to change as well. If we want to know what these new practices mean for us and for literacy education, we need to look more closely at how people actually use the new media and what they mean to them. (Bruce, 2003, p. 128)

The Alis’ histories, experiences, values, and belief systems surrounding digital literacies reflect their everyday practices that make sense to them in the home. With only one computer, the Alis share a plethora of digital literacy practices that range from texting and IMing to playing videogames, troubleshooting, blogging, designing comic strips on- and offline, and taking apart and rebuilding a computer. Their interactions with one another around digital literacies not only have encouraged and supported family relations but have afforded them reciprocal asymmetrical and symmetrical learning relationships.

Digital literacies shaped the Ali family in unique and complex ways. Their practices were constantly constructed and reconstructed as Larnee and Gerard used digital literacies as mediating tools to help make sense of their lives. Larnee created an
environment in which she and her sons embraced digital literacies as normal practices in
the home. The Alis related to one another in multifaceted ways that are uncommon in
traditional family literacy practices. At times, face-to-face conversations were limited in
the home, but conversations online increased by creating a blog or texting and IMing.
Eating and talking at the dinner table competed with eating in various locations in the
house and engaging in various forms of digital literacy practice. When Larnee was in
need of a family member, she either texted or called one of her sons from her cell phone
upstairs. These family literacy practices address the complexities that make this family
unique and that are integrated into the fabric of their daily lives (Auerbach, 1989).

This study opens conversations about how digital literacy practices in the home
are influencing the ways we define literacy and how the family dynamics in the home
have changed because of what people do with digital literacies. Through digital literacies,
Gerard and Larnee are creating counter narratives to the scripts being written for them by
institutions (e.g., schools and social service agencies). I have shown how their access to
and use of digital literacies have positioned them in powerful ways. Although Larnee has
a disability, which makes traveling to and from various locations almost impossible, and
is currently unemployed, she makes herself accessible to help solve computer problems
for family and friends. She has also become a resource to other epidermolysis bullosa
carriers by promoting information through Web sites and chat rooms.

In the remainder of this chapter, I will address ways that family literacy research
has been positioned from causal relations between traditional literacy activities, from
literacies and language practices that exist in families and communities. I then examine
what family literacy looks like in the digital literacy age into which we are evolving.
While exploring this new era, I illustrate how agency plays an important role by focusing on Larnee’s life. I show how her use of digital literacies influenced her choice to purchase technologies for the family, and how digital literacies affect the family’s relationships overall, and how they changed the way Larnee managed her life and her sons’ lives.

Family Literacy in the Digital Literacy Age

The field of family literacy has explored traditional literacy practices that specifically focused on the ways families communicated and interacted with each other in the home (i.e., Cairney & Ruge, 1998; Heath, 1983; Taylor, 1983; Taylor & Dorsey-Gaines, 1988). Family literacy research offers varied ways of looking at the relations between traditional literacy practices in the home and school success, as well as examining how language and literacy practices exist in families and communities. The research is drawn from the work of New Literacy Studies and includes multiple social practices (Barton, 1994; Barton & Hamilton, 1998; Barton et al, 2000; Gee, 1996; New London Group, 1996; Street, 1995). It is a broad focus, which reflects an interest in the ways in which naturally occurring literacy practices in the home have evolved into new digital literacy practices.

While researchers have done an extensive job laying down the foundation of family literacy practices over the years, the increasing technological advances in society have changed how today family members communicate and interact with one another. Digital literacies have become increasingly important in the ways families communicate, disseminate information, read and write, learn, have fun, cope, and perceive literacy.
Ba, Tally, and Tsikalas (2002) examined 9 low-income and 10 middle-income African-American and Latino families with children ranging from the 7th to the 8th grade. Like the Alis’, these families’ digital literacy practices influenced a number of interrelated aspects of family life such as purchasing an Internet connection, children spending leisure time on the computer, parents’ experiences on the computer, troubleshooting, and how families communicated with the children.

The authors found that the families’ use of digital literacies in the home was mainly influenced by their social, technological, and school environments. The children used digital literacies to complete school assignments, to communicate with their peers, and to play games. Economics played a major role in accessing the Internet. Low-income families did not have money or credit cards to pay for Internet access. This resulted in these families not being as fluent with certain computer tools or terminology as were their middle-income counterparts. Ba et al.’s (2002) study influenced the authors to identify ways for low-income families to have the resources to not only gain access but maintain access, to be and stay computer literate. Unlike the Alis, these low-income families under study were less inclined to model and less comfortable modeling digital literacy practices with their children. Since they had not fully embraced digital literacies due to limited access, they offered less insight into the ways digital literacies affected families’ relationships.

Marsh’s (2006) study focused on three different studies that examined the digital literacy practices of 83 young children from the United Kingdom. Drawing from Cairney and Ruge’s (1998) documentation of four categories of purpose for literacy in homes, children engaged in literacy practices that ranged from media-related and pop culture
interests through to print-based texts that played a significant role in their lives. Cairney and Ruge’s categories of communicative practices are “literacy for establishing or maintaining relationships,” “literacy for accessing or displaying information,” “literacy for pleasure and/or self-expression,” and “literacy for skills development” (pp. 22–23). These categories capture the roles and functions of literacy practices used in the home.

Cairney and Ruge’s (1998) four purposes for literacy in homes may apply to certain homes today. In the Alis’ house, the four purposes apply to how Larnee established and maintained relationships through the affinity groups that she established on pogo.com. She also assessed information on the Internet: to purchase digital technologies, to search for jobs, and to look up school-related information for her sons. Gerard used digital literacy for self-expression—he constructed and reconstructed his identity through video game characters. Larnee used literacy for skills development by taking a computer repair course to learn how to take apart and build a computer. However, Cairney and Ruge’s four categories are limited in the face of the Alis’ literacy practices and make light of their use of the literacies in their lives.

“People’s purposes and desires are not fixed, but change over time. As people’s life circumstances changed, the relative priority of their goals could shift rapidly” (Barton Ivanič, Appleby, Hodge, & Tusting et al., 2007). There is evidence that Larnee’s purpose for literacy also shifted, as evidenced in the way she engaged in digital literacies for “security and comfort.” She relied on digital literacies. She felt comforted when she connected with her sons on her cell phone. She also protected her sons from potential telemarketers or from pranks when she facilitated her sons’ ability to screen calls via her
speakerphone. In addition, she monitored her sons’ use of the computer by placing it in her bedroom. In this way, she shielded her sons from seeing inappropriate pop-ups.

Another purpose that has been demonstrated in this study is “gratification and representation.” Larnee purchased digital technologies to feel better. She chose to purchase the latest technologies at a moment’s notice. This example mirrors the similar characteristics of a compulsive spender, who spends for “a pick-me-up” or gets a “rush” in the process of buying. More women normally fall in this category than men because they buy things that they believe they need when they may not necessarily need them (Engs, 2006, p. 1).

These purposes (gratification and representation) and practices reinforce Barton and Hamilton’s (1998) argument that “people learn new literacies throughout their lives and incorporate new technologies into their everyday activities” (p. 263). Larnee and Gerard’s digital literacy practices became “normal” practices that showed their ways of being in the world (Lewis & Fabos, 2005). However, as Lewis and Fabos (2005) conclude, it is not the digital tool that is the central component to literacy but, rather, how the tool shapes an individual’s social relations and practices. Therefore, this study confirms the importance of the uses and purposes of digital literacy practices and how they extend the ways we understand family literacy in the digital age. The use of literacy also shapes family members’ communications, forms of engagement, and overall relations in the home.
Digital Literacies and Relational Practices in Families

The data from this study show how a low-income African-American family engaged, learned, communicated, socialized, and problem solved using digital literacies. In the process, their behaviors reshaped their family relationships. These data have significant implications for research into how digital tools mediate literacy learning and practices beyond the home setting (Chandler-Olcott & Mahar, 2003). Larnee and Gerard demonstrated ways in which digital literacies affect family relationships. Larnee engaged in numerous digital literacy practices to compensate for hardships in her past (i.e., being taken out of school, being physically and sexually abused) that had negatively impacted her adult life. She chatted online, played video games on pogo.com, and purchased various technologies to fill voids and mask pains in her life. Her digital literacy practices elevated to strategies to attain “security and comfort.” Larnee used digital literacies extensively and ultimately was able to manage her life and her sons’ lives. Her actions had a profound impact on the quality of the family’s relations and their existence.

The need for digital literacies originated in Larnee’s past; every time she was punished as a child she had to stay in her bedroom where she would engage in some form of digital literacy. Larnee allowed digital literacies to become a critical piece of the family’s practices in how they related to one another and how they made sense of their lives, even though there was not adequate money for many of the family’s necessities. Larnee did not sacrifice digital technology.

She initiated communication through texting and IMing with Gerard when they were 2 feet apart from one another or created a blog for her and Gerard, even though they had one computer. Her goal was to introduce a social network to foster further
discussions and enhance communication skills and interactions between her and her children around tools that were of interest to her family and their cultural community.

As seen in chapter 5, Gerard created ways to tell complex stories through comic strips and made meaning through verbal and nonverbal descriptions. Gerard and his cousin Jake’s involvement with digital literacies in designing online Sims from scratch illustrated how they merged characters’ digital identities to characters in both on- and offline worlds. They used this practice to help make sense of their own identities. Gerard created stories through his practice that revealed the complexities that arose when designing texts (e.g., maneuvering and managing the remote control, quick changes, collaborative meaning making) through verbal and nonverbal descriptions in a multimodal space. This is important. Not only did Gerard and Jake spend time communicating and creating new identities online, they allowed the digital tools of *The Sims 2* video game, associated with the remote control and the television screen, to create affinity spaces within the context of family relations. They adopted various roles such as gamer, designer, learner, and mentor that provided evidence of how digital literacy practices shaped their relational practices and how these relational practices transformed how the family members related to each other.

As seen in chapter 6, Larnee’s and Gerard’s blogging shifted their interaction in surprising ways. As evidenced in Larnee’s blog, she expressed how the time spent engaging with Gerard and her other sons influenced their family relations:

“I can’t tell you how much fun this blogging thing has been for Gerard and myself. We have watched the sun rise and fall at our computer and have enjoyed each and every moment of it. . .[T]his blog has really brought me and all my boys
closer . . . Since we started all this, there has been an enormous amount of interaction with my boys and me.” (8/25/07).

Larnee’s comment clearly explains how blogging with Gerard, with her other sons nearby, influenced their relationship. Larnee and Gerard produced creative ways to communicate beyond face-to-face, through digital tools and texts via writing that allowed the virtual world to view their conversations online. They created their own style, purpose, and choice of communicating when they could have spoken to each other in the same room. They constructed and conveyed personal meaning in how they communicated, which made this practice inaccessible to other families.

Larnee and her sons’ interactions with the blog, in particular, provide a contrast to Ba et al.’s (2002) study. The authors found that low-income African-American parents were not comfortable touching the computer, let alone troubleshooting or modeling certain features on the computer with their children. Rather, their work suggested other activities to bring the families together. Larnee and Gerard were not concerned that there was only one computer or that they had to switch places in order to type responses on the blog. Instead, they were interested in engaging with one another in this practice, which debunks the idea that low-income families do not engage in meaningful activities with family members or that low-income families are not knowledgeable about digital technologies in their homes.

Carrington and Luke’s (2003) study highlights the digital literacy practices of Eve, a 6-year-old Australian who lived with her divorced father. Because of her father’s busy schedule, she spent a great deal of time e-mailing her mother every day. Like Larnee and Gerard’s, Eve’s online communication shows the complexity of her digital
literacy practices, which extended beyond face-to-face interaction or communication via phone. Instead, her e-mails are viewed within the context of family relations. These experiences tell us that Larnee, Gerard, and Eve share home literacy engagements involving sophisticated ways of using digital literacies to interact with family members that may not have been accomplished without the digital tools. Eve did not have the parental interaction at home to prevent her use of online interaction but communicated with her mother every day about activities that related to her world. Larnee and Gerard had frequent home interactions; yet they made choices to create new and innovative literacy practices and knowledge that reveal how new discourses, multimodalities, and texts have changed the way family relations are positioned in literacy research (Carrington & Luke, 2003).

In any relationship, there are issues of power. Larnee and David, her 17-year-old son, addressed these issues when Larnee needed David’s assistance to troubleshoot on the computer. I show in chapter 6 how they interchangeably apprenticed each other in a seesaw of asymmetrical and symmetrical power relationships. These practices changed the dynamics of the family’s relationships around digital literacy practices when Larnee and David conceded authority to teach the other on the computer at different times. This sort of relationship was not common in traditional literacies because the older generation possessed the expertise that the younger needed to acquire. With the rapid change of digital literacies, both generations are acquiring different aspects of the technology at the same time and can have complementary knowledge.

The management of family relationships was evident in the ways Larnee managed the physical and digital spaces within which the family operated. As Larnee and Gerard
texted back and forth with each other in Larnee’s bedroom, they drew on a range of modes (linguistic and nonlinguistic) to make meanings. Larnee and Gerard’s texting and IMing practice limited their face-to-face conversations. The typing on the keyboard, the beeps of the cell phone with overlapping exchanges, second delays, and proximity blur the boundaries of how we examine literacy in this age. Texting and IMing in the same room at the same time are not “typical” practices but were celebrated and acknowledged in Larnee’s home, signifying changing practices (Lewis & Fabos, 2005). Practices are changing because the social demands, roles, and functions of literacy are changing and because society continues to produce new kinds of digital technologies (Leu, 2000; Lewis & Fabos, 2005). The Alis’ practices give credence to the verbal and nonverbal occurrences that present new ways of communicating in homes and schools in the 21st century.

The Ali family constantly used, reused, made, and remade digital literacies that shaped their relational practices throughout the course of a given day. As evidenced in this study, the technology they used to text, blog, troubleshoot, and game became a critical platform for communication and engagement in the Ali household. Larnee’s and Gerard’s multiple and sophisticated experiences suggest the need for more in-depth research of low-income families digital literacy practices. It is also relevant to study the connection between economics and the increase of digital technologies, as well as issues of consumption that can control what and how families choose to use digital literacies.
Agency and Structure/Consumerism and Poverty

One way to think about the digital technologies that individuals engage in is to shift our focus from the technologies and literacies used, to examine what individuals are doing with the technology and how these practices are culturally meaningful in their lives (Jacobs, 2006). In chapter 4, I discussed how Larnee used her knowledge and skills when engaging in digital literacy practices with her sons (i.e., creating blogs, texting and IMing) despite the fact that she has not obtained her GED. Throughout this study, Larnee redefined herself in each literacy practice. Her attitude showed tenacity, determination and resilience to go to enormous lengths to learn on her own. However, I argue that Larnee was unaware that the social, institutional, and economic forces outside of the home (i.e., the medicine she relied on, obtaining her GED, issues of poverty) played a significant role in how she engaged in digital literacy practices and how these practices shaped her as a mother, learner, and consumer.

Larnee spent time on the Internet researching medical procedures and medicines that she had to take in order to manage her illness. She allowed the digital literacies to shape her when she was enrolled in and later dropped an online GED course because she did not have enough money to continue but still felt as though she had to purchase more technologies.

Lewis et al. (2007) argue that agency relates to “the strategic making and remaking of selves’ within structures of power” (p. 4). Larnee views digital literacies as a tool that gives her agency. Structure refers to factors such as social context, culture, and class that can either influence or limit when agents enact in these structures (Giddens, 1984). When Larnee engages in digital literacies, she is positioning and repositioning
herself, creating new ways of being that generate new identities in the practice and in her life. By voluntarily creating a blog for Gerard and me as a springboard for further communication about digital literacies placed Larnee outside of the realm of a mother and participant of this study, into a role as a blog creator and designer. In addition, Larnee’s ability to learn how to take a computer repair course suggests her need and desire to acquire a skill that she could use to teach her sons or to become tech support for her family and friends. These practices reveal how certain “structural constraints,” such as poverty, education, and health, are controls in Larnee’s life.

Larnee used her bedroom to engage in multiple digital literacy practices that were the norm for her and Gerard. These practices influenced and shaped how she interacted with Gerard and her other sons. However, she did not notice that she was also being influenced by the digital literacies until halfway into this study. For instance, she would occasionally purchase more digital technologies when most of her money could have been used to tend to the maintenance and financial needs of the home. These practices became a recursive act that she might not have been aware of when she logged onto the computer or checked the Internet from her computer or cell phone to purchase more digital technologies.

In addition, Larnee spent a great deal of time on the Internet, searching in and out of Web sites and watching television. It is possible that she gained access to various advertisements that may have enticed her to purchase more digital technologies. She distinctly made choices to use digital literacies in creative ways, and yet, for some reason, some of her practices tracked into using tools to buy more tools. Larnee purchased more digital technologies even if it meant getting further in debt. Here, digital literacies
provide the illusion of choice to use these tools yet structure our choices in ways that can be more harmful than we anticipate.

If we think about Larnee and this notion of choice, we must also think about the demand of technologies that fuel our choices through “fast capitalism” (Agger, 1989). Agger argues that this concept relates to the rapid intensity of purchasing products for consumption. He states that technologies that relate to production and consumption, such as the Internet, are used not only in social institutions, but in homes. He argues: “The Internet dismantles barriers or boundaries between private and public, home and work, in ways that profoundly affect our identities and intimate lives. Whole families go online in order to check e-mail, visit chat rooms, and consume” (Agger, 2004, p. 18). Larnee’s practice of relying on and engaging in digital literacies is a distinctive feature of fast capitalism, whereby she found time everyday to enter into a virtual world to meet the daily demands of this “high-tech-driven” society (Gee, 2000c, p. 46).

Gee (2000b, 2000c) also addresses concerns as to how fast capitalism or the new capitalism deals with being “high-tech-driven.” He argues that due to massive and rapid global and technological changes, corporations are in competition with each other to produce the highest-quality technologies at lower prices. As a result, these changes force individuals, like Larnee, to find ways to meet the demand or risk being marginalized (Jacobs, 2006). Larnee is already marginalized in society—by her illness, being unemployed and not having a GED—but the fact is that her practice of purchasing digital technologies forces her to stay marginalized. I argue that Larnee has been positioned as a fast capitalist because of her past history and an economy driven by the search for a quick profit.
Barton et al. (2007) argue that people bring their histories with them when they enter into community settings. Larnee carries her past hurts of abuse, educational challenges, economic struggles and health issues, which became constraints that have affected her digital literacy practices. They have affected the ways she makes choices for her sons and about what to purchase for the home.

This information raises serious concerns for Larnee and individuals like her who, through digital literacies, may be lured into purchasing digital technologies to meet the demands of the world. The choices she makes to purchase technologies for the safety of her sons or to connect her to the world of virtual communities are relevant, but they carry a hidden cost that is determined by the digital industry regardless of race, gender, or class. However, being an African-American living in new capitalist societies raises numerous questions, such as: What role does culture play in the fast capitalist economy?

Gee (2000c) mentions that regardless of being affected by fast capitalism, individuals still need to know how to survive in a fast capitalist society by reshaping themselves to meet the needs of this society. This factor situates Larnee in competition to refine her skills and redefine herself without academic credentials. There are not enough data to determine whether her literate proficiencies with digital technologies will provide her with more of an edge in the workforce, especially considering her inability to keep a job with her illness. However, her skills are meaningful to her and have the potential of generating revenue until she completes her GED.

The fast capitalist society not only has failed all Americans but has duped certain cultural groups such as African-Americans; by decreasing the prices of digital technologies, the market is in fact causing people like Larnee to depend on those
technologies to keep purchasing them. For instance, Larnee was ensnared by attractive specials and promotions, similar to those aimed at consumers by Rent-A-Center. Businesses like this are feeding into the marketing statistics that African-Americans’ buying power has increased 166% over 17 years, “from $318 billion in 1990 to $845 billion in 2007,” and according to the University of Georgia’s Selig Center for Economic Growth, the buying power of African-Americans is expected to increase to $1 trillion by 2012 (Magazine Publisher of America, 2008).

According to Shapiro (2004), author of *The hidden cost of being African-American*, the black-to-white net worth ratio is $.10 to $1.00. This racial inequality states the true cost of being African-American and the advantage of and the institutionalized and historical benefits of being white. Shapiro states that the statistical facts relate to the ways some African-Americans lack the assets to maintain a stable household. Larnee does not have income based on an inheritance left in her name or from a savings account to live off of; therefore, purchasing and using digital technologies in the home is her way of connecting and interacting with her sons at all costs. She uses these technologies as a legacy to her sons.

As a result, Larnee’s role as a consumer in this fast capitalist and new capitalist society requires her to make significant choices in the way she positions herself as an avid digital literacy user and as a mother. This study is relevant. It raises many questions as to how families, like the Alis, can enjoy the benefits of engaging and creating digital literacy practices at home and still be aware of the structures of power that can negatively shape and influence their excess of consumption. Without this awareness, she may be transferring a continued legacy of debt and few financial resources to her sons.
Implications

This study has several implications for further research that focuses on digital literacy practices, particularly of urban African-American families. Studies on the evolution of how technology has changed and is being used to facilitate literacy in the 21st century are lacking. In particular, digital literacies among African-Americans in family settings have been overlooked. Research is needed to explore these phenomena and how they are represented in literacy research.

The Alis’ practices are unique and complex because of the rapidly changing technologies that continue to emerge in this society. Their digital literacy practices have begun to alter traditional family literacy practices in multiple ways. Evolving digital literacy practices have changed the definitions of family literacy and shifted the makeup of families’ social and cultural surroundings. They have altered the traditional ways families communicate and interact with one another from face-to-face contact to online interactions. They have transcended physical space to connect in digital spaces.

Taylor (1983) argues that “no single, narrow definition of ‘family literacy’ can do justice to the richness and complexity of families, and into the multiple literacies, including often unrecognized local literacies, that are a part of their everyday lives” (p. 4). The Ali family has defined family literacy in ways that are mediated by social contexts that influence what they bring to communal learning settings every day. They demonstrate how engagement with digital literacies changes family dynamics. This study shows how a family’s digital literacy practices influenced family relations. It reveals how further research is needed to examine how other families are also using digital literacy
practices in their everyday lives (Barton et al., 2007; Merrifield, Bingman, Hemphill, & Bennett deMarrais, 1997).

Based on my findings, there are new questions and insights that warrant further discussion concerning family literacy and digital literacies. First it is important to understand and acknowledge how families communicate in their homes. Having digital literacies in the home may make families depend more than on cyber connections than on face-to-face communications (i.e., Larnee and Gerard texting and IMing in the same room; Larnee using the cell phone to call her sons in various parts of the house). Families like the Alis may also unconsciously displace traditional practices such as eating dinner together where family members converse with each other. These home literacy practices reinforce Taylor’s argument that family literacy cannot be defined but is based on the individual literacies that occur in people’s everyday lives.

The consequences of how this family communicates may position the family to function in more complex ways than in a “traditional” home. Larnee is not yielding to traditional literacy practices defined by family literacy researchers of the past (Heath, 1983; Taylor, 1983). Rather, she is concerned about introducing new literacy practices through which the family can communicate best; they embrace these modalities as integral parts of their daily lives. This claim is not to suggest the total displacement of face-to-face communication with texting, as this study does not examine the necessary historical data to support such a claim, but it does open up further implications for subsequent research.

Further research needs to examine how communicating via phone or Internet versus direct personal contact eliminates the nonverbal cues generated by what families
say and do (i.e., facial expressions, emotions in tone). In their place, the use of digital tools offers an alternative channel for communication. The Alis’ digital literacy practices relate to 21st century skills of communicating information through multiple modes of meaning (Kress & van Leeuwen, 2001).

There may be concern about the modes that this family and others like it might lose as they embrace new digitally mediated practices. There may also be excitement about trends and skill sets for use in new and innovative ways in other communal settings (i.e., schools). For example, Gerard and his siblings have social networks outside of the home, including school, the after-school program, and involvement around their community. Larnee spends a great deal of time at home. Because of her illness, she makes frequent visits to the doctor and the after-school program; therefore, communicating online becomes more practical and meaningful to her. We should make special note of this because it demonstrates how persons like Larnee have to make choices when other facets of their lives are limited (i.e., histories involving pain, restricted access to learning and education). The choices affect how they respond to situations and people; they represent preference of one mode over others to facilitate communication.

Reflecting on this research, consider Gerard’s labeling as ADHD in 2005 and how his use of digital literacies defied the diagnosis. Research has documented how children who live below the poverty line have more illnesses and disabilities and have either have been inadequately treated for ADHD or have been misdiagnosed. Also, research has shown how race can often affect how teachers diagnose hyperactivity, particularly among

Gerard was often inattentive and easily distracted during my observations of him at the after-school program. However, I collected evidence that he can sustain attention for hours when playing a videogame or when creating a comic strip online individually or with another person. During these times of his sustained engagement, I made deliberate attempts to interrupt him while collecting data and was, at times, unsuccessful in shifting his attention to answer some of my inquiries. He was too heavily engaged in creating his comic strip online. It is unclear how I might make sense of this classification, especially when African-American boys are classified with ADHD more than their white counterparts. However, Gerard offers evidence that, at the very least, his inattentiveness is situational. This suggests the possibility that, given similar situations at school, his attention might not be viewed as problematic.

At school, Gerard has been observed as not focusing on instruction or falling asleep in class; however, Larnee argues, “It takes a special teacher and a special technique to teach Gerard.” This comment might suggest that his behavior is problematic at school because he is bored. Interestingly, Larnee appears to accept the diagnosis that he has ADHD, although his behavior at home refutes the concomitant symptoms. She believes that Gerard is not challenged in class, as he is when composing and creating comic strips.

At home, Gerard designs online and offline identities for himself. Games such as The Sims 2 allow Gerard to be an active problem solver, to create and recreate meaning while recruiting identities in a way that could be equally relevant in schools. As video
games become more sophisticated and demand more attention, it is vital for schools to capitalize on these media to enhance learning.

The way we offset this discrepancy with Gerard’s labeling as ADHD is to examine his actions in this study when he engaged in digital literacy practices with on- and offline comics and video games. Creating and designing comics and playing videogames require creativity, knowledge and multitasking skills, which Gerard has acquired. Games are no longer constructed to be short and simple to play but, in fact, they are longer and challenge players in multiple ways (Gee, 2004). Gerard’s attitude, skills and practices vary significantly in the home and school settings. Larnee is aware that Gerard uses skills at home that sometimes conflict with those needed at school. Digital technologies will continue to cultivate new practices and identities for children like Gerard to learn optimally; students are learning to multitask and develop different skill sets to be used in varying venues in this society. They are going to have to look beyond the text to get meaning. They are going to have to use their creative know-how to master literacies in the 21st century. Larnee supports Gerard and her other sons with these new demands, which is another basis of her rationale for purchasing digital technologies. She understands that there are multiple images, gestures, and linguistic cues that constantly occur when she and Gerard engage in literacy practices on the computer or when playing video games.

Another revelation of this study is the value and use of Web sites. Due to the limited research that focuses on African-American families and digital literacy practices in the home, assumptions arise concerning Web sites that African-Americans use that are specifically geared to their culture. According to Williams (1998), “The social
component of culture is a description of a particular way of life that expresses certain meanings and values not only in art and learning, but also in institutions and ordinary behavior” (p. 48). This study may raise questions regarding the cultural significance of the Web sites that Larnee and Gerard engage in and how it relates to cultural issues of the family and of African-Americans. My study examined the ways Larnee embraced culture through certain meanings and values that were of interest to her on popular culture Web sites, such as www.blackplanet.com. This is a social network site—similar to myspace.com or facebook.com, which reflect more mainstream culture, but it caters to African-Americans’ perspectives.

However, Larnee recognized EB chat rooms and www.pogo.com because of their culturally diverse membership. She has met people from various ethnicities on www.pogo.com, exclusive of just playing games, who were also confined to bed, due to diseases such as cancer. She has connected with them and given and received encouragement and support. Therefore, Larnee made choices to extend her African-American identity to include other social network groups that were more relevant to her personally, not just racially.

Larnee has also explored certain sites with her children for educational purposes. For instance, she logged on to Web sites, as well as used Google.com to assist her sons with their homework during African-American History Month to gather information. Generally, the family’s interests in sites did not reflect their culture as much as it reflected the information that they needed to obtain at a given time.

Moreover, when Gerard and Jake played The Sims 2 video game, they had the choice to create a character who looked like them, but they chose to design a non-
African-American character. This practice is normal as most gamers find it appealing to design characters different from themselves (Gee, 2003). Gee, a white male, explains how he would often play videogames and customize the characters to portray another ethnicity or gender, in particular an African-American female. In a fantasy world, most gamers want to have more freedom to explore other behaviors, attitudes and ethnicities because it creates an excitement that is different than the real world. Gee argued, “Games, reflect the culture we live in--a culture we can change” (p. 11).

One of the underlying themes expressed in this study is that of identity. As Gerard, Jake, and Larnée spent time creating and communicating online, not only did they forge social connections, but they represented themselves in unique ways. It was not rare that Gerard and Jake chose to design characters that were adults rather than children, from different cultures, and a different gender. These characters were a way to take on new identities and to explore new possibilities with these avatars (Alvermann, 2006). It was not uncommon for Larnée to forgo certain Web sites specifically geared to African-Americans and join groups that were more diverse. Therefore, further investigation is needed to examine how individuals’ literacy practices recruit identities that are valuable in on- and offline affinity spaces (Gee, 2004).

In addition, my study challenges the way we think about apprenticeships. Shifts from traditional teacher/student roles to reciprocal apprenticeships reinforce how literacies and their acquisition involve complex social practices. For Larnée and David each had specific kinds of expertise in troubleshooting which resulted in reciprocal apprenticeships in the home. The Alis’ digital literacy practices enhanced their modes of problem solving, provided dialogue between a mother and son around a digital tool, and
showed how the dynamics of family relationships changed in the context of the complementary expertise of mother and son as digital immigrant and a digital native.

My study contributes to the New Literacy Studies (NLS) tradition. For years, the field of NLS has attempted to shift research away from a view of literacy as an autonomous model of learning to read and write toward a view of literacy as a social practice in social environments (Street, 1995), describing the multiple literacy practices that cross various cultures and contexts (Pahl & Rowsell, 2006). Consistent with NLS, my research challenges and complicates the ways literacy has been discussed. This study of a lower-class African-American family’s digital literacy practices in the home is in contrast to other studies that conclude that low-income African-American families do not have access to or know how to utilize digital literacies in the home. Larnee and Gerard’s story not only disputes this notion but creates a springboard for discussing the numerous ways this family engages in digital literacy practices for purposes that have not been explored in other literacy research.

My study shows how even the simple transmission of meaning when designing comic strips, on- and offline, creates fascinating ways for this family to influence and relate to one another. Gerard and Jake’s roles as digital natives (“native speakers” of the digital era of using video games, computers, and the Internet) have increased the ways they communicate with each other. They speak the same digital language of video games, like *The Sims 2*, that allows them to think and process information differently from a digital immigrant (a person not born into the digital world but who has accepted many of the functions that technology offers) but in a way that makes sense to them (Prensky,
This practice adds to the evolving vision that new literacies bring to the 21st century.

Methodological Implications

Mediated Discourse Analysis (MDA) provides both a theoretical framework and a set of methodological tools for examining social actions in real-time activities (Scollon, 2001a). MDA allowed me to analyze the ways the Ali family constructed meaning through real-time interactions with texts, tools, and one another while engaging in digitally embedded literacy practices. MDA, theoretically and methodologically utilized within ethnographic research, allowed me to actively become a part of the Alis’ everyday lives and actions in their home. As a result, I was able to observe and investigate the second-by-second unfolding of meaning that occurred in the home around digital literacy practices.

MDA is a valuable tool for researching literacy practices. Wohlwend (2007a, 2007b) and Mosley (2007, 2008) have used MDA to provide descriptions of literacy practices to illustrate the connection among the material environment, textual resources and meaning making. Wohlwend (2007a, 2007b) examines how verbal and nonverbal interactions – such as talk, gestures, maneuvering toys and books – influenced children’s play identities (i.e., role-playing, holding a book, touching print). Meanwhile, Mosley (2007, 2008) has applied MDA, along with Critical Discourse Analysis, to analyze how preservice teachers used cultural tools to design literacy practices. She uses MDA to identify how these teachers incorporated multimodal literacies including music, play, and movement in their literacy lessons with students. By studying the ways discourse is
mediated through social practices, researchers have been able to examine talk and social actions. They have focused on children’s nexuses of practices, merging their everyday and classroom cultures. Drawing from the frameworks described above, I have extended the use of MDA to trace and identify moment-to-moment discursive and multimodal practices to show how the Ali family made sense of their day-to-day lives (Norris & Jones, 2005; Scollon, 2001a, 2001b).

By focusing on MDA in the Ali’s digital literacy practices, I learned how each mediated action reveals the complexities of the family’s lives. For example, Larnee’s computer unit demonstration of video stills, in slide-by-slide formation, shows how she drew on a wide range of modalities to communicate through gestures, movements, spatial cues, and sounds. In this case, her actions indeed “spoke louder than words.” While Norris and Jones (2005) note, “It is not always possible to ‘read’ social actions from discourse or to expect certain forms of discourse to accompany social action,” (p. 9), they do conclude that MDA is a relevant form of analysis that traces how talk and social actions are used and understood through the tools we use in our daily literacy practices (p. 9).

Each verbal and nonverbal gesture and interaction, with various forms of digital literacies, taught me about Larnee’s life as a woman and mother. All of the fears, adversities, and inadequacies she felt were revealed through her narrative of the past. Being taken out of school confronting roadblocks on a daily basis because she did not have her GED, looking for a steady job, and the other challenges she faced came through loud and clear in her actions. MDA was not just about Larnee taking apart the computer and showing me the equipment that made this practice significant. It was connecting the
balling, circling and shaking fists, touching of chest, and wiping of tears that Larnee used that made this practice meaningful to her. Her story was mediated by the tool (i.e., the motherboard); which showed how she made meaning in this practice. The motherboard was a narrative tool she used to express herself through talk and metaphors.

This analysis is important to stories like Larnee’s because she exemplifies a misrepresented group of individuals with serious issues that affect their daily lives in real-time activity. Researchers need to acknowledge how the meanings present in Larnee’s life were demonstrated through the digital literacies and tools she engaged in and with. This is why it is important to acknowledge what individuals bring to the setting in literacy research, in which individuals’ identities, histories, current life situations, and imagined futures must be taken into consideration (Barton et al., 2007). This provides a framework for how we can use MDA to focus on the social actions that individuals like Larnee produce.

In utilizing MDA, data analysis is an ongoing process; data are gathered by a number of different modes and from different points of view. Thus, the actions are always complex, just as the relationships between talk and action are also complex (Scollon, 2005b). MDA allowed me to go beyond the tone of Larnee’s voice and a single transcript, to provide relevancy to her literacy practices (Norris & Jones, 2005).

Applying MDA to literacy research shows promise for exploring literacies as a social practice because current research has expanded our understanding of literacy. It is multimodal and includes ways of identifying verbal and nonverbal gestures, spatial contexts, images, and objects in social practices (Jewitt, 2006; Kress & Jewitt, 2003; Pahl & Rowsell, 2006). MDA borrows from New Literacy Studies by looking at social
practices and how individuals engage in various functions that are guided by discursive practices. Therefore, more consideration is needed to determine why particular discursive modes are used by some while ignored by others (Jewitt, 2006). MDA allowed me to see ways in which literacy is contingent upon the social practices and purposes at play in a given moment.

Tracing the complex ways the Ali family used multiple modes to communicate and engage in digital literacy practices reveals how MDA can be used to explore how other families make sense of language and action in their homes. Families may not be aware of (or may not care) how their literacy practices are multimodal, as most families might not consider their home literacy practices to hold meaning in their social practices. However, it is for this reason that researchers must address and understand the complexities of the varied modes that surface in individuals’ social practices.

In order to extend the scope of my study of family literacy, below are recommendations for literacy researchers who use MDA. Inspired by Norris and Scollon (2005) and Scollon (2001a, 2005a), I provide suggestions for researchers using MDA, adding to the body of work related to literacy, identity, and families. Researchers will be able to note what and how actions contribute to social change.

- Researchers can use MDA to understand the ways individuals are positioned in their past (i.e., Larnee’s abusive past), educational inequalities (i.e., taken out of school), and societal inequalities (i.e., on welfare), which play a significant role in the ways modes are brought into their individual identities and interactions with others. This will help researchers understand how an individual’s actions are not as simple as
they appear on paper, but, rather are chains of complexities embedded in social practices.

➢ “What was the action taking place?” “How does Discourse figure into this social action?” (Scollon, 2001a, p. 143) What kinds of actions are relevant in this practice? What are the underlying meanings made in this image? Questions such as these are used as analytical tools for researchers to examine their own literacy practices before they begin to research subjects. I suggest that researchers use self-analyses as precursors to writing journal entries about their subjects’ literacy practices engaged in at home (i.e., during dinnertime) at school (i.e., when teaching), and in their communities (i.e., at the grocery store). By recognizing and building on the complexities of these multimodalities, other participants’ multimodalities that are embedded in practice will be more apparent.

➢ Researchers can use MDA to closely determine and describe which modes are best communicated in an individual’s practices and why. As my study focused on demonstrating the importance of modes and the meaning behind a family’s digital literacy practices, it is also critical to recognize why certain modes (i.e., images or gestures) are relevant to what the individual brings to the context.

The outcomes of using MDA can lay the groundwork for researchers in understanding how individuals make sense of their literacy practices; however, the quest for more knowledge continues in our striving to understand how individuals construct meaning through texts that exist in multiple social contexts and through multiple modes.
in moment-by-moment actions. While MDA focuses on the social actions that take place in individuals’ lives, it also addresses the fact that language is not the only way to communicate (Scollon, 2001a). The questions that still remain include relevant points inspired by Kress and Jewitt (2003). What and how are modes best communicated in each practice? Do the tools carry the meaning over the gestures, and vice versa? What are the trade-offs in today’s families that rely on modes that may conflict with face-to-face and online interactions in the home? Or does it even matter?

With numerous questions and challenges before me, it is my hope that MDA will provide some insight on how we, as researchers, will continue to engage in further study to begin to answer some of these questions.

**Limitations**

Studying the Ali family’s rich digital literacy practices has offered a detailed and situated picture of the implications of digital literacies for family literacy. That richness was traded against generalizability. We have no indication of how representative these practices are of any wider group or how they will relate to another family’s practices. Indeed, this is an important area of research to pursue.

Meeting the Ali family once, sometimes twice, a week, followed with emails and text messages, ranging from three months to a year of data collection and analysis, revealed ethnographic insight on methodological procedures. For instance, my identity as an African-American and a former reading specialist at Gerard’s after-school program affected the dynamic of our in-home and in-school interactions. On many occasions, Larnee mentioned that her involvement in this study was therapeutic to her, and I was
aware how she relied on our meetings as ways to share stories of her past and present which complemented the study.

My efforts to examine multilayered themes relating to the Alis’ digital literacy practices were not fully captured in the data analysis. For instance, I did not explore the role of gender in the findings due to the fact that there was not a sufficient amount of data to build an argument. In addition, I did not examine Gerard’s learning practices in the mainstream classroom, though I realize that they might have had an impact on his learning at home, identities and agentic roles, as well as my understanding of possible affinity spaces/groups and communities of practice. I wanted to focus on the context of home, since studies that examine family literacy and digital literacy practices, in particular, families of color are rare in the literature.

Although, I focused on brief vignettes of Gerard’s siblings (i.e., David), I chose not to make the rest of the family members focal informants in the study. Although Gerard’s brothers, Romeo, Lil Jay, and David, used digital literacies in different ways, I wanted to profile Larnee’s and Gerard’s roles separately. I explained earlier how Gerard’s digital literacy practices were the impetus that drew me to consider him as a participant for the study. Extending the study for a complete year or two would possibly allow me the opportunity to examine more interactions with the entire family and friends of the family, to fully explore how their digital literacy practices influence their relations with family and community.

I thought that this study was going to be driven by Gerard’s digital literacy and conventional comic strips. I found that Larnee’s practices displayed complexities that were also relevant and, in fact, significant to this study. As a result, her story shows great
potential for further research and discussions about family literacy and adult literacy practices. The unfortunate and at times horrible occurrences—in Larnee’s life—the abuse, the illness, and the lack of education—allowed me to examine how digital literacies shaped her choices, her management at home, and the online practices that she brought into the home that influenced her children. The ill-fated occurrences in Larnee’s life have not stopped her from raising her sons or pursuing her GED one day. Her story tells of hope, faith, and creativity, which display her resilient and agentic self.

This study gave the Alis’ a voice to represent their digital literacy practices in the home that has left a mark in literacy research. This study suggests how this family’s unique digital literacy practices speak to how meanings are made over time in digital and non-digital contexts, revealing how this family communicates in the rapidly changing literacies of the 21st century.
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LARNEE’S DIGITAL PHOTOS

Digital Dryer

Digital Scale at the Doctor’s Office

Telephone

Gerard’s Cell Phone

Television

Digital Microwave

Television with PlayStation and CDs

Two MP3 Players
The tracker tracks the driver’s designed travel itinerary. The tracker was located on the right-hand corner of a shuttle Larnee was waiting for. The tracker is notified if the driver stays too long or arrives at the customer’s residence late.
If you look closely at the light, you can see that there is a camera inside that is also rotating and watching every movement on the street.
Digital Flashing Crosswalk Sign

Neon Sign

Speaker

Parking Meter

Pay Phone

Car Radio

Porch Lights

Clock
APPENDIXES

APPENDIX A

FIGURE 2.1. FIVE SEMIOTIC SYSTEMS OF DESIGN

Spatial
Layout/Organization of Objects and Space)
(e.g., proximity between participants and screen)

Gestural
Facial Expressions and Body Language
(e.g., jumping up and pointing to the screen)

Linguistic
Oral and Written language
(e.g., talking)

Visual
Still and Moving Images
(e.g., Sims 2 video game)

Auditory
Music and Sound Effects
(e.g., video game music)
FIGURE 3.1. DC NEIGHBORHOOD MAP

APPENDIX C

**TABLE 3.1. THREE PHASES OF DATA COLLECTION**

<table>
<thead>
<tr>
<th>PHASE I: DESCRIPTIVE PHASE</th>
<th>PHASE II: GROUNDED PHASE</th>
<th>PHASE III: PARTICIPATORY PHASE</th>
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</thead>
<tbody>
<tr>
<td>• Interviews/transcripts</td>
<td>• Data collection</td>
<td>• Data collection</td>
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<td>ongoing analysis</td>
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<td>• Participant observations; fieldnotes</td>
<td>• Target interviews</td>
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<td>2001; Spradley, 1980)</td>
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</tr>
<tr>
<td>(Orellana &amp; Hernandez,</td>
<td>setting</td>
<td></td>
</tr>
<tr>
<td>1999)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Guided “digital walk”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>through the home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Orellana &amp; Hernandez,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Digital photos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Hamilton, 2000; Moss,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001; Spielman, 2001)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D

FIGURE 3.2. PROTOCOL FOR STRUCTURED INTERVIEWS

Interview Protocol for Larnee Ali

1. How many computers do you have in your home?
2. Do all of the computers work?
3. Describe the reasons why you use your computer?
4. When did you get your computer?
5. Where is your computer located in the home?
6. How often do you have access to the computer?
7. How comfortable are you on the computer?
8. How comfortable are you with other kinds of technology?
9. What Internet service do you have?
10. Do you have trouble signing on to the Internet? (e.g., Is the Internet fast or slow?)
11. On an average day, how much time do you spend on the computer/engaging in technology?
12. What other kinds of technologies are you involved in? If any?
13. Why do you use them?
14. What is an average day like for you when you get home?
15. What did you do before you bought the technologies (e.g., computer, cell phone, television) in your home?

18 The terms technology and digital literacies were used interchangeably in this protocol and in discussions. Later in the study, Larnee felt comfortable using “digital literacies” in further discussions and observations.
16. What did you do after you put technologies (e.g., computer, cell phone, television) in your home?

17. How did you decide what kind of technology to put into your home?

18. Who taught you how to use the technology?

19. Can you share how you felt the first time you engaged in technology?

20. When on the computer, how many windows do you have open at a time?

21. How/where do you get your news?

22. If you had to choose which technology you would engage in, which one would it be? Why?

23. Where do you spend the most time engaging in technology in your house?

24. How would you describe what you do with technology from beginning to end?

25. When I mention these technological tools, tell me the first thing that comes to your mind and what they mean to you and why:

   a. Texting;
   b. Cell phone;
   c. Videogames;
   d. Digital camera;
   e. Web site;
   f. Instant messaging;
   g. E-mail;
   h. Dinner time;
   i. Storytelling;
   j. Talking;
k. Handheld device.

26. How often do you check your e-mails when you are at home/work/out of town?

27. How do you keep in contact with your family/friends?

28. How long do you wait before answering and responding to an e-mail?

29. In what ways do you use your cell phone?

30. What color is your cell phone?

31. What kind of screen saver do you have on your cell phone? On your computer screen? Why?

32. Which family member spends the most time engaging in technology? Why?

33. Who is the one who teaches you or the family about technology?

34. What happens when you have problems with technology? (e.g., computer, cell phone)

35. Which way of communicating do you prefer? Online, by phone, face-to-face, letter? Why?

36. In what ways does technology affect your social life?

37. On average, how many family/friends have e-mail addresses, cell phones?

38. What is your favorite Website? Why? How often do you visit it? Why?
APPENDIX E

FIGURE 3.3 DIGITAL PHOTO OF JUMBOTRON
APPENDIX F

FIGURE 3.4. DIGITAL PHOTO OF GERARD GETTING HIS TEMPERATURE TAKEN
## TABLE 3.2: THREE PHASES OF DATA ANALYSIS

<table>
<thead>
<tr>
<th>PHASE I: DESCRIPTIVE PHASE</th>
<th>PHASE II: GROUNDED PHASE</th>
<th>PHASE III: PARTICIPATORY PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Aimed at providing a thick description of the digital literacies and activity systems in the homes. During this phase, pertinent categories using qualitative coding procedures, which reflect the intentions of the three research questions, were located (Merriam, 2001; Miles &amp; Huberman, 1994).</td>
<td>• Transcribed data of ongoing interviews, and co-generative dialogues with the family about the digital walks. Observations were highlighted. Finally, Activity Theory was used to analyze the structure of activity that occurred in participants’ home.</td>
<td>• The family members were invited to analyze and “member check” (Creswell, 1994) their digital photos (Anstey &amp; Bull, 2006; Hamilton, 2000; Moss, 2001; Spielman, 2001). Meanwhile, after participant observations were audio/video recorded and transcribed, themes from the family were identified that illustrated engaging, provocative and useful data in the study (see chapters 4–6).</td>
</tr>
<tr>
<td>• Locate pertinent categories using qualitative coding/color-coding procedures that reflect the three research questions</td>
<td>• Use Activity Theory to analyze the activity systems that occur in participants’ home</td>
<td>• Apply six central concepts of MDA to chart mediated action in homes (Norris &amp; Jones, 2005; Scollon, 2001a, 2001b)</td>
</tr>
<tr>
<td>• Open code and color-code/category specific data (Lewis &amp; Fabos, 2005; Merriam, 2001; Miles &amp; Huberman, 1994)</td>
<td>• Use ATLAS.ti for qualitative coding (audio/video); create video stills of sophisticated digital literacy practices</td>
<td>• Check for validity “member checks” and “peer debriefing” from Dissertation Discussion Group members to color code</td>
</tr>
</tbody>
</table>
## APPENDIX H

### TABLE 3.3. KEY OF COLOR-CODED TRANSCRIPTS

<table>
<thead>
<tr>
<th>Coding Colors</th>
<th>Research Questions</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Green</strong></td>
<td><strong>Question #1</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In what ways does this family enact “digital literacies” in the home?</td>
<td>Larnee takes apart a computer, creates a Blog, plays video games, sends text messages. Gerard designs comic strips, instant messages.</td>
</tr>
<tr>
<td><strong>Blue</strong></td>
<td><strong>Question #2</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>How might digital literacies shape this family’s relational practices, and vice versa?</td>
<td>Larnee personifies “the motherboard” as a mediating tool that is associated with the same roles and functions of being a mother of four sons.</td>
</tr>
<tr>
<td><strong>Purple</strong></td>
<td><strong>Question #3</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>How might a mother and her children interchangeably apprentice one another when engaging in digital literacies?</td>
<td>The reciprocal apprenticeships and asymmetrical power relationships between Larnee and her sons.</td>
</tr>
<tr>
<td><strong>Yellow</strong></td>
<td>Purposes for engaging in digital literacies</td>
<td>Information, literacy, leisure, emotionalism</td>
</tr>
<tr>
<td><strong>Red</strong></td>
<td>Questions/thoughts that arose while/after reading and rereading transcript</td>
<td>How might another computer in the home differ in family interactions? How do Larnee and Gerard self-teach themselves on the computer? How might digital literacies limit one’s access to communicate with family members?</td>
</tr>
</tbody>
</table>
APPENDIX I

FIGURE 3.5. COLOR CODING PROCESS

Interview with Gerard

G: Actually, I’m funny and um…I have a really, um. I like technology. I like the computer most of all. I like to play the video games. Uh…

T: So, why do you like technology?

G: Because it’s just some fun things to do with it.

T: Okay. Such as?

G: Hmm…um, like going online, Playing flash games, going…playing my PlayStation. Uh, watching TV…yeah.

(transcript, 7/24/07)
APPENDIX J

FIGURE 3.6. SEVEN ACTIVITY SYSTEMS

19 Center for Activity Theory and Developmental Work Research 2003–2004
APPENDIX K

FIGURE 3.7. LARNEE AND GERARD TEXTING AND IMING

Cell phone, computer, Internet keyboard, keypad, mouse, scrolling, menu on phone, send button, signs, symbols, critical thinking, manipulating buttons/signs and symbols, social and physical spaces

Larnee and Gerard

No time constraints when answering text/IM; subjects can answer while engaging in other signs, symbols, or acronyms

African-American; low-income, SES; avid digital users

Larnee initiated activity; Larnee socializes Gerard with text acronyms

Interact with one another

Engage with one another without interfering in each other’s

Rules Community Division of Labor

Instruments

Subject

Object

Outcome
# APPENDIX L

## TABLE 3.4. LARNEE TAKING APART THE COMPUTER

20 From Chapter 4

<table>
<thead>
<tr>
<th>Time Stamps</th>
<th>MDA Concepts</th>
<th>Video Still</th>
<th>Verbal and Nonverbal Interactions</th>
</tr>
</thead>
</table>
“Historical accumulation within the habitus/historical body of the social actor of mediated actions taken over his or her life (experience) and which are recognizable to other social actors as ‘the same’ social action” | ![Video Still](image) | L: First, you have to go back…  
([Larnee moves hands back and forth])  
my struggles with my illness.  
Mmm, mmm,  
all of the adversities I’ve had to deal with as a child, you know being abused. I overcame all of that  
([Larnee’s hands are lifted up near her chest, palms facing her])  
and I’m sure the motherboard got  
([Larnee’s thumbs touching all four fingers])  
thrown around flipped and flopped, got poked and prodded.  
([Larnee’s hands balled in fists])  
As you can see  
([Larnee points to the Motherboard])  
all of the …and I went through that.  
So,  
([Larnee balls right fist and shakes it up and down]) |

[20 From Chapter 4]
APPENDIX M

FIGURE 3.8. TRANSCRIPTION KEY

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>…</td>
<td>Delay when talking</td>
</tr>
<tr>
<td>😊</td>
<td>Laughing</td>
</tr>
<tr>
<td><strong>Bold CAPS</strong></td>
<td>Rising intonation</td>
</tr>
<tr>
<td>(1.0)</td>
<td>Silences timed to the nearest second</td>
</tr>
<tr>
<td>(---)</td>
<td>Elongated</td>
</tr>
<tr>
<td><em>(points)</em></td>
<td>Nonverbal gestures</td>
</tr>
<tr>
<td>[</td>
<td>Overlapping dialogues/gestures</td>
</tr>
</tbody>
</table>
APPENDIX N

TABLE 3.5.DIGITAL LITERACY TIMELINE

- Explore concepts of what digital literacy practices are, what role digital literacy practices play in my life, and how digital literacy influences what I do on an everyday basis.
- Why did you do it, what were you trying to achieve, where were you?

<table>
<thead>
<tr>
<th>DECADE</th>
<th>LITERATE PRACTICES</th>
<th>PURPOSE AND CONTEXT</th>
<th>DIGITAL LITERACIES/TECHNOLOGIES USED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From age five until about age eleven I was one of the most unhappy children on the planet… I really can't believe how so very lonely I was between those years of my life. It was clear to me that I was not one of my parents’ favorites… I remember it like it was yesterday. I was in my room where I spent the majority of my time, my mother was getting ready for work when she entered my room. The air around her was so that when she entered my doorway, before I actually saw her I felt an angry wind blow into my room and cut through me like a knife. I looked up at my mother [whom] I love dearly in a petrified stare. She said to me in a low but very stern voice, ‘Today is your sister and your brother's first day of school, and I want this house cleaned and dinner cooked before I get home from work.’ (document from class, 5/07)
## APPENDIX P

### TABLE 4.1. LARNEE’S DEMONSTRATION OF TAKING APART A COMPUTER

**[extended chart]**

<table>
<thead>
<tr>
<th>Time Stamps</th>
<th>MDA Concepts</th>
<th>Video Still</th>
<th>Verbal and Nonverbal Interactions</th>
</tr>
</thead>
</table>
| 0:08:31-0:14:10:28 | **Mediated Action**  
   “Social action taken with or through a mediational means (cultural tool)”  
   [Taking the computer unit apart] | ![Video Still](image) | L: “This is suppose to release…”  
   *(Using scissors to crack open the lock)*  
   L: “Squeeze it [the lock] and slide it up…  
   *(Larnee rests arm on top of Computer Unit and sighs)*  
   *(Tisha squeezes the lock for it to slide forward)* |
| 0:18:15:01 | **Site of Engagement**  
   “Convergence of social practices in a moment in real time which opens a window for a mediated action to occur”  
   [Lifting the cover off of the computer unit] | ![Video Still](image) | L: “Oh…Ah”  
   *(Larnee touches the front and back of the computer unit and lifts off the cover)*  
   T: [“Oh Wow!” *(Tisha looks in fascination)*]  
   L: [“Ha-ha-haa” *(Larnee switches the computer unit to stand up)*] |
| 0:11:02:33-0:11:06:26 | **Mediational Means**  
   “Semiotic means through which a mediated action (e.g., any social action) is carried out or [communicated]”  
   [Shows the bus line and other equipment features] | ![Video Still](image) | L: “This is the spinal cord…  
   *(Larnee is standing over the computer. She is holding the ‘bus line’ and taps it to make a point of its importance)*  
   [These connect to the brain all the way down to the spine. They’re important because they connect to the C drive. This connects directly to the motherboard… this is what flows through the veins These are important] |
| 0:11:53:28-0:13:09:08;0:18:47:21-0:20:04 | **Practice**  
   “Historical accumulation within the habitus/historical body of the social actor of mediated actions taken over” | ![Video Still](image) | L: First, you have to go back…  
   *(Larnee moves hands back and forth)*  
   my struggles with my illness. Mmm, mmm, all of the adversities I’ve had to deal with as a child, you know being abused. I overcame all of that  
   *(Larnee’s hands are lifted up)* |
his or her life (experience) and which are recognizable to other social actors as ‘the same’ social action”

[Communicating how she relates to the motherboard; reproduces identities, histories]

near her chest, palms facing her) and I’m sure the motherboard got

((Larnee’s thumbs touching all four fingers) thrown around flipped and flopped, got poked and prodded.

((Larnee’s hands balled in fists)

As you can see

((Larnee points to the motherboard)

all of the …and I went through that. So,

((Larnee balls right fist and shakes it up and down)

L: This is the Motherboard. (Larnee touches the ‘bus line’ and moves it out of the way. Grabs the C Drive. Points to the motherboard)

Actually, people call this the CPU. This isn’t the CPU. (Hits the computer unit)

THIS is the central processing unit

((Points to a small square chip)

L: This little chip right here [the CPU] is the brain.

((Points to the CPU chip with a pencil)

This tells everything…what to do…then it gets all of the information first then it passes it on down the street to this person’s house and that person’s house.

T: What are these things?

((Tisha touches the equipment that looks like batteries)

L: Roadblocks for me, personally is not finishing school. That’s a major roadblock for me. ((Touches the computer unit)

I…um…that’s a roadblock for me because I’m so uh, dedicated to making sure that my boys…they have to finish school. They HAVE to finish school! They have to finish school.

That’s a roadblock for me because it’s not that I haven’t completed school because it’s not my fault that I wasn’t in school, I was taken out of school.

((Larnee’s voice lowers and is very serious) (4 second delay)
APPENDIX Q

FIGURE 4.1. LARNEE’S LETTER TO THE PRESIDENT OF THE MEDICAL RESEARCH FOUNDATION

You don’t know me but my name is [redacted] and I am a mother of four wonderful boys (all EB free…Thank God!) living in [redacted]. I am 37 years old and one of only two people in my area who has EB (I have RDEB) [recessive dystrophic epidermolysis bullosa]. I would really like to help spread EB awareness in DC but I really don’t know where to start. I was looking at the video on your site and decided that I wanted to let people know as much as I possibly could about this ugly disease. I have been living with this monster all my life and although it has been very difficult for me as a “Butterfly Child,” it’s even more trying for me as a “Butterfly Adult.” Being the only adult in this area with EB, I really want to open up the eyes of the people in this area about it and become an example of what is possible while living with this disease. I want to become the face of “Butterfly Adults” in the [redacted] area. I really could use your help in getting started and some guidance on how to get others involved. I’m sure you have plenty on your plate with all the wonderful awareness work you’re doing of you own, but it would really mean a lot to me if you could let me know where to begin. Thank you for taking the time to view my request.

(e-mail document, 3/28/08)
Hello [Name],

How wonderful that you have managed to fight the EB monster and still manage to have 4 boys of your own and especially them being EB free. As you are well aware, spreading EB awareness is a huge struggle. I am certainly no expert. I am actually the EB clinic coordinator at the Children's Derm Department at Stanford/LPCH in Palo Alto. I have an 11 year old son with RDEB and so between my job with the clinic and caring for him and the rest of our family of 7 is a full time job. I wish I could be an expert in the awareness area, but I am not. However, it is ironic that you have emailed me today. There are two HUGE things happening for EB that perhaps you are not aware of. First is, Oprah Winfrey is doing a feature program on EB this coming Monday 3/31 and will bring much awareness since Courtney Cox has made a goal of raising $1Million dollars in two weeks for the EBMRF for research. Also USA TODAY is doing a feature on Camp Wonder, a skin camp that caters to EB and other severe skin conditions in their Wednesday, April 2nd, front page of Lifestyles section. I would suggest you pass the word about these two monumental pieces of publicity that might help you start the ball rolling in your area. I hope this helps a bit. Good Luck and great that you are so motivated!!

Sincerely, [Name]
APPENDIX S

TABLE 5.1. CONVENTIONAL COMIC STRIP: “TEAM DESTINY 1”

<table>
<thead>
<tr>
<th>Comic Strip</th>
<th>Gerard’s Verbal Narrative of TD1</th>
</tr>
</thead>
</table>
| **Frame 1.** | 1a. The first frame is Yumi and Max just running.  
  *(Holding the notebook tight)*\(^{21}\)  
  *(Points at the first frame of comic TD1)* |
| **Frame 2.** | 2a. The second frame is Yumi just tripped on a rock.  
  *(Uses his fingers to circle (4x) the rock in the frame)* \(^{22}\) |
| **Frame 3.** | 3a. The third frame is Yumi accidentally grabbed Max’s hand, and he fell.  
  *(Drags his finger from left to right)*  
  *[Points to Max]* \(^{23}\) |
| **Frame 4.** | 4a. The fourth one he gets mad.  
  *(Circles (5x) Yumi with his fingers)* |
| **Frame 5.** | 5a. The fifth one, Yumi throws a rock, and he falls down.  
  *(Points at Yumi)*  
  *[Uses his finger to trace an imaginary line in the direction of Yumi and Max from left to right]* |

\(^{21}\) Italic indicates nonverbal actions.  
\(^{22}\) The (x) signifies the quantity of times.  
\(^{23}\) The [ signifies overlapping gestures
Frame 6.
6a. ...and his head hits the dirt.
   [(Taps the frame with his finger)]

Frame 7.
(Makes big circles around the character)
7a. And then the seventh frame,
(Starts talking but stops to count the frames to make sure he was on Frame 7)
7b. Max fell down on the ground
7c. and Yumi fell down on the ground
7d. and Yumi wanted to go with him
7e. and they found this button
7f. and Yumi pressed the button.
   [(Points at the button)]
APPENDIX T

FIGURE 5.1. GERARD’S 10-FRAME COMIC STRIP OF TD1
## APPENDIX U

### TABLE 5.2. GERARD AND JAKE PLAYING *THE SIMS 2* VIDEO GAME

<table>
<thead>
<tr>
<th>Images</th>
<th>Verbal and Nonverbal Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><strong>Frame 1.</strong></td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>1a. G: It starts out with nobody. (Instrumental music plays throughout the interaction) (Blank screen is shown with a diamond-shaped top that spins and an animated white male figure appears) (Gerard and Jake keep their eyes on the television screen; both have remotes in their hands)</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>1b. It’s better when you create a story…. (Animated white male figure appears on the screen, including a side profile of the figure) (Title options are shown on the left of the screen)</td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td>1c. J: [Okay gender] [Click it again. Just click accept Sim.]</td>
</tr>
<tr>
<td><img src="image5.png" alt="Image" /></td>
<td>1d. G: And then you can do this body morphing stuff. ([With remote in hand, Jake quickly clicks on the body morphing icons and chooses other icons to consider])</td>
</tr>
<tr>
<td><img src="image6.png" alt="Image" /></td>
<td>1e. J: I’m going to change him. He needs to get some exercise. ([Scans to the figure’s legs])</td>
</tr>
<tr>
<td><img src="image7.png" alt="Image" /></td>
<td>1f. G: That looks…no that’s the knee. Go down. Go…now THOSE are the muscles ([Jake scans to the upper part of the body]) ([Jake scans to the lower part of the body])</td>
</tr>
<tr>
<td><img src="image8.png" alt="Image" /></td>
<td>1g. J: That’s better.</td>
</tr>
<tr>
<td><img src="image9.png" alt="Image" /></td>
<td>1h. G: [No. All the way to there. All the way to there. Down…Down]</td>
</tr>
<tr>
<td><img src="image10.png" alt="Image" /></td>
<td>1i. like that. ([Gerard gets up and points to the figure’s legs on the screen]) ([Gerard points his finger in a downward motion and sits down])</td>
</tr>
</tbody>
</table>
APPENDIX V

TABLE 5.3. JAKE CHANGING JAKE’S HAIR COLOR TO BLONDE

<table>
<thead>
<tr>
<th>Images</th>
<th>Verbal and Nonverbal Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Frame 1" /></td>
<td>Frame 1.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Frame 2" /></td>
<td><em>(Jakes quickly goes through multiple hair colors till he gets to the color blonde.)</em></td>
</tr>
<tr>
<td></td>
<td>(1a) J: I’m blonde, so I’ll make him look like ME!</td>
</tr>
<tr>
<td></td>
<td>(1b) T: You’re blonde? You want him to look just like you? <em>(Jake enlarges the screen showing the character in full length with the options on the left side.)</em></td>
</tr>
<tr>
<td></td>
<td>(1c) J: Yeah, that’s what I like to do. I have to make him look like me.</td>
</tr>
</tbody>
</table>
APPENDIX W

EXCERPT 5.1

1. T: So how does it feel when you both create your own identity…
2. like your own person?
3. J: It’s feels FUN because you get to do what you want to do in the future
4. G: [Yeah!
5. J: I can make an inventor like I’ve always wanted to be. (Sings Hallelujah)
APPENDIX X
EXCERPT 5.2

1. L: [Points and circles the comic frames while reading] I see
   that he (character from the strip) was on MySpace and he got
   sleepy and went to sleep… and I see where it says “Five minutes
   later.” But five minutes later what?! What happened five minutes
   later? (5.0)

2. G: [Skakes his head] (3.0) I’m not that good at doing this.

3. L: [With balled fists, softly hits the table] Yes you are! This is great!

4. T: So, Gerard, you put different pieces into one of those block?

5. G: Yes.

6. T: Wow!

7. L: Like this Pookeyball. He put that there. [Talking to me] These
   people… he actually added them.

8. G: Yeah. I’ll show you how I got it [quickly changes the screen]

9. L: Okay, but go back.

10. T: Are you going to be working on that now?

11. L: Um-hm.

12. T: Cause I would love to see you do that.

13. G: (Yeahhhh!!!---)
### APPENDIX Y

**TABLE. 5.4. GERARD AND LARNEE SEEKING ASSISTANCE TO DOWNLOAD A VIDEO CLIP**

<table>
<thead>
<tr>
<th></th>
<th>Gerard (G)</th>
<th>Larnee (L)</th>
<th>Gaze</th>
<th>Touch/Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NA</td>
<td><em>(On phone with Romeo)</em> What is it called that you click on?</td>
<td>G/L look at screen&lt;br&gt;G has right hand on mouse</td>
<td>G puts left hand under chin, sitting erect in chair&lt;br&gt;L puts right hand on table while talking to Romeo on the phone</td>
</tr>
<tr>
<td>2</td>
<td>NA</td>
<td>Click on “What’s this?”</td>
<td>G/L look at screen</td>
<td>L points to the screen&lt;br&gt;[G clicks mouse to screen&lt;br]L reads the screen with left hand on the arm of the chair</td>
</tr>
<tr>
<td>3</td>
<td>NA</td>
<td>Hold on, wait a second Gerard</td>
<td>G/L look at screen</td>
<td>L lightly taps G’s back five times; G leaves chair&lt;br&gt;[L holds chair and sits down holding the phone with hand on mouse</td>
</tr>
<tr>
<td>4</td>
<td>NA</td>
<td><em>(On phone)</em> I’m not understanding what you’re saying.</td>
<td>G/L look at screen</td>
<td>L’s left hand on the mouse&lt;br&gt;G puts left hand on the chair arm hunching over to the left with right hand on the table</td>
</tr>
</tbody>
</table>
I labeled the red stars in this diagram to represent the location of the digital technologies. I gave each tool a different highlight color (e.g., the computer [black]; drawer [yellow] and nightstand [brown] television, cable and video games [green]). The lavender dot illustrated where family members would reside to engage in the digital literacy practices.
APPENDIX AA

TABLE 6.1. RECIPROCAL APPRENTICESHIP BETWEEN LARNEE AND DAVID

<table>
<thead>
<tr>
<th>SOCIAL PRACTICE</th>
<th>SEMIOTIC SYSTEMS</th>
<th>TRANSCRIPTIONS</th>
<th>DIGITAL PICTURE OF PARTICIPANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory</td>
<td>Mother and son are working to send documents through AOL to Tisha’s cell phone.</td>
<td>L: Mmm...go right here. (Mouse Scrolling) Open up the mail go to...yeah close that up. Then go to some of the ones that umm Gerard had sent to me.</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Spatial</td>
<td>The mother and son are listening to each other’s perspectives/views on how to effectively send a document. Larnee reads text from the screen in an effort to send documents. The scrolling of the mouse and the fast typing are heard throughout the observations. Various sounds reveal the computer shutting down and going to another family members’ online account.</td>
<td>D: Right here?</td>
<td></td>
</tr>
<tr>
<td>Linguistic</td>
<td>Oral communication between mother and son. The mother and son are listening to each other’s perspectives/views on how to effectively send a document. Larnee reads text from the screen in an effort to send documents. The scrolling of the mouse and the fast typing are heard throughout the observations. Various sounds reveal the computer shutting down and going to another family members’ online account.</td>
<td>L: Uh huh, you gotta open it up...yeah and then you’re gonna umm forward them to her. (Mouse Scrolling)</td>
<td></td>
</tr>
<tr>
<td>Visual</td>
<td>Intense gaze when viewing sites and reading text from the screen, as well as how they interact with one another.</td>
<td>D: This it...Just send it?</td>
<td></td>
</tr>
<tr>
<td>Gestural</td>
<td>Intense gaze when viewing sites and reading text from the screen, as well as how they interact with one another.</td>
<td>L: Yeah (Mouse Scrolling) OK...wait, wait click keep as new, cause I gotta put ‘em all in a file. OK exit out and go to the next one. (Mouse Scrolling)</td>
<td></td>
</tr>
</tbody>
</table>

**L:** OOOOH!!!
APPENDIX BB

EXCERPT 6.1

1. L: Sometimes if I’m not feeling good and I just want to mess
2. around or talk to someone else, or CHECK my messages,
3. even though my computer [laughs] is like inches away
4. from my bed, but my cell phone is closer
5. [high pitch] So, I’ll check my messages [laughs]. That’s
6. so bad.
7. [laughs] That’s what I’ll do or if my son’s are online, I’ll
8. message them and IMing from my bed and I’ll have a
9. conversation. [laughs]
10. T: And you all are in the same room?
11. L: Same room [laughs]

(semi-structured interview, 7/24/07)
APPENDIX CC

TABLE 6.2. TEXTING AND IMING FROM BEGINNING TO END

<table>
<thead>
<tr>
<th>Scene</th>
<th>Time</th>
<th>Moment-to-Moment Action/Context</th>
<th>Talk at Each Turn/Verbal Discourse</th>
<th>Effect on Action/Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0:29:09:02</td>
<td>Gerard is sitting to the left of the screen counterclockwise and is looking at the computer screen. His right hand is on the mouse and his right foot is on the computer unit on the floor. Larnee’s right hand is shown holding her cell phone and is texting Gerard. She appears to be leaning back with a mug in her left hand.</td>
<td>L: This is pretty much an average day right here, for real. Once we get all of the formalities out the way, this is what we do. (laughs)</td>
<td>Larnee initiates and apprentices Gerard into the practice</td>
</tr>
<tr>
<td>2</td>
<td>0:29:29:11</td>
<td>The back of Gerard’s chair faces the right side where Gerard cannot be physically seen. Larnee’s position is the same.</td>
<td>L: It’s more structured then. [regarding the children playing on the computer in the summer vs. fall]</td>
<td>Larnee is comfortable in this space. Gerard shows agency, owning his practice</td>
</tr>
<tr>
<td>3</td>
<td>0:29:33:25</td>
<td>Gerard, leaning back in his chair, turns around to face Larnee. His right hand is on the mouse, and his left hand is on the bottom of his chin.</td>
<td>G: What does <em>structured</em> mean?</td>
<td>Gerard as student; Larnee as teacher. Discourse motivates questioning of vocabulary word</td>
</tr>
<tr>
<td>4</td>
<td>0:29:35:18</td>
<td>Gerard leaning back in his chair turns all the way around to face Larnee. Larnee continues to hold her cell phone with her right hand.</td>
<td>L: More scheduled</td>
<td>Vocabulary skills enacted</td>
</tr>
<tr>
<td>5</td>
<td>0:29:59:20</td>
<td>Gerard faces Larnee in his chair, but his body changes to the right so that he turns his head</td>
<td>No communication</td>
<td>Nonverbal, gestural body movements and shifting demonstrate that Gerard is still</td>
</tr>
</tbody>
</table>
to the right to watch television. Larnee’s head is down to text Gerard. Random beeping noises are heard of Larnee texting Gerard.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30:22:00</td>
<td>Gerard, who is watching television, shakes his head. Larnee has her head down and texts Gerard. Gerard, who is watching television, shakes his head. Larnee has her head down and texts Gerard.</td>
</tr>
<tr>
<td>6:30:30:10</td>
<td>Gerard is in the same position looking at the television and then faces Larnee. Larnee has her head down and texts Gerard, then looks up and talks to him holding her cell in the right hand and talks with her left hand, showing a claw-like position. Larnee looks back down at her cell phone screen. G: That’s just nasty.” [referring to a scene on “The Simpsons”]. Expressions, decision-making</td>
</tr>
<tr>
<td>6:30:48:26</td>
<td>Gerard is sitting straight up in the chair facing Larnee. Larnee looks up at him and then down to her cell phone screen. G: Like what do you mean? L: Like this one I’m about to send you. You’ll see…you never missed a beat. Larnee apprenticing Gerard into a discussion, initiating questions, evaluating Gerard’s methods of practice and how he engages in the social practice. Larnee as teacher; Gerard as student. Evidence in how this practice of knowing the IM acronyms shapes Gerard in how he responds when Larnee sends him a text. Decision-making strategies are utilized</td>
</tr>
<tr>
<td>6:30:53:1</td>
<td>Gerard is facing his L: Wait a minute. I’m Demonstrating</td>
</tr>
<tr>
<td>Time</td>
<td>Scene Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------------</td>
</tr>
<tr>
<td>0:31:17:21</td>
<td>Gerard turns the chair around facing the television. He slumps down in his chair with his left hand on his chin. Larnee is pointing to the computer screen and snaps her fingers motioning to Gerard that the text has been sent. She continues to point up and down to the computer screen to get Gerard’s attention. Gerard is still slumped in his chair swirling right to left waiting for the text to appear.</td>
</tr>
<tr>
<td>0:32:01:28</td>
<td>Gerard swings back and forth in the chair. His right hand is on the mouse.</td>
</tr>
<tr>
<td>0:32:13:23</td>
<td>[Same movement with Gerard] Larnee is looking at the computer screen and trying to open a bag of potato chips.</td>
</tr>
<tr>
<td>0:32:25:34</td>
<td>[Camera is pointed to the screen] Larnee’s name appears on the screen in “restore” mode so that Gerard’s sprite screen is also visible. Larnee’s text appears on the screen. The cursor moves around.</td>
</tr>
<tr>
<td>0:32:58:08</td>
<td>[Camera is pointed to the screen] Gerard’s head is in the background where he</td>
</tr>
</tbody>
</table>

**Notes:**
- **Demonstrating authority**
- **Recognition of technology permanence**
- **Larnee as teacher**
- **Initiating questions, interpretations, decision making processing action/practice**
- **Decoding, encoding, interpretation, analysis**
<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Transcript</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:33:51:05</td>
<td>[Camera points to the back of Gerard’s chair] Larnee’s head is faced down looking down at her cell phone. Gerard texts Larnee [52:14 silence]</td>
<td>L: You know what I mean? Basically, I’m the only one he chats with. And I know that because I’m in here when he’s on the computer. (laughs) But, I be like, how did he…</td>
<td>Mother/child interaction with digital tools, proximity</td>
</tr>
<tr>
<td>0:34:08:22</td>
<td>Gerard faces the computer answering the text. Larnee is texting him something again. Beeping sounds are evidenced as Larnee continues to text Gerard. Gerard moves around in his chair until I ask him a question. [64:85 silence]</td>
<td>L: Okay, I’m going to ask him. I’m about to ask you. He’ll probably figure it out. T: Gerard, what are you doing?</td>
<td>Choices, decision-making</td>
</tr>
<tr>
<td>0:37:20:27</td>
<td>Gerard faces the computer. Larnee leans back with an apple in her right hand. She points to the computer screen.</td>
<td>L: Did you see what I asked him? Look.</td>
<td>Directive</td>
</tr>
<tr>
<td>0:37:48:22</td>
<td>[Camera points to the computer screen of back-and-forth text and IM messages from Larnee and Gerard]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Two Days And A Night

What I [Gerard] was doing last night. I was starting on the Blogging on the website and it was a good night. I went to bed at about 9pm and woke up at about 4am, where I saw mom on the computer, where she had been all night until morning when I awoke from my “Quick nap.” Now I’m still on the computer, And now I will make a comic with my characters right now after mom puts in her update.
I can’t even tell you how much fun this Blogging thing has been for Gerard and myself. Outside of doing things around the house I have been at this computer non stop. We have watched the sun rise and fall at our computer, and have enjoyed each and every moment of it.....no I mean it this blog has really brought me and all my boys closer. In the wee hours of the morning, I thought of a post that I wanted to do and one of Gerard’s brothers was still up. He wandered into my room as I was working and began to help me navigate the technology for the post. I also found that we all are really into the book Animal Farm. I have even started reading it to my baby child, and my oldest boy that lives in the home is gonna start reading it in a bit (he is just waiting for Gerard to finish the chapter he is reading now as I am typing this post to the blog). When we started this study I recall saying something about how technology is emotional for me. Well since we started all this, there has been an enormous amount of interaction with my boys and I. Just like I once said “we are a hands on family” we have to do the task to really, really know it, and by having to do this its causing us to work more and more together, which allows our moods to intertwine, interact, and join one another and become unified as one. If that is not what you would call emotional then.........?
APPENDIX FF

EXCERPT 6.3

Yes I would say that we at some point where students. As far as the difficulty, I would have to say that we never got frustrated with any of what we did not know. From my view of it, we both love learning how to put it together. In any video that you make on “Windows Media Player” you can chose how each picture comes in, how long it stays there, what color it is when it comes in or goes out, and what shape it is. These are what we call swipes.