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Making Matters:  
Teaching and Learning Literacies and Identities in Urban Schools

by

Aaminah Muhammad Norris

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

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of the

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Committee in charge:

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Making Matters: Teaching and Learning Literacies and Identities in Urban  
Schools

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Aaminah Muhammad Norris

## Abstract

### Making Matters: Teaching and Learning Literacies and Identities in Urban Schools

By

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Doctor of Philosophy in Education

University of California, Berkeley

Professor Jabari Mahiri, Chair

This qualitative study conducted over a 14-month period examined how teachers and students' identities influenced their learning and implementation of design thinking processes in conjunction with their technology use in urban classrooms. Design thinking is a learning approach through which students engage in hands-on project-based activities that solve complex problems (Carrol, et al., 2010). This research was an examination of teachers' professional development with design thinking principles to understand 1) how teachers' identities influenced their learning to use tools afforded in training, and 2) how teachers' took up the use of digital technologies in classroom practice. Additionally, this work examined 1) how access to technologies influenced 60 predominately Latino/a and African American students' identities and 2) how it also influenced these students' developing new and critical literacies. Findings revealed how teachers' identities differentially affected their learning of design thinking principles and how they facilitated the use of technologies in their classrooms. This work also revealed that students transformed negative self-perceptions by designing digitally mediated projects that facilitated the development of more positive identities. Finally, this work found that students' developing new and critical literacies were influenced by their lived experiences because students evidenced a predilection for making digitally mediated projects that relevantly connected to their personal lives. Implications of this work are that both teachers and students' identities play integral roles in how they learn and utilize principles of design thinking as well as digital technologies such that identity connections need to be much more central to the processes of learning for both teachers and students.

## **Dedication**

In the name of Allah, most gracious and most merciful, I dedicate this work to my parents. Mom and Dad thank you for teaching me to love learning and for pushing me to strive for excellence. May Allah reward you for your sacrifices. Loving you always.

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## Chapter One

### Making Matters: How Design Thinking Informs the Teaching and Learning of Literacies and Identities

This qualitative study examined how design thinking influences the teaching and learning of identity processes as well as how it influences new and critical literacies in urban schooling contexts. Design thinking is a hands-on learning approach through which students solve complex problems that develop students' empathetic mindsets as they design, make, and build tangible artifacts (Carrol, et al., 2010). Design thinking, also known as making, "mirrors, or at least echoes, traditional forms of scientific and artistic investigation in which devices are built, tested, and used for purposeful activities and investigation," according to Vossoughi and Bevan (2014). This study examined how 20 teachers with differing personal and professional experiences with technology received professional development with design thinking principles to understand 1) how teachers' identities informed their learning to use the tools afforded in teacher training, and 2) how teachers used digital technologies in classroom practice. This study explored how urban schoolteachers who were trained to facilitate students in making digitally mediated projects using design thinking processes were either helped or hindered by previous experiences with digital technology.

This work is also an exploration of the relationships among identity processes, access to technologies, and literacy practices for 60 predominately Latino/a and African American students. To uncover the relationships between design thinking, identity processes, and access to technologies, I observed both professional development activities and three focal teachers' classroom facilitation of design challenges over the course of a 14-month period. Design challenges build new literacies that are important for the 21st century because students are tasked with solving complex problems through collaborative processes (Carrol, et al., 2010, Kwek, 2011, Norris, 2014).

Researchers have differentiated upper case *New Literacies* from lower case *new literacies*, pointing to the former as a theoretical framework with a large enough breadth to incorporate the dynamism of advances that take place as youth learn the latter through use of digital technologies. According to Leu et al. (2009) New Literacies have four theoretical components:

- 1) New Literacies include the new skills, strategies, dispositions, and social practices that are required by new technologies for information and communication;
- 2) New Literacies are central to full participation in a global community;
- 3) New Literacies regularly change as their defining technologies change; and
- 4) New Literacies are multifaceted, and our understanding of them benefits from multiple points of view (p. 4).

These researches contend that as we learn more about new literacies by examining how they are taken up in social contexts we will continue to develop a deeper understanding of the New Literacies framework. For example, researchers who have

examined how new literacies are formed in social contexts argue that new literacy practices assist young people with learning problem-solving capacities. According to Lankshear and Knobel (2006), learning new literacies involves the development of mindsets that encourage “collaboration, participation, dispersion, [and] distributed expertise” (2006, p. 27). However, barriers to new literacies often exist within formal schooling contexts. These barriers include lack of access to resources and teachers’ lack of expertise (Jenkins, 2009; Lankshear and Knobel, 2006).

Moreover, barriers including racism and poverty have prevented Latino/a and African American students from developing academically in urban schools (Duncan-Andrade & Morell, 2008; Lipman, 1999). For example, Lipman (1999) detailed the impact of the negative experiences of marginalized youth in schooling. According to Lipman:

The overwhelming failure of schools to develop the talents and potential of students of color is a national crisis. The character and depth of this crisis are only dimly depicted by low achievement scores, high rates of school failure and dropping-out (p.2).

Lipman pointed out that the pain of marginalization is a part of urban school students’ lived experiences and is evidenced through their failure and dropout rates.

Theorists have pointed out that schools are sites of contention and have called for pedagogical approaches that assist students with developing more positive identities. For example, in a call for critical pedagogies Giroux (1997) argued that the discourse of schooling affords spaces where certain ideologies are promoted while others are silenced. He called for a critical pedagogical approach in which language is used by both teacher and student to understand the relationships they have to self, each other and society at large.

My study examined the relationships among design thinking processes and students’ developing critical literacies in urban schooling contexts. It explores how teachers were trained to facilitate students in problem solving as they tackled issues that affect them within and beyond their schooling contexts. It also investigates ways that teachers with differing personal and professional backgrounds 1) were trained to develop students’ new and critical literacies through use of design thinking processes and 2) engaged their predominately Latino and African American students in making digitally mediated projects using design thinking processes.

This research seeks to address the following questions:

1. How do teachers’ identities influence their learning to use the design thinking principles afforded in training?
2. How do teachers take up the use of digital technologies in classroom practice?
3. How does access to technologies influence students’ identities?
4. How does access to technologies influence students’ developing new and critical literacies?

To address these questions, chapters Four, Five, and Six of this study analyze the relationships among teachers and students' identities, access to and experiences with technologies, and learning of literacies.

Chapter Four, *Tweaking Pedagogies*, investigates ways that 20 teachers with differing exposure to and expertise with digital tools were trained to facilitate design challenges in their classrooms that assisted students in developing new and critical literacy practices. Findings for Chapter Four revealed that teachers' relationships to racism and poverty inform their identities, experiences and access to technologies and ultimately their practice. Teachers' experiences with marginalization and discrimination can limit their access to technologies and instruction with digital resources. The teachers in the study exhibited what I term "influential identities," which are personal and professional experiences that inform how teachers guide students' learning with technology to mirror teachers' perceptions of digital texts and tools. These teachers were able to use their learning experiences in schooling to enable 21<sup>st</sup> century critical pedagogies and support students in having better learning experiences than their own.

Chapter Five, *Changing Privacy Settings*, examined ways that students developed empathetic mindsets by supporting classmates in processing their racialized and gendered identities. Findings revealed that students who were instructed to design, build, and present cultural productions resisted participation by creating private spaces to process their identities. This study suggests connections between local contexts, participatory cultural practices and identity processes. It revealed how young people's development of new and critical literacies is complicated by their lived experiences because students resisted making digitally mediated projects that did not reflect their personal lives.

Chapter Six, *Make-her-spaces as Hybrid Places*, examined the classroom practices of one urban schoolteacher to show how she attempted to guide tenth grade Latina and African American young women in developing positive self-concepts through the implementation of design thinking processes. This work examined how young women who had limited access to digital media negotiated their identities as they created projects with a focus on developing positive self-images. Findings revealed that these students' classroom became what I call a *hybrid place*. In the case of this classroom, the *hybrid place* was a physical location in which students who envisioned themselves being devalued by adults were able to use emerging technologies to design artistic representations of an imagined future. Students' development of *hybrid places* suggests the potential that designing digital projects can have for influencing more positive racial and gender identities.

This study is a qualitative analysis of the relationships among access to technologies, design thinking processes, new and critical literacy practices, and identity processes for teachers and students in urban schooling contexts. Empirical

investigation of learning approaches that engage Latino and African American students in problem solving is necessary given that urban schools have struggled to support these students.

## Chapter Two

### **A Review of Literature: How Design Thinking, Literacies, and Identity Processes are Influenced by Access to Technologies**

This study uncovered ways that design thinking principles, new and critical literacies, and identities are influenced by access to technologies. This chapter begins with an examination of literature on the use of design thinking processes as a means of addressing critical challenges. It then examines the connections between design thinking, new and critical literacies, and access to technologies in learning environments. Finally, I review how identities are formed both in schools and online.

#### *Designing Thinking as Problem Solving*

Design thinking is a human-centered learning approach that addresses problems within and beyond classroom contexts (Carroll, M., Goldman, S., Britos, L., Koh, J., Royalty, A., & Hornstein, M., 2010; Kwek, 2011). The design thinking process helps students develop seven mindsets that are important for learning: human centeredness, empathy, mindfulness of process, culture of prototyping, show don't tell, bias toward action, and radical collaboration. For example Carroll et al. (2010) define empathy as:

The intellectual identification with or vicarious experiencing of the feelings, thoughts or attitudes of others. The empathy that comes from observing users enables design thinkers to uncover deep and meaningful needs (both overt and latent). Empathy develops through a process of 'needfinding' in which one focuses on discovering peoples' explicit and implicit needs (p. 41).

The empathetic mindset that is developed as a result of uncovering the needs of others to design solutions to the problems that exist is one that is beneficial for schooling and other lived experiences.

Carroll et al. (2010) pointed out that "students need both the skills and the tools to participate actively in a society where problems are increasingly complex and nuanced understandings are vital" (p. 38). Educators have utilized design thinking within the classroom to tackle complex issues as they design solutions through a process that develops their empathy and creativity, according to Carroll et al. (2010).

Today, design thinkers use tangible artifacts, coupled with computer interfaces, to design solutions to complex problems, such as bullying, climate change, transportation needs, and immigration (Di Salvo, 2012; Raley, 2009; Stanford University Institute of Design, 2012). Researchers have pointed to a need for students "to become literate in critical thinking and critical designing. The former encourages students to look at their community through an inquisitive lens, while the latter encourages students to design for community impact" (Watkins, 2012, Critical Design Literacy section, para. 1).

According to Di Salvo (2012) there are three key components to design thinking. First, more than professional designers practice design. He posits that the act of invention and making goods and services is design whether or not professionals are involved. Second, design is normative producing tools in response to current conditions. And third, Di Salvo argues, “the practice of design makes ideas, beliefs, and capacities for action experientially accessible and known” (p. 16). Di Salvo (2012) contends that, as artifacts are designed and re-imagined, individuals become critically aware of the artifacts. Di Salvo (2012) frames design as an interdisciplinary process maintaining that there is a historical connection between design and art. He points to the designer as creating representations that appeal to visual aesthetics.

Other researchers have explored how design thinking develops new literacies as students’ learn to design for themselves. Resnick, et al., (2009) called for design thinking, arguing that being fluent in the digital “requires not just the ability to chat, browse and interact but also the ability to design, create, and invent with new media” (p. 3). These researchers pointed out that as learners are engaged in media creation they are also engaging in the social world. They argue that designers address real problems such as inequity and create solutions for them.

In addition to connecting design principles with real problems, researchers have examined the relationships between design thinking and cultural contexts. Blikstein & Cavallo (2003) conducted research with students from local school districts in Brazil. The researchers conducted a design-based study initially intended to address the energy crisis in the region by assisting residents with reducing their energy use by 20%. However, after communicating with students it became clear that energy was being illegally obtained. Students “documented with still pictures and video various dangerous connections and decided to use their publication to teach people how to make safe, yet illegal, energy connections” according to Blikstein and Cavallo (p. 3). These researchers demonstrated ways that students learned using design principles. Additionally, their work sheds light on the importance of connecting design thinking research to cultural contexts.

Kafai and Harel (2006) maintain that the design process has affordances for developing students’ new literacies and learning. These researchers explored the influence of design thinking on student learning in informal learning contexts arguing, “When learners are asked to design something for the use of others, their learning becomes instrumental to a larger intellectual and social goal” (p. 72). Design thinkers have used the process to transform learning in 21<sup>st</sup> century learning environments. As students design solutions to critical challenges, they also develop a new literacy ethos.

### *The New Literacies Landscape*

This study explored the influence of design thinking processes, on students’ developing new literacies. Researchers have called for new literacy practices to

advance learning in urban schools. For example, Mahiri (2012) pointed to a need for teacher professional development with digital texts and tools arguing, “Now new conceptions of design and new practices for delivery and instruction are crucial to education and societal challenges of the twenty-first century” (p. 2). Mahiri argued that while new literacies are not “a panacea for failing schools” teachers should receive the necessary skills to prepare students for 21<sup>st</sup> century environments.

Although educators employ design thinking in 21<sup>st</sup> century learning settings, its roots are in constructionism theory. Papert and Harel (1991) argued for a theory of learning based in constructivist practices that afforded learners the ability to create tangible artifacts. The authors point out:

Constructionism--the N word as opposed to the V word--shares constructivism's connotation of learning as "building knowledge structures" irrespective of the circumstances of the learning. It then adds the idea that this happens especially felicitously in a context where the learner is consciously engaged in constructing a public entity, whether it's a sand castle on the beach or a theory of the universe (p.1)

These authors contend that through constructionism learners create materials that support the public good as well as their own personal development. As a hands on learning approach that requires students to design, make, and build artifacts, design thinking is a constructionist approach to learning. This study investigates ways that 20 teachers with differing personal and professional backgrounds were trained to support predominately Latino and African American students in making digitally mediated projects using design thinking processes. Other researchers have called for teachers to support learning processes by employing tools to problem solve. Rogoff and Jean (1984), posit, “Central to the everyday contexts in which cognitive activity occurs is interaction with other people and use of socially provided tools and schemas for solving problems” (p. 4). The authors draw on Vygotsky (1978) to argue that learning is situated in context and is embedded in relationships between people and tools.

In fact, researchers maintain that teachers must situate learning to develop mutually constitutive learning processes. Young (1993) posited that there is a dual process of learning within classrooms. Young argues that learning is a reciprocal process between the learner and the environment:

From the perspective of situated cognition, there are always two components to learning: the agent and the context. Knowledge and intelligence must be viewed as the relationship between the actor (effectivities/abilities) and the environment (information specifying particular affordances)” (p. 44).

This study investigates how teachers develop learning using design thinking processes to foster new literacies for Latino and African American students.

Researchers argue for increased access to new literacies within formal schooling contexts to assist young people with the capacity to succeed in the rapidly changing digitally mediated world (Gee, 1996; Hobbs, 2011; Jenkins, 2009; Kress, 2003; Lankshear and Knobel, 2006; Leander, 2007; Mahiri, 2012;). However, researchers

contend that, unfortunately, educators are either unfamiliar with the digital technology and/or have succumbed to a preference for print text. Therefore, youth must often develop new literacies through what Gee (1996) termed *acquisition*:

a process of acquiring something subconsciously by exposure to models and a process of trial and error, without a process of formal teaching. It happens in natural settings, which are meaningful and functional in the sense that the acquirers know that they need to acquire something in order to function and they in fact want to so function (p. 122).

Gee (1996) distinguishes *acquisition* from *learning* as he posits that the former is necessary for mastery and performance. *Learning*, however is essential to the development of meta-knowledge and critique. Gee points out that every individual has access to a primary *discourse community*, which is a tool kit that includes ways of thinking, being, believing, behaving, and speaking. The primary discourse community is the means by which native language is acquired.

Secondary discourses are those that occur when an individual develops language through involvement with the larger society in discourse communities. Secondary discourses are developed through both *acquisition* and *learning*. Gee (1996) defines learning as follows:

a process that involves conscious knowledge as gained through teaching, though not necessarily from someone officially designated a teacher. This teaching involves explanation and analysis that is breaking down the thing to be learned into its analytic parts. It inherently involves attaining, along with the matter being taught, some degree of meta-knowledge about the matter (5).

*Learning* is precipitated through secondary institutions, which include schools. These institutions serve the purpose of providing individuals with opportunities for practice.

Young people today obtain new literacies through *acquisition* in digital discourse communities. However without *learning* vis a vis schools and other secondary institutions it appears difficult for them to develop meta-knowledge. For example, Lankshear and Knobel (2006) contended, "What seems to be happening is that the day to day business of school is still dominated by conventional literacies, and engagement with the 'new' literacies is largely confined to learners' lives in spaces outside of schools and other formal educational settings." These authors called on literacy educators to develop a transcendent education that allows learners to navigate between the conventional and the new. They point out that the literacy landscape of the future involves the development of mindsets that foster new literacies.

Moreover, Lankshear and Knobel (2006) argue that, within schooling contexts, barriers to the development of new literacy practices include lack of access to resources, and teachers' lack of expertise. Other researchers have pointed to barriers to developing new literacies in schools (Gee, 1996; Hobbs et al., 2011; Jenkins, 2009). Jenkins (2009) argued that media are a product of the social contexts in which they are used. Within the United States 50% of teens are media creators. He maintains that race,



ethnicity, and gender are not barriers to teen's media creation. However, other barriers do exist including lack of access due to differing socioeconomic status and lack of teacher knowledge. Jenkins (2009) called for an ecological approach that considers the interconnections of technologies, the cultural communities in which they exist, and the activities conducted through use of digital resources. My research illuminates teachers' training and facilitation of a learning approach within formal schooling contexts and examines the relationships between access to technologies and students developing literacies and identities.

In previous research on use of mobile technologies, I found that both inside and outside of formal schooling young people who desire to develop new literacies must act as agents for their own edification (Norris, 2011). Other scholars have argued that youth find themselves in the midst of a hierarchical model fashioned by society that delegitimizes digital resources (Hull and Nelson, 2005; Ito et al., 2008). This hierarchy that positions print over digital text is one that appears consistent with other literacy debates throughout history in which the diffusion of literacy was deemed problematic. Cook-Gumperz (1986) pointed out that while it appeared that literacy is the function of schooling, within the 20th century the notion of making literacy accessible to the populace proved challenging. She contended, "there was a time when many influential people saw literacy as a dangerous possession for the majority of the working class" (p. 21). According to Cook-Gumperz (1986), who historically researched working class people, advocated to develop functional literacy in public schools.

The previous generation surpassed societal constraints of functional literacy for the working class, and developed the skills that led to upward mobility. The current generation's literacy practices may have the potential to lead to the social advancement of their predecessors. However, today's youth struggle to obtain new literacy skills without penalty within spaces that are orchestrated by adults (Ito et al., 2008; Lankshear and Knobel, 2006; Mahiri, 2012; Pew, 2002). According to Ito et al. (2008), adults restrict use of digital technologies in a move to control and monitor teens' use of these media. Despite the obstacles to new literacy development, youth have taken up digital tools in unprecedented ways in informal learning environments (Gee, 2003; Hull & Schulz, 2001).

### *Developing Critical Literacies in Schooling Contexts*

In addition to exploring connections between design thinking and new literacies, my study maps design thinking onto critical literacies. Freire (1970) pointed out that the 20th century educational system was flawed because of "banking educational methods" (p.78) in which students are seen as receptacles for information. Freire (1970) argues for reformation of education through a dialogical model in which both students and teachers co-create the learning environment:

True dialogue cannot exist unless the dialoguers engage in critical thinking—thinking which discerns an indivisible solidarity between the world and the people

and admits of no dichotomy between them—thinking then perceives reality as process, as transformation, rather than as a static entity—thinking which does not separate itself from action, but constantly immerses itself in temporality without fear of the risks involved (p. 92).

Freire called on students and teachers to transform the world through a process of praxis in which they critically think about situations and then devise a program that consists of action and reflection. To facilitate the development of critical literacies, educators have employed generative themes in the form of problems that are discovered through co-investigation. Freire (1970) argued that educators should dialogue with students to create generative themes, which necessitate critical awareness of reality. He outlined a process for investigation that included the use of visual aids including sketches and photographs.

The idea of generative themes can be productive even in the 21st century because barriers including racism and poverty have prevented Latino/a and African American students from developing academically in urban schools (Duncan-Andrade & Morrell, 2008; Lipman, 1999; Noguera and Wing, 2006). In a call for reformation of urban schooling through the institution of critical pedagogical approaches, Duncan-Andrade and Morrell (2008) contend, “For both educator and student, [critical pedagogy] means discarding the framework of meritocracy and critically embracing the role of the underdog” (p. 10). These authors call for a reframing of classrooms and schooling pointing to a need for critical pedagogical approaches in which educators and students work together to build communities and challenge inequities.

Duncan-Andrade and Morrell (2008) review literature on critical literacies and argue for the institution of a “Cycle of Critical Praxis” that incorporates a process for developing critical literacies with youth in urban classrooms. According to these authors, critical pedagogical approaches encompass identifying, researching, and solving problems through collective action. Once the problem is solved educators and students must work together to “evaluate, re-evaluate and re-examine the state of the problem” (p. 12). They argue, “Each of the steps in the cycle of critical praxis reveals powerful opportunities for critical pedagogy with urban youth. The cycle breaks down the inherent power relations in traditional pedagogy and identifies students as collaborators with adults” (p. 13). Duncan-Andrade and Morrell’s (2008) work focuses on compatible ways on developing critical literacies that would transform urban schools. Design thinking and critical literacies are parallel processes as they call for problem solving, action, and engagement. My research explicitly links design thinking with critical literacies. It examined the ways that teachers were trained to engage traditionally underserved students in the use of digital media to address the development of positive self-concepts that inform their identities within and beyond formal schooling contexts. Further, in keeping with Duncan-Andrade and Morrell (2008) and Di Salvo (2012), my research illuminates how teachers and students might utilize design thinking to become critically aware and thereby transform learning.

## *Teachers and Students' Identity Processes*

In addition to understanding the connections between design thinking and literacy practices, a primary goal of this study is to better understand the relationships among teachers and students' identities and design thinking processes. I draw on Bakhtin's (1981) theory of ideological becoming to examine how lived experiences in an urban school influence identity processes. Bakhtin (1981) theorized that human beings develop identities in discourse with other individuals and the ideological world. He contended that ideologies are embedded in discourses. According to Bakhtin, differing ideologies cause tensions as individuals form personal belief systems in connection with others'. He argued that "an individual's becoming [is] an ideological process" (p. 342).

Freedman and Ball (2004) argue that the Bakhtinian theory of ideological becoming is useful in examining the landscape of identity processes, particularly as these are informed by language, literacy, and learning. Freedman and Ball point out:

In effect the ideological environment--be it the classroom, workplace, the family or other community gathering place--mediates a person's ideological becoming and affords opportunities that allow the development of this essential part of our being. In ideological environments characterized by a diversity of voices, we would expect new communication challenges, but also exciting opportunities and possibilities for expanding our understating of the world (p. 6).

Bakhtin (1981) theorized that the tensions that arise through discourses are important for ideologies. He argues, "The importance of struggling with another's discourse, its influence in the history of an individual's coming to ideological consciousness, is enormous" (p. 348). My study examined how teachers and students develop ideologies in concert with each other and how these ideologies influence teachers and students' identities and students' learning of literacies.

Other researchers have used Bakhtinian' theories to understand how identities are formed (Britzman, 1994; Freedman & Ball, 2004). For example, drawing on the Bakhtinian theory of ideological becoming, Freedman and Ball (2004) argue:

As we form our own ideas, we come into contact with the discourses of others and those discourses enter our consciousness much as an authoritative discourse does. The discourse of others also influences the ways we think and contributes to forming what ultimately is internally persuasive for us" (p. 8).

The design thinking process may have affordances for addressing critical challenges within and beyond schooling contexts as it provides an opportunity to assess the ways that ideologies are transformed as identities are formed.

Literature in the field of Learning Sciences shows relationships between students' participation in design thinking and students' learning processes in out of school contexts(Resnick et al. 2009). However, there is a dearth of literature that explores design thinking processes and identity processes within formal schooling contexts. Hence, a goal of this study is to bridge a gap in the literature. To do so, I link design

thinking processes with research conducted in participatory popular culture, which are interest-driven spaces where youth create, distribute, and remix cultural productions (Jenkins, 2006; Williams & Zenger, 2012). Although youth involvement in participatory popular culture has largely been studied in out of school settings, my work connects formal schooling with out-of-school contexts because students in this study are charged with using digital media to solve complex problems that affect them within and beyond schooling. Further, with the affordances of new media, students can actively engage in media creation both within and outside of formal schooling contexts because, “[d]igital technologies allow individuals to sample and remix popular culture content, write back to popular culture producers, and connect with fellow fans from around the corner and around the world,” according to Williams and Zenger (2012, p. 1).

Researchers have found relationships between participatory popular culture and identity processes. For example, Williams and Zenger (2012) argue that identities are formed and transformed as youth involve themselves in making and performing identities online: “Personal webspaces such as Facebook are filled with popular culture images, links, and video as ways of performing identities rather than expository, written personal statements” (p. 2). These authors contend that new technologies have produced a “networked world” (p. 1) in which young people can readily connect across national boundaries without spatial and temporal restraints.

However, despite the ease of communication, cultural boundaries exist (Carpenter, 2012; Rajakumar, 2012; Williams and Zenger, 2012). Young people must find ways to negotiate their cultural practices and identity processes within the context of the developing networked world. My study explored how 60 students who were instructed to make digitally and socially mediated projects to solve complex problems participated in the networked world. It looked at the influence of design thinking processes as participatory popular cultural practices on students’ racialized and gendered identity processes. It explores how the lived experiences of students in urban schooling contexts influence their design of digitally mediated projects.

Empirical investigations of students’ involvement in participatory popular culture, as expressed through design thinking processes in schools, are necessary given that urban schools have struggled to assist in the formation of positive identities for Latino/a and African American students. Further, there is a gap in the literature when it comes to the connections that exist between design thinking processes and identity processes. This study begins to bridge this gap.

To do so, this study explores how cultural contexts inform identity processes. Other theorists have explored connections between cultural contexts, cultural production, and identity processes. For example, Yudice (2003) connects cultural production within the United States to social movements of the 1960s and the institutionalization of enrichment activities in schools. The author argues that social movements were relegated to cultural expressions housed in schools and other community based organizations as vectors of the state. For Yudice (2003) schools are

institutions where culture is performed and identities are formed, “Cultural belonging is not characterized only by the set of practices that a particular community engages in; relations with others and with institutions also demarcate a sense of community” (p. 56). Yudice’s (2003) point is that identities are formed within cultural contexts in concert with others and institutions.

Researchers have explored the relationships between lived experiences of poor people within urban contexts, including their consumption and production of artifacts and their identities (Andrews, 1991; Hall, 1993; Hill Collins, 2004). In fact, Hall (1993) pointed out that representations are inseparable from lived experiences. He argues, “Popular culture always has its base in the experiences, the pleasures, the memories, the traditions of the people. It has connections with local hopes and local aspirations, local tragedies, and local scenarios that are the everyday practices and the everyday experiences of ordinary folks” (p. 4). Hall maintains that representation is interrelated with the perceptions and experiences of the represented and therefore has some connection to their lived reality. My research uncovers relationships among identities, design thinking processes, and literacy practices within an urban schooling context.

To do so, I also draw on the work of Nasir (2012) who conducted research on racialized identity formation of African American students both within and outside of formal schooling contexts. Within schools, she examined “how the academic and racialized identities that students construct are linked to their experiences and access and exposure to particular kinds of racial socialization in local school and classroom settings” (p.87). Although her work targets African American youth, she argues that identity processes affect other marginalized youth as well.

Further, Nasir (2012) details three forms of resources that inform identity formation within formal schooling contexts. These she terms *material resources*—or the ways that physical environment, organization, and artifacts contained within an organizational structure support connectivity and participation, *relational resources*—or relationships with others involved within the same organization or group, and *ideational resources*—which refers to an individual’s perception of self and “place in a practice in the world, as well as ideas about what is valued and what is good” (p. 110). Nasir (2012) maintains that these resources and how an individual negotiates them within schooling influence the formation of racialized and academic identities. In addition to racialized identities, Nasir’s *resources* have affordances for the construction of gendered identities since these are influenced by the materials available within schooling contexts as well as notions of self, and relationships with others.

One goal of my research is to better understand the impact of design thinking on racialized and gendered identities. Researchers have called for various approaches to looking at identities and ways that they are formed within urban schooling contexts (Kelley, 1998; Olsen, 1997a; Olsen, 1997b; Majors & Mancini Billson, 1992). For example Kelley (1998) argues that social scientists’ research on the identities of poor

black people from urban communities has resulted in reductionist representations of their lived experiences. He asserts that social scientists' research has failed to do justice and to provide nuance to the experiences of black people because it essentializes the experiences of urban African Americans in general and marginalized youth in particular.

According to Kelley (1998), "Contemporary black urban culture is a hybrid that draws on Afrodiasporic traditions, popular culture, the vernacular of previous generations of Southern and Northern blacks, new and old technologies, and a whole lot of imagination" (p.8). In this study, I investigated the hybridity that existed in one urban school by analyzing the relationships between digitally mediated projects made through design thinking processes and the formations of gendered and racialized identities.

Although there is a lack of research on the relationships between design thinking and identity processes, researchers have explored the development of identities within both spaces and places including schools. Review of the literature reveals that the terms space and place have been used interchangeably in conjunction with the formation of identities (Jameson, 1991; Keith & Pile, 1993). However, Harrison and Dourish (1996) draw on the fields of architecture and urban design to differentiate between the two concepts. The authors distinguish between space and place as they argue:

Physically, a place is a space, which is *invested with understandings* (authors' emphasis) of behavioral appropriateness, cultural expectations, and so forth. We are *located* in "space", but we *act* in "place". Furthermore, "places" are spaces that are valued. The distinction is rather like that between a "house" and a "home"; a house might keep out the wind and the rain, but a home is where we live (p. 3).

These researchers argue that understandings, behaviors and cultural expectations are all negotiated in places. As such, identities are formed as individuals negotiate their places in the world.

Additionally, with the advent of new technologies the concept of place has been transformed. Janelle and Hodge (2000) define place as "an extended locale of human activity imbued with the heritage, identity, and commitment of people and institutions" (p.1). These authors point out that place is transformative and is extended by access to media and technology. My research seeks to understand the ways that students and teachers used design thinking to negotiate their identities within the classroom.

This study explored the connections among design thinking, developing new and critical literacies, identities, and access to technologies. It also examined how the design thinking process was used in addressing critical challenges within and beyond schooling contexts. Given that schools have continued to underserve Latino and African American students, this study provides a contribution of empirical evidence of ways that design

thinking as a learning approach might inform literacies, learning, and identities for these students.

## Chapter Three

### A Qualitative Study of Design Thinking Processes

This qualitative study analyzed teachers' training in and use of design thinking methods to guide students to problem solve by addressing critical challenges that impact them both within and beyond schooling. It also explored the impact of design thinking processes on teachers and students' identity processes. From November of 2011 until May of 2013, I collected data as a participant observer both in professional development programs utilizing design principles and in the classrooms where teachers guided students through the design process. Data sources for this research include participant observations; formal and informal interviews with the professional development director, focal teachers, and students; and ethnographic field notes. Design thinking is a learning approach that calls on students to solve complex problems. As students experience the design process the design thinking framework develops mindsets that are important for learning that include human centeredness, empathy, and mindfulness of process, according to Carroll et al. (2010).

#### Theoretical Framework

This study relies upon Interpretivist theory (Glesne & Peshkin, 1992) to better understand teachers' and students' "lived experiences" as exemplified through the implementation of design thinking as a learning approach within their formal schooling context. According to Glesne and Peshkin (1992), Interpretivist scholars attempt to better understand "direct 'lived experiences' instead of abstract generalizations" of their participants in order to appreciate the ways in which these experiences influence their everyday lives.

Additionally, Interpretivists rely upon naturalistic methodologies such as interviews and participant observations within their research in order to build upon a dialectical framework for understanding (Cohen, D., & Crabtree, B., 2006). This study incorporated dialectical methods to analyze the relationships that existed between the design process as well as new and critical literacies and identities. Specifically, to establish dialectical relationships with study participants, a practice of ongoing informal communication was employed to build trust with participants in this investigation. My status as a participant observer was informed through these dialogues. Members of the faculty of the school site began to see me as a part of the school community. Further detail of the impact of this experience on this research can be found in the *Positionality of the Researcher* section of this chapter.



## Research Design

In addition to examining teachers in professional development, qualitative methodology was used to analyze focal teachers' facilitation of three design challenges. The ideas for the design challenges originated in teacher professional development. The administrators came up with the problem to be addressed in each of the design challenges with the input of teachers. Design thinking is an integral part of the school's mission and is incorporated in quarterly school design challenges. During these design challenges, the entire school participates in the activities for the day with teacher and administrators facilitating students in designing, making, and building, solutions to problems that are posed in the design challenge.

The first design challenge, which took place during the spring semester of the 2011-2012 school year, was entitled, "How might we create a community where difference is valued and appreciated?" The purpose of the first design challenge was for students to learn to value difference. The second design challenge, which occurred during the beginning of the fall semester of the 2012-2013, was entitled, "How might we get our hands dirty?" Its purpose was to engage students' interest in building the school community by guiding them to 'make things' during the first two days of school. The third and final design challenge took place during the beginning of the spring semester of the 2012-2013 school year and was entitled, "Ode to someone I love." The focus was on developing students' self-concepts by assisting them with learning more about the concept of love. This research explored how teachers guided students in making digitally mediated projects that addressed the problems posed in these design challenges. Data sources for this research include participant observations of classroom instruction, formal and informal interviews with four focal teachers, one administrator, informal interviews with students, and ethnographic field notes.

### *Site*

Dimension Charter School (Dimension)<sup>1</sup> is a middle and high school located on two separate campuses in an urban city in Northern California (for more detailed demography see appendix A). Dimension is the first charter school of its kind within this particular city. The school was born out of a desire to better serve low-income Latino/a and African American students. The school served approximately 400 students. The majority of Dimension's students come from under-resourced schools, and approximately 80% qualified for free or reduced-fee lunch (See appendixes A and E).

Dimension's faculty numbered approximately 20 full-time teachers and five administrators. The faculty participated in professional development on design thinking at both a prestigious university in Northern California and through ongoing in-service design thinking trainings conducted by the school's Director of Design. In addition to teaching discipline-specific courses, all of the school's teachers and administrators facilitated weekly advisory classes with students. The advisory classes were designed to develop mentoring relationships between teachers and students by providing

academic support and enrichment activities. The principal of the charter decided to divide these classes by gender. The principal was of the belief that teachers and administrators would provide influential mentorship by mentoring students of the same gender as themselves. This meant that teachers who had the same gender as their students instructed all advisory classrooms. Teachers facilitated quarterly design challenges that required students to design solutions to problems posed in their advisory. The design challenges mirrored teacher training and were planned by administrators with input from teachers. Teachers and administrators came up with the problems to be addressed and the stages of the design process to be implemented, including how students' work would be presented to their peers.

### *Participants*

Out of the 20 teachers and five administrators observed in professional development, one administrator and four focal teachers were selected for participant observation and formal and informal interviews. I selected teachers of differing genders and racial/ethnic backgrounds, who taught different grade levels and disciplines so that I might compare the ways that teachers from different backgrounds took up the tools afforded in training and implemented them in classroom practice. The administrator, Ms. Maya<sup>2</sup>, Director of Teacher Training and 10<sup>th</sup> grade female advisory instructor was a biracial Chinese and African American woman in her thirties. Ms. Maya was a sixth-year high school English teacher and second-year administrator.

The four focal teachers included two that instructed high school and two that instructed middle school. The teachers were equally divided by gender. Ms. Kish, the tenth grade Geometry teacher, was a white woman in her thirties. This was her second year as a teacher at Dimension. Mr. Freedman, the ninth grade English teacher, was a gentleman in his mid-thirties. He declined stating his race and ethnicity. Prior to teaching at Dimension, he taught high school humanities courses for six years. Mr. Landry, the sixth grade science teacher, was a Chinese American gentleman in his early thirties. This was his second-year as a middle schoolteacher. Ms. Herbert, the sixth grade history teacher, was an African American woman in her mid-thirties. Prior to teaching at Dimension, Ms. Herbert instructed high school history for seven years. However, this was her second year instructing middle school.

Examination of teachers of differing racial makeups, genders, disciplines, and grade levels provided me with the opportunity to analyze the ways that teachers from different backgrounds incorporated design thinking processes as participatory cultural practices in their classroom activities. This work explored the ways that teachers' identities influenced their facilitation of design thinking (as evidenced through teachers' facilitation of the process within their disciplines), and the influence of the design thinking process on students' developing racialized and gendered identities.

As a participant observer, I participated along with the entire faculty in the six-week long summer in-service training that was facilitated by the Director of Design, Ms.

Ellington. Also, I observed 20 teachers in design thinking trainings and three of my focal teachers' facilitation of design challenges over the course of two school years. During my observations, I interacted with students in small and large group work, which gave me the opportunity to conduct informal interviews with students and build rapport with them. I also facilitated activities that teachers asked me to lead. Immediately following each of the design challenges, I conducted formal interviews with the four focal teachers and the administrator. Specifically, I was interested in uncovering the ways that the teachers, who had received the professional development training in design thinking, facilitated the design challenges. I was also interested in the role that design thinking had on teachers and students' identity processes. I observed approximately 60 predominately Latino/a and African American students in Ms. Herbert, Mr. Landry, and Ms. Kish's classrooms. My interest was in the way that students' gendered and racialized identities influenced their designs. Therefore, I examined designs crafted by students in the three design challenges.

The total time spent in participant observation was 210 hours. This included approximately 100 hours in professional development and 110 hours in classroom observations. The total time spent in formal interviews was 15 hours. The interviews were audiotaped and transcribed resulting in approximately 80 pages of transcript data. Field note data was taken immediately following the teacher trainings, design challenges and post interviews.

#### Data Analysis

All of the data collected as a result of field notes and transcriptions were then compiled and displayed utilizing Atlas TI software. I used comparative analysis to deepen the richness of understanding comparing follow-up interviews with field note data (Bogdan & Biklen, 2007) to identify patterns and to develop a framework for the categorization and coding of data sources. Inductive codes were created for students' impressions and participation in the design challenges (for a list of codes and definitions see Appendix B). Throughout the data collection process, I refined my descriptions of the focal teachers' understanding and facilitation of the design process through a combination of follow-up interviews and continual participant observations. Since my interviews with students were informal, the data collected from them was written in field notes.

I developed a conceptual framework that assisted me in focusing my attention on themes that I witnessed during my observations of classroom instruction. Specifically, what continuously arose was the need for a safe space for students to process their racialized and gendered identities. In an attempt to better understand the relationship between design thinking, new and critical literacies, and identity processes, I triangulated the data by comparing teachers and students' interviews, and field note data, and developed and reflected on analytic memoranda (For Comparative Charts and Conceptual Frame see Appendixes C and D).

## *Positionality of Researcher*

My relationship to this research was influenced by my role as a participant observer. As an Interpretivist researcher, I attempted to establish relationships with my study participants in order to better understand their “lived experiences.” As a result, participants informed me that they viewed me as a member of their school community. In fact, a few of the non-focal teachers would mistakenly identify me as a teacher. Fortunately, the focal teachers within this study assisted me with making my role clear to their students.

I selected Dimension School as a site for this research for multiple reasons that align to my own personal experience and practice as an educator and woman of color. I was made aware of Dimension as a school that would support Latino/a and African American students from parents and other activist community members with whom I have worked. Although I had not met Principal Vargas prior to embarking on this research project, his reputation had preceded him, along with that of the Dimension teachers.

I found that as an African American woman I had to be particularly reflective in my work and research especially as it pertained to African American students in this urban school. Hill Collins (1999) argued that black women hold a special relationship to research as they have historically held relationships in which they were positioned as both insider (as caregiver) and outsider (due to their racial makeup). As a researcher in this site, I was positioned as both an insider and outsider. I was an insider because of my previous experience as a classroom teacher, which allowed focal teachers to view me as relatable. As a black woman, I also was positioned as an insider because the majority of teachers and administrators at Dimension were of color. However, my gender positioned me as both an insider and an outsider. As a woman, I was able to observe the female advisory classrooms without being conspicuous. Mr. Landry also allowed me to observe his sixth grade advisory. However, I was unable to observe Mr. Freedman’s 10<sup>th</sup> grade male advisory, because it was a male-only space. Thus, I was sensitive to my perception as *outsider within* and attempted to utilize it to both build a dialogic relationship with my study participants and to drive me to be exceedingly reflective in my field note data collection. I wrote reflections in my field notes and kept a journal in order to assist me with processing my role. For example, I would often overhear African American students framed by teachers in professional development activities as either difficult or failures. I addressed this challenge in two ways, 1) by raising questions in my interviews to unpack ways that teachers positioned students and 2) by writing about my feelings in a journal.

### *Limitations*

One key limitation of this study was that I was unable to act as a participant observer in Mr. Freedman's classroom. Therefore, all of the data collected from Mr. Freedman is based upon my observations of him in professional development and interviews.

## Chapter Four

### **Tweaking pedagogies: How Teachers' Identities Influence Their Learning and Facilitation of Design Thinking.**

*"The message that I am getting [in teacher training] is that 'this is how you do design.' I don't necessarily believe that. I am saying you can tweak stuff and somewhere in here students should decide."  
Mr. Freedman*

In this chapter, I share findings that reveal how teachers took up the use of digital technologies in classroom practice and how teachers' identities influenced their learning to use tools afforded in training. Findings reveal that teachers were able to use their learning experiences in schooling to develop what I call "tweaking pedagogies." Tweaking pedagogies are ways that teachers alter and improve upon the resources provided in professional development to facilitate students' learning of new and critical literacies. As a pedagogical approach, tweaking pedagogies provide ways for teachers to address barriers to developing new literacy practices for traditionally underserved youth because teachers are able to deconstruct the learning processes and augment the materials provided in training.

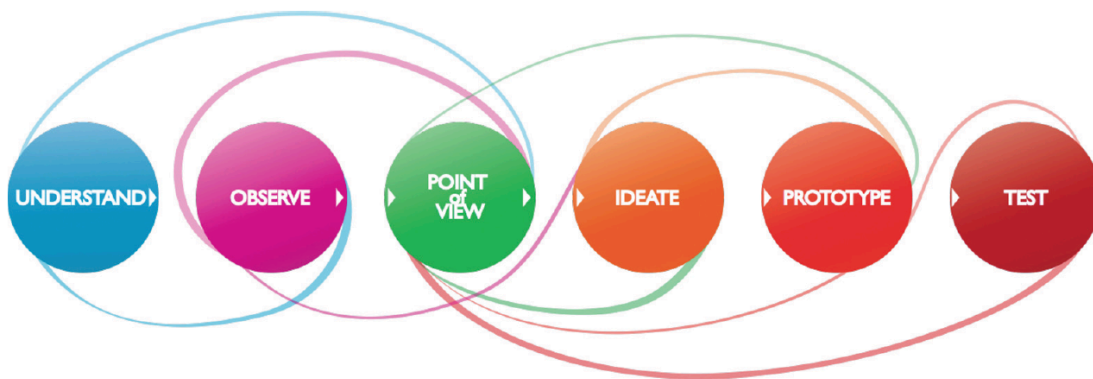
Moreover, tweaking pedagogies also support students in developing what I call "canvas literacies." Canvas literacies are new literacy practices that allow urban students to create artistic representations by developing digitally mediated projects that unpack traumatic experiences in their personal lives. Although Dimension was an under-resourced school with limited access to digital resources, canvas literacy practices afforded teachers opportunities to support students in creating digitally mediated projects that broke down walls. As a result, students were able to unpack traumatic experiences over time using digital technologies. This work suggests that tweaking pedagogies can develop canvas literacies that support teachers from under-resourced schools in assisting historically marginalized students' development of new literacy practices.

Findings also suggest that teachers' identity processes were influenced by access to technology and their identities influenced facilitation of design thinking processes. The teachers in this study used technology in their classrooms based upon previous exposure and access to digital texts and tools. The teachers exhibited what I term "influential identities," which are personal and professional experiences that inform how teachers guide students' learning with technology to mirror teachers' perceptions of digital texts and tools. When exhibiting influential identities, teachers guided students' learning to echo teachers' own experiences with technology. Hence, this work shows how teachers' identities influence teaching and learning.

## Discussion/Analysis

### *Tweaking Pedagogies.*

All of Dimension’s teachers who participated in professional development on design thinking at a prestigious university in Northern California were trained in an iterative process. The figure below illustrates the six stages of the design process including: gaining an understanding of the problem, observing the problem to develop empathetic mindsets, developing a point of view about the problem to be addressed, ideating or brainstorming potential solutions to the problem, developing prototypes of solutions, and testing the prototypes by presenting them to peers to gain feedback. Figure 1.



During professional development, Dimension’s teachers were not instructed on how to incorporate technology in the design thinking process. As a school, Dimension provided its teachers with only limited access to technology. There were two laptop carts that each had 24 computers. This meant that 48 laptops were shared among the 400 students.

Although there was limited access to technology, Dimension’s teachers who had transformative experiences with students were able to deconstruct the design thinking process and develop what I call “tweaking pedagogies.” Tweaking pedagogies are pedagogical approaches that alter and improve upon the resources provided in professional development to facilitate students’ learning of new and critical literacies. To develop more equitable learning opportunities for students in their classrooms and to address traumatic experiences that affect students’ identities, teachers deconstructed the design thinking process that they were taught in professional development to allow students to focus on specific steps in the process. As a result, tweaking pedagogies afforded teachers with opportunities to better support students who revealed traumatic experiences. Teachers were able to find ways to encourage students to problem solve and unpack their experiences using digital texts and tools. Hence, teachers used tweaking pedagogical approaches to support students in developing new and critical literacies.

The teachers that developed tweaking pedagogies exhibited empathy towards students who suffered from traumatic experiences. Mr. Freedman, for example, worked to increase students' input in the design thinking process. He maintained, "They [other teachers] are training them [the students] to be silent. I can almost guarantee that some of [the students] hate this shit." Mr. Freedman felt passionately that the design process needed to be tweaked in order to incorporate students' voices.

Other teachers were also frustrated that students' designs were not being used. Students designed and presented prototypes such as separate lounge spaces for males and females, additional elective courses, and a computer laboratory/library. Despite my observations of three quarterly design challenges with each advisory presenting their prototypes to the entire school, only one of the designs students suggested was implemented at Dimension during the course of my 14-month observation. The one design was off-campus lunch. Mr. Vargas implemented a school policy that provided off-campus lunch for the high school students. However, during a professional development training, several high school teachers expressed frustration that students were returning from lunch late and lacked supervision when they departed the campus. Therefore, the teachers voted to rescind off-campus lunch without any input from students.

Ms. Maya pointed out that the conflict between school leadership, teachers, and students could be resolved if parties took the lead in implementing students' designs. She argued:

The leadership of the school is waiting for the teachers to step up and take leadership or the students to step up and take leadership. I think it's both and I think there needs to be an administrative push to take these ideas further. And their needs to be initiative on the part of the students and the teachers to say this is really important to us. Let's do something with this.

Ms. Maya felt that students, teachers, and administrators needed to take the initiative in implementing students' designs at Dimension.

To address the tension, some teachers implemented tweaking pedagogical practices that allowed students to address their experiences using design thinking processes within the classroom. The following are excerpts from Mr. Landry's interviews. Mr. Landry, the sixth grade science teacher, expressed that he had a "special" time discussing students' backgrounds in the "Ode to Someone I love" design challenge. This he attributed to his own comfort discussing sensitive issues with his students:

For me it was natural in that I am comfortable sharing emotion and sharing deeply and personally. For me it was an awesome feeling. I kind of knew how to lead them and guide them (Interview Mr. Landry, November 2012).

Mr. Landry felt confident in helping his students process difficult situations and sharing more openly in class. He pointed to previous personal experiences that afforded him with the skills to facilitate these discussions and help his students to process their own difficulties. Additionally, Mr. Landry was able to tweak the design thinking process to



allow students to spend more time learning concepts that would assist them in developing projects that addressed personal struggles. He was able to support students by deconstructing the design process for his students.

Although, Dimensions' teachers were trained to facilitate the design thinking processes, they were not trained in ways to counsel students through more traumatic experiences. As a result, teachers used tweaking pedagogical approaches to assist their students in tackling more difficult subject matter. For example, rather than implement the design thinking process in its entirety, Mr. Landry facilitated a two-week long ideation session that allowed students to discuss how bullying occurs. His deconstruction of the process assisted his students with addressing bullying in school:

So I did two weeks on bullying. That was the first week we had a long discussion on that. The second week, I brought it up again. The second week, we talked about how have we contributed to the bullying. I shared out how I was bullied at school [...] Often time's bullies are victims and victims are bullies too. It is not just black and white. Like are we also bullies and victims? But how have we been bullies? And everyone shared out about that.

Mr. Landry pointed out that as his students unpacked the differing ways that bullying transpires they began to brainstorm possible solutions to the issue.

Mr. Landry facilitated his students in creating digitally mediated projects to solve the problem of bullying they faced. He pointed out that bullying was a huge issue for middle school students. Mr. Landry's class tackled the issue of bullying by developing a video that addressed it. His students described ways that they have been both victims and perpetrators of bullying. They also discussed the importance of supporting one another and developing relationships. Mr. Landry was able to successfully use tweaking pedagogies to support developing new and critical literacies by deconstructing the process he learned in professional development training.

As a result of tweaking pedagogies, Mr. Landry's students were able to take ownership of their learning and create a digitally mediated project that addressed a challenge they experienced within and beyond schooling. According to Mr. Landry, "We did a video for anti-bullying that was our most successful project because it sort of grew from its own. Students had ownership over it and they used it" (Interview Mr. Landry, November 2012). Mr. Landry said, "students had ownership" over the video. Students' ownership over the process encouraged them to make a digitally mediated project that was authentic to their experiences with bullying.

Mr. Landry pointed out that his students "used" the video because they knew its genuineness in tackling the problem of bullying. Hence, tweaking pedagogies allow students to develop new and critical literacies because they have affordances for student-centered problem solving using digital technologies. Additionally tweaking pedagogies allow teachers to express empathy for students by allowing them to process their difficult experiences in class overtime.

Mr. Landry used tweaking pedagogies to assist his students with unpacking their lived experiences. He expressed that as students opened up about their experiences a “special” transformation occurred. For example, his students discussed whether or not they should openly grieve the death of loved ones or quietly grieve without discussing loss. He described two students who lost relatives due to violence:

His dad got shot and he wanted to create an alter to his dad. That broke walls. Another kid talked about his uncle that passed. How he used to play with his uncle and how he appreciated that about his uncle. But that kid was like ‘I think it is better to just not think about it, so you don't feel sad.’ He said that. I was like ‘I kind of agree and I kind of don't agree. Because remember how you were sharing about how your uncle used to play with you? And how those were great memories, right?’ Yeah, if you think about that all of the time it would be very hard. So then I asked, ‘what do you guys think?’

Mr. Landry’s tweaking pedagogical practices assisted his students in processing experiences of loss with each other. He described ways that discussing traumatic experiences of loss “broke walls.” He talked about ways that students used the design challenge as opportunities to “create” artifacts that assisted them in processing their lived experiences. As such, tweaking pedagogies fostered both critical and new literacies.

Other examples of tweaking pedagogical approaches occurred as teachers worked to support students in developing a deeper understanding of the design process than what they learned in professional development. Confusion around design thinking terminology was revealed during the first week of the summer in-service training. Dimension’s administrators decided to include design thinking as a part of the central mission of the school. However, tensions arose because the administrators assumed that parents and students understood the terminology of the design thinking process. Principal Vargas shared a revised mission statement with the faculty that included design thinking as a component of the mission (See Appendix E).

Mr. Vargas asked teachers to share their thoughts on design thinking as written in the mission. Mr. Freedman asked, “Why are the terms in the design thinking section without any explanation? Parents will see that and wonder, what’s ideate” (Field Notes, August 2012). Mr. Vargas explained that Ms. Ellington would be responsible for further incorporating design thinking into the school’s mission. However, no change was made to the school’s mission statement. Teachers implemented tweaking pedagogies by linking the terminology to previous instruction and providing definitions for students through review and practice. The following is an excerpt from an interview with Ms. Herbert:

Design thinking gives a name to what a lot of us were already doing which was just that process of kind of reflecting. You know going through the process of researching something. Say I want to do a new unit; I will go through the process of laying out and kind of ideating (Interview Ms. Herbert, September 2012).

Ms. Herbert felt that she and other teachers already implemented the design thinking process in lesson planning. She tweaked the professional development by naming what was already being done in her practice.

Additionally, Mr. Landry implemented tweaking pedagogical approaches by breaking down segments of the design process and facilitating discipline specific design challenges to support students' learning and creativity. Mr. Landry said, "[Students] know when we say ideate [we mean] come up with ideas for the prototype [we have] to build. We've gone through these activities where we've practiced ideate. It is sort of segmented, but I think it is going deeper" (interview, Mr. Landry November 2012). Rather than facilitate the design thinking process in its entirety, he decided to deconstruct it to encourage student learning. Through tweaking pedagogies such as deconstruction of the design thinking process, Mr. Landry was able to foster students' developing new and critical literacies.

Another way that teachers exhibited tweaking pedagogical practices was by giving students' opportunities to craft useful projects and more time to develop their designs. During the in-service trainings, teachers expressed frustration that students' designs were not being implemented in the school. Teachers were also dissatisfied with the lack of time to assist students with making something beneficial. They made statements like, "It's too open-ended and I am not able to plan." And "The kids feel like this is a waste of time." Mr. Vargas, the principal, said, "I am not certain why we feel like we have to make something that has to be used. Students make things for us all the time that we don't use. They will write an essay and we will grade it and stick it in a folder" (Field Notes, March 2012). However, some teachers disagreed with placing students' solutions in folders and disregarding them.

### *Canvas Literacies.*

"Once you give them a computer it opens up like the canvas they created"  
Mr. Landry

To support students in processing their difficult experiences, teachers used tweaking pedagogical approaches to develop what I call "canvas literacies." Dimension teachers supported students' development of canvas literacies by facilitating students' designs of digitally mediated projects that unpacked personal experiences. Canvas literacies are new literacies that allow students to process traumatic experiences using digital texts and tools over time.

Mr. Landry advocated using technology in design challenges to support students developing new literacies and processing difficult experiences. He argued:

The problem with design thinking a lot of times it is the limitation of skills to produce what [the students] want. And giving [students] the digital tools allows them creativity and flexibility in what they create and gives them the skills to do

that. Once you give them a computer it opens up like the canvas they created” (Interview Mr. Landry, November, 2012).

Mr. Landry believed that digital resources provided students the ability to create a “canvas” likening their work to art. He pointed out that students’ ideas were limitless; however, they lacked the skills to bring them to fruition. He contended that having access to digital technology would afford the students with opportunities to transform their imagined ideas into solutions to problems they faced both within and beyond school.

As a result of canvas literacies, teachers were able to incorporate technology into their design activities believing that access to digital resources in the classroom was transformative for students’ learning. During the fall semester of 2012, Mr. Landry and Mr. Freedman guided students developing canvas literacies by supporting students in making useful designs using digital resources. For example, to unpack experiences of violence, trauma, and loss Mr. Freedman’s students made a Tumblr. It was a visual blog that included photographs and students’ writings.

Mr. Freedman used the design challenges as opportunities to build trust with his students. Mr. Freedman contended that design thinking is not a linear process that has to be implemented uniformly, “The message that I am getting [in teacher training] is that ‘this is how you do design.’ I don’t necessarily believe that. I am saying you can tweak stuff and somewhere in here students should decide.” Mr. Freedman focused on supporting his students’ in designing what students’ deemed important, “Only because with my group of kids that I work with, whenever we have a design challenge they almost fall on the floor. It’s like teachers were planning something for the students and there’s no student voice” (Interview Mr. Freedman, November 2012). Mr. Freedman’s tweaking pedagogical approach afforded students the opportunity to develop canvas literacies during the design process to unpack their experiences and incorporate students’ voices.

Rather than treating the school site as one social context and the home as another, canvas literacies aided students in bridging gaps between contexts. Mr. Freedman expressed that several of his students experienced personal hardships in their lives. As a result, they lacked interest in developing conventional literacies in school. According to Mr. Freedman, “I know my kids. The students that I teach, it is like they’re older than they really are, like moms and dads are not in their lives. They’re not [going to] make shit out of paper you know?” (Interview, Mr. Freedman November 2012). Mr. Freedman pointed out that his students grappled with difficult situations causing them to mature rapidly. He believed that conventional literacies were insufficient for assisting them in articulating the pain of their lived experiences. By facilitating canvas literacy practices Mr. Freedman was able to assist his students with tackling difficulties that conventional literacies insufficiently addressed.

Another example of developing canvas literacies occurred when Mr. Freedman described a student who had a problematic relationship with his father. The student told Mr. Freedman that the student's father was largely absent from his life. Mr. Freedman in turn instructed his students to use digital resources to address their difficulties:

So they either did a poem or a letter style to somebody. And I didn't really give them parameters I just pushed them. The person who had a fucked up relationship with his dad, he wrote one to his girlfriend. And I was like 'what are you doing? We talked about this for 2 and half hours!' (Interview Mr. Freedman, November 2012).

Rather than allowing his students to skirt challenging situations, Mr. Freedman "pushed" his students to address their personal experiences using digital media, thereby supporting the development of canvas literacies. The students were allowed to create artistic representations. He facilitated canvas literacies to both assist his students in connecting their experiences at home with school, and to unpack traumatic experiences of neglect and abuse by connecting visual imagery with their own poetry and prose.

### *Influential Identities.*

This section reveals how teachers' identities influenced the ways they took up the design thinking process by illuminating the ways that they facilitated design challenges and integrated technology in classroom practice. What became evident is that without sufficient training in technology use, teachers' previous personal and professional experiences influenced ways they incorporated technology and facilitated the design thinking processes within their classrooms.

For example, The Director of Teacher Training, Ms. Maya, was responsible for coordination of all teachers' professional development activities, including the ones implemented by Ms. Ellington, the Director of Design. Ms. Maya did so in collaboration with Dimension's principal and fellow administrators. In a post interview, Ms. Maya described ways that her identity informed how she conceived of education and access to resources:

[M]y friends who went to school, just did not, in my opinion, fulfill their potential. They didn't end up believing in themselves. They didn't have access to resources. And then when I was in high school, I just remember feeling left out of the curriculum to make a long story short. That's where I came to, and I took a class in high school that really highlighted what oppression was, different types of oppression, and not defined it for me but really helped me to reflect about what it was and why I was feeling so disempowered in my life (Interview, Ms. Maya, March 2012).

Ms. Maya explained that exposure to an Ethnic Studies course empowered her and affirmed her commitment to educating students with similar histories as her own. She pointed to a lack of access to resources, including digital technology, both in her own learning and in her teaching experiences.

Ms. Maya's reflection on her own and her peers' experience with learning points to ways that her identity was influenced by access to digital texts and tools:

Honestly I really haven't had access to much technology, especially at my last school, even getting a TV was hard. And if I had a TV, getting a DVD player was hard, and if I had a DVD player, getting a remote was an issue and sometimes I couldn't operate that. So the fact that we have smart boards here blew me away, and I'm still not even utilizing the full capacity of the smart board but I definitely show a lot more documentaries or clips of documentaries or films, and I think it's helped me cater to visual learners more. And so that's definitely a huge step for me (Interview, Ms. Maya, March 2012).

Ms. Maya explained that in her previous teaching accessing digital tools was "hard" for her. As a result, although she had a smart board in the classroom at Dimension she did not use it to its full capacity. Rather, she selected to use digital resources in limited ways such as providing lessons that included students' viewing of power point presentations and documentary films.

Ms. Maya's previous lack of access influenced her teaching practice at Dimension despite having more resources in her current school. She explained that available technological resources at Dimension were an improvement over the ones available at her previous schools. However, due to her limited experience with technology, Ms. Maya was still learning its affordances and did not incorporate much in either her teaching or the professional development training. She said, "I don't remember us doing anything with technology. We struggle like for the first six months of the year we didn't even have email for staff. We were using our own personal email. We haven't had the opportunity to have that professional development around technology." Ms. Maya pointed out that she had not incorporated digital technology into the teachers' training.

Ms. Maya said that Dimension's Director of Technology lost his position due to budget cuts. Prior to his leaving he conducted initial trainings on technology use. However, she did not continue to introduce trainings incorporating technology. She explained her limited access to technology in schooling and in prior teaching left her feeling ill prepared to implement technology in professional development, "It's like, something that's not really available to me, that I am not exposed to. That I don't know what the potential is for it." Hence, Ms. Maya's lack of access to technology restricted her use of digital texts and tools in teacher professional development and classroom practice.

Ms. Maya exhibited what I call an "influential identity." Her previous experience of lack of access to digital resources influenced the ways that she used digital technologies in her classroom. As a teacher, Ms. Maya's capacity to incorporate digital technologies was heavily influenced by the barriers she experienced in teaching and learning in under-resourced schools. Therefore, her influential identity informed how she took up the resources available to her and incorporated them into her teaching practice.

Another teacher who exemplified influential identity processes was Ms. Kish. Ms. Kish, who was a second-year Geometry teacher, felt strongly that there were relationships between identity and learning. She believed that learning was directly related to identities:

One of the things I think about a lot is that most people did not feel comfortable in their classroom, being who they are, knowing what they know. The people who feel the most comfortable are the people who have 'A's, who get everything. And I've been that person I feel like all of these people get it, and I don't, and I feel isolated because of that (Interview Ms. Kish, October 2012).

Ms. Kish contended that her own feelings of isolation in classrooms occurred because she lacked confidence in her knowledge about material and content. For this reason, she credited the professional development she received from the Director of Technology prior to his dismissal as essential to her incorporation of technology in her classroom practice.

Ms. Kish believed that technology training lessened her anxiety and fears of using it in her practice. Hence, Ms. Kish's teaching identity was influenced by her exposure to digital resources, including training and support for using technology in her classroom:

I got trained on how to use the laptop cart which is really useful too, because I think that the more you know how to do something, the more willing you're going to be to use it. So I use the computers pretty much every week, because I know exactly what to do. It is really helpful because I can actually functionally work with them. I know what's going on with them, and I think that that distills some of the fear and anxiety that I would normally feel around technology (Interview Ms. Kish, November 2013).

Ms. Kish's ideas about learning influenced the way she took up the use of digital tools in her classroom practice. She believed that the Internet was a valuable tool for research.

Ms. Kish thought of the Internet as an "extended brain" that she could readily access. She trained her students to use technology to access information in ways that echoed her own ideas about technology:

I think that mindset [believing information is accessible] is something that I want for my students too. Knowing that some things are worth memorizing and really knowing, but most of the time what you need to know is the process of how to get there and knowing where to look when you need something.

Ms. Kish viewed the Internet as an extension of herself. She felt that she did not have to rely on memorization because she could readily access information with digital technology. As a result of influential identity processes, she supported students in obtaining information through Internet research. Ms. Kish's comfort with using technology in the classroom came as a result of the training she received on laptop carts in professional development. She pointed out that her willingness to use technology is directly related to her knowledge and proficiency with it.

Additionally, Ms. Kish pointed to the design thinking processes as affording students with similar opportunities to overcome feelings of isolation through learning collaboratively. She observed that some of her math students were withdrawn because of the difficulty of the subject matter. She believed that participation in design challenges would allow students and teachers to be “authentic about how we actually feel and how we actually think, and I think that if we’re not willing to do that, then we’re not going to be in that zone where we’re stretching.” Having access to resources and training shaped Ms. Kish’s influential identity. Further, her influential identity processes informed how she incorporated technology in her classroom and her goals for students’ learning.

Teachers had different views about the importance of technology as a tool for students’ learning in design thinking processes. During in-service training, Ms. Ellington suggested that teachers use digital media that they were accustomed to using within disciplines in facilitating design challenges. However, disciplinary lines were not the sole dividers of teachers’ use of technologies within classrooms. An additional factor that held sway was teachers’ influential identities. Teachers’ previous experiences with learning and access to technology influenced how teachers guided students learning with and use of technologies.

Another example of influential identity processes is Mr. Freedman, the ninth grade English teacher. He facilitated his students in using digital resources in school although he expressed that he too had limited access to technology during his own schooling. He described how his identity in school was shaped by experiences of being devalued: “for me I always have to go back to my experience of education and hating school for those reasons because I felt like I wasn’t valued” (Interview, Mr. Freedman November 2012). Mr. Freedman linked his own use of technology to his previous experiences with schools. He articulated a relationship between his lack of access to technology to a lack of feeling “valued.”

Despite his lack of proficiency with technology, Mr. Freedman supported its use within the classroom because he felt students were accustomed to it. He said:

I want to teach [my students] the value of the old way so to speak, but their experience is very valid [...] I didn’t get a computer—my house didn’t get a computer, my whole family didn’t until middle school” (Interview, Mr. Freedman November 2012).

Mr. Freedman wanted to teach his students “the value of the old way”, meaning conventional literacies, but felt it was impossible because students had more exposure to technology than he did. He did not have access to technology until he was in middle school. However, he believed his students were exposed earlier than he. As a result, Mr. Freedman elected to encourage his students to use technology. Mr. Freedman’s previous experiences with technology influenced how he conceived of it. He incorporated digital resources into his classroom to support students to have more access than he did.



Like Mr. Freedman, other teachers who had either grown up accessing technology and/or obtained access through professional experiences evidenced influential identities. For example prior to becoming a teacher, Ms. Herbert was a librarian. She shared how her experiences in library science informed her development of research skills. As a result, she wanted to facilitate her students in becoming proficient researchers:

So for me, having access to what is increasingly like digital records and digital catalogues and things like that was critical to me learning how to be a better researcher and learning how to teach other people how to research. That was important for me.

Ms. Herbert believed teaching students to use digital resources for research was important. She felt that having access to digital resources assisted her in the same way she wanted to help her students. Therefore, Ms. Herbert's previous experiences with technology shaped her influential identity processes.

All of the focal teachers instructed their students in a manner that evidenced influential identity processes. Influential identities also informed the ways that teachers took up design thinking principles and facilitated design thinking processes in their classrooms. For example Ms. Maya pointed out that although individual teachers had experienced success with incorporating technology and supporting more positive identities, Dimension as a whole had not experienced a school-wide transformation.

However, Ms. Maya pointed to professional development with design thinking as having affordances for fostering more positive identities with students. Ms. Maya suggested that design thinking as a process had affordances for transforming identities because teachers in certain advisories were able to use it to build trust with students:

The feedback was actually really positive. So the same tensions came up like 'what do we do with this'. But there were a lot of advisories that did experience the group dynamic shift. So that was met within advisory. As a school community, I don't think that it has moved from the classroom advisory to the school. But within particular advisories, advisers were saying that they saw transformation happening (Interview Ms. Maya, November, 2012).

Ms. Maya maintained that individual teachers had experienced transformation within their classrooms. I suggest that teachers' identities influenced how they took up design thinking and instructed design thinking within their classrooms. As a result of influential identity processes, individual teachers had transformative experiences with their students who learned using design thinking.

## Conclusion

This research shows that teachers were able to use tweaking pedagogies to alter and improve upon resources obtained through professional development and assist students' developing new and critical literacies. For example, when Dimension's mission statement did not provide the definitions of design thinking terminology, Mr. Landry and

other teachers tweaked how they taught students the terms and the process. Mr. Landry deconstructed the design thinking process to facilitate students' deeper understanding of ideation. To encourage deeper learning and connections for students, Dimension teachers altered the design thinking process by deconstructing it. Moreover, teachers made improvements to ways that design thinking processes were implemented at Dimension to engage with students and develop canvas literacies. Rather than simply building designs in a day, Mr. Freedman and Mr. Landry assisted students with unpacking traumatic experiences overtime. Tweaking pedagogies, then, are 21st century critical pedagogical approaches that involve both critical and new literacy practices.

Additionally, this study suggests that tweaking pedagogies can assist teachers with overcoming barriers and inequities in urban schools. Teachers in this study were ultimately able to assist students in developing new and critical literacies. Since Mr. Freedman's students had more exposure to technology than he did, he fostered collaboration and distributed expertise. Moreover, he and other teachers assisted students in developing new and critical literacies in working collaboratively to research and solve problems that impact them within beyond schooling.

Further, teachers' identity processes influence their use of digital technologies in the classroom. Teachers exhibited influential identities that allowed students learning with digital texts and tools to mirror teachers learning with technology. This chapter reveals that influential identities are informed by teachers' experiences and access to technologies and ultimately influence teachers' practices with and use of technologies. Teachers' experiences with technologies and instruction with digital resources influence how they institute them in teaching practice. For example, due to her previous experiences in schooling Ms. Maya had limited exposure to technology and was unable to see the "potential for it." Additionally, as a teacher, Mr. Freedman used his own experiences as a springboard to developing tweaking pedagogies to support students' developing canvas literacies. Mr. Freedman's students made a Tumbler to unpack traumatic experiences and to have better learning experiences than his.

All of the teachers in my study show that differing experiences with technology influence practice. Teacher's identities influenced their abilities to develop students' learning with and use of technologies. These teachers guided their students' experiences to mirror their own. Access, then, is not simply about having a computer in the classroom or at the home.

## Chapter Five

### Changing Privacy Settings: How Youth Practice Participatory Popular Culture in Urban Schools

In this chapter, I share findings that reveal how access to technologies influence students' identities. I also share findings on the relationships among access to technologies and students' developing new and critical literacy practices. Findings suggest that design thinking, as participatory cultural practice, informs racialized and gendered identities and encourages what I call "demo culture", which are schooling practices that emphasize presenting projects to draw visceral responses from audiences. Other researchers define participatory popular culture as interest-driven spaces where youth create, distribute, and remix cultural productions (Jenkins, 2006; Williams & Zenger, 2012). This study reveals that the design challenges required students to present what they made to peers; however, some students were resistant to demo culture and instead developed private spaces to process their racialized and gendered identities. Students in this study clearly demarcated the differentiations between public and private spaces for processing their racialized and gendered identities and for involvement in participatory popular cultural practices.

Additionally, findings reveal that opening up about difficult personal experiences assisted students with developing empathetic mindsets, while limited access to technology stifled students' abilities to develop new and critical literacies. Although design thinking processes afforded students the opportunity to develop empathy for each other and process difficult experiences, students' developing new literacies practices were limited by access to technology within the school site. As a result, although students were able to build rapport and more positive identities, they struggled to develop new literacies. Additionally, this study reveals that the presentations during the design thinking processes contributes to demo culture, which can hinder students' developing critical literacies.

#### Discussion/Analysis

At Dimension teachers instructed students to solve problems that both teachers and administrators had selected prior to design challenges. As a result, tensions arose, primarily around two specific interconnected themes. The first was the need for a safe space for youth to process their racialized and gendered identities without being instructed to engage in demo culture. It became clear that students struggled with presenting their prototypes, which were reflections of their lived experiences, in the public space of the classrooms. Consequently, the second theme emerged as a result of my observations of peers assisting one another with processing their identities. What became clear was that developing empathetic mindsets did not necessarily lead to developing new and critical literacies. Students' limited access to technology stifled their abilities to process difficult experiences using digital texts and tools. As a result, although students showed empathy for each other and found ways to support

classmates in processing traumatic experiences, they were not always able to do this using digital texts and tools.

### *How Demo Culture Informs Identity Processes.*

Within the phases of design thinking process is the prototyping stage in which designs are presented for feedback and assessment. The process of presenting prototypes within schooling leads to what I call “demo culture,” which is a schooling practice of presenting what one has made to draw visceral responses from one’s audience. Dimension’s students resisted presenting projects that reflected their private lives within the public space of the classroom. Resistance to demo culture was exhibited not only by the designs that students crafted, but also in the ways that they articulated their concepts of schooling. For example, Ms. Herbert instructed her 20 predominately Latina and African American female students to participate in team building activities that might assist them with learning about each other’s backgrounds, to envision Dimension as a school where differences are valued, and to design, build, and present prototypes that might assist the school in attaining the vision. As the young women began to conceive of their school as a place where differences might be valued, some expressed displeasure and a need for a place to positively process their racialized and gendered identities. The following is an excerpt from field notes:

I overheard Stacey, an African American student say, “I don’t like being black.” Laura, a Latina girl, who sat across the circle from Stacey and me said, “That is racist!” Stacey then replied, “No it is not racist because I am talking about myself.” Amirah, a biracial student who was of a lighter complexion, asked, “Do you mean being black, or dark skinned?” Stacey said “I don’t like being black. And I can’t wait to get out of here. When I move away from here I won’t have to worry about being black no more” (Field Notes, May 2012).

Stacey’s construction of “here” was based in school where she felt that her blackness was a detriment. Stacey spoke of moving to a place outside of school where she would not feel devalued because of her race. Although she articulated her displeasure openly in school, Stacey’s conception of school was a place where she could not conceive of her blackness positively. As a result, she expressed a need for a setting where her identity would be valued.

Furthermore, Stacey and other students’ resistance to demo culture was exhibited in the prototypes that students themselves crafted. The following excerpt is taken from field notes:

Ms. Herbert and I walked around assisting the four groups of students. Stacey, Amirah and two Latina students designed separate lounge spaces for girls and boys. I overheard Amirah and Stacey discuss how boys and girls need places to talk about issues that were of concern to them. They said things like “we need our own place where we don’t have to worry about boys” and “If there are video games and stuff boys will have fun in their lounge just like we will in ours.” They used Ms. Herbert’s laptop to download pictures of room décor including video games and pool tables and placed the pictures on poster board. In addition to

wanting access to video games in their lounges, the students also expressed wanting access to computers both at home and at Dimension(Field Notes, May 2012).

Stacey and the other students designed private spaces that were divided by gender. They wanted safe spaces to discuss issues specific to their genders without interference. Additionally, they wished for access to technology. The young women envisioned technology as more than a tool for their entertainment. Students evidenced their conception of technology as a vehicle for processing gender identities in safe spaces they designed. Rather than participate in demo culture within the public space of the classroom, students designed private spaces where they had access to technology to process their racialized and gendered identities.

In addition, students also designed contested spaces in which the formation of racialized and gendered identities was influenced by access to technologies. For example, while Stacey's group designed lounge spaces that had access to video games and other digital resources, Laura and her group designed a computer laboratory/library. The following is an excerpt from my field notes:

When I asked the students how having a computer lab/library could assist them with valuing differences Laura said, "You can learn about other people and culture in the library. You could read about them. Or you could look it up on the Internet." Laura and Frieda, the other Latina student in the group, both told me that they felt the lab should be open to the community (Field Notes, May 2012).

Although Laura and Frieda wanted the computer lab/library to be "open to the community," it was a contested space, which was both unrestricted and restricted. The students wanted adults from the community who were unable to have access to a computer to be able to use the facilities to access the Internet including social media websites. However, they wanted to restrict fellow students' use of the same computers. Although they supported researching culture on the Internet, they were opposed to students having access to Facebook and other social media at school. They characterized Facebook as "a waste of time" for students who needed to finish homework. Laura and Frieda's prototype of a computer lab/library had contradictory rules and policies for access and use.

In effect, Laura and Freida were arguing that students should not be allowed to process their racialized and gendered identities using Facebook and other social media in school. They had appropriated adults' concepts of what are valued and good uses of technology, including researching on the Internet and doing homework. However, they conceived of participatory popular cultural practices as "a waste of time." Laura and Frieda evidence that demo culture as a schooling practice can lead to prototypes where students echo adults and restrict students' access to technology and ability to process their racialized and gendered identities.

In a follow up interview, Ms. Herbert informed me that she believed the design challenge was an opportunity for students to develop comfort with discussing more

difficult subject matters such as race and gender. However, Ms. Herbert contended that teachers were not always prepared to facilitate such discussions:

So I do think that with the design challenge there is a greater comfort with discussion of topics that are a little more sensitive maybe. I don't know that we are super equipped to deal with the topics. But I think the kids do feel comfortable enough in this environment where they can bring those things up or to talk to us individually about it.

Ms. Herbert contends, "the kids do feel comfortable" in discussing sensitive topics including race and gender. She adds the caveat that students might bring the issues up or desire to converse about them "individually." This chapter reveals that tensions arose as students struggled for safe spaces to process their identities that were not controlled by adults. Students struggled with demo culture as they designed prototypes that either afforded them access to technologies to process their identities, or were contested spaces controlled by adults.

Within the context of the design challenges, students prototypes that were both private spaces to discuss and process their racialized and gendered identities or public spaces where they could not do so. Ms. Herbert constructed the classroom as a place where her students felt comforted as they broach race and gender, and she expressed her own discomfort explaining that she and other teachers are not "equipped" to deal with the more difficult topics of race. Although Ms. Herbert asked her students to envision a school community where difference is valued, she expressed that she and other teachers were oft times ill equipped to assist them with achieving the goal. Unfortunately, demo culture as a schooling practice draws visceral responses from both students and teachers and leaves teachers who are sometimes unequipped with the responsibility of assisting students with processing racial and gender identities publically.

Another strategy that students used to resist demo culture was the invocation of language in use. Students used language to create safe spaces for themselves that protected them from demo culture. For example, Mr. Landry's 20 sixth-grade male students designed, "Bring Your Pets to School Day", which included a small petting zoo with students' dogs, cats, and rats in a cage, Facebook pages for pets, and a Skype camera pointed toward two guinea pigs whose images projected off of classroom laptops.

I assisted students in making prototypes of their Facebook pages. These were poster boards that included photographs of students' pets with brief descriptors including names, breed, and country of origin. Mr. Landry instructed students who did not have pets to collaborate with those who did. Two Latino youth, Julio and José, were working in a pair together when Jack approached them. The following is an excerpt from my field notes:

Jack asked, "What is your name?" as he looked at José. José responded, "José." Jack then started laughing, "Ho Say? You a Ho, You a Ho." He repeated the derogatory term "Ho" which meant whore. Julio then turned to José and

asked in Spanish “José, hablas Español? (José, Do you speak Spanish?)” José responded, “Sí. (Yes.)” The two boys then continued to converse in Spanish effectively excluding Jack from their conversation (Field Notes, September 2012). Spanish became a wall of protection against the ridicule that these students experienced while participating in demo culture. Effectively, they were creating their private space, a space that Jack had been excluded from because he had mocked them while they were crafting their prototypes. Language became a means to protect themselves against others disparaging remarks. They used language to protect themselves from being racialized while they composed their prototypes. As a result, students resisted demo culture by their language in use. This chapter reveals that students exhibited ways to resist demo culture as a schooling practice by envisioning and enacting private spaces to process their identities.

### *How Demo Culture Informs New and Critical Literacies.*

Findings for this chapter also reveal that demo culture not only informs racialized and gender identity processes, but it also informs students’ developing new and critical literacy practices. Although students were charged with evidencing their designs to draw visceral responses from others, their refusal to participate influenced their literacy practices. In this section, I provide examples of ways that students’ developing new and critical literacies were informed by their resistance to demo culture.

In a follow up interview, Mr. Landry told me that some of his students felt that they did not have friends at the school. It was not until the topic came up during the design challenge that students’ were able to build rapport with each other. This rapport deepened into developing empathetic mindsets over the course of the school year as students participated in additional design challenges. When I asked Mr. Landry how his male students discussed the concept of love, during the “Ode to Someone I Love” design challenge, he expressed that as students discussed their odes a “special” transformation occurred. His students discussed whether or not they should openly grieve the death of loved ones or quietly grieve without discussing loss. Mr. Landry’s questions and facilitation assisted his students in processing experiences of loss with each other. He described ways that discussing traumatic experiences of loss “broke walls” as they developed empathy for each other. Mr. Landry said that the remainder of the design challenge was spent with students tearfully expressing grief and consoling one another.

Although Mr. Landry instructed his students to present their odes to peers in a sixth-grade class, students evidenced resistance to demo culture. This resistance included a refusal to clarify their prototypes for their peers and in some cases Mr. Landry. As a result, although Mr. Landry’s students were able to develop empathetic mindsets within the trusted confines of his classroom, they struggled in developing new and critical literacies because they resisted demo culture. The following is an excerpt from my field notes:

I turned and looked at a misshapen clay figure on the desk. I asked Mr. Landry, “what is this?” He shrugged his shoulders and said, “It is one of their odes” (Field Notes, March 2012).

Mr. Landry was unsure what his student had made through the prototyping process. He pointed out that they do not always have the ability to make what they envision. Mr. Landry attributed this to a lack of access to digital skills that would afford less skilled students the ability to bring their designs into fruition. I suggest that their resistance was as a result of more than a lack of access to technologies. Students were in effect resisting demo culture and thus were not able to transform their ideas into designs that articulated their developing new and critical literacies.

Like Mr. Landry, Ms. Kish’s students also participated in the “Ode to Someone I Love” design challenge. At the beginning of the unit, Ms. Kish’s 20 tenth-grade female students watched a video in which the speaker discussed ways that both family and the media criticized young women’s appearances causing young women to develop poor concepts of body image. The video pointed out that as a result of feedback from families and the media, young women may internalize negative self-concepts.

After the video, Ms. Kish’s students were told to think of a heart that belonged to a young child and to brainstorm words that adults might say to give that child a negative self-concept. For each hurtful statement, Marisol, a Latina student, wrote a red letter “X” inside of the heart the teacher had drawn on the whiteboard. During the second week, the young women designed journal covers filled with people, places, things, and ideas that they loved. Finally during the third-week of instruction, the design challenge task was for each student to design an “Ode to someone that [she] love[d],” beginning with a written piece and then ending with a three-dimensional object. When students were making the hearts, I noticed that one African American student, Georgia, refused to participate in the design challenge after she expressed anger at having been neglected by her mother:

Georgia shouted, “That is so fucked up!” Anna, another African American student, who was seated near Georgia’s desk, asked, “What?” Georgia responded, “She told me to eat when I get home. There is no fucking food in my house!” Georgia then put her sunglasses on and sat at her desk without making a sound for the rest of the class period. (Field Notes October 2012).

Georgia wore sunglasses inside the classroom and folded her arms, effectively daring us to invade her private space. I approached her and attempted to speak to her, asking for the markers on her desk. She did not respond to me. Georgia effectively refused to participate in demo culture and to communicate further with either of us. Georgia’s refusal to participate in the activity that did not reflect her lived experience evidences her refusal to participate in demo culture. It also evidences that demo culture hinders criticality in the design process.

A critical reflection of her lived experiences might have afforded Georgia with the ability to better understand the relationships among love and neglect. However, unfortunately, this was the last day that I was to see her. She and one-third of the



students in Ms. Kish's class were absent the day of the design challenge. However, I did notice that Anna made a card to give to a close friend of hers. However, she also refused to show what she made to either Ms. Kish or me. In a follow-up interview, Ms. Kish, described Anna's refusal to share what she made:

[Anna] made a really touching letter for one of her friends she wouldn't show me. I think she didn't want to share it because she comes off as a really tough person. Even though she comes off as a tough person she still wanted to express love to someone.

Anna's refusal to participate evidences her resistance to demo culture. Here again demo culture hindered a student's willingness to further process her experience through reflecting upon what she had made. Thus, demo culture limited Anna's developing critical literacies. Unfortunately, Anna and Georgia were not the only students whose developing new and critical literacies were limited. In fact, several of Ms. Kish's students refused to participate in demo culture. They expressed a desire to control the elements of their designs that would remain public and the elements that would remain private.

The youth resisted presenting personal experiences and feelings on the public stage of the classroom. For example, Ms. Kish asked one Latina student, Berenice, seated near me to show me a card that she was making. Once I began to read the card, she said, "You know I really did not want anyone to read that" (Field notes, October 2012). The Friday following the design challenge, Ms. Kish told her students that they had to present what they had made to a group of ninth graders. After hearing the instructions, several of the students expressed trepidation about showing the "odes" to their peers. They said things like, "this is personal" and "I only want the person I made this for to see it." To respect the students' privacy she decided to have the young women limit sharing to details of construction, rather than require them to reveal the more intimate details of their artifacts. This work evidences that demo culture is a hindrance to students' developing new and critical literacy practices. As students refuse to put their private lives on public display, they are limited in their ability to critically analyze and reflect upon their experiences. Further, although some students lacked skills to physically make artifacts, they also refused to make and share what they made publically using either high or low technological tools. Thus students' development of new literacies was also hindered by demo culture.

## Conclusion

This chapter evidences that design thinking processes as participatory cultural practices informs racialized and gendered identity processes. Also, it examines the relationships among design thinking processes and new and critical literacies. The prototype stage of the design process leads to demo culture, which can be a detriment to students' developing identities and literacies. At Dimension, demo culture resulted in the design of contested spaces, which limited the formation of racialized and gendered identities. The contestations lie in the relationships that exist between access to technology and the public display of private experiences.

While Ms. Herbert valued the design challenge as a means of providing opportunity to assist students in broaching the difficult subject of race, she maintained that teachers were not well equipped to support students in processing the more difficult discussions. Stacey wished to escape into imaginary private spaces where she might play video games, own a laptop, and be reassured by supportive friends and family. Stacey and other students' resisted demo culture as schooling practice. Rather, they designed private spaces free of adult supervision with access to digital technology to process their identities.

Unlike Stacey's resistance to demo culture in a private place where she felt supported, Laura's public space of the computer laboratory/library restricted students from processing their identities online. Laura and Frieda continued to construct adults as authorities. For them, knowledge of cultural differences was housed in books on shelves, which were under teacher supervision and control. Access to digital resources within schooling contexts meant restriction for youth who were under adult supervision. Laura and Frieda evidence that within schools demo culture hinders the development of more positive identities. As a result, young people were not allowed the freedom to access social media, to control knowledge about culture, and to develop more positive self-concepts. Ms. Herbert's students designed private lounge spaces to process their gendered and racialized identities without the interference of adults. The public spaces that Laura and Freida designed were contested spaces where students were unable to process their identities online.

During the design challenges, Mr. Landry's students resisted demo culture through language in use and refusing to explain their prototypes. Mr. Landry's students' resistance to demo culture evidences how it can be a hindrance to both developing identities and literacies. Like Mr. Landry's students', Georgia refused to participate in the "Ode to Someone I Love" design challenge, because it contradicted the truth of her lived experiences. She and other students resisted making projects that did not reflect their private lives. This refusal limited their abilities to develop criticality in their designs and new literacy practices. In fact, nearly one-third of Ms. Kish's students were absent from the design challenge, effectively evidencing that demo culture can be detrimental to developing literacy practices.

## Chapter Six

### **Make-Her-Spaces as Hybrid Places: Designing and Resisting Self-Constructions in Urban Classrooms**

In this chapter, I address how access to technologies influences students' identity processes and critical literacies. Design thinking is a learning approach, which suggests that students learn best by designing and making tangible artifacts in locales that are termed "makerspaces." Findings reveal the ways that young women who lacked access to digital tools in their makerspace (classroom) nonetheless used design thinking to negotiate their gendered and racialized identities. This chapter also reveals how young women designed and resisted constructions of themselves by participation (and lack thereof) in design thinking activities. Findings reveal that students resisted participation in demo culture and struggled with developing positive self-concepts in their schooling environment. The classroom became what I call a "hybrid place." I define hybrid places as both real places where young people struggle to develop self-worth and imagined spaces in which identities are formed and contested. Hybrid places are a fusion of both places and spaces where youth learn to develop positive self-concepts through design of artistic representations and envision being constructed by adults.

Place "is subject to transformation through social and technological innovation, and through various levels and means of association and experience", according to Janelle and Hodge (2000). As such, the design challenges afforded the students the opportunity to imagine themselves as positively constructed. However, their imaginings were a hybridization of the future with the present reality. Students in this chapter conceived of their futures and envisioned ways that they continued to be devalued.

The goal of this chapter is to better understand the relationships between what is learned, what is made, and the development of positive self-concepts. To do so, I investigated ways that a teacher, whose makerspace had limited access to digital tools, assisted her students in developing both new and critical literacies by instructing them to make an "Ode to someone that [they] love(d)" in a design challenge.

#### Discussion/Analysis

Ms. Kish and her three female colleagues developed a three-week unit to scaffold toward the design challenge. The task of the design challenge was for students to make an "Ode to someone that [they] love(d)." At the beginning of the unit, Ms. Kish's students watched a video in which the speaker discussed ways that both family and the media criticized young women's appearances, causing young women to develop poor concepts of body image. The video pointed out that as a result of feedback from families and the media, young women may internalize negative self-concepts.

After the video, Ms. Kish's students were told to think of a heart that belonged to a young child and to brainstorm words adults might say to give that child a negative self-concept. For each hurtful statement, Marisol, a Latina student, wrote a red letter "X" inside

of the heart the teacher had drawn on the whiteboard. During the second week, the young women designed journal covers filled with people, places, things, and ideas that they loved. Finally during the third-week of instruction, the design challenge task was for each student to design an “Ode to someone that [she] love[d],” beginning with a written piece and then ending with a three-dimensional object.

Examples from this chapter evidence ways that hybrid places inform racialized and gendered identity processes and students’ new and developing literacies.

### *How Hybrid Places Inform Identity Processes.*

The design thinking processes lead to what I call “hybrid places,” which are both real places where young people struggle to develop self-worth and imagined spaces in which identities are formed and contested. During the scaffolding opportunities leading up to the “Ode to Someone I love” design challenge, difficulties arose for the young women. Some of the young women had initially expressed a lack of understanding of the concept of love. They said things like “I don’t know what love is” and continued to state this even after the class brainstormed a definition and Ms. Kish wrote it on the whiteboard. When asked to brainstorm experiences that might lead to the development of negative self-concepts, young women shared ways they had been neglected and abused. Brenda, an African American student, said, “My mother calls me bitch all of the time.” Linda, a Latina student said, “Hispanic families always call their kids pinche puta (fucking whore) and beat them.” Other young women pointed out that, as a result of the difficult experiences in their lives, a young woman might “shut down” or “commit suicide.”

After expressing ways students had been verbally and physically abused, they were asked to envision themselves as being positively affirmed. Following the activity that led to a child’s heart symbolically filled with red letters “X” on the whiteboard, the young women were instructed to make their own hearts and populate them with positive affirmations of themselves. Not all of the young women completed this assignment. Several of the young women sat without making hearts. Others made hearts that were not populated with positive affirmations. Rather, the hearts were filled with either hash marks or names of internal organs such as “liver” and “kidneys.” One African American student, Georgia refused to participate in the activity after she expressed anger at having been neglected by her mother. The following is an excerpt from my field notes:

Georgia shouted, “That is so fucked up!” Anna, another African American student, who was seated near Georgia’s desk asked, “What?” Georgia responded, “She told me to eat when I get home. There is no fucking food in my house!” Georgia then put her sunglasses on and sat at her desk without making a sound for the rest of the class period. (Field Notes October 2012).

The refusal to participate played out in both young women’s lack of involvement in the scaffold activities, and their absenteeism from the design challenge. In fact, on the day of the design challenge, approximately one-third of the students were absent from Ms. Kish’s class, including both Georgia and Brenda. Ms. Kish’s classroom became a hybrid place. The hybridity existed between the current local of the classroom and the future space where they envisioned continually being devalued at the hands of adults. Therefore, several of

them were unable to positively process their racialized and gendered identities using the design challenge.

For those young women that were in attendance, sharing what they made became an issue. They expressed a desire to control the elements of their designs that would remain public and the elements that would remain private. For example, Ms. Kish asked one Latina student, Berenice, seated near me to show me a card that she was making. Once I began to read the card, she said, “You know I really did not want anyone to read that” (Field notes October 2012). The Friday following the design challenge, Ms. Kish told her students that they had to present what they had made to a group of ninth graders. After hearing the instructions, several of the students expressed trepidation about showing the “odes” to their peers. They said things like, “this is personal” and “I only want the person I made this for to see it.” To respect the students’ privacy she decided to have the young women limit sharing to details of construction, rather than require them to reveal the more intimate details of their artifacts. Those youth who were able to overcome the difficulties of their experiences made artifacts that included letters, journals, poems, manifestos, and sculptures. The odes that students were able to make despite their limited access to technology evidenced that design thinking processes have affordances for processing racialized and gendered identities. The hindrance to processing identities lies in demo culture particularly for students who have refused to process their private experiences within the public space of the classroom.

To find out the relationships between access to technologies and students’ identity processes students as evidenced by what they had made I conducted informal interviews . Since Brenda and Georgia were both absent from the design challenge, I conducted an informal interview with Brenda the day that she returned. The Friday following the design challenge, Ms. Kish asked her students to share “odes” with 9th graders from an adjacent classroom. Ms. Kish instructed the young women that they would have to complete a reflection sheet on their odes after presenting the artifacts to peers. After hearing the assignment, Brenda said, “I didn’t make an Ode so I am going to share my journal cover. I know we are supposed to share an Ode to someone we love, but I am going to share this cover because I love myself. Do you think that is selfish?” (Field Notes, November 2012). I informed her that I did not think she was selfish, pointing out that there was nothing wrong with letting others know that she loved herself. Brenda was concerned because she had not completed an ode for someone else due to her absence. Instead, she decided to present the journal cover she made the week prior to the design challenge. What became evident is that the hybrid place informed Brenda’s ability to participate. Brenda was absent from the real place of the classroom because she envisioned being devalued by her mother and was unable to construct an ode for her or anyone else in her life. However, she was able to use low technology to develop an artistic representation that assisted her in processing her identity.

Brenda’s journal cover was not an ode to someone else; additionally it was not completed the way that Ms. Kish had instructed. The teacher asked students to populate the journal covers with people, places, things, and ideas that they loved. However, Brenda’s journal was more abstract. The journal cover contained a heart filled with a purple, red and gold pattern. Brenda explained, “These horizontal lines that are going up represent survival,

the vertical lines they intersect with that represents struggle. You know there is a clash between the lines. But they keep building on each other. That's like, you know, the tree of life. I also picked these colors because they are the color of royalty." Brenda told me that she was an artist. She said, "You know why I am an artist? It's because an artist takes the stuff that no one else wants" (Field notes November 2012). Brenda thought that sharing her journal would be a way of sharing self-love. She pointed out that her art was a form of rescue as she made things out of scraps others devalued. Although Brenda had limited access to technology, she was still able to develop an artistic representation that assisted her with processing her identity and evidencing self-love. She identified herself as an artist and used her art to create a transformative work.

In a follow up interview, Ms. Kish informed me that she thought the young women were excited about making certain artifacts while frustrated with the design challenge. For example, she observed that the students enjoyed making the journal covers because it meant they were making something for themselves. Ms. Kish believed that this was a way that students evidenced self-love. However, she expressed that involvement in design thinking was wearisome for her students despite participating in several activities to help conceptualize and represent love:

I think they feel frustrated by the design challenge. Part of that is that they don't feel like pressure to be there. It is not high stakes to not come because there is not a lot of content in other classes.

According to Ms. Kish, it was exhaustion that led to students' absenteeism. She was disappointed and saddened that nearly one-third of her students were absent from the design challenge. I suggest that students' resistance had to do with their refusal to participate in demo culture within the hybrid place of the classroom. The students were limited in the access to technology needed to process their personal experiences and develop more critical literacies. Students refused to share their private artifacts in the public space of the classroom.

Ms. Kish pointed out that because of the lofty concepts that are being tackled within design challenges she was unable to assist students who missed the material. She felt that the classroom was not the place where students generally tackle issues such as love. She articulated that students were being asked to be vulnerable at school. Many of the youth found this difficult. For example, rather than desiring to share what they made, several of the young women desired privacy. Ms. Kish spoke of Anna who refused to share what she made:

[Anna] made a really touching letter for one of her friends she wouldn't show me. I think she didn't want to share it because she comes off as a really tough person. Even though she comes off as a tough person she still wanted to express love to someone.

Ms. Kish was saddened by the frustration that her students experienced with design thinking. She maintained that as a teacher it is difficult to facilitate the design challenges with students who are disinterested and disengaged. Ms. Kish said, "It is hard to go through the whole day and seeing the look on their faces like I don't want to be here. I feel very trapped. I feel like there is nothing I can do about it" (Interview, Ms. Kish November 2012). Ms. Kish pointed out that despite her efforts to make the design process interesting to her students, several of them refused to participate. She felt "trapped" because she was

required to make her students participate in the design challenge even though several of them did not want to be involved. As a result of their refusal to participate, students were stunted in their abilities to develop critical literacies.

### Conclusion

This chapter reveals that the relationships among hybrid places and developing racialized and gendered identity processes. Several of the young women struggled to develop ideational resources and translate these into tangible “stuff.” In other words, they resisted the construction of an image of themselves that would belie the negative constructions that were forced upon them by their families, school, and the media. Young women in Ms. Kish’s class seemed to demo culture, which was evidenced by their struggle with the conflict between social contexts. There was disjuncture between the idea of constructing a public entity that would represent positive self-concepts and the reality of their private lives. Design thinking is a user-centered process requiring designers to participate in demo culture and develop a point of view about a problem prior to developing its solution. However, as young women shared their points of view regarding personal experiences, approximately one-third resisted further participation in the process by absenteeism. For example, Georgia expressed ways that she was neglected at home and refused to make either a heart or an ode at school.

Hence, Ms. Kish’s students’ critical awareness of their lived experiences hindered some of their participation and their development of ideational resources and thereby more positive identities. As a user-centered process, design thinking aims to develop products that solve problems through continued iterations. However, at Dimension the process ended at the test phase. Ms. Kish articulated that she wanted her students to find participation in the design challenge meaningful. However, some students resisted making prototypes for themselves. Ideally, as young women make things they exhibit positive self-concepts as expressed through what is made. Yet, resistance to making artifacts may evidence something more than a lack of self-love.

Although Brenda was absent during the design challenge, she still participated in the final step of the design processes. She tested her design by sharing her journal cover with me. She chose not to make an ode for someone else. However, she demonstrated positive self-perceptions by making an ode for herself. As Brenda’s journal cover suggests, these young women’s lives were a mix of struggle and survival. I contend that the lack of participation evidences the instantiation of relationships that young women have to themselves, peers, teachers, school, and the media. In other words, it was difficult for some of the young women who were victims of negative social constructions to deconstruct the negative images and reconstruct positive self-images and identities.

Although some students were able to make meaning as they designed individual projects using limited technologies that helped them to develop more positive identities, other young women did not make “tangible stuff.” This was evidenced in the heart activity as the young women expressed experiences with abuse and were therefore resistant to making hearts with positive affirmations. However, hybrid places allow for marginalized students to develop more positive self-concepts by designing artistic representations of

themselves and their lives. Despite sharing experiences of abuse, Brenda's journal cover was an abstract representation of her lived experience that allowed for her to express self-love and process her identity. As Brenda said, "the artist takes the stuff no one else wants."

This work also evidences a relationship between design thinking processes and Freirian critical literacies. Freire (1970) pointed to a need for a critical awareness of reality. Involvement in the scaffolding activities brought to the fore the pain of students' lived experiences. Design thinking afforded them the opportunity to design a heart populated with positive affirmations. Georgia and Anna's unwillingness to complete hearts evidenced that they were both critically aware of their realities. They were unwilling to design something that would be an injustice to the truth of their lives within and beyond school. In other words, designing a heart that positively affirmed them would be the same as designing an untruth. Kelley (1997) pointed out that artists find pleasure in making representations of their experiences.

These young women's refusal to participate suggests that they refused to design a representation that was forced upon them. There is, then, a relationship between criticality in design and the formation of identities. As these young women constructed and resisted constructing representations of their lived experiences, they evidenced what Brenda described as "the clash between struggle and survival." Students in this study struggled to develop new literacies as their self-concepts influenced their willingness to design and to share what they had made. We can see that, although the design challenge afforded the young women with the opportunity to deconstruct and reconstruct self-images, they were not able to redesign their places in the world. Ideally the process would assist them in the development of self-confidence and enable them to present and to share with their peers. However, social constructions and the need for privacy overshadowed their willingness to design and their need to share their designs.



## Chapter Seven

### Learning to Unlearn: Towards 21<sup>st</sup> century Literacies and More Positive Identities

#### *Conclusion.*

This study addressed the relationships among teachers' identities and their learning to use tools afforded in training and classroom practice. Additionally, this work explores how access to technologies influences students' identities and their developing new and critical literacies. Findings for this study suggest that teachers' identity processes are influenced by their access to technology. Teachers in this study evidenced influential identities. Influential identities are ways of being that inform how teachers guide students' learning with technology to mirror teachers' perceptions of digital texts and tools. As a result, teachers' identities influence their facilitation of the design thinking processes. The teachers in this study used technology in their classrooms based upon their previous exposure to and access with digital texts and tools. As such, influential identities informed how teachers guided students' learning. Teachers guided students' learning to echo their own experiences with technology. Thus, this study suggests that influential identities inform teaching and learning.

Findings also reveal that teachers were able to use their learning experiences in schooling to develop tweaking pedagogies. Tweaking pedagogies are ways that teachers alter and improve upon the resources provided in professional development to facilitate students' learning of new and critical literacies. This work suggests that tweaking pedagogies have affordances for teachers with limited experiences with digital technology who wish to augment training and facilitation of design thinking processes within their classroom practice. This study suggests that as a pedagogical approach, tweaking pedagogies provide ways for teachers to address barriers to developing new literacy practices for traditionally underserved youth because teachers were able to deconstruct the learning processes and push students to process traumatic experiences using digital texts and tools.

Moreover, this study reveals how tweaking pedagogies support students in developing canvas literacies. Canvas literacies are new literacy practices that allow urban students to create artistic representations by developing digitally mediated projects that unpack traumatic experiences in their personal lives. Although Dimension was an under-resourced school with limited access to digital resources, canvas literacy practices afforded teachers with opportunities to support students in creating digitally mediated projects that broke down walls. As a result, students were able to unpack traumatic experiences over time using digital technologies. This work suggests that tweaking pedagogies can develop canvas literacies that support teachers from under-resourced schools in assisting historically marginalized students' developing new literacy practices.

Although teachers received limited professional development with technology, some teachers were able to use their own personal and professional experiences to develop tweaking pedagogies. Dimensions' teachers learned the design process; however, they did not receive training on how to support students in processing the more difficult issues occurring in their personal lives. Therefore, teachers relied upon their personal experiences to support students' learning of literacies and development of more positive identities.

This study also shows relationships between teachers' identities and their use of digital technology in classroom practice. Despite Mr. Landry and Mr. Freedman's differing experiences with technology, they both facilitated students in navigating through their personal hardships, thereby fostering learning across social contexts. The teachers both allowed students to have ownership over their projects and "pushed" them to process their experiences. This study suggests that irrespective of teachers' previous experiences with technology, they can support students in "creating canvases" that are a means of processing more difficult experiences in their lives and thereby developing both new and critical literacies. Mr. Landry and Mr. Freedman's students were both able to make sense of their lived experiences at home by creating digitally mediated projects at school. These students broke down protective walls through creating artistic representations of their lives. The teachers were able to support their students in using digital media to unpack painful experiences. Opening up about experiences with bullying and loss allowed them to design digitally mediated prototypes using technology in their classrooms.

In addition to teachers, this work also reveals findings on the relationships among access to technologies and students' developing new and critical literacy practices. Findings suggest that design thinking, as participatory cultural practice, informs racialized and gendered identities and encourages demo culture. Demo cultures are schooling practices that emphasize presenting projects to draw visceral responses from audiences. Other Researchers define participatory popular culture as interest-driven spaces where youth create, distribute, and remix cultural productions (Jenkins, 2006; Williams & Zenger, 2012). This study reveals that the design challenges required students to present what they made to peers; however, some students were resistant to demo culture and instead developed private spaces to process their racialized and gendered identities (or not). Students in this study clearly demarcated the differentiations between public and private spaces for processing their racialized and gendered identities and for involvement in participatory popular cultural practices.

Additionally, findings reveal relationships among resistance to demo culture and developing new and critical literacies. Students' resistance to demo culture stifled students' abilities to develop new and critical literacies. Although design thinking processes afforded students the opportunity to develop empathy for each other and process difficult experiences, students' developing literacies practices were limited by access to technology within the school site. As a result, demo culture hinders students from developing more positive identities and new and critical literacies.

Findings for this study also suggest that students who lacked access to digital tools in their makerspace (classrooms) used design thinking to negotiate their gendered and racialized identities. Students had limited access to laptops in their classrooms. The

two laptop carts were shared by all twenty of Dimension's teachers. To use the laptops teachers were required to reserve them in advance. Findings reveal how students resisted demo culture by participation (and lack thereof) in design thinking activities. Findings suggest that students resisted participation in demo culture and struggled with developing positive self-concepts in their schooling environment. The classrooms became hybrid places. Hybrid places as both real places where young people struggle to develop self-worth and imagined spaces in which identities are formed and contested. Findings suggest that hybrid places fuse both places and spaces where youth learn to develop positive self-concepts through design of artistic representations and envision being constructed by adults. The design challenges afforded the students the opportunity to imagine themselves as positively constructed. However, their imaginings were a hybridization of the future with the present reality. Students in this study conceived of their futures and envisioned ways that they continued to be devalued. Students evidenced limited criticality and difficulty processing identities within hybrid places.

According to Kafai and Harel (1991) "Only when students are ready for [an idea] will they appropriate it. We believe that the basis for appropriation has to do not only with social aspects of learning but also with child's readiness." This research indicates that one's own identity processes can hinder her readiness. Rather than become appropriated, ideas and learning can be resisted. This calls for a reinterpretation of what has been shared. Rather than assuming that the students were not ready to learn, this work evidences that they were not ready to unlearn. That is, these young people had already learned what it meant to be constructed. What some of them shared with others was an instantiation of the negative self-concepts that had been appropriated from social constructions. This research evidences that young people's desires are influenced not only by their own self-concepts but also by their access to technologies. Self-concepts are developed in concert with the influences of their surroundings, including their access to material, ideational, and relational resources.

The teacher, then, as facilitator, must act in such a way that supports the development of relational resources for students who need to unlearn. According to constructionists, meaning is made through tangible artifacts that are built and shared. As Ackermann argued, "if our minds, senses, and bodies are expanded through use of personal and cultural tools, then these tools become incorporated, and integral part of ourselves" (p.27). Students in this study suggests that the tools that were created by others negatively influenced their concepts of self and hindered their ability to form their own tools. The design of hybrid places shows a relationship between access to digital resources and the development of positive self-concepts.

Further, this study reveals relationships between access to technologies and racialized and gendered identities. Nasir (2012) pointed out that young people socialize into identities and there is a need for schools to provide them with resources to develop positive concepts of self. The students in this study illuminate ways in which having less influenced students' concepts of themselves. Within this urban schooling, teachers and students used digital media to (re)conceptualize the concept of "value." Despite differential experiences

with technology, some teachers supported youth in creating artistic representations that valued their lived experiences, including those of violence, pain, and loss. This work shows ways that teachers can use technology to support students in developing more positive identities. Teachers valuing students' experiences fosters learning by supporting students in creating digitally mediated projects that develop more positive identities.

Further, this study reveals that young people's developing new and critical literacies is complicated by their lived experiences. Within schooling contexts, youth who believe that adults are the only ones vested with authority have difficulty using digital spaces to process their identities. Therefore, *demo culture* can be detrimental to low-income Latino/a and African American students who require safe spaces to process their racialized and gendered identities. It also suggests that teachers must be equipped to facilitate relationship building and processing of traumatic experiences for traditionally under-served youth. Students in this study invoked several resistance strategies that impeded their developing new and critical literacies. Students resisted through absenteeism, lack of participation, language use, and privacy. What became evident was the need for further iterations and the development of mutually constitutive processes to assist students with developing more positive identities.

According to Carpenter (2012) online communities are embodied spaces that mirror the real places of the classrooms and home. At Dimension students built walls that protected them from the pain of their lived experiences. Carpenter (2012) argues that space both real and virtual are embodied and imbued with cultural contestations. His "concern is that in embracing these online communities as important places for fostering transnational perspectives, cultures, and literacies, we may neglect to fully acknowledge the complex manner in which virtual space is tied to local material-metaphor places" (p.206). This work shows that students need virtual and real spaces to unlearn and to develop new and critical literacies. Otherwise, students resist developing these literacy practices despite that design thinking has affordances for both action and reflection.

### *Implications.*

It is important for researchers to examine ways that teachers are trained to support students' unlearning and ways that teachers and students come to value themselves as they negotiate their places in the world. Research should explore ways that teachers facilitate and evaluate students in making digitally mediated solutions to the problems that affect students in their lives. It is important for educators to support youth interests and positive identities within schools through mutually constitutive processes that break down walls.

Researchers might examine ways that students who have less are able to conceive of doing more with less. Finally, researchers should examine ways in which hybridity is formulated in places where students lack access to material resources. Future research might investigate further the role of the teacher in unpacking toolboxes that inhibit more positive identities and developing literacies. Perhaps then educators might assist all students in the development of positive self-concepts and unlearning.

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Appendix A

City and Dimension Demographic Chart

<b>Race</b>	<b>City</b>	<b>Dimension</b>
White	56%	2%
African American	13%	30%
Latino	9%	60%
Asian	16%	Less than 1%
Other Races	10%	8%
Free and Reduced Lunch	39% (across the entire school district)	80%

Appendix B  
Transcription Coding

<b>Transcription Grid Name of Teacher</b>	<b>CODES</b>	<b>Main points How does this connect/Potential themes?</b>	<b>Examples from Transcripts (please include page number)</b>
Interview KM 3 29 (Kish)	<b>Student voice— tension between teacher authority and student empowerment</b>	<p>Through this, it seems as though she wants to empower her students and meet them where they are. She's unsure of how to do that, but ideally I think she would like her students to be empowered in their own knowledge.</p>	<p>I'd also really like to figure out a way to help students know what they already know, and know where to start. I have suggestions for them but for some of them, I think it's difficult for them to know where to start. So that's where I'd really like to start. (7)</p>
	<b>Privacy— Tension between</b>		

	<p><b>demonstration of designs and personal nature of what students were asked to make</b></p>		
	<p><b>Technology Access-availability of technology in the home and the school</b></p>	<p>She refers to how resourceful Kahn Academy has been to her classroom instruction</p>	<p>I've been using Kahn Academy in the classroom where a student gets to work on individual skills through this website...that has been a useful piece of technology that we've been doing" (2)</p>
		<p>She strives to bridge the gap between what her students have at home, and what they have in the classroom</p>	<p>I taught some of my students how to find a scientific calculator application on their ipods and on their phones,</p>

		Recognizing the resource gap of those who don't have calculators at home	because not all of them have calculators at home, and so, even though I don't let them use it in class, because I have calculators, I tell them you can use those at home. Even if you don't have the resources to have a separate calculator, this is just as good. (8)
		She takes full advantage of the online resources that the textbook provides and most likely incorporates it with her classroom instruction	The text book that I use is CPM, and they have a really extensive website with a lot of resources, and they actually have these animations that are linked up with specific lesson (5)
	<b>Influential identities — The ways that teachers'</b>	This passage demonstrates how her personal connection to being that student who	"One of the things I think about a lot is that most people did not feel comfortable in their

	<p><b>identities influence their practice and student learning</b></p>	<p>doesn't understand the material has helped her understand how the kids in her classroom may feel.</p> <p>Because of this identify connection, she is more empathetic to her students and understands how math can be "terrifying". As a result, her classroom will be a space for students to be honest about their understandings or misunderstandings.</p>	<p>classroom, being who they are, knowing what they know. The people who feel the most comfortable are the people who have A's, who get everything ...and I've been that person I feel like all of these people get it, and I don't, and I feel isolated because of that. And I think that this Design Challenge is giving us the opportunity to kind of open up doors for honesty, and being authentic about how we actually feel and how we actually think, and I think that if we're not willing to do that, then we're not going to be in that zone where we're stretching. So I see it as completely relevant, especially in Math.</p>
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			<p>It's a really terrifying subject for a lot of people, and they want to hold in their questions, they want to hold in their confusions, and just kind of either pretend like they don't care, because it's easier enough to care and fail, than to care a lot, and still not get it...And I think that we would all benefit from having real conversations if people were actually saying, "Actually, I don't get that. Would you mind helping me with it?", or people saying "I understand it, and I wanna help", and having that be an authentic reaching out to each other. So I see it as really exciting and useful.</p>
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		<p>She's trying to find the boundary of being able to identify with her students socially, but at the same time, remain the professionalism of being a teacher.</p>	<p>"I see the value of also being connected with students, but I haven't done that because I'm afraid of what kind of information they have, and feeling like it's not appropriate for me to know that about them, and I feel like there should be some distance of some kind. I don't know, I'm still thinking about it" (4)</p>
	<p><b>Expertise— The skills that teachers have with technology and how this influences their practice</b></p>	<p>Because she has expertise from the training of the whiteboards, she is able to effectively use it in her classroom.  The knowledge of this technology influences</p>	<p>"One training is for the whiteboards, and we got everything that we needed and we also know what to do to make it work. And because I know how it works, I can also have that conversation with students</p>

		<p>her teaching practice and as she describes, “the technology is the launching pad for even more discussion about what’s going on and why it’s working the way it is.”</p> <p>Perhaps other teachers in low performing schools don’t have much expertise with technology, so they are not able to help their students in the capacity that they would like.</p>	<p>who are interested because it’s kind of amazing when you see it and it’s neat to have that connection. And having them ask how it works, and me being able to tell them, “this is how it works”. It’s not just me using the technology, but the technology is the launching pad for even more discussion about what’s going on and why it’s working the way it is” (2).</p>
		<p>Knowing how to use the technology leads to a higher frequency</p>	<p>“I got trained on how to use the laptop cart which is really useful too, because I</p>

		<p>of using technology in her classroom (<u>ex:</u> used “pretty much every week”)</p>	<p>think that the more you know how to do something, the more willing you’re going to be to use it. So I use the computers pretty much every week, because I know exactly what to do.” It “is really helpful because I can actually functionally work with them. I know what’s going on with them, and I think that that distills some of the fear and anxiety that I would normally feel around technology” (4)</p>
	<p><b>PD Influence—the role that PD has on teachers facilitation of design</b></p>	<p>Key point that teachers should not operate in isolated bubbles. They should be engaging and supporting each other in their teaching</p>	<p>It “helps us be much more united in the way that we teach, and we’re much more aware of how other people are thinking, and we’re not just these isolated teachers doing our own things in our</p>

	<b>challenges and their use of technology</b>	practices. It may help to provide feedback of what's working and what's not working in their classrooms	own classrooms” (2)
		Individualizing instruction may be a great support to her students who are at different stages and have different paces of learning	“I've also been pushed to individualize my instruction a little more through Professional Development (2)
	<b>Social justice--The ways that teachers beliefs about society influences their teaching practice</b>		

## Appendix C: ATLAS TI Coding Report

### All current quotations (28). Quotation-Filter: All

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HU: AtlasTI Test  
File: [C:\Users\Shanga\AtlasTI Test.hpr7]  
Edited by: Super  
Date/Time: 2013-12-16 08:23:46

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**P 1: welcome.png - 1:1 [welcome.png] (370:445) (Super)**

Codes: [This is a Code]

No memos

P 1: welcome.png - 1:1 [welcome.png] (370:445) (Super)

Codes: [This is a Code]

**P 2: Norris--Make-her-spaces--Forthcoming 2014.pdf - 2:1 [Georgia shouted, "That is so f.."] (@578-@417) (Super)**

Codes: [Misbehavior - Family: Deflection by Acts of Resistance] [Privacy Wall - Families (2): A Safe Space for Privacy, Deflection by Acts of Resistance]

No memos

**P 2: Norris--Make-her-spaces--Forthcoming 2014.pdf - 2:2 [[Anna] made a really touching ..] (@659-@581) (Super)**

Codes: [Privacy Wall - Families (2): A Safe Space for Privacy, Deflection by Acts of Resistance]

No memos

**P 2: Norris--Make-her-spaces--Forthcoming 2014.pdf - 2:3 [who are disinterested and dise..] (@531-@446) (Super)**

Codes: [Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memo

**P 5: Its not racist if I talk about myself.docx - 5:1 [Ms. Herbert the sixth grade teac..] (39:39) (Super)**

Codes: [Humor-Deflection - Family: Deflection by Acts of Resistance]

No memos

Ms. Herbert the sixth grade teacher (all names of people and locations have been provided pseudonyms) asked her sixteen female advisory students, “What does it look like when people show you that you are valued or loved?” A dark brown complexioned African American girl named Bianca who was seated near me said, “My family loves me and they show me they love me.” Then Bianca turned to the girl sitting on the other side of her, Jackie, a lighter skinned girl who looked to be biracial and said, “Well that is as long as I don’t bring no babies home. If I had a baby my family would bring a cradle for the baby and a coffin for me!” Ms. Herbert and other students started laughing (Field notes 3/28/12).

**P 5: Its not racist if I talk about myself.docx - 5:2 [The focus question for the DC ..] (73:73) (Super)**

Codes: [Empathetic Mindsets - Family: Deflection by Acts of Resistance]  
[Space for Identity - Family: A Safe Space for Privacy]  
No memos

The focus question for the DC was being projected from the smart board. It read, “How do we create a school environment in which are differences are valued and appreciated?” As the girls began brainstorming group agreements I overheard Bianca say aloud, “I don’t like being black.” Laura, a Latina girl, who sat across the circle from Bianca and me said, “That is racist!” Bianca then replied, “No it is not racist because I am talking about myself.” Amirah, another biracial student who was of a lighter complexion, asked, “Do you mean being black, or dark skinned?” Bianca said “I don’t like being black. And I can’t wait to get out of here. When I move away from here I won’t have to worry about being black no more.” I looked to see if Ms. Herbert had overheard the discussion, but she did not seem to hear what had transpired.

**P 5: Its not racist if I talk about myself.docx - 5:3 [The girls facilitated the “int..] (74:74) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy]  
No memos

The girls facilitated the “intention setting” activity and asked each of the participants to write one thing that they hoped to get out of today. All of the girls in the class wrote their intentions. They then folded the post its and placed them in the center of the room. They were asked to pick one that did not belong to them and to read it aloud. Almost every girl read a post it note that said that they wanted to “go outside”, “to enjoy the sunshine”, or “to go to the park”. The girls got their wish and they walked to the park that was located around the corner to conduct the “common ground” activity. As they walked to the park I noticed that the girls were grouped by race despite differences in ethnicity. The Latina girls walked together and the African American girls walked together.

**P 5: Its not racist if I talk about myself.docx - 5:4 [During this activity, Jackie s..] (75:75) (Super)**

Codes: [Misbehavior - Family: Deflection by Acts of Resistance]  
No memos

During this activity, Jackie shouted out, "You're white too, stupid!" She was standing next to Ms. Herbert in the circle and was shouting at Amirah who was standing on the other side of the circle by me. Ms. Herbert turned abruptly to Jackie who said, "She called me a stupid white girl! So I told her she is white too." Ms. Herbert then told Amirah "That is enough of that. I am telling you right now, if I hear of you saying anything like that again, you will be out of here so fast!" Amirah nodded and looked down at the grass.

**P 5: Its not racist if I talk about myself.docx - 5:5 [” The girls began to express n..] (79:79) (Super)**

Codes: [Refusing Presentation]  
No memos

” The girls began to express nervousness about presenting to the older girls in 9<sup>th</sup> grade. They asked, "How long do we have to stand up there?" and "Do we all have to speak?" One Latina girl named Shelly said, "I don't want to say anything. Why do we have to present to them?" Ms. Herbert directed them to write their ideas on post it notes. She pointed out that they only had an hour to make something to present.

**P 5: Its not racist if I talk about myself.docx - 5:6 [When I asked them how having a..] (81:81) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy] [Space for Learning]  
No memos

When I asked them how having a computer lab/library could assist them with valuing differences Laura said, "You can learn about other people and cultures in the library. You could read about them. Or you could look it up on the Internet." Laura and Frieda, the other Latina student in the group, both told me that they felt the lab should be open to the community. However they felt it should have strict rules about use. They said they felt like there was not an adequate space to study at Dimension. They pointed out that other students are loud and rambunctious during study hall. They envisioned the computer lab to be a quiet space that required students to complete homework assignments afforded them by teachers

**P 5: Its not racist if I talk about myself.docx - 5:7 [Bianca, Amirah, Jackie, and th..] (81:81) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy]

No memo

Bianca, Amirah, Jackie, and the two other girls in their group designed two lounges replete with couches, lamps, and high definition television sets, and activities including video games. With the use of Ms. Herbert's laptop, they were able to download pictures from the Internet to use in their display. There were two girls that designed the process for electives.

**P 5: Its not racist if I talk about myself.docx - 5:8 [Ms. Herbert hoped that the activ..] (87:88) (Super)**

Codes: [Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memos

Ms. Herbert hoped that the activities within the DC would provide opportunity for girls to develop relationships and overcome differences. I mentioned to her that I overheard Bianca's statement about being black and asked her if similar comments come up like that in class. She said that she had not heard of those types of comments being made by the students. Ms. Herbert said:

I think it is kind of interesting and kind of difficult as a teacher to figure out, you know, what we are going to talk about. When those things do come up, it's like some things need to be addressed immediately. And some things...we have to get through these activities and we have to get these things done. So I don't think that things have come up quite like that.

**P 5: Its not racist if I talk about myself.docx - 5:9 [Ms. Herbert believed that the DC..] (89:90) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy]

[Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memos

Ms. Herbert believed that the DC was an opportunity for students to develop comfort with bringing up topics of identity such as the ones raised by Bianca. She said that although teachers were not always prepared to facilitate such discussions the DC had created a safer space for young people:

So I do think that with the design challenge there is a greater comfort with discussion of topics that are a little more sensitive maybe. I don't know that we are super equipped to deal with the topics. But I think the kids do feel comfortable enough in this environment where they can bring those things up or to talk to us individually about it.

**P 6: Transcription SW 5.docx - 6:1 [Not really I was really disapp..] (25:25) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy]

[Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memos



Not really I was really disappointed in the last one. I think had its kind of selfish of me but I really wanted that space for my advisory. There was so much potential for us to go deeper in our relationships and when we added another group to it changed the group dynamic. It changed the level of trust in the room and we lost that opportunity. We came back the second day of the DC and it was better but I think it could have been really transformative.

**P 6: Transcription SW 5.docx - 6:2 [The feedback was actually real..] (27:27) (Super)**

Codes: [Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memos

The feedback was actually really positive. So the same tensions came up like what do we do with this. But there were a lot of advisories that did experience the group dynamic shift. So that was met within advisory. As a school community I don't think that it has moved from the classroom advisory to the school. But within particular advisories advisers were saying that they saw transformation happening

**P 6: Transcription SW 5.docx - 6:3 [Kids were not liking being in ..] (34:34) (Super)** Codes:[Space for Identity - Family: A Safe Space for Privacy] [Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memos

Kids were not liking being in the same room together so we decided that there was not enough safety to go there. But then I think you know that maybe some of my own fears of that got in the way of where we could have gone. Because I know that some of the other, like with the boys advisory uhm there was a lot negativity in the morning like I don't want to be here this is boring and they just pushed on ahead. I don't think they did the dot activity specifically but they got to the step into the circle and share something about yourself. And the boys actually allowed themselves to be vulnerable in that circle. But I also think that there was a different dynamic with the male population of the 9<sup>th</sup> grade vs. the female population of the 9<sup>th</sup> grade. But you know I don't think that I made the wrong choice to modify the agenda. Because I do have a lot of experience with building community. That was the work that I did for two years at the organization that I did no that went into schools and did the project based learning. So I feel confident in my ability to assess the safety the level of safety. So but I think that we had built enough community within the one advisory to do that but in the context of the two I don't think there was.

**P 6: Transcription SW 5.docx - 6:4 [ Uhm there was an idea that o..] (36:36) (Super)** Codes: [Space for Identity - Family: A Safe Space for Privacy]

No memos

. Uhm there was an idea that one of my advisees brought up and we had a really interesting discussion about it. She wanted to throw a carnival or a fair for the sixth

graders. And she asked me before advisory if she could share that idea. And I said “Yeah” you know that’s great. This is a really shy girl. I was actually talking to her mom last night and her mom was like “I am just amazed at the way that she has blossomed this year.” We had a long discussion about it where they talked it out. In the beginning everyone was against it. In the end there were 8 people who were for it, 8 “I’ll do it but I’m not like super juiced about it”. And one who was a no. And the one who was a no was like “Okay I’ll do it.” And just that discussion amazed me. Number one that this student who is kind of you know an outsider in the 9<sup>th</sup> grade class uhm and who didn’t really have that many friends outside of advisory in our advisory. But that they really supported her in that way. And considered it and they talked it out with very little prompting from me. It all came from them, and I tried my best to just stay back and let it organically happen. And so I really wish that we could take that up. And again we could take that up but given all of the things that I’m doing at the school I just don’t have the capacity. I have to be honest with myself I am not going to organize a carnival..

**P 8: KVChanging Privacy Settings Findings.docx - 8:1 [During the first day of the “H..] (6:8) (Super)**

Codes: [Privacy Wall - Families (2): A Safe Space for Privacy, Deflection by Acts of Resistance] memos

During the first day of the “How Might We Get Our Hands Dirty?” Design Challenge students in Mr. Landry’s class decided to make a Facebook page for their pets. There were 20 young men in Mr. Landry’s class the majority of whom were Latino. I was assisting students with making prototypes of their Facebook pages. These were poster boards that included photographs of students’ pets with brief descriptors including names, country of origin, and hobbies. Two Latino youth, Julio and José were working in a pair together when Jack, an African American student, approached them. The following is an excerpt from my field notes:

Jack asked, “What is your name?” as he looked at José. José responded, “José.” Jack then started laughing, “Ho Say? You a Ho, You a Ho.” He repeated. Julio then turned to José and asked in Spanish “José, hablas Español?” José responded, “Sí.” The two boys then continued to converse in Spanish effectively excluding Jack from their conversation.

Spanish became a wall of protection that Jose and Julio used to block out Jack. It was through Spanish that the students were able to engage in a private conversation that excluded the English speakers in the room. When the boys realized that I understood their Spanish they smiled at me and asked me to say a few words in Spanish to them. Effectively, they were inviting me into their private space; a space that Jack had been excluded from because he had mocked them.

**P 8: KVChanging Privacy Settings Findings.docx - 8:2 [Another mode of language that ..] (9:11) (Super)**

Codes: [Privacy Wall - Families (2): A Safe Space for Privacy, Deflection by Acts of Resistance]

Another mode of language that students used to build private space for themselves was body language. Ms. Kish instructed 19 tenth grade predominately Latina and African American young women. I noticed that one African American student, Georgia refused to participate in the design challenge after she expressed anger at having been neglected by her mother. The following is an excerpt from my field notes:

Georgia shouted, "That is so fucked up!" Anna, another African American student, who was seated near Georgia's desk, asked, "What?" Georgia responded, "She told me to eat when I get home. There is no fuckin' food in my house!" Georgia then put her sunglasses on and sat at her desk without making a sound for the rest of the class period. (Field Notes October 2012).

Georgia wore sunglasses inside the classroom and folded her arms effectively daring us to invade her private space. I approached her and attempted to speak to her, asking for the markers on her desk. She did not respond to me. The wall of silence that Georgia built was a way for her to brood in her private thoughts without being disturbed.

**P 8: KVChanging Privacy Settings Findings.docx - 8:3 [Students at Dimension were req..] (13:20) (Super)**

Codes: [Teacher/Student Relationships - Family: A Safe Space for Privacy]  
No memos

Students at Dimension were required to share designs with peers after completing the design challenges. On different occasions students informed their teachers that they were unwilling to share with others. Mr. Freedman's students made a Tumblr. It was a visual blog that included photography and students' writing created to unpack their experiences of violence and loss. Mr. Freedman told me:

I told them 'we are supposed to share with another group but if you guys don't want to its all good.' And they're like 'yea we don't'.

My guys are saying that they don't want to share. It's about relationships and trust (Interview Mr. Freedman, November 2012).

**P 8: KVChanging Privacy Settings Findings.docx - 8:4 [Teachers also held fears about..] (25:27) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy]  
No memos

Teachers also held fears about uncovering too much information about their students and crossing boundaries of trust. Ms. King told me that she did not friends students on Facebook because she wanted to respect their privacy. She said:

"I see the value of also being connected with students, but I haven't done that [friend them on Facebook] because I'm afraid of what kind of information they have, and feeling like it's not appropriate for me to know that about them. I feel like there should be some distance of some kind. I don't know, I'm still thinking about it"

Ms. King wanted to keep a safe distance from her students and was unwilling to cross the boundaries of becoming friends with them using social media. She was afraid

of the “kind of information” students possessed. She did not feel comfortable learning about their private lives as a voyeur [yet isn't reading students' work produced in the classroom also a form of voyeurism?](#) [is it somehow sanctioned because it is produced in the classroom in the confines of an assignment?](#)

**P 9: LY interview transcription.docx - 9:1 [So I did two weeks on bullying..]  
(46:46) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy]  
[Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memos

So I did two weeks on bullying that was the first week we had a long discussion on that. The second week I brought it up again. The second week we talked about how have we contributed to the bullying. I shared out how I was bullied at school okay it is easy to share okay I was bullied but like we talked about there is a group of bullies and a group of victims. Often time's bullies are victims and victims are bullies too. It is not just black and white. Like are we also bullies, we can share lots of stories where we are victims but how have we been bullies? And everyone shared out about that. And then like we watched a video about cyber bullying we talked about different contexts of bullying. Leading to that and like how words are powerful.

**P 9: LY interview transcription.docx - 9:2 [So then that's when I discover..]  
(46:46) (Super)**

Codes: [Teacher/Student Relationships - Family: A Safe Space for Privacy]  
No memos

So then that's when I discovered I thought we were just building relationships building community and not getting them ready for a project, which we really didn't know the details of until much later. It is not like we knew the details of the project like 5 weeks ago and then we got ready for the project. We knew the details of the project like two weeks before and then that is when you get that is what you actually have to do. This is the project. The only information I think we got was love. We are going to do something on love. It is very broad so I was like I did not know we were supposed to do that

**P 9: LY interview transcription.docx - 9:3 [The activity I did was I saw a..]  
(48:48) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy] No memos

The activity I did was I saw an email that was done at the high school which was to put yourself on a love spectrum from 0 to 10 your being unloved and 10 being loved and line yourself up on this love spectrum. How loved do you feel at school? Specifically at school because I don't think we are ready yet to talk about issues at home. Maybe soon. But at school how loved do you feel? I had the kids kind of line up across the classroom and then got back in a circle and shared how loved are you and

why? And some interesting stuff came up we had boys I am a3 because I don't have any friends. Everyone in advisory was like "what are you talking about? I am your friend." I thought we were friends. Are we not friends? (laughter)

**P 9: LY interview transcription.docx - 9:4 [We were constantly in my class..] (87:87) (Super)**

Codes: [Refusing Presentation]

We were constantly in my class they were contently presenting. We did two presentations already in my classroom. It was sort of unnatural because of the personal aspect of it. I made them share constantly. We would stop and share what we have then got some feedback. What do you guys love about it? What do you think, how do you think they can make it better. So my kids were uncomfortable at first but they were fine. Because they all presented twice at different stages of development. So when we came back they presented twice.

**P 9: LY interview transcription.docx - 9:5 [Do you think you should remember..] (91:91) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy]

No memos

Do you think you should remember because the Day of the Dead was coming up? Do you think we should remember them or not think about them? Then people started talking about it and that lead to other people sharing even more personal, two other students also lost their dad. One shared that they lost their dad he was shot. He told his story which was really traumatic. Then another kid shared that he lost his dad. He was shot and it was really hard and traumatic. And then kids just started sharing about people who they are close to who had died. And then one by one kids were crying and comforting each other. Kids would tell stories that they couldn't finish. They would just break down. It was probably a lot of stuff that they had been holding inside that they never got the opportunity to talk about.

**P 9: LY interview transcription.docx - 9:6 [And also letting them knows th..] (91:91) (Super)**

Codes: [Space for Identity - Family: A Safe Space for Privacy]  
[Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memos

And also letting them knows that what we shared in here is confidential. I don't want you guys going off and telling other students. I think that what we have in here is trust and I also feel like a lot of you have grown just in the last hour by sharing this. So that happened in the middle of the DC and I think it all started when the two students discussing lost of their loved ones and me allowing a space and opening it up to the rest of the people to talk about it. There was part of me that was like yeah I could just let it

go. Then I was like it needs to stop now because if my kids continue this for the next ten minutes until lunch they are going to go out there with red eyes.

**P 9: LY interview transcription.docx - 9:7 [For me it was natural in that ..]  
(95:95) (Super)**




Codes: [Space for Identity - Family: A Safe Space for Privacy]  
[Teacher/Student Relationships - Family: A Safe Space for Privacy]

No memos

For me it was natural in that I am comfortable sharing emotion and sharing deeply and personally. For me it was an awesome feeling. I kind of knew how to lead them and guide them. It felt safe so yeah like I have been through therapy. I have had a counselor for like 5 or 6 years. It was comfortable.

## Appendix D: Dimension's Mission Statement

The image shows a screenshot of a PDF viewer window titled "LoveGritAction\_1page\_v8-2.pdf (1 page)". The window displays a table with three columns representing dimensions: Love, Grit, and Action. The rows represent different aspects of the mission statement: REALM, SCHOOL CULTURE, TEACHING, and LEARNING. Each cell in the table contains specific text related to that dimension and aspect.

REALM	Love 	Grit 	Action 
<b>SCHOOL CULTURE</b>	Students are known. Differences are appreciated. Community agencies are integrated.	Students are tough. Students are taught how to get "unstuck." Collaboration is ubiquitous.	Students have a participatory voice and a hunger for change.
<b>TEACHING</b>	Learning is fun, rigorous, innovative, and integrated.	Metacognition is practice. Problem-solving is central. Challenges are welcome. Endurance is required.	Communities are transformed and new discoveries are unearthed.
<b>LEARNING</b>	Teachers are reflective. Leadership values self-care of teachers. Dialogue is ongoing and committed.	Research is comprehensive and rigorous. Analytics are diverse and ongoing. Evidence is systematically collected and shared.	Teaching and learning are always purposeful and thorough.

<sup>1</sup> All names of people and places have been provided pseudonyms.

<sup>2</sup> Ms. Maya selected her pseudonym. All other names of people and places were provided pseudonyms by the researcher.