Spring 3-28-2017

Students’ Experience of Flow in a Critical Literacy Unit in a 6th Grade English/Language Arts Classroom

Barbara E. McClure
Kennesaw State University, bem6886@students.kennesaw.edu

Follow this and additional works at: http://digitalcommons.kennesaw.edu/eddsmge

Part of the Secondary Education Commons

Recommended Citation
http://digitalcommons.kennesaw.edu/eddsmge/1

This Dissertation is brought to you for free and open access by the Department of Secondary and Middle Grades Education at DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Doctor of Education in Secondary and Middle Grades Education Dissertations by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.
Students’ Experience of Flow in a Critical Literacy Unit in a

6th Grade English/Language Arts Classroom

By

Barbara McClure

A Dissertation

Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

In

Secondary Education English

Kennesaw State University

March 2017
Dedication

For Meredith Wann, who handed teenage me a book of poetry and taught me that words have power and who has stood by my on every step of this journey not only supporting it, but making it possible. And for James Chapman, who has believed in me since day one.
Acknowledgements

A word of gratitude is due to all those who have guided and supported me on this journey.

Thank you to Dr. Mei-Lin Chang, my committee chair, for her relentless support and understanding through this process. Without her guidance, this English teacher would have never felt knowledgeable or comfortable enough to have taken on a quantitative study. Thank you as well to Dr. Nita Paris for supporting my vision from the very beginning when it was just a rough draft of a conceptual framework. I would also like to show my appreciation to Dr. Megan Adams for her support who helped me to meet her high expectations. I have been so fortunate to have a supportive and enthusiastic committee who met me right where I was.

I would also like to thank Dr. Darren Crovitz for his guidance during my initial teacher preparation and then taking a chance on a first year teacher and allowing me to reach this goal early in my career. In addition, appreciation must be given to Dr. Ryan Rish for introducing me to critical literacy and putting a name to the practices I was trying to bring to life in my classroom.

In addition, I would like to thank the 110 sixth grade students who participated in this study. Once again, I have learned more from my students than I could ever hope to teach them.

Finally, it is essential that I thank my family. Beth McClure and Mike McClure- thank you for helping me grow up to believe that I could accomplish anything. James Chapman, Meredith Wann, and Charles Wann- thank you for standing by me, supporting me, and cheering me on as I worked to reach this goal. It is only with your love and support that this was made possible.
Abstract
The purpose of this study was to measure students’ experiences of engagement as conceptualized by flow during a critical literacy unit in a 6th grade English Language Arts class. A total of 61 respondents replied to an 18-item survey consisting of 14-Likert scaled items, one identifier, two open-ended questions, and one multiple-choice question three times a day for five days. In addition, respondents completed a 7-item survey consisting of one identifier, three demographic questions, and three Likert-scaled items. All respondents were sixth grade students at a middle school just outside of a large city in the Southeastern United States. Items on the survey were adapted from the Sloan Study of Youth and Social Development (2009) to measure students’ experience of flow conditions, students’ experience of the internal dimensions of flow, and students’ emotions in the moment. A two-tailed paired samples \( t \) test revealed that students experienced higher levels of flow in the critical literacy unit than in general Language Arts. Using Pearson’s correlation, positive correlations were found between the conditions of flow (success, importance, skill, autonomy, and focus) and the flow experience. In additions, a negative correlation was found between the challenge skill balance of a task and the flow experience. Results indicate that students’ experience of flow in the critical literacy unit was significantly increased from the baseline data. In addition, the easier the students found the assigned task, the higher students’ flow experiences were. Several significant correlations were found among the conditions of flow: importance and skill, and success and skill. A multiple linear regression was modeled to predict flow based on Skill, Challenge, Success, Autonomy, Importance, and Focus. Success and importance were significant predictors of flow while other conditions were not significant. In order to measure how students’ engagement levels change over a period of class, a repeated measures ANOVA was conducted on the flow variables from each survey. No significant difference was found for students’ flow experiences throughout the
week. To measure students’ changes in flow over a class period, a repeated measures ANOVA was conducted for each day using the three composite variables measuring flow. A significant difference was found only for Day 1 of the survey. Finally, in order to measure how students’ engagement levels differed based on the type of task, composite variables of flow were created for tasks based on whether students were consuming text, creating text, or reflecting on their experience. Again, no significant difference was found. The present findings suggest that students experience flow during critical literacy practices in a sixth grade classroom due to flow conditions being met. Further research is needed to determine what qualities of critical literacy practices or the classroom environment create these conditions in students. In addition, future research is needed to identify how specific students engage in critical literacy.

**KEY WORDS:** Critical Literacy, Student Engagement, Flow
Table of Contents

Dedication ........................................................................................................................................... 2

Acknowledgements .......................................................................................................................... 3

Abstract ............................................................................................................................................... 4

List of Tables ....................................................................................................................................... 9

List of Figures ..................................................................................................................................... 10

Appendices ......................................................................................................................................... 11

Chapter One: Introduction ................................................................................................................ 12

Rationale ............................................................................................................................................ 14

Research Questions .......................................................................................................................... 14

Chapter Two: Literature Review ....................................................................................................... 15

Conceptual Framework ..................................................................................................................... 15

Critical Literacy and Counter-narratives .......................................................................................... 17

Critical literacy .................................................................................................................................. 17

Critical literacy and popular culture. .............................................................................................. 19

Critical literacy with younger students ........................................................................................... 22

Critical textual production. .............................................................................................................. 24

Counter-narratives ............................................................................................................................ 26

Counter-narratives in schools ........................................................................................................... 28
List of Tables

Table 1: Activities and corresponding survey labels ................................................................. 53
Table 2: Research Questions, Type of Measurement for Variables, and Corresponding Statistical Analysis.................................................................................................................. 59
Table 3: Correlation between Flow Experience and Flow Conditions ..................................... 61
Table 4: Correlation among Flow Conditions ........................................................................... 62
Table 5: Model Summary of Flow Conditions Relationship to Flow Experience ...................... 63
Table 6: Strength of Prediction of Individual Flow Conditions for Flow Experience ............... 63
Table 7: Descriptive Statistics: Flow throughout Week ............................................................. 64
Table 8: Repeated Measures ANOVA: Day 1 ........................................................................... 65
Table 9: Repeated Measures ANOVA: Task Type ................................................................. 66
Table 10: Correlation between Flow Conditions and Challenge Skill Balance ....................... 66
Table 11: Correlation between Challenge Skill Interaction and Flow Experience ..................... 67
List of Figures

Figure 1: Initial Conceptual Framework of Interaction between Critical Literacy Unit, Flow Conditions, and Flow ................................................................. 16
Figure 2: Updated Conceptual Framework of Interaction between Critical Literacy Unit, Flow Conditions, and Flow ................................................................. 71
Appendices

Appendix A: Demographics and General Engagement in Language Arts Survey .................. 93
Appendix B: Experience Sampling Forms Day 1-5................................................................. 96
Appendix C: Parental Consent Form .................................................................................. 111
Appendix D: Child Assent to Participate............................................................................. 112
Chapter One: Introduction

In recent years, the study of student engagement has become increasingly important to schools, teachers, and educational researchers (Fredericks, Blumenfield, & Paris, 2004). Research suggests that the majority of American students are chronically disengaged (Shernoff, 2012) and student engagement steadily declines as students get older beginning in late elementary and middle school (Marks, 2000). This decrease begins in. These decreases in engagement are strongest in male students, minority students, and students from a low socioeconomic status background (Skinner et. al., 2008).

In the 2009 High School Survey of Student Engagement, 66% of high school students reported being bored at least every day. The researchers found that 81% of students reported being bored because the material was not interesting, 42% were bored because they felt the material was not relevant, 35% were bored by a lack of interaction with the teachers and 26% reported boredom because the classwork was too hard. Disconcertingly, disengaged students are more likely to have low grades and drop out of school (Kaplan, Peck, & Kaplan, 1997).

As classrooms throughout America become increasingly diverse, it is important to begin considering ways that teachers can engage this diverse student body and promote achievement for all students. However, critical literacy proponents argue that in today’s classrooms, the push to focus on standardized testing encourages educators to embrace or promote a single, dominant view of society by maintaining the status quo of language, literacy, literature and culture (Boyd, et al., 2006). This singular view of the world marginalizes students who increasingly come from
diverse linguistic, ethnic, and cultural backgrounds (Boyd, et al., 2006). Critical literacy educators work to ensure that, rather than marginalizing students, curriculum embraces and celebrates the diversity found in today’s classrooms. In order to accomplish this, Luke (2010) encourages educators to “begin from learners’ worldviews, in effect turning them into inventors of the curriculum, critics and creators of knowledge” (p. 7).

In order to measure students’ engagement in critical literacy practices, this study uses Csikszentmihalyi’s (1990) theory of flow as the conceptualization of engagement. Flow experiences are characterized by intense concentration, a deep sense of involvement, a merging of action and awareness, a sense of control over ones actions, enjoyment or interest in an activity and a distorted sense of time (Schmidt, Shernoff, & Csikszentmihalyi, 2014). Research on flow in the classroom suggests that there are five conditions that contribute to students’ experiences of flow: (1) perceived autonomy, (2) perceived challenges of the task are high and in balance with perceived skills, (3) goals that are regarded as important, (4) feedback indicating success, and (5) focused, rather than divided attention (Schmidt, 2010).

Data will be gathered using Experience Sampling Method (ESM). Experience Sampling Method is a tool that allows researchers to measure participants’ experiences in the context of specific situations (Csikszentmihalyi, 1990; Csikszentmihalyi & Larson, 2013). In ESM, participants complete multiple surveys that measure their thoughts and emotions about their current experience (Csikszentmihalyi, 1990; Csikszentmihalyi & Larson, 2013). This provides researchers with the ability to measure people’s subjective experiences and relate the psychological or emotional experience to the characteristics of a person or the context of a situation (Csikszentmihalyi, 1990; Csikszentmihalyi & Larson, 2013).
Rationale

This study investigates the relationship between student engagement and critical literacy practices in sixth grade Language Arts. For the purpose of this study, student engagement is conceptualized using Csikszentmihalyi’s (1990) theory of flow and measured using Experience Sampling Method. Critical literacy theory is used as a framework to guide students’ creation of counterstories.

By providing students with a meaningful voice in the classroom, critical literacy theorists believe that students are more engaged in learning; however, these reports are generally based on observation. This study aims to understand if and how this connection between student engagement and critical literacy practices can be measured. However, as of the time of this writing, there has been little to no research measuring if, how, or why critical literacy practices impact student engagement. It is the intention of this study to fill this gap in the research.

Research Questions

The purpose of the research study is to measure students’ experiences of engagement as conceptualized by flow during a critical literacy unit in a 6th grade English Language Arts class. For the purpose of this study, students’ psychological and emotional experiences will be measured during their creation of counterstories to answer the following research questions:

1. What flow conditions contribute to students’ experiences of flow in critical literacy practices in a sixth grade classroom?

2. What is the relationship between the various conditions of flow in critical literacy practices in a sixth grade classroom?
3. How does student engagement level change over a period of class and/or over several classes in the critical literacy unit?

   a. How do student engagement levels vary according to the type of task?

4. How does the balance of challenge and skills correlate with the conditions of flow and the overall flow experience in 6th grade students?

The first two questions will help identify how the conditions of flow work together to create an experience of flow for students. The third question will attempt to identify if students are more or less likely to experience flow at different points throughout the unit. Finally, the fourth question will measure how students’ perceptions of the challenge of the activity and their own skill correlate with students’ experience of flow. Flow theory suggests that both challenge and skill must be high for students to experience flow, but other research suggests that this correlation does not exist for younger students (Schweinle et al., 2006), so this question will illuminate specifically how 6th grade students’ experiences of flow are correlated with the balance of challenge and skill.

Chapter Two: Literature Review

Conceptual Framework

Figure 1
Initial Conceptual Framework of Interaction between Critical Literacy Unit, Flow Conditions, and Flow

Figure 1 is the visual representation of the conceptual framework designed at the beginning of this study. It represents how flow conditions and flow experience will be studied within the context of a unit focused on the student construction of counterstories.

As illustrated above, the conditions for flow are: (1) balance of challenge and skills, (2) student perception of autonomy, (3) student perception of importance, (4) focus of action and thought on activity, and (5) student perception of success (Schmidt, 2010). Flow theory suggests that if these conditions are met, students will report high levels of concentration, enjoyment, and interest (Shernoff & Csikszentmihalyi, 2008). According to the construct of flow, when these three psychological components are high, students are experiencing flow (Shernoff & Csikszentmihalyi, 2008).

In the visual representation, the construction of counterstories is nested within Critical Text Production, which is nested within critical literacy. This represents how counterstories are embedded within Morrell’s (2003) philosophy of Critical Textual Production while the
construction of these stories in the classroom will be representative of the philosophy of critical literacy.

In the diagram, an arrow points from the critical literacy component to the conditions of flow aspect which points toward the flow experience component. Based on the construct of flow, if the critical literacy components activate the conditions of flow, students will experience flow. However, the entire diagram is bracketed to express that the conditions of flow and experience of flow will both be examined in the context of critical literacy practices even if the initial hypothesis of cause and effect of flow conditions and flow experience proves incorrect. Data analysis identifies correlations between separate conditions of flow and the experience of flow as well as the overall experience of flow regardless of flow conditions.

In order to examine the relevant literature for the proposed study, the literature is synthesized into three strands that reflect the conceptual framework: 1) Critical Literacy and Counter-Narratives, 2) Engagement and Flow Experience, and 3) Engagement in the Literacy Classroom Context.

Critical Literacy and Counter-narratives

Critical literacy. Critical literacy theorists and educators draw upon Freire’s (1970) theory of critical pedagogy. Freire believed that the modern education system contributed to the dehumanization of oppressed people through rote learning and reinforcement of dominant belief systems (Morrell, 2008). His use of the banking system metaphor to describe school as a place where knowledge is poured into students who have no pre-existing knowledge highlights critical theorists’ critique of the traditional school system (Freire, 1970).
Freire suggested the education system should be reformed to be a place in which students develop “critical consciousness” (Morrell, 2008, p. 54). In order to develop this critical consciousness, Freire (1970) believed students need to read and reread the world. As part of his implementation of this philosophy, Freire created a literacy campaign for illiterate adults. He believed that in order for students to acquire dominant literacies, they must first be empowered to use the literacies that they are already comfortable with. Students were encouraged to speak authentically about the injustices in their own world, and having done so were prepared to engage with the dominant literacies (Freire, 1970). Freire then pushed students to “interrogate, deconstruct, and ultimately subvert the implicit logic contained in these words” (Morrell, 2008, p. 54). This philosophy of education has inspired educators to encourage students to read and write though a critical lens and engage in critical literacy practices.

Researchers, educators, and theorists in the field of critical literacy have not reached a consensus on a singular curriculum that represents critical literacy practices; however, there are patterns of thought in the multiple, varied conversations around critical literacy. These conversations assume that language and power are coexisting, cooperating variables that impact the world students live in, and that discussions of power must always be central to conversations about literacy and language (Luke, 2012). Hyland (2010) explains that critical literacy does not limit its focus to local marginalized groups, but instead investigates justice as it applies to multiple categories including race, gender, sexual orientation, and more. Lewison, Flint, and Van Sluys (2002) describe a framework of critical literacy consisting of four dimensions: (1) disrupting the commonplace, (2) interrogating multiple viewpoints, (3) focusing on sociopolitical issues, and (4) taking action and promoting social justice (p. 382). Throughout the review on
critical literacy practices, these dimensions were evident in the real world application of critical literacy practices in the classroom.

**Critical literacy and popular culture.** Before discussing how popular culture may be used in the classroom, it is important to understand what popular culture is. While arriving at a singular definition of popular culture may be impossible, or even unwanted (Alvermann, Xu, & Carpenter, 2003), it is important to have an understanding as to how popular culture functions in current society:

Popular culture is hard to avoid because it is at the center of the public sphere in U.S. society. Of course, popular culture is largely driven by commercial interests, which are private and concerned with profit. Nevertheless, popular culture is a site where people have a voice, a stake, and an interest. Except on rare occasions (national tragedies, presidential elections), popular culture is the conversation starter at school, work, and at social occasions. It often serves as social “glue” and a social divider: friendships solidify around a shared love for a particular band, music video, or television show, and being outside of the currents of the popular can lead to social isolation. Popular culture is also integral to the public sphere: Politicians campaign on late-night talk shows, and *The West Wing* and other television programs produce episodes that address terrorism and themes related to September 11. Thus, popular culture is not simply fluff that can be dismissed as irrelevant and insignificant; on the contrary, it has the capacity to intervene in the most critical civic issues and to shape public opinion. (Dolby, 2003, pp. 258-259)

Alvermann, Xu, and Carpenter (2003) assert that it is important to recognize that popular culture is different from mass media. Instead, in their view, popular culture should be
conceptualized as *everyday culture* (p. 14). Those who view popular culture as *everyday culture* view “audiences as understanding that media-produced popular culture contains images, sounds, symbols, and the like that appeal to different audiences in different ways” (Alvermann, Xu, & Carpenter, 2003, p.14).

With this understanding of critical literacy, the use of popular culture in the classroom to help students think critically about a variety of texts has become more common in recent years (Alverman, Xu, & Carpenter 2003; Alvermann, 2011; Dyson, 2003; Marsh & Millard, 2005; Morrell, 2002). Alvermann (2011) suggests that the broadening of what theorists and practitioners consider texts and the ease of access to a variety of texts has increased the interest in using popular culture in the classroom. Researchers in the field suggest that the use of popular culture in the classroom encourages students to bring the higher order thinking skills they are already using to analyze these texts outside of class into the classroom and provides potential to increase students’ achievement (Mraz, Heron & Wood, 2003; Hall et. al., 2011). Alvermann, Moon, and Hagood (1999) propose a constructivist approach to using popular culture in the classroom that views students as constructors of their own knowledge. With this approach in mind, Alvermann, Moon, and Hagood (1999) suggest that teachers encourage students to critically analyze popular culture.

Many critical literacy researchers have written about their use of popular culture as a tool to scaffold academic skills for students. Morrell (2002) defines popular culture as “the everyday *social* experience of marginalized students as they confront, make sense of, and contend with social institutions such as schools, the mass media, corporations, and governments” (p.73). He argues that popular culture is an exchange between an imposed mass culture and the people’s
culture. By viewing it through this lens, it can be seen as an “ideological struggle expressed through music, film, mass media artifacts, language, customs, and values” (p. 73). Using this definition, popular culture seems to cover the students’ experiences as well as modes of literacy commonly de-valued as entertainment only. Throughout Morrell’s implementation of critical literacy, he frequently used popular films such as The Godfather to help students access complex academic texts. Gainer (2010) also described his use of popular films and television shows to encourage students to deeply analyze media texts. This study, part of an after school group, enabled students to use mainstream academic skills such as citing text evidence, analysis of complex texts, and debating the merit of ideas with peers. Petrone and Borsheim (2008) instituted a unit in high schools that asked students to consider the messages of media to teenagers and analyze how and why those messages were being delivered. As students did this, they practiced important academic skills including rhetorical analysis and analyzing author’s purpose. Dyson (2003) suggests use of a permeable curriculum that enables students to use their own understanding of and experiences with popular culture to access academic literacies. In this context, students bring their own popular culture into the classroom in order to “recontextualize” it as a way to develop students’ writing skills (Dyson, 2003).

In other classrooms, teachers bring in popular culture such as hip-hop as a way to help students access complex texts (Morrell & Duncan-Andrade, 2004). By connecting students’ knowledge of popular culture with academic skills, teachers help students understand that all texts are constructed and encourage them to begin reimagining how those texts could be re-constructed (Gainer, 2010). Critical literacy proponents recognize the value of ensuring that students can apply literacy skills in contexts and to texts that are valued in the current education system (Boyd et. al., 2006). Therefore, popular culture is often used to scaffold material so that
students can then access complex texts. However, Gainer (2007) reminds practitioners that it is important not to co-opt children’s popular culture, but rather to incorporate said popular culture into the classroom as a way to connect the curriculum to students’ lives and show relevance of class work to outside lives (p. 113).

In addition to using popular culture such as music, television, and movies in the classroom, practitioners have found the use of young adult novels to be meaningful as part of a critical literacy curriculum. In Behrman’s (2006) review of literature on critical literacy practices, he found that the use of young adult novels plays a prevalent role in the classroom. These novels often address issues of discrimination or marginalization and provide students with the opportunity to apply mainstream academic skills while also considering bigger questions about the world in which they live (Agee, 2000; Behrman, 2006; Bean & Moni, 2003). By teaching young adult literature in addition to or instead of canonical literature, teachers have the opportunity to make positive statements about who and what is valued in an increasingly diverse society (Agee, 2000; Bean & Moni, 2003). The use of young adult literature in the classroom “shifts the boundaries of discussion between teacher and students, changes relationships, and generates substantive conversations about texts” (Bean & Moni, 2003, p.646) and provides students with the sense of agency that critical literacy practitioners strive for (Behrman, 2006).

**Critical literacy with younger students.** Critical literacy research often centers on high school students; however, researchers have also begun to implement critical literacy philosophies in primary classrooms. This research indicates that meaningful critical literacy skills can be implemented with students of all ages in similar ways (Exley, Woods, and Dooley, 2013; Marsh, 1992; Vasquez, 2007). Vasquez (2007) explains that even young children can be introduced to
critical literacy skills. Vasquez used “everyday items” to begin introducing elementary students to important mainstream academic skills like code breaking and text analysis. For example, in one unit of study, Vasquez used items such as candy wrappers to engage students in practices analyzing the power of language. Students were encouraged to analyze these candy wrappers, determine the message of the creator, and create their own wrapper. During this activity, the class discussed the elements of advertising, analyzing how and why companies create advertising and packaging in certain ways. Exley, Woods, and Dooley (2013) studied the implementation of critical literacy in classrooms with four and five year old students as part of a unit on fairy tales. These young students successfully discussed issues of power in these classic tales while also meeting the requirements for the standards as set forth by the school system. Marsh (1992) applied critical literacy practices to a unit in a kindergarten classroom that enabled these young students to talk about injustices around race, immigration, and more. Marsh noted that the students became increasingly adept at discussing these complex issues and even began to organize events to address these issues.

This use of popular culture, young adult literature, and everyday items enables students to make connections between the skills learned in the classroom and the world in which they live. Using these items that feature a language the students are already familiar with provides students an inroad to the skills that are valued by the school system while also encouraging them to deconstruct and rewrite the texts. Research indicates that students at all levels are capable of thinking critically about the world they live in and the texts they consume. Critical literacy theorists argue that this skill is invaluable and necessary for students who will become “informed and empowered readers who are able to take action for the betterment of themselves and society” (Papola-Ellist and Eberly, 2015, p. 14).
**Critical textual production.** For much of the history of critical literacy, theorists focused on students’ alternative reading of texts. However, in the 21st century, some critical literacy theorists and practitioners have begun to focus on the creation of texts as essential or central to critical literacy practices. Rather than simply read texts with a critical lens, critical textual production “asks students to be producers and creators of their own world through text” (Tate, 2011, p.202). Morrell (2003) argues that critical literacy educators must require more from students than reading the word and the world:

> Critical literacy instruction needs to fundamentally be concerned with the consumption, production, and distribution of texts; counter-texts that not only name and delimit the workings of power, but critical texts that serve as the manifestation of an alternate reality or a not-yet-realized present that only enters into the imagination through the interaction with new and authentically liberating words that are created by writers as cultural workers (Morrell, 2003, p. 6).

Through this use of writing as part of a critical pedagogy, Morrell (2003) argues that writing can encourage students to re-make and re-articulate reality and excite those students about the possibilities of writing for social change. Janks (2010) agrees that writing is an essential part of the critical literacy pedagogy: “If repositioning texts is tied to an ethic of social justice then writing and rewriting can contribute to the kind of social and identity transformation that Freire’s work advocates” (p. 156). Selvester and Summers (2013) suggest that writing has the ability to be a tool for the transformation of ideas for students. Comber, Thompson, and Wells (2001) believe that by providing students with a voice to tell the narratives of their lives and their community, students are able to tell narratives “about what we stand for, why we are as we are, and hint at what we may become” (p. 461). Goodman (2003) believes that the most
powerful form of critical literacy is the creation of critical texts. Bomer and Bomer (2001) insist that the act of writing in a critical literacy classroom is essential not only to a critical literacy pedagogy, but also to a well-functioning democracy:

A democracy depends on public attention to the concern of its members. A conversation aimed at bringing more social justice into a culture must, in part, stem from individual life stories. Furthermore, learning to speak out in the world about what previously seemed domestic and walled in is a step to political efficacy. When we write, we are always doing something with and to others; writing in school should also address real audiences for real purposes. Only by participating in communities where others are waiting to hear from us, where a group believes our words and thoughts are significant, can we develop a habit of speaking up about things we care about. (p.4)

Shor (1987) suggests that critical literacy should be used by students to connect the political and the personal as a way to discover paths for social and self-development. By doing this, students begin to rethink their previous understandings of the world. In addition, Shor (1987) calls for critical literacy to be a process of reading and writing that helps students become aware of how historical constructions shape their own experiences. In critical writing, students should begin to create text that can be viewed as social action (Shor, 1987).

Critical textual production has been used to provide marginalized students with a voice in classrooms. In the course of a research seminar with high school students, Tate (2011) found that critical textual production “provided a way for students to subvert mainstream discourses in pursuit of illuminating the racial and social inequalities in their schools.” Enciso (2011) worked with a diverse group of middle school students in a lunchtime story club. Immigrant and non-immigrant students shared stories of their lives and families and asked questions of each other.
Enciso (2011) concluded: “Through storytelling…and through informal student-led spaces where stories are anticipated and encouraged, it is possible to hear voices and lift them over walls” (p. 39). In one study, critical textual production was shown to enable English Language Learners to connect their own experiences to a larger world and illustrated the potential of critical literacy as a way to help these oft-marginalized students begin to envision themselves as equally participating members of the society in which they live (Huang, 2012). Another study found that the use of critical textual production in an English as a Foreign Language classroom led to increased feelings of empowerment as well as a higher quality of writing (Mazdaee & Maftoon, 2012).

Understanding the importance of critical textual production, practitioners have included critical textual production as a part of their curriculum in a variety of ways. Poetry has been used to describe immigrant students’ experiences as well as the perception of immigrants by non-immigrant students (Enciso, 2011). Wood, Soares, and Watson (2006) suggest the use of student constructed letters to the editor, journals, and narratives addressing important issues to invite students to think and write critically. Morrell (2007) encouraged students participating in critical textual production to create blogs, iMovies, memoirs, and research papers. Fisher (2005) used the creation of spoken word poetry to encourage students to analyze re-write the world in which they live. Regardless of the modality that students’ texts take, critical textual production ultimately, and in support of Freire’s (1970) theory of critical pedagogy, provides a sense of agency and enables students to act on the world they live in.

**Counter-narratives**

Counterstories, or counter-narratives, emerged from Critical Race Theory (CRT) as a method to counter the dominant or master narratives and provide a voice to those from groups
that have been historically marginalized (Dyches Bissonnette & Glazier, 2015; Curwood & Gibbons Pyles, 2009; Delgado 1989). Delgado (1989) suggested that counterstories serve two purposes: they aid the oppressed in understanding their own stories and promote group solidarity and they help the dominant group overcome ethnocentrism and see the world in new ways.

It is important to note that the terms counterstory and counter-narrative are defined slightly differently. Nelson (2001) defines counterstory as “a story that resists an oppressive identity and attempts to replace it with one that commands respect” (p. 6). Counter-narratives are defined as “stories that challenge widespread beliefs and discourses” (Solorzano & Yasso, 2001, p. 32). The difference between the two definitions seems to imply that counterstories focus on one’s own experiences while counter-narratives may focus on a larger story or cultural experience. Despite the fact that the terms counterstory and counter-narrative have slightly different definitions, the terms are frequently used interchangeably in the literature and the two work to serve the same goal- resistance to a dominant or master narrative. For the purpose of this literature review, the terms will be used as the researcher or theorist being cited used them.

In a review of the literature on counter-narratives, Solorzano & Yasso (2001) described four theoretical, methodological, and pedagogical functions of counterstories:

(1) They can build community among those at the margins of society by putting a human and familiar face to educational theory and practice; (2) They can challenge the perceived wisdom of those at society’s center by providing a context to understand and transform established belief systems, (3) They can open new windows into the reality of those at the margins of society’s center by providing a context to understand and transform established belief systems; and (4) They can teach others that by combining elements from both story and the
current reality, one can construct another world that is richer than either the story or the reality alone (p. 475).

**Counter-narratives in schools.** Counter-narratives have recently begun to be used in schools as a way for students to push back against the mainstream narratives that are so prevalent in our current educational system (Godley & Loretto, 2013; Luttrell, 2013; Knobel & Lankshear, 2002; Wilson-Keenan, Solsken, and Willett, 1999). In a study of counter-narratives related to African American Vernacular English in a high school classroom, researchers observed that in this context, students’ identities were not essentialized into pre-existing racial or linguistic categories. Instead, these identities were acknowledged as part of a complex relationship between language and race (Goldey & Loretto, 2013). The researchers concluded that it is essential to foster counter-narratives about language race and ideas because “the voicing of these tensions challenge dominant views of African American adolescents’ language and literacy skills as deficient and acknowledges the value, rich cultural history, and art of language choices” (Godley & Loretto, 2013, p. 326). The researchers also found that the discussions that took place around these counter-narratives helped teachers better understand the funds of knowledge that their students brought into the classroom. This experience contrasts with the way that schools have that have historically validated the dominant cultures use of language while oppressing the users of non-standard dialects by dismissing these dialects as incorrect (Luke & Freebody, 1997).

Wilson-Keenan, Solsken, and Willett (1999) worked with a first and second grade to create counter-narratives related to gender. One activity called for the young girls to create princess stories in which the princess did the rescuing rather than being rescued. In a study based in sociology, Luttrell (2013) asked middle schoolers from a low-income neighborhood to create a narrative of their lives using pictures. Luttrell found that the stories these students told
constructed a counter-narrative to the stories told by mainstream media about these children’s experiences. Gainer (2010) studied students as they viewed, debated, and deconstructed various media texts as part of an after school program. After viewing the movie Dangerous Minds, students discussed the way this text portrayed inner city schools like the one they attended. The students were then given the opportunity to dissent against this depiction by creating counter-narratives. These counter-narratives enabled “students to take power to construct their own identities through alternative representations” (Gainer, 2010, p. 372). In another classroom, students created counter-narratives in a variety of forms including letters to authors, memoirs, issue pieces, reflections, academic presentations, and more (Morrell, 2003, 2006, 2013; Morrell & Duncan-Andrade, 2005; Garcia & Morrell, 2013;). Knobel and Lankshear (2002) also asked students to create counter-narratives about their hometowns that contrasts with the images presented in tourist brochures and websites.

Gachago, Cronje, Ivala, Condy, and Chigona (2014) engaged students in the creation of digital counterstories and found that students were engaged in not only the creation of these stories, but also in the sharing. Students reported that sharing the counterstories built community among the students and provided all students a window into the lives of others whose experiences were different from theirs. Gutierrez (2008) found that instruction that fosters counterstories positions students to reframe their own experiences and challenge dominant narratives about topics including race, poverty, language, and power. In addition, counter-narratives allow students to assert their social identities that are oft not reflected in traditional school curriculum (Godley & Loretto, 2013). In contrast, master narratives often work to bolster racism and educational inequities (Delpit, 1992).
Critical literacy theorists have often urged educators to foster student agency by constructing environments in which students have the opportunity to examine their lived experiences (Freire, 1970; Knoblauch & Brannon, 1993). Moll, Gonzalez, and Amanti (2001) argues that when teachers fail to take students’ lived experiences into account and draw upon these funds of knowledge, students are silenced and alienated. By providing space for students’ own stories, counter-narratives allow students lived experiences to come alive in the classroom. These projects enable students to apply their academic skills to begin addressing inequities and calling for change in the systems in which they live. These counter-narratives give students the authority to share their voice and provide legitimacy to their perspectives (Behrman, 2006). By using counter-narratives in the classroom, practitioners are helping students do what Morrell (2007) suggested a Critical Writing Pedagogy does: students are re-imagining the reality of the world and sharing that reality with others.

Engagement and Flow

Knowing that research indicates that student engagement and student achievement are positively correlated (Hughes, Luo, Kwok, & Loyd, 2008; Reyes, Bracket, White, & Salovey, 2012; Shernoff & Schmidt, 2008; Wellborn & Connell, 2004), those in the field of education, who are increasingly called to ensure achievement for a diverse student population, have begun to explore how adolescents are engaged and how teachers can make that happen in the classroom. In the following section, the current understandings of engagement as multi-dimensional and malleable, the construct’s relation to student success, and current research on engagement in the English/ELA classroom are explore. Finally, Csikszentmihalyi’s (1990) theory of flow and how engagement has been conceptualized using this theory will be discussed.
One struggle of the study of student engagement is the lack of consensus on what student engagement is, what it consists of, and what it looks like. In a review of the literature, Appleton, Christenson, and Furlong (2008) noted, “The theoretical and research literature on engagement generally reflects little consensus about definitions and contains substantial variations in how engagement is operationalized and measured” (p. 370). The authors found inconsistency among both the terminology and constructs of engagement used by researchers, but noted patterns throughout the study of engagement. These patterns include an understanding that engagement is multi-dimensional, malleable, and impacts student achievement (Appleton et al., 2008; Christenson et. al., 2008; Connell & Wellborn, 1991; Furrer & Skinner, 2003, Fredericks, Blumenfield, & Paris, 2004; Guthrie & Wigfield, 2000; Klem & Connell, 2004; Marks, 2000; Ryan & Patrick, 2001; Ryan, Stiller, & Lynch, 1994; Shernoff & Schmidt, 2008; Skinner et al., 2009).

**Multi-dimensionality of engagement.** Despite the lack of consensus on a construct of engagement, many researchers agree that engagement is a multi-dimensional concept (Appleton et al., 2008; Christenson et. al., 2008; Connell & Wellborn, 1991; Furrer & Skinner, 2003). In their review of the research, Appleton et al. (2008) found that engagement is generally viewed as a two or three component construct. The two-component model includes behavioral and emotional/affective, sometimes called psychological, subtypes while the three-component model adds a cognitive subtype (Appleton et al., 2008). Academic engagement is often measured as a combination of behavioral, affective, and cognitive engagement (Christenson et. al., 2008).

**Behavioral engagement.** The behavioral subtype of engagement refers to the behaviors of students in the classroom and school setting (Appleton, et al., 2008; Janosz, 2012). These behaviors include how students pay attention, respond to questions, and complete assignments
(Appleton, et al., 2008; Janosz, 2012). In addition, researchers studying behavioral engagement also study how and when students ask for help, their participation in academic extracurricular activities, and voluntary extension of learning (Furrer & Skinner, 2003). Finally, the behavioral component also considers how students participate in school including attending classes, following rules, interacting appropriately with teachers and peers, and avoiding disrupting the class (Finn & Zimmer, 2012). In a review of tools used to measure engagement, researchers found that studies measuring behavioral engagement focus on the above behaviors as well as preparation for class and completion of homework via teacher reports and student self-report. Other measurements of students’ behavioral engagement included observations of on and off task behavior (Fredericks, et al., 2011). When students are behaviorally disengaged, they show signs of procrastination, are easily distracted, and are disinclined to complete assignments (Skinner & Pitzer, 2012).

**Emotional/affective engagement.** Emotional/Affective engagement reflects how students feel about school, involvement in school, and whether the activities of school are worth pursuing (Appleton et. al., 2008; Finn & Zimmer, 2012.) Students who are engaged in this way feel a sense of belonging in their school and believe that school provides tools needed for future success or a sense of relatedness (Appleton et. al., 2008; Finn & Zimmer, 2012; Pekrun and Linnenbrink-Garcia, 2012). Surveys measuring students’ emotional engagement ask students to self-report on their feelings of happiness or anxiety, relationships with parents and teachers, and valuing of school (Fredericks et al., 2011). Students experiencing affective engagement report positive emotions like excitement and joy, while students experiencing affective disengagement report negative emotions like anger, sadness, and frustration (Pekrun & Linnenbrink-Garcia, 2012).
**Cognitive engagement.** Cognitive engagement is “the expenditure of thoughtful energy needed to comprehend complex ideas in order to go beyond the minimal requirements” (Finn & Zimmer, 2012, p. 102). Cognitive engagement can be observed through student behaviors like asking questions, persisting with difficult tasks, reviewing previously learned material, and using self-regulation and other strategies to guide learning (Finn & Zimmer, 2012, Appleton et. al., 2008; Reschly and Christenson, 2012). In order to measure students’ cognitive engagement, researchers typically include items addressing self-regulation and cognitive strategy use on student self-report surveys (Fredericks et al., 2011). Students who are not cognitively engaged avoid learning activities, are unwilling to work to overcome challenges, and portray themselves as incapable of completing assignments (Skinner & Pitzer, 2012).

Much of the research on engagement measures only one component of engagement rather than the interactions among the three components. Because engagement has been shown to be multi-dimensional, Appleton et al. (2008) see a need for a comprehensive conceptualization of engagement, which would allow for research findings to be understood in comparison to each other and possibly guide us to an understanding of how the dimensions of engagement work contributing to overall student engagement.

**Malleability.** Research indicates that student engagement is impacted and able to be changed by a variety of factors (Fredericks, Blumenfield, & Paris, 2004; Guthrie & Wigfield, 2000; Marks, 2000; Ryan & Patrick, 2001; Ryan, Stiller, & Lynch, 1994; Skinner et al., 2009). Student engagement levels have been found to be impacted by features of the environment and task and how the environment is meeting students’ individual needs (Christenson et al., 2012, National Research Council and Institute of Medicine of the National Academies, 2004; Shernoff, 2013). These needs include autonomy, competence, and relatedness (Fredericks et al., 2004).
**Environment and task features and engagement.** Research shows that the features of a task and the environment have the ability to change students’ engagement levels (Finn & Zimmer, 2012; Fredericks, Blumenfield, & Paris, 2004; Guthrie & Wigfield, 2000; Marks, 2000). Researchers have studied the impact of a wide variety of factors of the environment and task on engagement and found many factors that engage students. (Fredericks, Blumenfield, & Paris, 2004). For instance, the opportunity to work with peers may positively impact student engagement (Guthrie & Wigfield, 2000). Guthrie and Wigfield (2000) found that students were highly engaged in reading activities that incorporated discussion, debate, and critique with their peers. Limited research has been done on students’ engagement in specific tasks in the English Language Arts classroom, but Marks (2000) found that students’ participation in authentic tasks was predictive of student engagement. Authentic tasks exhibit the following qualities: students are asked interesting questions and solve new problems, dig deeply into understanding a single topic, apply the subject to problems and situations outside of school, and/or discuss own ideas with students and teachers (Marks, 2000, p.163). Similarly, other research has shown that students are more engaged in novel tasks and hands-on assignments. Students have been found to be more engaged when challenged in acts of complex problem solving, provided with real-world tasks, and given opportunities to achieve mastery (Newmann, 1992). In addition, engagement has been shown to be positively impacted by certain instructional approaches including cooperative learning, student discussion, and strategies promoting in-depth inquiry and metacognition (Finn & Zimmer, 2012).

**Individual needs impact on engagement.** Engagement research indicates that students feel more engaged when certain individual needs are met. Connell’s self-system model (1990) is most prevalent theory on the relationship between engagement and individual needs (Fredericks
et al., 2004). This model indicates that all people have three basic needs that must be met: autonomy, competence, and relatedness. According to this model, the degree to which these needs are met determines how engaged a student is in school.

_Autonomy_. Classrooms that support autonomy have repeatedly been linked to higher levels of student engagement. Autonomy refers to one’s need to express their true self and act in accordance to their preferences (Skinner, et. al., 2009; Skinner and Edge, 2002). Students with autonomy are allowed to make their own choices about what to do and how to do it rather than being fully directed by the teacher’s directions (Hodgins et al., 2010; Sneddon, 2013). In order to provide students with a sense of autonomy, teachers provide autonomy support. Autonomy support refers to “taking the others’ perspective, encouraging initiation and exploration, providing choice, and being responsive to others” (Deci & Ryan, 2011, p. 422). Connell and Wellborn (1991) measure students’ perceived autonomy by measuring students’ self-regulatory styles. They found that students “who experience themselves as regulating their own behavior in school are more engaged and these engaged patterns of action are associated with higher levels of academic accomplishment” (p. 63). Skinner et al. (2008) found that autonomy had the strongest correlation with student engagement. In this study, students who experienced high levels of autonomy showed improved effort and enjoyment in class. In addition, teacher behaviors that encourage autonomy in students have been found to be positively correlated with students’ well-being and satisfaction (Jang et al., 2009). Teachers providing an autonomy supportive environment provide opportunities for students to be more engaged and experience increased academic achievement and concept mastery (Reeve et al., 2014; Ryan and Deci, 2009, p. 175; Schunk and Zimmerman, 2008; Vansteenkiste et al., 2004). In order to support autonomy, Deci and Ryan (2009) encourage teachers to exhibit the following behaviors: “to
listen more, made fewer directives, responded more to students’ questions, attended more to students’ wants, resisted giving problem solutions to students, made more statements that implied perspective taking, and were generally more supportive of the students’ initiatives” (p. 184).

*Competence.* According to the self-system model, students also require a sense of competence to feel engaged in school. Within self-determination theory, competence refers to “the extent to which students feel a sense of mastery” (Skinner, et. al., 2008, p. 767). Students with high levels of competence perceive that they are in control of outcomes and capable of success (Elliot et al., 2002; Skinner et al., 2008). They also believe that they have knowledge about how to do well in school and believe that they are capable of applying that knowledge (Connell & Wellborn, 1991; Skinner, et. al., 2008). Students’ perceptions of their competence evolve constantly and are impacted by a variety of factors including feedback from teachers, intrinsic motivation, internal goals, and personal values (Zimmerman, 1995; Vallerand and Reid, 1984). In addition, students reported higher levels of competence when provided with increased autonomy (Goudas et al., 1994). Students’ feelings of competence have been positively correlated to students’ behavioral engagement and negatively correlated with students’ disaffectation (Skinner, et. al., 2008). Researchers have found a positive correlation between students’ positive perceived competence and student engagement (Connell & Wellborn, 1991; Klem and Connell, 2004; Park et al., 2011).

*Relatedness.* Finally, the self-system model indicates that students need to experience relatedness to be engaged in school. Deci & Ryan (2000) define relatedness as the “sense of belongingness and connectedness to the persons, group, or culture disseminating a goal” (p. 64). Students’ feelings of being cared for and respected by the teacher are often a reflection of
relatedness (Ryan & Patrick, 2001; Ryan, Stiller, & Lynch, 1994; Skinner & Belmont, 1993).
Students’ sense of relatedness has been positively correlated to students’ efforts and motivation in class (Reyes et al.; Ryan & Patrick, 2001; Skinner et al., 2008). Connell and Wellborn (1991) measure students’ sense of relatedness in two ways: students’ perceived emotional security and students’ perceived need for a closer relationship. Through path analysis, they found that students’ emotional security with teachers and classmates was positively correlated with students’ teacher-rated engagement. Skinner, et al. (2008) found that students’ perceptions of teacher support are central to students’ engagement in the classroom. Similarly, the classroom emotional climate has been linked to increased student engagement. Classrooms that are characterized by warm, respectful relationships are positively correlated with student engagement levels (Reyes, Brackett, White, & Salovey, 2012). Furrer and Skinner (2003) found that classrooms with a sense of connectedness and belongingness correlate with higher student engagement. Research indicates that both teachers and peers impact students’ engagement levels in the classroom (Ryan, Stiller, & Lynch, 1994, Skinner, et al., 2008, Connell and Wellborn 1991). Recent studies indicate that interactions among teachers and students most strongly predict student achievement rather than materials, space, or curriculum (Connor et al., 2005; Mashburn et al., 2008)

Teacher Support. Teacher support has been shown to positively impact behavioral, emotional, and cognitive engagement (Blumenfield & Paris, 2004; Connell & Wellborn, 1991; Feldlaufer, Midgley, & Eccles, 1988; Fredericks, et al., 2004; Ryan, Stiller, & Lynch, 1994). A review of literature on teacher support and engagement led Fredericks, Blumenfield, & Paris (2004) to conclude that teachers must balance creating a positive social environment with challenging work in order to engage students emotionally and cognitively. Interestingly, research
on teacher support in middle school showed a decline in the quality of teacher-student relationships (Feldlaufer, Midgley, & Eccles, 1988) and has been hypothesized to be related to the decline in student engagement during these years (Gillet et al., 2012; Fredericks, et al., 2004; Sazik et al., 2012). In addition, research suggests that middle schools tend to focus on competitions and discipline for students in this age range instead of interpersonal relationships and hypothesizes that this is one of the causes for decreasing student engagement (Fredericks, et al., 2004). Finally, behavioral engagement has been positively correlated with teachers who set clear expectations, provide consistent responses, and can accommodate the individual needs of students (Connell & Wellborn, 1991; Pianta et al., 2012; Reeve, 2009).

Relevance of engagement to student achievement and success. Multiple studies have linked student engagement to student achievement and success. Research has repeatedly shown that engaged students exert more effort in class, pay more attention, and participate more often in class discussions that students who are not engage. In addition, engaged students achieve at higher levels than students who are not engaged. This is especially true for English Language Learners and students from low socioeconomic status backgrounds (Finn & Zimmer, 2012). A significant relationship has been found between student engagement and student grades (Klem & Connell, 2004, Shernoff & Schmidt, 2008). In Klem and Connell’s (2004) study, both student self-report and teacher reports of student engagement were correlated with student achievement. In addition, the field of positive psychology suggests that there is a strong relationship between engagement and personal well-being (Shernoff, 2012).

Student engagement appears to have a cyclical feature (Finn & Zimmer, 2004; Finn & Zimmer, 2012; Skinner & Belmont, 1993). Just as teacher support positively impacts student engagement, student engagement seems to increase teacher support (Finn & Zimmer, 2004;
Skinner & Belmont, 1993). Additionally, while student engagement positively impacts student achievement, student achievement positively impacts student engagement. Finn and Zimmer (2004, 2012) found that engaged students tend to have higher academic achievement and receive respect from teachers as a result of their being engaged and this achievement and feeling of teacher support helps keep students engaged.

In addition, student engagement has been linked to students’ motivation and performance in the future. Students who reported high engagement in high school science class were found to continue experiencing motivation in science classes in college (Shernoff & Hoogstra, 2001). The researchers found that students who reported higher levels of interest and enjoyment at random moments during a high school science class were more likely to choose science as a college major two years later (Shernoff & Hoogstra, 2001). In addition, these levels of interest and enjoyment acted as a better predictor of student grades in college than high school grade (Shernoff & Hoogstra, 2001).

Student engagement has also been correlated with lower dropout rates (Klem & Connell, 2004). Low engagement is correlated with increased dropout rates, especially among students from disadvantaged backgrounds (National Research Council Institute of Medicine, 2004). Appleton et al. (2008) consider student engagement the “primary theoretical model for understanding dropout” (p. 372) and suggest that a greater understanding of student engagement could provide schools with the ability to intervene and lower student dropout rates.

Flow. Over the last several decades, Csikszentmihalyi’s theory of flow (1990) has provided the opportunity for researchers to examine how various people engage in their daily lives. Csikszentmihalyi began his study by interviewing “experts” in various fields, including artists, musicians, and surgeons. Based on these individuals’ descriptions of their experience, he
developed a theory of optimal experience that he describes as flow (Csikszentmihalyi, 1990). In the years that followed, Csikszentmihalyi (1990) and his colleagues discovered that optimal experiences are experienced and described similarly by a variety of people in a variety of situations.

Optimal experience—or flow—is characterized by a variety of factors. Those in the flow state report experiencing intense concentration, a deep sense of involvement, a merging of action and awareness, a sense of control over ones actions, enjoyment, or interest in an activity, and a distorted sense of time (Csikszentmihalyi, 1990; Schmidt et al, 2014). Based on these descriptions, Csikszentmihalyi (1990) defines flow as “the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it” (p. 4).

**Student engagement as flow.** In recent years, educational researchers have begun to apply flow to classroom settings as a way to conceptualize student engagement (Schmidt, 2010; Schmidt et al., 2007; Shernoff & Csikszentmihalyi, 2008; Schmidt et al., 2014; Shernoff, 2013). Research has shown that three quarters of the variation in flow is due to moving from one situation to another (Schmidt et al., 2014), so classroom instructional practices and activities are likely to have a strong impact on students’ experiences of flow. Additionally, research shows that students’ experiences of flow are not correlated with one’s socioeconomic status, academic achievement, age, or aspirations for the future (Schmidt, Shernoff, & Csikszentmihalyi, 2007), so there is potential for the application of flow theory in the classroom to engage all students. Finally, flow experiences have been shown to enhance the quality of life (Csikszentmihalyi, 1990) and the potential for engaging students while enhancing their quality of life seems a worthwhile pursuit.
Flow theory conceptualizes student engagement as a “simultaneous occurrence of high concentration, enjoyment, and interest” (Shernoff & Csikszentmihalyi, 2008). Using this conceptualization, students are considered engaged or experiencing flow when all three of these variables are high.

Concentration is an essential component of flow (Shernoff & Csikszentmihalyi, 2008). Concentration has been found to be higher when instruction is challenging and relevant (Shernoff et al, 2003). Enjoyment refers to the positive emotions related to the task at hand. These positive emotions are linked to the demonstration of competencies, accomplishment, and school performance (Shernoff & Csikszentmihalyi, 2008).

Interest directs attention, reflects intrinsic motivation, and stimulates desire to continue engagement (Shernoff & Csikszentmihalyi, 2008). Hidi (2001) differentiates between situational and personal interest. Individual interest is developed over time and tends to be long lasting. Situational interest is related to a stimulus in the immediate environment. Both states of interest evoke increased attention, cognitive functioning, and persistence, but it is important to recognize that a student does not have to be interested in a topic beforehand in order to find a topic interesting (Hidi, 2001; Krapp, 2002).

Conditions for flow in students. The flow theory of student engagement specifies five conditions that contribute to the experience of flow by students in school: (1) perceived autonomy, (2) perceived challenges of the task are high and in balance with perceived skills, (3) goals that are regarded as important, (4) feedback indicating success, and (5) focused, rather than divided attention (Schmidt, 2010).
Research has supported the connection between these factors and adolescents’ experiences of flow. In a study of flow in adolescents, Schmidt et al. (2007) found a positive correlation between all five factors and the flow experience. Autonomy is strongly, positively associated with flow (Schmidt, 2010; Schmidt et al., 2007). Students who felt that they were doing an activity because they wanted to experienced greater levels of flow. In addition, students who felt that their skills matched the challenge of the task experienced more flow more intensely (Schmidt, 2010; Schmidt et al., 2007). Students who felt the activity they were engaged in was important were more likely to experience flow (Schmidt, 2010; Schmidt et al., 2007). Perceptions of success were positively correlated with flow (Schmidt, 2010). Finally, when students’ attention was focused by “a convergence of thoughts and action,” greater flow was experienced (Schmidt et al., 2007, p. 551).

**Challenge and Skills.** Challenge and skill have been found to be two primary conditions for the flow experience. When challenge and skills are relatively high and in balance, people are more likely to experience flow (Csikszentmihalyi, 1990). This relationship is often described as four different channels of experience dependent on the balance between the two components. When challenges are high but skills are low, this tends to evoke anxiety, while low challenges and high skills produce relaxation. When both challenge and skill are low, the state is referred to as apathy. When both conditions are high, one is more likely to experience flow (Schmidt, 2010).

Flow theory recognizes that challenge and skills are dynamic. When one repeatedly participates in an activity that is initially challenging and that they are skilled at, the challenge will eventually decrease (Csikszentmihalyi, 1990). Because of this, flow theory states that the challenge must be increased by increasing the difficulty or setting a higher goal (Csikszentmihalyi, 1990). It is also important to understand that flow theory recognizes that
these conditions are salient to the individual, not inherent in a task (Csikszentmihalyi, 1990). Individuals may find challenges in generally unchallenging situations or create goals, rules, or other conditions that create flow (Csikszentmihalyi, 1990). While the balance of challenge and skill is often described as essential to flow, this balance does not guarantee flow and flow can be experienced outside of this balance (Csikszentmihalyi, 1990; Shernoff, 2013).

**Optimal Learning Environment.** Shernoff (2013) describes a classroom in which flow is likely experienced due to the conditions of flow being present as an “optimal learning environment.” An optimal learning environment “provides academic intensity through environmental challenge characterized by clear goals and high expectations for performance with complex tasks found to be relevant to students’ lived and the community at large” (Shernoff, 2013, p. 353). Optimal learning environments also help students succeed using motivational support, positive relationships, feedback, and opportunities for actions and collaboration (Shernoff, 2013). The result of these optimal learning environments is that students are engaged and feel confident and in control and build a foundation of skills and interest for the future (Appleton et al., 2008).

**Engagement in the Literacy Classroom**

Research on student engagement in English/Language Arts reflects the current research and findings on student engagement as a whole. Students are more engaged in reading, writing, and other literacy skills when the work is authentic, interesting, and relevant. In a study on students’ engagement in writing, Lawrence and Harrison (2009) found that students were engaged when given choice on their writing topics and could write about topics that interested them. Similarly, Bean, Senior, Valerio, and White (2001) found that students were engaged in reading and writing about a multi-cultural novel because students felt a sense of agency and
control their writing. Students were engaged because they felt empowered by not only the topic of the multi-cultural novel and the way it related to their daily lives, but also because they were given opportunities to talk and write about the novel in a way that was meaningful to their own lives (Bean et al., 2001). In a poetry workshop during a high school English class, students reported being engaged due to being able to write about their own interests and knowledge (Wiseman, 2010). Garlid (2014) found that reluctant male writers in middle school were more engaged when writing about topics of their own choosing. In the course of a unit titled “Write for Your Life,” middle school students selected social issues that affected their own lives and wrote research papers. Students were found to be engaged due to the choice component and the real-world application of their writing (Fairbanks, 2000). Likewise, middle school students reported feelings of engagement during the course of a unit focused on writing memoirs. Students reported feeling interested in the topic because it was about their own lives (Dytash & Morgan, 2013). In a study on the impact of students’ interest with student engagement in reading, the two were found to be positively correlated. In addition, the research showed the students did not have to be interested in the topic before reading as long as they became interested during reading (Hidi, 2001). Finally, in a study of engagement in writing by reluctant and engaged writers, researchers found that interest was key to engagement for both types of writers, but even more so for reluctant writers. In the same study, students reported being more engaged when the work they were doing in class was more reflective of work they would see in the real world (Hawthorne, 2008). All of these studies on engagement in Language Arts support the concept of relatedness in engagement literature as well as one of the key components of the flow experience—interest.
Concept Oriented Reading Instruction (CORI) was developed for Reading and Language Arts classes as a way to teach reading while embedding supports for engagement. These supports include the creation of learning and knowledge goals, real world interaction, interesting texts, autonomy support, strategy instruction, collaboration support, and evaluation. These supports are easily identified as related to concepts discussed in engagement and flow. For example, real-world interaction and interesting texts correlate with the concept of relatedness in engagement and interest and importance in flow while strategy instruction and collaboration closely resemble engagement theory’s competence and flow theory’s perceptions of ability to feel success. Research has shown that this method increases student engagement and achievement in reading (Guthrie and Cox, 2001; Guthrie and Klauda, 2014).

Students were also more engaged in reading and writing when they felt that they had the opportunity to be successful. Using the CORI method, researchers found that students were more likely to engage in reading tasks at which they felt they could be successful (Guthrie & Klauda, 2014). English Language Learners were engaged in the process of reading a novel by the use of epistolary writing that allowed them to communicate their understanding and analysis of the text with the teacher (Rahim and Hashim, 2015). This enabled students to feel that they understood the text and provided the teachers with the ability to appropriately scaffold material based on the students’ responses (Rahim and Hashim, 2015). In addition, young middle school writers were found to be more engaged when the focus of writing was on process and support rather than product because they were given the tools they needed to be successful (Garlid, 2014). This supports the idea of competence found in engagement literature and the construct of challenge and skill balance as well as the idea of student perception of success as conditions for flow.
This review of the literature related to critical literacy, counternarratives, and student engagement indicates that many of the qualities of critical literacy are likely to evoke engagement in students. The review of critical literacy practices revealed that critical literacy practitioners strive to create a classroom in which the learning feels authentic to the real world and representative of the students. The work that students do in critical literacy attempts to combine the students’ personal experiences and knowledge with academic skills to address real-world issues, often related to identity, language, power, and injustice. This work seems poised to engage students who, research suggests, are engaged by work that feels important, related to their lives, and challenging. In addition, the use of students’ own experiences and interests in critical literacy seems to correlate with the need that students have for autonomy. Many critical research educators indicate that the work students do in critical literacy is engaging, but as of this writing, no research that quantitatively measures students’ engagement in critical literacy practices has been found.

Chapter Three: Methodology

Studies on student engagement in English/Language Arts classrooms have primarily relied on qualitative tools including case studies, interviews, and observation. In much of the literature, engagement is generally not examined as being explicitly multi-dimensional which is in contrast with the field’s current understanding of engagement. Often, clear indicators of what the researchers are defining as engagement are absent and engagement is viewed as something that students and teachers will know when they see. This study uses a quantitative approach to measure engagement based on the theoretical framework of flow in the ELA classroom in order to view how and when the various conditions of flow are activated and if or how that leads to students’ increased engagement in ELA and Critical Literacy practices.
Purpose

Using Experience Sampling Method, the current study explores how students engage in critical literacy practices, specifically the production of counterstories. Engagement is conceptualized as “flow.”

Research Questions

The research questions for the proposed study are:

1. What flow conditions contribute to students’ experiences of flow in critical literacy practices in a sixth grade classroom?

2. What is the relationship between the various conditions of flow in critical literacy practices in a sixth grade classroom?

3. How does student engagement level change over a period of class and/or over several classes in the critical literacy unit?
   a. How do student engagement levels vary according to the type of task?

4. How does the balance of challenge and skills correlate with the conditions of flow and the overall flow experience in 6th grade students?

Procedure

The study was conducted within a unit specifically designed with the philosophies of critical literacy as its foundation. Generally, the aim of the unit was to ask students to question the labels and stereotypes they and others apply to people and ultimately provide them an opportunity to push back, or resist, a stereotype or label often applied to them or people from the
groups with which they identify. As the end project, students created a written and visual counter-narrative entitled “I Am Not” that expressed not only who or what they did not want to be seen as, but also how they did want to be perceived. Specific details of each task can be found in Table 1. At the beginning of this weeklong unit, students completed a one-time questionnaire answering demographic questions (Appendix B) and a survey collecting baseline data on their general engagement in English Language Arts. During the course of the unit, students completed three experience sampling forms per day (Appendix C). These surveys were completed using school supplied iPads that the students were familiar with and have used frequently in class before. Before completing the surveys, students were provided with a description of the study’s goals and reassured of their own confidentiality (Hektner, Schmidt, & Csikszentmihalyi, 2007). It was made clear to the students that their responses on the survey were not related to their grade or success in the class. Because the purpose of the study is to measure students’ engagement or flow experience during critical literacy activities, students were prompted to complete the survey at specific times during instruction. All students were prompted simultaneously to respond three times during each class period: once in the first fifteen minutes of class, once in the middle of the class period, and once ten minutes before the end of class. These time periods were chosen because of the way the classroom functions using an opening, work session, closing model. These time periods ensured that students completed a survey for each of the three activities each class. While all students participated in the surveys, only the data of those that returned consent forms was used for analysis.

**Experience Sampling Method**

Experience Sampling Method (ESM) evolved as a tool to study flow and is used to measure participants’ experiences and behavior in context. In these studies of subjective
experience, participants complete multiple short surveys about their current environment, behavior, and feelings at various intervals over a period of days, weeks, or months (Zirkel, Garcia, & Murphy, 2015). By gathering information in this way, researchers are able to objectively measure subjective experience (Hektner, Schmidt, & Csikszentmihalyi, 2007). The purpose of ESM is to study the subjective experience of people as they interact in their natural environment. This allows researchers to relate ones emotions or psychological experience to the characteristics of a person or to the interaction between a person and a situation in order to analyze how patterns of one’s subjective experience relate to the wider conditions of one’s life (Csikszentmihalyi & Larson, 2013). ESM has been used in a variety of situations with participants as young as 10 and as old as 85 to measure the combination of external and internal experiences or just internal experiences and to research a variety of topics including student engagement, self-image and self-awareness, binge eating, alcohol and drug consumption, and thought disorders (Csikszentmihalyi & Larson, 2013).

**Rationale for experience sampling method.** In recent years, ESM has been used to study students’ experiences in schools and has been found to be an “effective instrument to gather direct measures of students’ emotional and cognitive engagement in the moment when engaged in natural or formal learning environments” (Shernoff, 2012, p. 201).

The use of ESM has many benefits in understanding the experiences of the participants. Because ESM surveys are completed in multiple contexts, researchers can use the data to examine individuals’ momentary fluctuations in cognitive and emotional states in these various contexts and then link these states to contextual factors (Shernoff, 2013). This study measures the cognitive and emotional components of flow in students and studies the link of these states to
the critical literacy practices in the classroom. The study also explores how students’ perceptions of the conditions of flow correlate with their experiences of flow.

In addition, ESM enables researchers to observe effects resulting from individual differences such as gender or ethnicity (Zirkel, Garcia, & Murphy, 2015). In this study, the students’ experience, or lack of experience, of flow will be linked to the instructional activities.

**Reliability of experience sampling method.** In their review of the reliability of Experience Sampling Method, Csikszentmihalyi and Larson (2013) found that respondents reports of their activities in diary studies and using ESM had a positive correlation (r = .93) indicating that ESM studies accurately reflect how participants spend their time. The researchers also investigated whether the measuring procedure impacts participants’ responses and found that while the measuring procedure seems to have no impact on responses, participants do become better at self-anchoring their emotional experience by the second half of the first week of a study.

Csikszentmihalyi and Larson (2013) indicate that because ESM is meant to measure the effects of situations on psychological states, it would be self-defeating to find perfect reliability in ESM studies. Instead, the researchers measured the individual response consistency of ESM by comparing each subjects’ mean and standard deviation from the first half of a week-long study to the second half of a week-long study and found that correlations were significant for both adolescents, with a median correlation coefficient of 0.60, and for adults, with a median correlation coefficient of 0.77. The researchers also identified internal consistency over two years based on a study of 28 adolescents who completed two ESM studies two years apart. For example, the stability of the psychological state *active* was r = .45 (p = .05) and the stability for the psychological state *happy* was r = .77 (p = .0001). Csikszentmihalyi and Larson (2013)
expressed the idea that because of the repeated measures component of ESM, it is less important for multiple items to measure a single construct, but that factor analysis of ESM mood items can be used.

**Validity of experience sampling method.** Past uses of Experience Sampling Method have indicated that internal validity in ESM is stronger than in one-time questionnaires. Studies have shown that over reporting and underreporting of behaviors and activities is less likely in ESM than it is in one-time questionnaires (Hektner, Schmidt, & Csikszentmihalyi, 2007).

In addition, Hektner, Schmidt, and Csikszentmihalyi (2007), found that in every ESM study at the time of their writing, emotional states that one would expect people to experience at the same time are actually experienced at the same time. The internal logic of these responses points to internal validity as participants who were intentionally misrepresenting their experiences would be unable to provide consistent patterns with “universally experienced linkages among different but related states” (p. 106).

ESM researchers recognize two “populations” about which inferences can be made based on the findings of their research. The first population is the collection of people participating in the study while the other population is the moments of experience. Historically, ESM studies have faced challenges around the response rate of participants. Because some participants may not respond to enough signals for their data to be used, these participants are removed from the study. This causes a problem for external validity because the remaining data are less representative of the intended population (Hektner, Schmidt, & Csikszentmihalyi, 2007). However, while some studies do have low response rates, Csikszentmihalyi and Larson (1987) found that response rate for fifth and eighth graders, a demographic similar to the participants in this study, was 91 percent.
Evidence also suggests that people who volunteer for ESM studies are more likely to be organized, diligent, and psychologically healthy. This impacts the representativeness of the samples and the external validity (Hektner, Schmidt, & Csikszentmihalyi, 2007). Hektner, et al. (2007) recommend that researchers take this information into account when selecting a sample and record if and how the final study sample differs from the original intended sample.

Sample

This study was conducted in a 6th grade classroom at a Title 1 middle school in the southeast region of the United States. During the study, all students in the classroom completed the surveys. In order for the data to be eligible for this study, students must have returned signed consent forms and completed self-reports for at least two third of the surveys. The former qualification is supported by previous ESM studies (Csikszentmihalyi & Larson, 2014). Out of 110 students, 61 students met these qualifications. The sample was 54.1% female, and 45.9% male. This is closely representative of the school demographics: 51% female and 49% male. Participants reported their race as: 49.2% Black, 37.3% Hispanic, 1.6% Multi-Cultural, 8.2% White, and 3.3% other. This is closely representative of the school demographics: 45% Black, 40% Hispanic, 9% White, and 6% Other. All participants were between the ages of 11 and 13: 26.2% were 11 years old, 72.1% were 12 years old, and 1.6% were 13 years old.

Measures

A total of 18 items were used to collect ESM data for this study. Survey instruments included items asking participants what activities they were engaged in the moments, as well as three scales measuring 1) students’ experiences of the conditions of flow, 2) students’ experiences of the internal dimensions of flow, and 3) emotions in the moment.
**Task and/or activity indicator.** ESM surveys of flow typically measure external and internal dimensions of experience. Because the external factors (including time of day and location and leisure versus work) were controlled as a result of the study taking place in one classroom in order to measure the impact of critical literacy on flow, questions regarding these factors were not required on the survey. The external factor of activity was measured by students selecting the appropriate activity on the survey. The external factor of on or off task behavior was indicated by an open-ended question asking the students to explain what they were doing. This was coded as on or off task in data analysis (Schmidt, Shernoff, & Csikszentmihalyi, 2013). A description of the activities in correspondence with the day and number of the Experience Sampling Form can be found in Figure 1. Lesson plans and lesson materials can be found in Appendix D.

Table 1

<table>
<thead>
<tr>
<th>Label</th>
<th>Day</th>
<th>Survey</th>
<th>Activity Description</th>
<th>Activity Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>1</td>
<td>1</td>
<td>Sneetches Video: Students watch a digital version of Dr. Seuss’s text <em>The Sneetches.</em></td>
<td>Consumption</td>
</tr>
<tr>
<td>1.2</td>
<td>1</td>
<td>2</td>
<td>Labeling Activity: Students viewed images of diverse people and brainstormed answers to the prompt “Write down 1-3 words that someone might use to describe or label people.”</td>
<td>Creation</td>
</tr>
<tr>
<td>1.3</td>
<td>1</td>
<td>3</td>
<td>Students participated in a Think/Pair/Share to discuss the following questions:</td>
<td>Reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- How did you decide what words to use to describe the people in these images?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Do you think these words tell you everything to know about the person? Why or why not?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Has anyone ever made an assumption about you?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Do you ever make assumptions about people in real life?</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>2</td>
<td>1</td>
<td>Reflection: Students wrote in their journal to respond to the prompt: “Have you ever been treated differently because of who you are? How did it make you feel? If you have not, have</td>
<td>Reflection</td>
</tr>
</tbody>
</table>
you ever treated anyone different because who they are? Why? How do you feel about it?”

2.2 2 2 Students read a text in which students discriminate against another student because of stereotypes. Consumption

2.3 2 3 Whole Class Discussion: Students discussed how stereotypes have impacted their own lives. Reflection

3.1 3 1 Brainstorming: Students brainstormed a variety of labels that have been applied to them and worked to choose one they would write about. Reflection

3.2 3 2 Writing: Students began writing a rough draft of their I Am Not pieces. Creation

3.3 3 3 Drawing: Students created a rough draft visual representation for their I Am Not piece. Creation

4.1 4 1 Peer Review: Students shared their rough drafts and provided feedback. Creation

4.2 4 2 Final Drafts: Students created their final drafts of their I Am Not piece. Creation

4.3 4 3 Final Drafts: Students created their final drafts of their I Am Not piece. Creation

5.1 5 1 Sharing: Students shared their written pieces with the class. Students either listened or shared. Consumption/Creation

5.2 5 2 Sharing: Students shared their written pieces with the class. Students either listened or shared. Consumption/Creation

5.3 5 3 Reflection: Students reflected on the unit by answering the following prompt:
- What did you learn about the labels people place on each other? What did you learn about yourself? What did you learn about your classmates?
- How will these new understandings impact the way you interact with others/the way you want others to interact with you?
Conditions of flow. A 5-item scale measuring the conditions of flow was adapted from the Sloan Study of Youth and Social Development (SSYSD), a national longitudinal study that explored how students think about their lives in the future (Csikszentmihalyi & Schneider, 2000). This study collected data from twelve sites during four (1992-1993, 1993-1994, 1994-1995, and 1996-1997) separate years from students in sixth, eighth, tenth, and twelfth grade. The ESM was only a component of this study that also included in-depth interviews and a battery of questionnaires Csikszentmihalyi & Schneider, 2001). Students in the study completed the experience-sampling form for one week during each year of the study. Items selected are those specifically used to measure the quality of students’ experiences including their experience of flow in school. The scale assessed students’ experiences of flow through the following items: Importance (“Was it important to you?” and “How important was it to your future goals?”, $\alpha = .808$), Autonomy (“Did you have some choice in picking this activity?” and “Did you wish you were doing something else?”, $\alpha = .706$), Success (“Did you feel good about yourself?” and “Were you learning something or getting better at something?”, $\alpha = .746$), Focus (coded-item based on student self-report activity is on or off task), and the Challenge/Skill Balance ($\alpha = .845$). The challenge skill interaction variable was created by subtracting the participants’ skill response from the participants’ challenge response. In this way, a participant with a challenge skill balance of 0 would indicate a perfect match between the challenge of the task and the skill of the participant. A positive balance score would indicate that the task was more difficult than the skill level of the participant, and a negative balance score would indicate the task was easier than the skill level of the participant.

Each condition of flow was measured using a fully anchored five point scale measuring each item as “Not at all,” “Mostly Not, “Neutral,” “Somewhat,” and “Very Much.” Because of
the limits of the Google Form used to administer the survey, these rankings were provided on the whiteboard and reviewed before each survey.

**Flow.** Flow is defined as students’ experiences of internal dimensions of flow including enjoyment, concentration, and interest (Shernoff, 2001). This study measured the internal dimensions of experience using the survey from the Sloan Study of Youth and Development (Csikszentmihalyi & Schneider, 2000). The first three questions (“Did you enjoy what you were doing?” “How well were you concentrating?” and “Was this activity interesting?”) are questions frequently used in ESM to measure student engagement as conceptualized by flow. The question “Did you enjoy what you were doing?” was designed to measure students’ enjoyment of a task. The question “How well were you concentrating?” was designed to measures students’ concentration during a task. The question “Was this activity interesting” was used to measures students’ interest in a task. The composite of flow was calculated by obtaining the mean scores of the three items described above. In addition, a high level of reliability ($\alpha = .84$) was found in this study.

**Emotions in the moment.** The next series of questions asks students to rate their mood on a Likert scale. In order to assess the reliability of self-reports of internal states, Cronbach’s alpha is often used. This reliability tool has been used in conjunction with the mood component of the survey to be used in this study and has consistently reported an acceptable level of reliability (primarily $r = .70$ to $r = .90$) (Hektner, Schmidt, & Csikszentmihalyi, 2007). This data was collected for future research purposes; therefore, it was not analyzed for the purposes of this study.

**Data Analysis**
Creation of composite variables. In order to develop the variable for autonomy, a composite variable was created using mean scores for responses to the questions “Did you have some choice in picking this activity?” and “Did you wish you were doing something else?” The latter question was reverse coded before the composite variable was created. The variable for importance was developed using the mean score for the questions “Was it important to you?” and “How important was it to your future goals?” The variable measuring success was created by developing a mean score for the questions “Did you feel good about yourself?” and “Were you learning something or getting better at something?” Finally, the variable for focus was created by coding students reported thoughts as on or off-task. These variables were then analyzed for skew and kurtosis.

The challenge skill interaction variable was created by subtracting the participants’ skill response from the participants’ challenge response. In this way, a participant with a challenge skill balance of 0 would indicate a perfect match between the challenge of the task and the skill of the participant (Moneta & Csikszentmihalyi, 1996). A positive balance score would indicate that the task was more difficult than the skill level of the participant, and a negative balance score would indicate the task was easier than the skill level of the participant. This variable was then analyzed for skew and kurtosis.

Composite variables were created for both the flow variable and the flow conditions (Challenge/Skill, Autonomy, Importance, Focus, and Success) to measure students’ total experience throughout the unit by creating a mean score using each surveys’ responses. In addition, composite variables were created for both skill and challenge independently. These variables were then analyzed for skew and kurtosis. Composite variables were also created to measure students’ flow experience based on activity type. The activities were defined as creating
text, consuming text, or reflecting. A composite variable was created for all flow conditions and the flow experience using the mean of each response. These composite variables were used for the remaining data analysis.

To analyze how students’ engagement was different between typical Language Arts instruction and the critical literacy unit, a paired samples T-Test was run on the composite baseline flow variable and the composition overall flow variable. In order to measure how flow conditions contribute and/or correlate to students’ experiences of flow, two statistical tests were used. First, Pearson’s correlation was used to measure how students’ experiences of the conditions of flow correlated to students’ experience of flow. In addition, multiple linear regression was used to analyze which flow conditions contributed to flow. Finally, Pearson’s correlation was used to analyze correlations among the flow conditions. Next, Pearson’s correlation was used to measure the relationship between the components of flow (concentration, enjoyment, and interest) and the flow experience.

Multiple Repeated Measures ANOVAs were run to measure how students’ engagement levels change over a period of class or over several classes. First, a Repeated Measures ANOVA was run for each of the three flow variables for each day to compare students’ engagement levels at the beginning, middle, and end of class. Next, a Repeated Measures ANOVA was run for the composite flow variable for each survey to compare students’ engagement levels for the days of the week. Finally, a Repeated Measures ANOVA was run to measure how students’ engaged in the types of activities based on whether the activity asked students to consume texts, create texts, or reflect.

Finally, Pearson’s correlation was used to analyze the how the balance of challenge and skill correlates with the flow experience and/or flow conditions.
A summary of each research question and the corresponding variables and statistical analysis can be found in figure 2.

Table 2

*Research Questions, Type of Measurement for Variables, and Corresponding Statistical Analysis*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Key Variables</th>
<th>Instrument(s) or Measurement of the Key Variables and Scale</th>
<th>Measurement Type</th>
<th>Statistical Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) What flow conditions contribute to students’ experiences of flow in critical literacy practices in a sixth grade classroom?</td>
<td>Flow: Composite variable-enjoyment, concentration, interest Flow Conditions: challenge skill interaction, success, autonomy, importance, focus</td>
<td>Flow Scale 1 to 5</td>
<td>Interval Variable</td>
<td>Pearson’s Correlation</td>
</tr>
<tr>
<td>(2) What is the relationship between the various conditions of flow in critical literacy practices in a sixth grade classroom?</td>
<td>Flow Conditions: challenge, skill, challenge skill interaction, success, autonomy, importance, focus</td>
<td>Flow Scale 1 to 5</td>
<td>Interval Variable</td>
<td>Pearson’s Correlation, Multiple Linear Regression</td>
</tr>
<tr>
<td>(3) How does student engagement level change over a period of class and/or over several classes in the critical literacy unit?</td>
<td>Flow: Composite variable-enjoyment, concentration, interest</td>
<td>Flow Scale 1 to 5</td>
<td>Interval Variable</td>
<td>Repeated Measures ANOVA</td>
</tr>
</tbody>
</table>
Chapter Four: Findings

The study sought to understand four main research questions regarding students’ engagement in critical literacy practices:

1. What flow conditions contribute to students’ experiences of flow in critical literacy practices in a sixth grade classroom?

2. What is the relationship between the various conditions of flow in critical literacy practices in a sixth grade classroom?

3. How does student engagement level change over a period of class and/or over several classes in the critical literacy unit?

   a. How do student engagement levels vary according to the type of task?

4. How does the balance of challenge and skills correlate with the conditions of flow and the overall flow experience in 6th grade students?
Preliminary Findings: Paired Samples t Test: Flow in Critical Literacy

A two-tailed paired samples t test revealed that students experienced higher levels of flow in the critical literacy unit as described by the composite variable of flow during the unit (M = 4.28, SD = .11) than in general in Language Arts as described by the composite variable of flow collected for baseline data (M = 3.76, SD = .111), (t (57) = 5.1724, p < .05).

Correlation between Flow Conditions and Flow

The correlation between participants’ flow conditions and flow is reported in Table 1. Success was strongly positively correlated with the flow experience (r = .915, p < .001). Importance was also strongly positively correlated with the flow experience (r = .904, p < .001). Skill was moderately positively correlated with the flow experience (r = .639, p < .001). Autonomy was also moderately positively correlated with the flow experience (r = .496, p < .001). Focus was also positively correlated with the flow experience (r = .401, p < .001). Finally, challenge skill interaction was negatively correlated with the flow experience (r = .441, p < .001). Challenge was not significantly correlated with the flow experience (r = .039, p > .01).

Table 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>CHXSK</th>
<th>SK</th>
<th>CH</th>
<th>AUT</th>
<th>IMP</th>
<th>FOC</th>
<th>SUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>4.28</td>
<td>.11</td>
<td>- .441**</td>
<td>639**</td>
<td>.039</td>
<td>.496**</td>
<td>.904**</td>
<td>.341**</td>
<td>.915**</td>
</tr>
</tbody>
</table>

Note. CHXSK= Challenge Skill Balance, SK = Skill, CH = Challenge, AUT = Autonomy, IMP = Importance, FOC = Focus, SUC = Success

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).
Correlation among Flow Conditions

Several significant correlations were found among flow conditions. Importance and success were strongly correlated \((r = .893, p < .000)\). Success and skill were also strongly correlated \((r = .745, p < .000)\). Moderate correlation was found among the following flow conditions: success and challenge skill interaction \((r = -.488, p < .000)\); success and autonomy \((r = .459, p < .000)\); importance and autonomy \((r = .603, p < .000)\); and skill and importance \((r = .548, p < .000)\).

Table 4

Correlation among Flow Conditions

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>CHXSK</th>
<th>SK</th>
<th>CH</th>
<th>AUT</th>
<th>IMP</th>
<th>FOC</th>
<th>SUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHXSK</td>
<td>-2.06</td>
<td>1.10</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SK</td>
<td>3.99</td>
<td>.77</td>
<td>-.781**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CH</td>
<td>2.10</td>
<td>.65</td>
<td>.621**</td>
<td>-.013</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUT</td>
<td>2.65</td>
<td>.64</td>
<td>-.031</td>
<td>.175</td>
<td>.117</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMP</td>
<td>3.43</td>
<td>1.08</td>
<td>-.291*</td>
<td>.548**</td>
<td>.153</td>
<td>.603**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOC</td>
<td>.75</td>
<td>.42</td>
<td>-.139</td>
<td>.268*</td>
<td>.103</td>
<td>.135</td>
<td>.259*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SUC</td>
<td>3.70</td>
<td>.81</td>
<td>-.488**</td>
<td>.745**</td>
<td>.102</td>
<td>.459**</td>
<td>.893**</td>
<td>.342**</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note. CHXSK= Challenge Skill Balance, SK = Skill, CH = Challenge, AUT = Autonomy, IMP = Importance, FOC = Focus, SUC = Success
**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Multiple Linear Regression: Flow Conditions and Flow
A multiple linear regression was calculated to predict flow based on Skill, Challenge, Success, Autonomy, Importance, and Focus. A significant equation was found ($F(6, 54) = 67.064, p < .000$) with an $R^2$ of .869. Success and importance were significant predictors of flow while other conditions were not significant.

Table 5

*Model Summary of Flow Conditions Relationship to Flow Experience*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.939a</td>
<td>.882</td>
<td>.871</td>
<td>.29809</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), TotalSuccess, TotalFocusThoughts, TotalAutonomy, TotalChallengeSkill, TotalImportance

Table 6

*Strength of Prediction of Individual Flow Conditions for Flow Experience*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.708</td>
<td>.247</td>
<td>2.867</td>
</tr>
<tr>
<td></td>
<td>CHXSK</td>
<td>-.069</td>
<td>.043</td>
<td>-.091</td>
</tr>
<tr>
<td></td>
<td>AUT</td>
<td>-.005</td>
<td>.077</td>
<td>-.004</td>
</tr>
<tr>
<td></td>
<td>IMP</td>
<td>.393</td>
<td>.095</td>
<td>.512</td>
</tr>
<tr>
<td></td>
<td>FOC</td>
<td>.120</td>
<td>.097</td>
<td>.061</td>
</tr>
<tr>
<td></td>
<td>SUC</td>
<td>.406</td>
<td>.131</td>
<td>.394</td>
</tr>
</tbody>
</table>
Note. CHXSK = Challenge Skill Balance, AUT = Autonomy, IMP = Importance, FOC = Focus, SUC = Success

a. Dependent Variable: TotalFlow

Changes in Engagement over Time

In order to measure how students’ engagement levels change over a period of class, a repeated measures ANOVA was conducted on the flow variables from each survey. No significant difference was found for students’ flow experiences throughout the week (F (5.75, 1.28) = -4.47, p = .30).

Table 7

Descriptive Statistics: Flow throughout Week

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Flow1.1</th>
<th>Flow1.2</th>
<th>Flow1.3</th>
<th>Flow2.1</th>
<th>Flow2.2</th>
<th>Flow2.3</th>
<th>Flow3.1</th>
<th>Flow3.2</th>
<th>Flow3.3</th>
<th>Flow4.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. Deviation</td>
<td>.45542</td>
<td>.94256</td>
<td>1.38511</td>
<td>.91262</td>
<td>1.06110</td>
<td>1.17043</td>
<td>.86489</td>
<td>1.16726</td>
<td>.90446</td>
<td>.95428</td>
</tr>
</tbody>
</table>
Flow4.2  4.2917  .89339  Creation  
Flow4.3  4.0833  1.21411  Creation  
Flow5.1  4.2708  1.14968  Consumption/Creation  
Flow5.2  3.9167  1.33055  Consumption/Creation  
Flow5.3  4.3750  .97278  Reflection  

To measure students’ changes in flow over a class period, a repeated measures ANOVA was conducted for each day using the three composite variables measuring flow. A significant difference was found only for Day 1 of the survey ($F(1.72, 82.746) = 81.026, p < .001$). Table 8 displays the results of the Repeated Measures ANOVA for Day 1.

Table 8  
Repeated Measures ANOVA: Day 1

<table>
<thead>
<tr>
<th>(I) Class1</th>
<th>(J) Class1</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig. $^b$</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>.476$^*$</td>
<td>.126</td>
<td>.001</td>
<td>.164</td>
<td>.788</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>.551$^*$</td>
<td>.181</td>
<td>.001</td>
<td>.104</td>
<td>.998</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>-.476$^*$</td>
<td>.126</td>
<td>.001</td>
<td>-.788</td>
<td>-.164</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>.074</td>
<td>.179</td>
<td>1.000</td>
<td>-.366</td>
<td>.515</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>-.551$^*$</td>
<td>.181</td>
<td>.001</td>
<td>-.998</td>
<td>-.104</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>.074</td>
<td>.179</td>
<td>1.000</td>
<td>-.515</td>
<td>.366</td>
</tr>
</tbody>
</table>
Finally, in order to measure how students’ engagement levels differed based on the type of task, composite variables of flow were created for tasks based on whether students were consuming text, creating text, or reflecting on their experience. Again, no significant difference was found \( F(1.94, .29) = -1.65, p = .74 \)

Table 9

Repeating Measures ANOVA: Task Type

| (I) Task | (J) Task | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval for Difference
|----------|----------|-----------------------|------------|------|----------------------------------------
| 1        | 2        | -.010                 | .105       | 1.000| -0.270 to .250                        |
| 1        | 3        | .063                  | .107       | 1.000| -.202 to .327                        |
| 2        | 1        | .010                  | .105       | 1.000| -.250 to .270                        |
| 2        | 3        | .072                  | .092       | 1.000| -.155 to .300                        |
| 3        | 1        | -.063                 | .107       | 1.000| -.327 to .202                        |
| 3        | 2        | -.072                 | .092       | 1.000| -.300 to .155                        |

Note: Task 1 = Consumption, Task 2 = Creation, Task 3 = Reflection

Challenge Skill Interaction and Flow

The correlation between flow conditions and the challenge skill balance is displayed in Table 10. The only variable with a significant correlation to the challenge skill balance was success \( r = -.488, p < .001 \).

Table 10

Correlation between Flow Conditions and Challenge Skill Balance
STUDENTS’ EXPERIENCE OF FLOW IN CRITICAL LITERACY

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>AUT</th>
<th>IMP</th>
<th>FOC</th>
<th>SUC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHXSK</td>
<td>-2.06</td>
<td>1.10</td>
<td>-.031</td>
<td>-.291*</td>
<td>-.139</td>
<td>-.488**</td>
</tr>
</tbody>
</table>

*Note. CHXSK= Challenge Skill Balance, AUT = Autonomy, IMP = Importance, FOC = Focus, SUC = Success
**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The correlation between flow and the challenge skill balance is displayed in Table 11. A moderate negative correlation was found \((r = -.441, p < .001)\). This indicates that the easier the students found the assigned task, the higher students’ flow experiences were.

Table 11

*Correlation between Challenge Skill Interaction and Flow Experience*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHXSK</td>
<td>-.441**</td>
</tr>
</tbody>
</table>

*Note. CHXSK= Challenge Skill Balance,
**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Chapter Five: Discussion

The purpose of the research study was to understand how students experience flow during a critical literacy unit in a 6th grade classroom. Experience Sampling Method was used to survey students’ experiences during a weeklong critical literacy unit. Participants were 61 sixth grade students at a public middle school in the southeastern United States. Survey data consisted of demographic self-report items, Likert scale items and two free response questions. The survey was adapted from the Sloan Study of Youth and Social Development (Csikszentmihalyi & Schneider, 2000). Previous literature on critical literature pointed to increased engagement
among students, but this is the first study to quantitatively measure students’ engagement during critical literacy practices.

In this study, a positive correlation was found between flow and participation in critical literacy practices. This finding is consistent with observation and anecdotal reports of increased engagement throughout critical literacy literature (Lawrence & Harrison, 2009; Bean, Seniour, Valerio, & White, 2001; Wiseman, 2010; Garlid, 2014; Fairbanks, 2000; Dytash & Morgan, 2013; Hidi, 2001; Hawthorne, 2008). Previous research indicated that students were highly engaged during critical literacy practices, but relied on observation and anecdotal reports. This study provides quantitative evidence that critical literacy practices are positively correlated with flow.

Several of the conditions of flow were found to be strongly or moderately correlated. Importance and success were strongly correlated. Success and skill were also strongly correlated. Moderate correlations were found among the following flow conditions: success and challenge skill interaction; success and autonomy; importance and autonomy; and skill and importance. These correlations support previous findings that the flow conditions are interconnected (Schmidt, 2010). Based on these findings, the flow conditions interact with one another. For instance, students experiencing autonomy may experience increased success because their control of the task increases their perception of success. Similarly, students may find that a task they are in control of is more important.

Another important finding is that flow conditions (challenge, skill, autonomy, importance, focus, and success) correlate with flow experience which reflects the literature on flow in schools (Schmidt et al., 2007). However, the regression model showed that two factors actually led to student engagement—success and importance. The ability of these specific factors
to independently predict flow has not previously been reflected in the literature on flow; however it is supported by research on student engagement that indicates that students are more likely to be engaged in tasks that are authentic and in which they experience competence (Marks, 2000; Fredericks, Blumenfield, & Paris, 2004; Skinner et. al., 2008). Qualitative research has indicated that students are more engaged in authentic tasks (Mark, 2000) and the significance of importance as a predictor of flow in this study supports this previous finding. Previous research has found that students who believe that they know how to be successful at a task are more engaged in the task (Connell & Wellborn, 1991). The findings of this study indicate that students who are experiencing feelings of success and autonomy in the course of completing their assignments will be more engaged in the learning taking place in a classroom. In the unit for this study, students’ personal experience with their own identity was the focus of the unit. Because this is a topic that matters to them and that they are automatically the experts on, it is understandable that students experienced high levels of both autonomy and success. The findings show that these high levels contributed to increased experiences of flow in the overall assignment in comparison with other experiences in Language Arts classes.

The significance of importance as a predictor of students’ engagement indicates that teachers need to strive to create authentic and meaningful tasks. The goal of the Critical Text Production that was undertaken in the unit for this study is to provide students with a sense of agency (Morrell, 2003). Students are rarely positioned as the creators of knowledge in the classroom. Students were provided with this sense of agency when considering their own identities and creating counter-narratives to the master narratives to which they are often exposed. Classroom instruction should aim to use students’ knowledge as an asset and build lessons and tasks from there in order to engage students in activities they consider important.
In addition, this study found a negative correlation between flow and the challenge-skill balance. In general, research on flow shows that the challenge-skill balance correlates positively with flow (Csikszentmihalyi, 1990, Schmidt, 2010; Schmidt et al., 2007; Shernoff & Csikszentmihalyi, 2008; Schmidt et al., 2014; Shernoff, 2013). However, the findings of this study reflect research that shows that younger students’ engagement levels are less correlated with challenge (Schweinle, et al., 2006). When students found a task too difficult for their skill level, they were less likely to experience flow. Conversely, when they felt skilled at a task they were more likely to experience flow. This finding suggests that younger students may be more engaged by activities at which they are more adept. Previous research suggests that challenge threatens younger students’ self-efficacy and therefore is not seen in a positive light (Schweinle, et al., 2006; Turner et al., 1998). Turner, Meyer, and Cox (1998) suggest that this can be addressed by providing students with scaffolded instruction, choice, and activities of interest. Based on these findings, younger students are more likely to be disengaged when they feel a task is too challenging for them. It is also possible that younger students do not label tasks challenging when they feel they have the necessary skills to be successful regardless of the innate challenge of a task. This would explain the positive correlation between skill and flow and the negative correlation between challenge and flow.

The study also found that, as a rule, there was no significant change in students’ engagement levels over a period of class or over several classes throughout the week. However, there was significant difference with the baseline data, and students’ engagement levels increased in the critical literacy unit. This finding suggests that students’ engagement levels are more reflective of the activity they are participating in than the time of day or day of week. This supports previous findings that engagement is heavily influenced by the characteristics of the
task at hand (Fredericks, Blumenfield, & Paris, 2004). No significant difference was found in students’ experience of flow dependent on task type suggesting that students experience flow conditions during a variety of tasks in a critical literacy unit. It is possible that students were engaged in specific tasks because of the overall aim of the unit- to provide students with space to take ownership of their identity. With this end goal in mind, students may have experienced feelings of importance, autonomy, focus, and success in tasks that they otherwise would not have. For example, students may have experienced these flow conditions during peer editing in this assignment whereas they might find peer editing of a different, non-critical writing task as lacking opportunities to experience flow conditions and therefore would not experience flow in said task. In addition, this may explain why students’ engagement levels did not vary throughout the week, as the end goal remained the same each day.

Figure 2

*Updated Conceptual Framework of Interaction between Critical Literacy Unit, Flow Conditions, and Flow*

In this updated conceptual framework, Challenge has been removed from the flow conditions and has been placed as a dotted line between Flow Conditions and Flow Experience to represent the negative correlation between Challenge and Flow Experience.
Based on the findings of this study, it is necessary to update the initial conceptual framework. Figure 2 provides the updated conceptual framework. Overall, the findings of this study suggest that critical literacy practices provide a way to engage 6th grade students by activating the flow conditions. Students experiencing feelings of skill, autonomy, importance, focus, and success will experience flow—a high quality engagement that even those out of school strive for. Because people seek out activities that cause flow, providing students with the opportunity to experience flow as a part of learning may enable them to pursue the lifelong readers, writers, and learners that teachers strive to develop. The use of critical literacy to provide opportunities for students to experience flow may help to create students who critically analyze and produce texts—both in and out of school. However, this study found that students experienced challenge as a barrier to flow. While it did not prevent flow, it did negatively correlate with experiences of flow. To represent this, challenge has been removed from the flow conditions that lead to the flow experience and is now represented by a dotted line between the flow conditions and the flow experience—representing the potential of challenge to act as a barrier to the experience of flow.

Implications

The findings of this study hold important implications in teaching practices. The aim of this study was to investigate how students experience flow in a critical literacy unit and to examine how the various conditions of flow correlate with each other and with flow itself.

The student engagement levels during this critical literacy unit suggest that the implementation of critical literacy practices may be one way to increase student engagement. Critical literacy proponents believe that current educational practices often marginalize students from diverse backgrounds (Boyd, et al., 2006). Because the majority of students in this study
were from historically marginalized groups, it is reasonable to infer from these results that students who feel marginalized by the education system are unlikely to engage in those same practices that are ostracizing them. Critical literacy practices may serve as not only a way to become inclusive of these students, but also to engage them. Based on this finding, teachers aiming to engage students from diverse populations may find that the use of critical literacy philosophy as a foundation for their unit and lesson planning will help them attain this goal.

Based on the findings, it is important that students experience success and find importance in their classroom activities. The lack of correlation between students’ engagement and the challenge skill interaction supports the importance of scaffolding assignments and tasks for younger students. The positive correlation between students’ feelings of success and their engagement in a task as well as the positive correlation between students’ feeling of being skilled at a task and their engagement in that task supports previous research that suggests that students need to feel competence in in order to be engaged (Connell & Wellborn, 1991; Skinner et al., 2008). By scaffolding assignments, teachers prepare students to face new challenges with the skills needed; therefore lowering the challenge students experience and increasing student engagement. While current trends in education focus on rigor and encourage teacher to provide students with opportunities to struggle, this research indicates that students must also be given opportunities to feel successful if we want them to be truly engaged in their schoolwork. Critical literacy proponents often scaffold complex texts and ideas with popular culture (Morrell, 2002; Gainer, 2010; Vasquez, 2007; Exley, Woods; & Dooley, 2017). In the unit conducted for this study, the complex ideas of identity and stereotyping were scaffolded using the Dr. Seuss (1953) book *The Sneetches* as well as an informal analysis of images taken from the internet. In addition, the unit was part of a young adult novel study, a tool frequently used to engage students
in complex ideas (Behrman, 2006). Activities like this prepare students to engage in complex work that they might otherwise struggle with and disengage from.

It is also notable that importance and autonomy were positively correlated. Students may find work that they feel in control of to be more important, or they may feel that because the work is important to them, they have more autonomy. Students will likely not experience these feelings of autonomy and importance with the kind of bookwork or worksheets seen in many middle school classrooms. In order to engage students, teachers should provide students with work that has the potential to inspire them to take ownership of their product and create something meaningful to them and/or others. In the unit for this study, students were able to create counter-narratives that spoke not only of their own experience but of that of many of their peers. These narratives were shared with peers, teachers, and parents and became a way for students to begin to consider how dominant narratives shape the world they live in every day.

Throughout the creation of counter-narratives, the participants reported that they enjoyed the work, were concentrated on the task at hand, and found the activity interesting. According to the theory of flow, these components come together to create flow- a “state in which people are so involved in an activity that nothing else seems to matter…” (Csikszentmihalyi, 1990, p. 4). This experience of flow is created by students experiencing skill, autonomy, importance, focus, and success. As teachers construct units and lesson plans, they should provide as many opportunities as possible for students to experience the amalgamation of these conditions and create the kind of learning experiences that have been shown to engage not only middle school students but all learners.

Limitations
Some social scientists question whether individuals can be trusted to provide accurate information about their own thoughts and feelings due to bias, forgetfulness, and editing for social desirability. However, proponents of ESM argue that this phenomenological approach assumes that “subjective experience is the most objective datum we have access to” (Hektner, Schmidt, & Csikszentmihalyi, 2007, p. 10) and that no matter what other indicators may suggest what one says they are feeling is what they are feeling (Hektner, Schmidt, & Csikszentmihalyi, 2007).

Because ESM studies rely on self-report data, they are “vulnerable to problems with memory, hasty completion, exaggeration, and falsification” (Schmidt, Shernoff, & Csikszentmihalyi, 2007, p. 556). Results from the study will be correlational, and all inferences regarding causality will be speculative (Shernoff et. al., 2003). In addition, this study does not examine how the teacher impacts student engagement or flow despite findings that indicate that student engagement is impacted by teacher behaviors.

One limitation of the study was the self-selected aspect of the participants in the survey. Students who did not return consent forms may be less likely to engage in school or classroom tasks than students who did return consent forms. Students whose parents denied consent may experience school differently than students whose parents consented. As with all self-selected participant studies, the non-participants may have different experiences than those who participate.

Another limitation of the study is the limited baseline data. While students did report being more engaged in critical literacy practices than in general Language Arts, the survey did not capture students’ engagement in specific tasks that were not focused on critical literacy. In addition, no data was collected to indicate whether students were more engaged in general in this
specific classroom than in other English Language Arts classrooms in previous grades and schools.

In addition, the study is limited by its use of only quantitative data. Engagement is often exhibited through observable behaviors and the use of only self-reported scale responses, while useful for measuring personal experiences of flow, would likely be enhanced by observations and interviews.

Finally, the study occurred over a short time period of just one week. The novelty of completing surveys and being asked for their input may have skewed students’ responses. In addition, while this classroom often uses critical literacy practices, the uniqueness of this particular assignment may have impacted students’ engagement levels.

Future Research

The aim of this research was not to compare students’ engagement in critical literacy practices with student engagement in other types of English/Language Arts instruction; however, future research may want to address this. A future research project could use ESM to collect data on both a critical literacy unit and a non-critical literacy unit and compare the results. This would enable researchers to observe differences between students’ engagement in a variety of both critical literacy and non-critical literacy tasks.

Future analysis of the data collected here or of similar data could include analysis of the data by demographic categories. This research indicates that students are engaged in critical literacy practices, but it may be helpful to identify if some groups of students are more or less engaged in specific tasks or in the unit as a whole.
Future research would benefit from a mixed-methods approach that incorporates observations and interviews as well as the survey data to examine students’ experiences of flow in the English Language Arts classroom. In addition, the survey was designed to take the students just a few minutes to answer to encourage completion and minimize interruption to instructional time. Future surveys may benefit from additional questions including those from the 500 Family Survey (Schneider & Waite, 2005) rating their interactions with others and strong emotions they had experienced since the last survey. This would enable researchers to study how interpersonal interactions and emotions interact with students’ engagement in tasks.

Additional research would benefit from being conducted in multiple classrooms completing the same task. Research indicates that the environment teachers create can impact students’ engagement. By conducting the research in multiple classrooms with different teachers, researchers would be able to discern the components of engagement that are specific to the task at hand.

Because of the finding that the middle school students in this study did not experience flow when levels of challenge were high, additional research should be conducted specifically focused on the interaction between challenge and engagement. It would be helpful to understand if students simply did not identify tasks at which they were skilled at as challenging or if they were truly disengaged from difficult tasks. It would also benefit the field to understand how students experience challenge and how teachers can work to help students experience challenge as a positive rather than a negative.

It would also be meaningful to include students’ grades on the tasks in the unit of study as a data point. This would enable researchers to correlate students’ achievement with their
engagement to determine if more engaged students perform better or how the different sources of engagement correlate with the conditions of flow.

Finally, future research on young middle school students’ experiences of flow would benefit from the kind of longitudinal study that has been conducted with older teens in the Sloan Study of Youth and Social development (Csikszentmihalyi & Schneider, 2000). Because we know that student engagement begins to decrease in middle school and the negative consequences, including dropping out of school that disengagement has on students it is imperative that we come to understand the qualities of tasks that engage students and begin to incorporate these qualities into classroom instruction.


References


Behrman, E. H. (2006). Teaching about language, power, and text: a review of classroom practices that support critical literacy: the author examines a number of articles published between 1999 and 2003 that present lessons or units to support critical literacy at the upper primary or secondary levels. *Journal of Adolescent & Adult Literacy, (6)*, 490.


Dyson, A. H. (2003). Popular literacies and the "all" children: Rethinking literacy development for contemporary childhoods. Language Arts, 81, 100


**Appendix A**

Demographics and General Engagement in Language Arts Survey
Demographic and Pre-Study Survey

1. Student ID # *

2. Gender
   Mark only one oval.
   - Male
   - Female

3. Race/Ethnicity
   Mark only one oval.
   - Asian/Pacific Islander
   - Black or African American
   - Hispanic or Latino
   - Multi-Cultural
   - White
   - Other

4. Age

5. In general, how much do you concentrate in Language Arts?
   Mark only one oval.
   - 1
   - 2
   - 3
   - 4
   - 5
   Not at all
   - Very Much

6. In general, how much do you enjoy Language Arts?
   Mark only one oval.
   - 1
   - 2
   - 3
   - 4
   - 5
   Not at all
   - Very Much
7. In general, how interested are you in Language Arts? 
   *Mark only one oval.*

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td>Very Much</td>
</tr>
</tbody>
</table>

Powered by

Google Forms
Appendix B: Experience Sampling Forms Day 1-5

Monday Experience Sampling Form

Please be honest and authentic with your responses. Results are anonymous and will not impact your grade or my perception of you.

* Required

1. Student ID Number *

At the time you were stopped...

2. What were you thinking about?

3. What was the assigned task? *
   
   Mark only one oval.
   
   - [ ] Sneetches Video
   - [ ] Labeling Activity
   - [ ] Class Discussion

4. What were you doing?

5. Did you enjoy what you were doing?
   
   Mark only one oval.
   
   - [ ] 1
   - [ ] 2
   - [ ] 3
   - [ ] 4
   - [ ] 5
   
   Not at all [ ] [ ] [ ] [ ] Very much

6. How well were you concentrating?
   
   Mark only one oval.
   
   - [ ] 1
   - [ ] 2
   - [ ] 3
   - [ ] 4
   - [ ] 5
   
   Not at all [ ] [ ] [ ] [ ] Very much
<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Was this activity interesting?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>8. How challenging was it?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>9. How skilled were you at it?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>10. Was it important to you?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>11. Did you wish you were doing something else?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>12. How important was it to your future goals?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>13. Did you feel good about yourself?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
</tbody>
</table>
Monday Experience Sampling Form

14. Were you learning anything or getting better at something?  
   *Mark only one oval.*

   1  2  3  4  5

   Not at all  ☐  ☐  ☐  ☐  ☐  Very much

15. Did you have some choice in picking this activity?  
   *Mark only one oval.*

   1  2  3  4  5

   Not at all  ☐  ☐  ☐  ☐  ☐  Very much

16. Were you succeeding in the activity?  
   *Mark only one oval.*

   1  2  3  4  5

   Not at all  ☐  ☐  ☐  ☐  ☐  Very much

**Describe your mood as you were beeped.**

17. *Mark only one oval.*

   1  2  3  4  5

   Bored  ☐  ☐  ☐  ☐  ☐  Excited

18. *Mark only one oval.*

   1  2  3  4  5

   Relaxed  ☐  ☐  ☐  ☐  ☐  Worried
Tuesday, 4/26 Experience Sampling Form

Please be honest and authentic with your responses. Results are anonymous and will not impact your grade or my perception of you.

* Required

1. Student ID Number *

At the time you were stopped....

2. What were you thinking about?

3. What was the assigned task? *
   Mark only one oval.
   ☐ Reflection
   ☐ Analyzing Text
   ☐ Brainstorming

4. What were you doing?

5. Did you enjoy what you were doing?
   Mark only one oval.
   1 2 3 4 5
   Not at all ☐ ☐ ☐ ☐ ☐ Very much

6. How well were you concentrating?
   Mark only one oval.
   1 2 3 4 5
   Not at all ☐ ☐ ☐ ☐ ☐ Very much
7. Was this activity interesting?  
_Mark only one oval._

1 2 3 4 5

Not at all 0 0 0 0 0 Very much

8. How challenging was it?  
_Mark only one oval._

1 2 3 4 5

Not at all 0 0 0 0 0 Very much

9. How skilled were you at it?  
_Mark only one oval._

1 2 3 4 5

Not at all 0 0 0 0 0 Very much

10. Was it important to you?  
_Mark only one oval._

1 2 3 4 5

Not at all 0 0 0 0 0 Very much

11. Did you wish you were doing something else?  
_Mark only one oval._

1 2 3 4 5

Not at all 0 0 0 0 0 Very much

12. How important was it to your future goals?  
_Mark only one oval._

1 2 3 4 5

Not at all 0 0 0 0 0 Very much

13. Did you feel good about yourself?  
_Mark only one oval._

1 2 3 4 5

Not at all 0 0 0 0 0 Very much
14. Were you learning anything or getting better at something?  
   *Mark only one oval.*
   
   1  2  3  4  5
   Not at all  ○  ○  ○  ○  Very much

15. Did you have some choice in picking this activity?  
   *Mark only one oval.*
   
   1  2  3  4  5
   Not at all  ○  ○  ○  ○  Very much

16. Were you succeeding in the activity?  
   *Mark only one oval.*
   
   1  2  3  4  5
   Not at all  ○  ○  ○  ○  Very much

Describe your mood as you were beeped.

17. *Mark only one oval.*
   
   1  2  3  4  5
   Bored  ○  ○  ○  ○  Excited

18. *Mark only one oval.*
   
   1  2  3  4  5
   Relaxed  ○  ○  ○  ○  Worried
Wednesday, 4/27 Experience Sampling Form

Please be honest and authentic with your responses. Results are anonymous and will not impact your grade or my perception of you.

* Required

1. Student ID Number *

__________________________

At the time you were signaled...

2. What were you thinking about?

__________________________

3. What was the assigned task? *
   Mark only one oval.
   ○ Reflecting
   ○ Writing I Am Not
   ○ Visual Representation

4. What were you doing?

__________________________

5. Did you enjoy what you were doing?
   Mark only one oval.
   1 2 3 4 5
   Not at all ○ ○ ○ ○ ○ Very much

6. How well were you concentrating?
   Mark only one oval.
   1 2 3 4 5
   Not at all ○ ○ ○ ○ ○ Very much

https://docs.google.com/forms/d/1zn020uarmA4yngj1zqHj8H6Fie5M7_jI3uwpWM30/edit
7. Was this activity interesting?  
   *Mark only one oval.*

   1  | 2  | 3  | 4  | 5  
   ——|——|——|——|——
  Not at all | | | | Very much

8. How challenging was it?  
   *Mark only one oval.*

   1  | 2  | 3  | 4  | 5  
   ——|——|——|——|——
  Not at all | | | | Very much

9. How skilled were you at it?  
   *Mark only one oval.*

   1  | 2  | 3  | 4  | 5  
   ——|——|——|——|——
  Not at all | | | | Very much

10. Was it important to you?  
    *Mark only one oval.*

    1  | 2  | 3  | 4  | 5  
    ——|——|——|——|——
  Not at all | | | | Very much

11. Did you wish you were doing something else?  
    *Mark only one oval.*

    1  | 2  | 3  | 4  | 5  
    ——|——|——|——|——
  Not at all | | | | Very much

12. How important was it to your future goals?  
    *Mark only one oval.*

    1  | 2  | 3  | 4  | 5  
    ——|——|——|——|——
  Not at all | | | | Very much

13. Did you feel good about yourself?  
    *Mark only one oval.*

    1  | 2  | 3  | 4  | 5  
    ——|——|——|——|——
  Not at all | | | | Very much
2/22/2017

Wednesday, 4/27 Experience Sampling Form

14. Were you learning anything or getting better at something?  
Mark only one oval.

1 2 3 4 5
Not at all   Very much

15. Did you have some choice in picking this activity?  
Mark only one oval.

1 2 3 4 5
Not at all   Very much

16. Were you succeeding in the activity?  
Mark only one oval.

1 2 3 4 5
Not at all   Very much

Describe your mood as you were beeped.

17. Mark only one oval.

1 2 3 4 5
Bored   Excited

18. Mark only one oval.

1 2 3 4 5
Relaxed  Worried

Powered by
Google Forms
Thursday, 4/28 Experience Sampling Form

Please be honest and authentic with your responses. Results are anonymous and will not impact your grade or my perception of you.

* Required

1. Student ID Number *

At the time you were stopped....

2. What were you thinking about? *

3. What was the assigned task? *
   Mark only one oval.
   - Pair Discussion
   - Writing Final Draft
   - Final Visual Representation

4. What were you doing? *

5. Did you enjoy what you were doing?
   Mark only one oval.
   
   |   |   |   |   |   |
   | 1 | 2 | 3 | 4 | 5 |
   | Not at all | | | | Very much |

6. How well were you concentrating?
   Mark only one oval.
   
<p>| | | | | |
|   |   |   |   |   |
| 1 | 2 | 3 | 4 | 5 |
| Not at all | | | | Very much |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Rating Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Was this activity interesting?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval.</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>8. How challenging was it?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval.</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>9. How skilled were you at it?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval.</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>10. Was it important to you?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval.</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>11. Did you wish you were doing something else?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval.</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>12. How important was it to your future goals?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval.</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
<tr>
<td>13. Did you feel good about yourself?</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Mark only one oval.</td>
<td>Not at all</td>
</tr>
<tr>
<td></td>
<td>Very much</td>
</tr>
</tbody>
</table>
14. Were you learning anything or getting better at something?
   *Mark only one oval.*

   Not at all  | 2  | 3  | 4  | 5  | Very much

15. Did you have some choice in picking this activity?
   *Mark only one oval.*

   Not at all  | 2  | 3  | 4  | 5  | Very much

16. Were you succeeding in the activity?
   *Mark only one oval.*

   Not at all  | 2  | 3  | 4  | 5  | Very much

**Describe your mood as you were beeped.**

17. *Mark only one oval.*

   Bored  | 2  | 3  | 4  | 5  | Excited

18. *Mark only one oval.*

   Relaxed  | 2  | 3  | 4  | 5  | Worried

---

*Powered by Google Forms*
**Friday, 4/29 Experience Sampling Form**

Please be honest and authentic with your responses. Results are anonymous and will not impact your grade or my perception of you.

* Required

1. Student ID Number *

__________________________

**At the time you were stopped....**

2. What were you thinking about?

__________________________

3. What was the assigned task? *
   
   Mark only one oval.
   
   ☐ Spartans speak
   ☐ Reflecting

4. What were you doing?

__________________________

5. Did you enjoy what you were doing?
   
   Mark only one oval.

   1  2  3  4  5
   
   Not at all ☐ ☐ ☐ ☐ ☐ Very much

6. How well were you concentrating?
   
   Mark only one oval.

   1  2  3  4  5
   
   Not at all ☐ ☐ ☐ ☐ ☐ Very much

7. Was this activity interesting?
   
   Mark only one oval.

   1  2  3  4  5
   
   Not at all ☐ ☐ ☐ ☐ ☐ Very much

https://docs.google.com/forms/d/e/1FAIpQLSsGl6tJ12vKGrLY85T3YKHelT13K9YHPw/edit
8. How challenging was it?
   Mark only one oval.

   1  2  3  4  5
   Not at all  Very much

9. How skilled were you at it?
   Mark only one oval.

   1  2  3  4  5
   Not at all  Very much

10. Was it important to you?
    Mark only one oval.

    1  2  3  4  5
    Not at all  Very much

11. Did you wish you were doing something else?
    Mark only one oval.

    1  2  3  4  5
    Not at all  Very much

12. How important was it to your future goals?
    Mark only one oval.

    1  2  3  4  5
    Not at all  Very much

13. Did you feel good about yourself?
    Mark only one oval.

    1  2  3  4  5
    Not at all  Very much

14. Were you learning anything or getting better at something?
    Mark only one oval.

    1  2  3  4  5
    Not at all  Very much
2/22/2017

Friday 4/29 Experience Sampling Form

15. Did you have some choice in picking this activity?
Mark only one oval.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Were you succeeding in the activity?
Mark only one oval.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Describe your mood as you were beeped.

17. Mark only one oval.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bored</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. Mark only one oval.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relaxed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Powered by

Google Forms
Appendix C: Parental Consent Form

Parental Consent Form

My signature below indicates that I have read the information provided and have decided to allow my child to participate in the study titled Student Engagement in Critical Literacy to be conducted at my child’s school between the dates of April 22, 2016 and April 29, 2016 I understand that the signature of the principal and classroom teacher indicates they have agreed to participate in this research project.

I understand the purpose of the research project will be to research how students engage in critical literacy practices and that my child will participate in the following manner (list what the student will be asked to do):

2. Complete several short surveys about their experience of engagement in Language Arts

Potential benefits of the study are:

The study will provide insight into if, how, and why students are engaged in certain instructional practices. Because engagement is positively correlated to student achievement and reduced drop-out rates, it is essential that teachers and researchers have a thorough understanding of the instructional activities that are likely to positively impact students’ engagement levels.

I agree to the following conditions with the understanding that I can withdraw my child from the study at any time should I choose to discontinue participation.

- The identity of participants will be protected. (Describe how you will protect the identity of participants.)
- Information gathered during the course of the project will become part of the data analysis and may contribute to published research reports and presentations.
- There are no foreseeable inconveniences or risks involved to my child participating in the study.
- Participation in the study is voluntary and will not affect either student grades or placement decisions. If I decide to withdraw permission after the study begins, I will notify the school of my decision.

If further information is needed regarding the research study, I can contact (provide contact information, including phone numbers and addresses).

Signature __________________________________________________________________________ Parent ________________________________ Date _______________

Signature __________________________________________________________________________ Principal _____________________________ Date _______________

Signature __________________________________________________________________________ Classroom Teacher ______________________ Date _______________
Appendix D: Child Assent to Participate

Child Assent to Participate

My name is Barbara McClure. I am inviting you to be in a research study about students’ engagement in critical literacy practices. Your parent has given permission for you to be in this study, but you get to make the final choice. It is up to you whether you participate.

If you decide to be in the study, I will ask you to take several short surveys about your thoughts and feelings during class. You do not have to answer any question you do not want to answer, or do anything that you do not want to do. By taking part in this survey you will be helping not only me gain understanding into students’ engagement in critical literacy practices, but you will also be helping our society, as they too will gain insight into student engagement. Everything you say and do will be private, and your parents and teachers will not be told what you say or do while you are taking part in the study. When I tell other people what I learned in the study, I will not tell them your name or the name of anyone else who took part in the research study.

If anything in the study worries you or makes you uncomfortable, let me know and you can stop. No one will be upset with you if you change your mind and decide not to participate. You are free to ask questions at any time and you can talk to your parent any time you want. If you want to be in the study, print your name on the line below and check the box:

☐ I want to be part of this study
☐ I DO NOT want to be part of this study

______________________
Child’s Name and Signature, Date

Check which of the following applies (completed by person administering the assent)

☐ Child is capable of reading and understanding the assent form and has signed above as documentation of assent to take part in this study.

☐ Child is not capable of reading the assent form, but the information was verbally explained to him/her. The child signed above as documentation of assent to take part in this study.

______________________
Signature of Person Obtaining Assent, Date