Afterschool Participation and School Engagement:
A Case Study of an Urban East Coast Public Elementary School

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ABSTRACT

Students attending schools in urban areas with high concentrations of poverty are at risk for academic failure. Besides being more likely to live in poverty, urban students in comparison to suburban students are more likely to be English language learners and to be exposed to violence and other health and safety risks linked to negative school and life outcomes. Without meaningful intervention, many of these students will fail, presenting a problem for the student, their family, and society. The theory and empirical base that is termed “positive youth development” suggests that providing opportunities for youth to enhance their cognitive, behavioral, and emotional engagement can prevent youth from taking part in risky behaviors that can lead to academic failure and poor life outcomes. Participation in afterschool programs has been shown to increase cognitive, behavioral, and emotional engagement. This study explores the process by which an urban east coast public elementary school designed and implemented an afterschool program for third, fourth, and fifth grade students. Formative assessment of the program suggests that participation in the program may lead to modest increases in behavioral and emotional engagement as well as overall school engagement. However, no significant results were found in regard to cognitive engagement or for Latino/a students who participated in the afterschool program. The implications of these findings for educational practice and future research are discussed.
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I. Appendix A
CHAPTER 1: INTRODUCTION

Statement of Problem and Significance

Students in urban schools can experience several challenges that may hinder their academic success. Students attending urban schools are more likely than their suburban peers to live in poverty, be English language learners, and be exposed to violence and other health and safety risks associated with negative educational and life outcomes. One major challenge many urban students face is living in a low-income household, especially living in protracted poverty (Payne, 2005). Children who live in poverty often witness, or are victimized by, domestic and/or neighborhood violence, gang activity, substance abuse, and family distress. These factors can contribute to a lack of interest in school and feeling of “disconnect,” which results in low levels of school engagement (Gruman, Harachi, Abbott, Catalano, & Fleming, 2008; Perdue, Manzeske, & Estell, 2009).

Low levels of school engagement, academic achievement, and high school completion are particularly pervasive among students from urban, low-income Latino homes (Garcia-Reid, Reid & Peterson, 2005). High numbers of Latino children live in households in which the home language is not English, thus limiting academic assistance to students by non-English speaking family members (National Women’s Law Center, 2009). The combination of living in an urban setting with high concentrations of poverty and having limited outside-of-school English language exposure makes Latino/a students especially susceptible to such risk factors as weak school engagement, low academic achievement, and low rates of high school completion (Nevarez & Rico, 2007).

School engagement is vital to students’ academic achievement and educational attainment. There is wide consensus regarding the adverse effects of weak school engagement:
“Students who are disengaged from school are at risk for poor academic achievement, skipping classes, sexual activity, substance use, and ultimately dropping out of school” (Lippman & Rivers, 2008, p. 1). The Afterschool Alliance has reported that “90 percent of parents say that having a safe, positive place for their child to hang out after school will keep their child safe and away from criminal activity, 89 percent say it will improve their child’s well-being, and 82 percent say it will help their child perform better in school” (2008).

Academic failure presents a problem for both the student and society. Students who do not perform well in school are at an increased chance of dropping out of school. It has been estimated that some 50 percent of students who live in an urban setting do not graduate from high school (Hymel, Comfort, Schonert-Reichl & McDougall, 1996). Students who drop out of high school typically earn an average of $10,000 less a year than those who have a high school diploma. Comparing the average earnings of an individual without a high school diploma to someone with a baccalaureate degree, the income differential is over $35,000 (Alliance for Excellent Education, 2012). This in turn causes a burden to society because individuals who have not completed high school are less likely to be employed and rely more on government assistance than those with a high school education (Hymel et al., 1996). Nationally, the price tag for school failure costs over the next decade will be over three trillion dollars (Alliance for Excellent Education, 2012).

**Theoretical Framework**

The positive youth development model has spawned numerous innovative programs that suggest that providing opportunities for youth to enhance their cognitive, behavioral, and emotional engagement can prevent youth from engaging in risky behaviors that can lead to academic failure.
Afterschool programs can serve as a venue to enhance students’ cognitive, behavioral and emotional engagements (Posner & Vandell, 1994; Cosden, Morrison, Gutierrez & Brown, 2004). According to the positive youth development approach, afterschool programs can help prevent youth from engaging in risky behaviors that may lead to academic failure. Grounded in this theoretical framework, many afterschool programs focus on students’ strengths, their skills and their possibilities (Benson et al., 2006). It is a strength-based approach that aims to increase students’ competence, confidence, and connection to school, peers and adult relationships as well as build their character and capacity to sustain a caring attitude (Lerner, Lerner & Phelps, 2009).

Based in an urban public elementary school on the east coast of the United States, the afterschool program that is the subject of this study was funded by the Massachusetts 21st Century Community Learning Centers (CCLC) program of the Massachusetts Department of Elementary and Secondary Education, and utilized the Positive Youth Development lens when developing the afterschool program. The federal funding source of this state-administered program is the U.S. Department of Education’s 21st Century Community Learning Centers program, which supports out-of-school-time academic support and enrichment opportunities for children and youth, focusing on students who attend high-poverty and low-performing schools. The federal program was created to help students meet state and district learning standards in core academic subjects such as reading and mathematics and to offer students a wide range of enrichment activities that complement their regular school-day academic programs.

The elementary school-based afterschool academic support and enrichment program under study was grounded in positive youth development principles and practices. Given that the school is located in a high-poverty urban district and half of the school’s population is Latino/a, it was all the more important to create a program that would provide positive opportunities for
these students while intervening on their engagement in risky behaviors. The afterschool program utilizes students’ strengths and interests when developing activities. Students’ competence and confidence are targeted in this strength-based approach as well as their relationships with school, peers, and adults. The enhancement of students’ character is also a main goal, all while sustaining a caring attitude through the implementation of afterschool groups and activities.

**Purpose of the Study**

The purpose of this case study is to describe the process by which an urban high-poverty public elementary school designed and implemented an afterschool program for third, fourth, and fifth grade students. In addition, this study explores how participation in the afterschool program impacts students’ cognitive, behavioral and emotional engagement.

Studies have shown that “participation in out-of-school time programs and activities can lessen the likelihood that children and adolescents will engage in negative behaviors, such as using drugs and alcohol, dropping out of school, and practicing unhealthy eating habits” (Bandy & Moore, 2009, p. 1). A growing number of studies have linked participation in afterschool programs with improved academic performance, increased social skills and/or enhanced overall behavior (Posner & Vandell, 1994; Cosden, Morrison, Gutierrez & Brown, 2004). However, few studies have analyzed the connection between participation in an afterschool program and school engagement of students who attend urban schools.

**Research Questions**

In order to explore the process by which the site school designed and implemented an afterschool program for third, fourth, and fifth grade students, data was collected and analyzed to inform the following research questions:
Central Question 1: What is the process by which the elementary school implemented an afterschool program for third, fourth, and fifth grade students?

Central Question 2: What are the activities offered by the school-based afterschool program under study and in what ways are they designed to enhance the school engagement of third, fourth, and fifth grade program participants?

Central Question 3: Does participation in the afterschool program at the urban east coast public elementary school impact the school engagement of the third, fourth, and fifth grade students?

Research Design

A descriptive single-case study was chosen as the research design of this study. The primary unit of analysis was students from the site school. This research design was chosen because this study represents a specific context—an afterschool academic support and enrichment program in an urban east coast public elementary school. In addition, the study was designed to illuminate the process of the afterschool program and its impact on students. Case studies are used as a “strategy of inquiry in which the researcher explores in depth a program, event, activity, process, or one or more individuals” (Creswell, 2009, p.13).

This single-case study includes both quantitative and qualitative data. Quantitative methods include the student survey, the teacher survey, and the instrument to measure quality of the afterschool program. One hundred students completed the student surveys, six teachers completed the teacher surveys, and two individuals completed the instrument to measure quality of the afterschool program. Qualitative methods include reflective memos, participant observations and interviews. Interviews were conducted with two individuals.

Limitations of the Study

This study provides a formative assessment of the afterschool academic support and
enrichment program based in an urban high-poverty public elementary school. Although the sample size for many of the quantitative analyses was 100, some were below that. Teacher surveys and interviews were also conducted using a small sample size. Larger sample sizes provide more reliable results because it is more representative of the populations being studies; however, at times larger sample sizes are just not feasible.

The possibility of researcher bias exists due to the half-time role of the researcher as school adjustment counselor in the site school and coordinator of the afterschool program under study. Every effort was made to reduce this potential bias, including administrating a confidential survey to the students, making the survey voluntary and utilizing archived documents and interviews instead of just relying on researcher’s memories of procedures.
CHAPTER 2: LITERATURE REVIEW

Association of School Engagement with Student Success

School engagement has been found to positively correlate with school success, including academic achievement and educational attainment (Ladd & Dinella, 2009). In response to widespread concerns regarding student performance and the so-called educational gap between white students and students of color, considerable focus has been devoted to identifying conditions that perpetuate low school engagement and strategies to increase it (Woolley & Bowen, 2007).

School engagement is composed of separate components: behavioral, emotional and cognitive engagement. Prior to viewing school engagement as a whole, each component was researched individually. As early as the early 1980s, Peterson, Swing, Stark and Waas (1984) studied behavioral engagement in regards to how students attended to classroom tasks. They found that “student ability and student achievement were significantly related to students’ reports of their thoughts during classroom instruction” (Peterson et al., 1984, p. 512). Emotional engagement had an even earlier start, with research dating back to the late 1960s and mid-1970s. Yamamoto, Thomas and Karns (1969) and Epstein and McPartland (1976) conducted research on student attitudes and how they are associated with emotional engagement. Both studies found that students’ attitudes towards school had a relationship with their overall academic success (Yamamoto et al., 1969; Epstein & McPartland, 1976). Finally, Zimmerman (1990) conducted a noteworthy study that linked self-regulated learning with student achievement and by extension cognitive engagement. These studies have all significantly contributed to the study of school engagement and have helped pave the way for present-day studies.
Since then, school engagement has been defined by different researchers in slightly different manners, but all concur with the core key components (Lippman & Rivers, 2008; Fredricks, Blumenfeld & Paris, 2004; Ladd & Dinella, 2009). To fully understand the concept, it is important to first grasp the individual components that make up school engagement. As previously mentioned, school engagement is comprised of three main areas: behavioral engagement, emotional engagement and cognitive engagement (Lippman & Rivers, 2008). Some studies have looked at school engagement as a single construct, while others have looked at each type of engagement separately. In this study, school engagement is considered as a whole because all three components impact a student’s life in school. Experts urge that the term, school engagement, should be used only when referring to multiple components (Fredricks, Blumenfeld & Paris, 2004). Fredricks et al., state, “engagement can be thought of as a ‘meta’ construct” (2004). In turn, researchers should not examine school engagement in isolation of school as experienced by students; instead, students’ behavior, emotions and cognitions should be seen as inextricably intertwined (Fredricks et al., 2004).

Behavioral engagement can be further separated into three aspects: conduct, involvement in learning, and participation. Conduct deals with student behavior. A student has positive conduct when they follow the rules and the norms. Negative conduct may be described as disruptive behaviors such as breaking school rules and truancy. Involvement in learning is seen as “efforts, persistence, and concentration, attention, asking questions and contributing to class discussion” (Fredricks et al., 2004, p. 62). Finally, participation is defined as involvement in school-related activities such as sports, clubs, and civic activities (Fredricks et al., 2004). Students with high behavioral engagement are less likely to engage in risky behaviors such as drug and alcohol use, sexual activity, truancy, and violence (Lippman & Rivers, 2008).
Emotional engagement is viewed as a student’s “affective reactions in the classroom, including interest, boredom, happiness, sadness and anxiety” (Fredricks et al., 2004, p. 63). Different researchers have identified this kind of engagement in a variety of ways, including emotional reaction to school and teachers, identification with school, and/or feeling of belonging and value. Emotional engagement is perhaps the most difficult form of school engagement to measure because a student’s positive feelings towards school can be caused by a variety of factors (Fredricks et al., 2004). Overall, it appears that positive relationships with teachers, peers and other adults contribute to enhanced emotional engagement, thus increasing a student’s valuation and attachment to school (Lippman & Rivers, 2008).

Cognitive engagement includes investment in learning, self-regulation, and being strategic. Exact definitions vary somewhat from author to author, but all seem to concur that cognitive engagement deals with students’ psychological investment in learning. Cognitive engagement has recently been defined as the a student’s “psychological investment in, and effort directed towards learning, understanding, mastering the knowledge, skills or crafts that the academic work in intended to promote” (Fredricks et al., 2004, p. 64). This engagement is strengthened through students’ positive experiences with academic work in which they achieve a sense of mastery and academic self-perception (Lippman & Rivers, 2008).

Each individual component of engagement is important, but the combination of the three is instrumental for the overall enhancement of students’ school engagement and ultimate success. Strengthening all three components of school engagement is imperative because behavioral, emotional, and cognitive engagement have been found to be inextricably interconnected. The level of behavioral engagement is a predictor for the level of emotional engagement for students in elementary school (Ladd & Dinella, 2009). These levels in turn help predict the level of
cognitive engagement (Ladd & Dinella, 2009). Students who exhibit weak behavioral engagement tend to also display low levels of emotional and cognitive engagement. In addition, it has been found that a student’s behavior actually influences their emotions toward school, and their emotions toward school in turn influence their behavior in school. It has been implied that as a student progresses through elementary school, “those who like, rather than avoid school (emotional engagement) tend to develop more cooperative, as opposed to resistant, participatory behaviors and those who participate cooperatively in classrooms (behavioral engagement), tend to develop more favorable sentiments towards school” (Ladd & Dinella, 2009, p. 202). As a student develops more favorable attitudes toward school and are more cooperative through the elementary level, their academic achievement will also progress (Ladd & Dinella, 2009).

According to positive youth development theory, these favorable sentiments are caused by the development of the so-called five Cs for healthy development: competence, confidence, connection, community and caring/compassion (Lerner, Lerner, et al., 2009).

Different factors that are prominent in high-quality afterschool programs have been shown to impact the development of school engagement. The quality of a student’s relationships with peers and their parents has been found to have a positive influence in students’ school engagement (Perdue et al., 2009). Peer acceptance and teacher support have also been found to have a positive impact on school engagement (Gruman, Harachi, Abbott, Catalano, & Fleming, 2008). As in many different aspects of a student’s life, parental involvement also has a positive effect on school engagement. Studies suggest that when parents are involved in a student’s life, students report “more effort, concentration and attention” (Gonzalez-DeHass, Willems & Holbein, 2005, p. 117). Parental praise and encouragement and overall interest in a student’s schooling has been linked to increased student motivation. In turn, these students “are more
likely to seek out challenging tasks, persist through academic challenges and experience satisfaction in their schoolwork” (Gonzalez-DeHass et al., 2005, p. 118).

Like parental participation, teacher involvement has also been shown to exert a positive effect on a student’s school engagement. A growing expectation is that teachers must attend not only to a student’s academic needs, but also their emotional and behavioral needs. Given the interrelationship between all three components of a student’s school engagement, this expectation makes sense. Studies have concluded that “the quality of the teacher-child relationship in the early school years have been associated with teachers’ ratings of behavioral engagement, such as cooperative participation and self-defectiveness” (Fredricks et al., 2004, p. 74-75). Other studies have found a positive correlation between teacher support and emotional engagement and cognitive engagement. Furthermore, ethnographic studies have concluded that students who have a positive relationship with a teacher are less likely to drop out of school (Fredricks et al., 2004). Nonetheless, for maximum benefit, it is vital that students enjoy consistent, caring and supportive relationships with adults not only in school, but also at home and in the community. Woolley and Bowen (2007), suggest that the more numerous that supportive adults are in a student’s life, the higher their school engagement. The positive youth development perspective suggests that positive relationships between students and adults, including teachers and parents, are extremely beneficial and, indeed, essential for the positive development of students (Jones, 2005).

Conversely, there are factors that negatively impact students’ school engagement. Family stressors and multiple changes of schools at the elementary level have been shown to have adversely impact school engagement. Students, who move from school to school, typically have family stressors, and lower cognitive engagement; however, teacher support can help mitigate
this difference. Students who experience family stressors and have changed schools multiple times, but have supportive teachers, fare as well as their counterparts in respect to cognitive engagement (Gruman et al., 2008).

School engagement seems to be related to demographics. It has also been found that girls tend to have higher school engagement than boys, and the same is true for students from higher socio-economic brackets when compared to students who live in low-income households (Perdue et al., 2009). Furthermore, studies report that African American and Latino/a students “experience poorer school outcomes because of less supportive environment that result from historical and continuing discrimination in society” (Woolley & Bowen, 2007, p. 99). Examples of less supportive environments range from language barriers that impede parents in helping their child with homework and/or communicate effectively with the school to living in a low-income home where work—making money to provide for the family—is prioritized over school performance and educational attainment. The authors believe that this accounts for the lower school engagement levels reported by these populations. It has been hypothesized that an increase in support adults in these students’ life would help increase school engagement, thus decreasing school outcome gaps (Woolley & Bowen, 2007). One study found that social support from teachers boosted the school engagement of middle and high school Latino/a students at risk of high school non-completion (Brewster & Bowen, 2004).

**Urban Schools**

Staggering numbers of students attending schools in urban districts are at risk for academic failure. A student can experience multiple challenges that may hinder their academic success. Students attending urban schools are more likely than their suburban peers to live in concentrations of poverty and to be English language learners (Payne, 2005).
The term “urban schools” has been variously defined. The definition that is most commonly agreed on is simply a school that is located in a city (Payne, 2005). Of widespread concern is the prevalence of academic underperformance and low educational attainment of students attending urban high-poverty schools with student populations of primarily students of color (Balfanz, Herzog, Mac Iver, 2007). As Kincheloe (2004) writes, “nowhere are the obstacles to success and the existential needs of the students as great as in urban areas” (p. 4). In urban districts, many students face social isolation, concentrated poverty, family instability, high exposure to substance abuse and violence, schools’ lack of cultural and pedagogical responsiveness to the needs of students—including a wide gap between the lives of teachers and the lives of their students. These factors can contribute to a lack of interest in school and feeling of “disconnect,” which results in low levels of school engagement (Gruman, Harachi, Abbott, Catalano, & Fleming, 2008; Perdue, Manzeske, & Estell, 2009).

Without focused, sustained intervention, many of these students will fail. Children from families living in poverty are more likely to “suffer from developmental delay and damage, to drop out of school, and to give birth during the teen years” (Payne, 2005, p. 4). In addition, they are seven times more likely to experience child neglect or child abuse when compared to peers of higher social economic status households (Payne, 2005). This makes engagement in school especially important for these students because education is the only viable route out of poverty. According to Dr. Ruby K. Payne, a leading U.S. expert on the mindsets of poverty, middle class and wealth, “schools are virtually the only places where students can learn the choices and rules of the middle class” (2005, p. 62). Nonetheless, this will only occur if given the proper opportunities. Considering achievement test scores and college entrance and completion rates, studies have shown that high-quality learning experiences can provide students of color and
students from low-income households with the opportunities for academic success (Resnick & Glennan, 2002, p. 2).

Dropping out of school carries enormous costs for the student and their families. According to the Alliance for Excellent Education (2012), individuals who dropped out of school make almost $10,000 less annually than their counterparts who graduated high school. In a lifetime, the difference is over a quarter of a million dollars between the two groups. This difference increases three and a half times when comparing a high school drop out with an individual who has earned his bachelor’s degree (Alliance for Excellent Education, 2012).

Dropping out of school not only constrains individual opportunity; it carries enormous social costs. Students who do not graduate from high school typically experience higher levels of unemployment and often require governmental aid for housing, health care, and welfare (Hymel et al., 1996). According to Alliance for Excellent Education, an estimated 13 million students will drop out of school in the next decade, with the attending national cost of over three trillion dollars (Alliance for Excellent Education, 2012).

**Latino/a Students**

Nearly half of the students attending the school in this study are Latino/a, while nearly one out of three is an English language learner; for the great majority of English language learners attending the school, Spanish is their first language. Besides educating students from low-income households, many urban schools serve rapidly increasing numbers and percentages of Latino/a students. For example, Massachusetts public schools saw an overall 22.7 percent increase in Latino/a enrollments over the past five years (Lavan & Uriarte, 2008). According to national statistics cited in Lavan and Uriarte’s article (2008), approximately 13 percent of students enrolled in Massachusetts’s schools are Latino/a. While Latino/a students are the fastest
growing ethnic group in schools, they are the lowest performing ethnic group. Compared with other ethnic groups, Latino/a students have the highest rates of absences and in-school suspensions, and come second in number of out-of-school suspensions (Lavan & Uriarte, 2008).

As previously noted, low school engagement results in a variety of negative consequences in the lives of students.

To be engaged in school, a student must also be cognitively engaged or perform in their academics. For the majority of Latino/as, this is not occurring. The difference between Latino/a and white students’ academic achievement can be seen as early as kindergarten. Latino/a students scored below the national average in reading, science, and mathematics (Nevarez & Rico, 2007). Moreover, Latino/a students are underrepresented in college-preparation and gifted and talented programs (Nevarez & Rico, 2007).

An achievement gap between Latino/a students and white students continues to be evident. The National Assessment of Educational Progress (NAEP) is a national assessment of reading and mathematics for students in fourth and eighth grade. While the period 1990-2009 saw an increase in all academic areas among both white and Latino/a students, a wide achievement gap persisted—not decreasing over the years. According to the 2009 NAEP results in mathematics, there was a 21-point gap between fourth grade white and Latino/a students and a 26-point gap between eighth grade white and Latino/a students. Similar results were found in reading. A 26-point gap and a 25-point gap were found between fourth and eighth grade white and Latino/a students, respectively (Hemphill & Vanneman, 2011).

Data from the Massachusetts Comprehensive Assessment System (MCAS)—the state’s high-stakes standardized test—show similar results. When compared to Asian, Black and white students, Latino/a students had the highest percentage of “warning/failure” in the MCAS in both
English language arts (ELA) and mathematics. The percentage rates range from 20 percent to as high as 57 percent from grades three to ten (Lavan & Uriarte, 2008). When analyzing the data using the Composite Performance Index (CPI), it was discovered that Latino/a elementary students “had the lowest CPI in all grades for both ELA and mathematics and thus the largest achievement gap” (Lavan & Uriarte, 2008, p. 19). The ELA gap decreases once the students enter middle school, but the gap in mathematics worsens. CPI is an analysis of both the ELA and math scores of students within a certain grade, in the two years of the previous rating cycle, throughout the state of Massachusetts (Massachusetts Department of Elementary and Secondary Education, 2011). Finding such a significant gap in the scores of Latino/a elementary school students shows the academic disadvantage this ethnic group is facing. This evidence supports that idea that school engagement for this population is vital, in order to help increase school success.

Adult support of students has been linked to improved academic achievement and school engagement. In their examination of how teacher support impacts the school engagement of Latino/a students, Brewster and Bowen (2004) discovered a strong association “between perceived teacher support and level of perceived school meaningfulness; levels of meaningfulness increased as levels of perceived teacher support increased” (p. 61). With respect to behavior, the researchers found that teacher support was more important to students than parental support and that the incidence of difficult behaviors decreased as the perception of teacher support increased (Brewster & Bowen, 2004). Nonetheless, this does not indicate that parental support is unimportant. When researching the school engagement among Latino/a youth in an urban middle-school context, Garcia et al. (2005) found that “Latino youth who reported more positive behaviors of other adolescents in their neighborhood (i.e., making good grades in
school, not joining gangs, etc.) also tended to report higher levels of parents support within their own homes” (p. 265). As the frequency of parental support increased, rates of school engagement also increased. The researchers also found that Latino/a students “who perceived more positive attitudes and behaviors of teachers tended to have higher school engagement scores, although those who reported greater frequency of supportive parental behaviors also tended to have greater school engagement” (Garcia et al., 2005, p. 267). These results are consistent with those from Brewster and Bowen (2004), but put a heavier importance on parental support. This aligns with the positive youth development principle that having supportive relationships with caring adults leads to positive outcomes in a student’s life (Jones, 2005).

Latino/a students have a higher rate of high school dropout than their white peers. This may be due to the fact that Latino/a students are also likely to be immigrants and/or children of immigrants. According to research, “students born outside the United States have a higher risk of dropping out than their native-born peers” (National Women’s Law Center, 2009, p. 10). The problem continues to be seen in second- and third-generation immigrants, whose dropout rates exceed those of white children. In addition to low academic achievement, data shows that Latino/a students are more likely to drop out of school when compared to white students. Latino/a students have a dropout rate of 26.5 percent—nearly four times that (6.9 percent) of their white peers (Lavan & Uriarte, 2008; Fry, 2003). Friedman, Neary and Wren (2008) suggest that Latino/a underrepresentation in afterschool programs is one of many factors accounting for the discrepancy between the dropout rates of the two ethnic groups. Participating in afterschool programs helps children become more connected to school, thus decreasing the chances of their dropping out of school. About afterschool program participation, the authors state “involvement
leads to higher test scores, higher GPAs and keeps kids out of trouble” (Friedman, Neary, & Wren, 2008, p. 1).

Many Latino/a immigrant families are undocumented, which fuels anxiety and uncertainty in the lives of family members. Moreover, undocumented individuals are often undereducated and have difficulty finding jobs, thus increasing financial stress (National Women’s Law Center, 2009). Parental education and background can also be viewed as a risk factor for Latino/a students. In a recent study, researchers found that nearly 50 percent of Latino/a fathers and 40 percent of Latino/a mothers had less than a high school education. The researchers state that the “second figure may be particularly important because the education level of a child’s mother has been shown to be closely correlated with student success across all ethnicities” (National Women’s Law Center, 2009, p. 13). On top of that, a parent’s lack of exposure to the educational system also decreases the likelihood that they will advocate for their children in school. Furthermore, many Latino/a parents feel unwelcome and uncomfortable at their child’s school. Simple tasks such as talking to their child’s teacher and attending school meetings and/or school presentations may be more difficult for Latino/a parents (National Women’s Law Center, 2009). Schools throughout the country are still not equipped to respond to Latino/a parents and their needs. A glaring deficiency is the lack of Spanish-speaking staff members in schools. A language barrier decreases the probability that parents will communicate with school personnel. Given that nearly half of the student population at the site of this study is Latino/a, this cultural and linguistic community receives special attention in this study.

Besides all the above-cited factors affecting the well-being of Latino/a children, many live in low-income households. In 2006, 26.9 percent of Latino/a children lived in poverty, compared to 14.1 percent of white children (Payne, 2005). By 2007, the percentage of Latino/a
children living in poverty had climbed to 28.6 percent, while the proportion of white children who were poor decreased to 10.1 percent (National Women’s Law Center, 2009). Poverty brings on many hardships, including lack of adequate health care, dental care, and vision care as well as family instability. In addition, poverty affects the educational opportunities of Latino/a children. Underrepresented in early childhood education programs, they have lower levels of school readiness (National Women’s Law Center, 2009). Many attend schools with fewer resources because they are likely to reside in poorer neighborhoods. In addition, they frequently transfer to different schools due to unstable housing (National Women’s Law Center, 2009).

Many Latino/a children also lack adequate community supports such as afterschool programs, playgrounds, and parks (National Women’s Law Center, 2009). The U.S. Department of Education’s 21st CCLC initiative has helped remedy this underrepresentation of Latino/a children in afterschool programs. Nationwide, more than one out of three 21st CCLC program participants are Latino/a (Afterschool Alliance, 2012).

Positive Youth Development Approach

The positive youth development theory and growing evidence base suggest that providing opportunities for youth to enhance their cognitive, behavioral, and emotional engagement can prevent youth from taking part in risky behaviors that can lead to academic failure. The positive youth development model is a strength-based approach to child and youth development. It is derived from a combination of developmental psychology and sociology research and theories. Instead of focusing on the negative characteristics and acting as an intervention, the positive youth development approach focuses on the positive characteristics and acts in a proactive/preventative manner. An afterschool program is an example of an activity that can do just that.
Historically, child development research has focused on risk factors such as poverty, substance abuse, violence, and academic failure. In welcome contrast, the positive youth development focuses on “young people’s strengths, skills and possibilities” (Benson et al., 2006, p. 1). Jones states, “positive youth development focuses on all the resources and assets in a community that offer young people positive choices, experiences and support” (Jones, 2005, p. 1). These positive choices, experiences, and support may be found in an afterschool program. If properly designed, afterschool programs can be used as an avenue to implement the positive youth development model.

Theories in developmental psychology, sociology and derivative youth-serving programs have mostly focused on fixing the problems of drug use, substance abuse and academic failure, instead of preventing these problems in the first place (Benson et al., 2006). These services, however, attempt to remedy existing personal or family crises. Instead of being triggered by the manifestation of serious problems such as youth drug use, pregnancy, sexually transmitted disease, school failure, or delinquent behavior, the positive youth development philosophy and approach aim at supporting youth before they exhibit problem behaviors—that is, prepare youth for the future though promoting their healthy development by harnessing their strengths and community assets (Benson et al., 2006). This shift in approach has been fueled by the high cost of juvenile justice programs, questions about their effectiveness, and evidence- and value-driven criticism of reliance on deficit models to effect change.

Positive youth development incorporates what is known as the “Five Cs”: competence, confidence, connection, character, and caring. Competence pertains to the “positive view of one’s actions in specific areas, including social, academic, cognitive, health and vocational.” Confidence is defined as “an internal sense of overall positive self-worth and self-efficacy.”
Connection is seen as positive relationships that the individual as made with others, school, family and the community. Character refers to the individual’s respect for others and their community. Finally, caring/compassion is described as a “sense of sympathy and empathy for others” (Lerner et al., 2009, p. 11). Researchers believe that if a child has low levels of the “Five Cs,” they are more likely to encounter difficulty in their personal and social life, including developing behavioral problems. Set within the conceptual framework of positive youth development theory, developing the “Five Cs” will help children grow to be individuals who contribute to society in a positive manner. In addition, developmental scientists “hypothesized that the availability of activities supporting the ‘Five Cs’ would help steer young people towards a life of successful contributions,” with the caveat that programs go “beyond simple extracurricular activities to focus on promoting youth development” (Lerner et al., 2009, p. 12). Structured, highly intentional afterschool programming is an environment in which positive youth development can be promoted.

Mutually beneficial relationships between children and others can aid in this positive, continuous development (Lerner et al., 2005). These mutually beneficial relationships can be developed and cultivated in such settings as an afterschool program with students’ peers and staff members. Seven hypotheses drive its growth. These hypotheses can be used as a guideline to be incorporated into the principles and practices of the afterschool program, in order to increase positive outcomes and enhance student success. The hypotheses are:

1. Change in contexts change young people, and we can intentionally change young people’s context(s) to enhance their developmental success

2. When youth themselves take action to improve their contexts, their efforts are empowering and also improve the contexts for themselves and their peers.
3. Both the person and the context matter.

4. Increasing the number of “developmental nutrients” across settings is what matters most, not increasing specific strengths or combinations of strengths in any single setting.

5. Building developmental nutrients can have an impact at the time of intervention as well as later in life.

6. Community-wide efforts to build developmental nutrients are as important as those on the organization, family and individual levels.

7. Community-level interventions to build developmental supports and opportunities will benefit all or almost all youth (Benson et al., 2006, pp. 2, 4-9).

A strategy drawn from the positive youth development approach is “to form affirming relationships between young people and caring adults and to use the skills of both in order to strengthen youth-related programs (Jones, 2005, p. 1). Positive relationships with peers and adults—or their absence—are significant in the lives of every student. High-quality afterschool programs strive to develop, nurture and capitalize on these personal connections with others to promote learning; in particular, peer or cooperative learning is widely utilized to build students’ knowledge, academic and social skills and confidence. At the elementary school under study, the afterschool program promotes a sense of belonging within a community of learners. The instrument to be used in measuring program quality, the Assessing Afterschool Program Practices, considers student relationships with their peers and with program staff and identifies them as intermediary outcome areas. Developing these skills helps students in later development and in preparation for successful navigation through life.
According to the positive development perspective, youth are not seen as broken, “in need of psychosocial repair or problems to be managed; rather, all youth are seen as resources to be developed” (Lerner et al., 2005, pp. 10-11). In other words, we should not consider youth simply in terms of what they need, but also of what they offer. The school-based afterschool program that is the focus of this study is conceptualized as a resource to promote learning and healthy development rather than prevent risky or negative behavior. The afterschool program is grounded in the principle that if students have “a mutually beneficial relationship with the people and institutions of their social world, they will be on the way to a hopeful future marked by positive contributions to self, family, community and civil society” (Lerner et al., 2005, p. 12).

Despite the research supporting the positive youth development approach, uncertainties remain regarding its full realization. Benson et al. (2006) argue that it is still unclear how intentional social change can be practiced and understood with respect to the positive youth development model. The authors state, “the complexity of this issue (as well as the social importance of promoting positive development) requires an interdisciplinary approach, intergrading multiple fields in common pursuit of how to enhance the dynamic fusion of ecological and individual-level strengths” (Benson et al., 2006, p. 12). In this study, the afterschool program works with the school, families, and community to enhance and help develop the ecological and individual-level strengths of students. Clearly, it is not the sole entity that will affect student growth and development, but it will greatly aid this process.

**Linkage of Afterschool Programs to Student Success**

It is widely known that afterschool hours are perhaps the most influential and critical time in a child’s day. Of the over 53 million children between the ages of 5 to 18 living in the United States, it is estimated that more than one in ten of these children regularly spend their afternoons
home alone or with a sibling under the age of 13 (Capizzano et al., 2002). Research shows that children who are not properly supervised are more likely to engage in negative behaviors such as drug and alcohol use, early sexual activity, unhealthy eating habits, and juvenile delinquency (Bandy & Moore, 2009; Fleming, 2011). One mechanism that municipalities and school districts may use to discourage such negative behaviors is the implementation of afterschool programs.

As the positive youth development approach stresses, it is important to be proactive and focus on positive development rather than being reactive and simply attempting to eliminate negative behavior (Jones, 2005).

Posner and Vandell (1994) explored the beneficial effects of afterschool programs on low-income children. The authors analyzed data from parent and teacher rating scales, children’s self-reports, and report cards. They concluded that children who participated in a formal afterschool program spent less time in unsupervised activities and more time engaged in academic activities and enriching lessons. They found a positive correlation between engagement in a formal afterschool program and grades, conduct, peer relationships and emotional adjustment (Posner & Vandell, 1994). This study explores and describes the importance of consistent participation in an afterschool program for children who attend a high-poverty school.

In 1999, Posner and Vandell expanded on their previous research by conducting a longitudinal study to analyze the development of low-income urban children and their participation in afterschool activities. It was found that girls chose to be more involved in academic activities, while boys engaged in sports. Students who attended afterschool programs spent less time watching television compared to their counterparts who were in informal
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afterschool care settings. Finally, the authors concluded that children’s adjustment was related to
time spent in structured afterschool activities (Posner & Vandell, 1999).

While afterschool programs have been credited with enhancing many different
characteristics of students’ lives, research has qualified that only high-quality afterschool
programs have these positive effects. Indeed, the case has been made that poor-quality
afterschool programs negatively affect participants, particularly in their social development. It
has been observed that high-quality afterschool programs are significantly higher in organization,
social climate, and skill-building emphasis than poor or mediocre programs (Mahoney, Parente
& Lord, 2007). In addition, high-quality afterschool programs tend to synchronize with in-school
learning and support regular-school program and district learning objectives. These programs
help students make connections with the school-day curriculum and clarify what they have
learned (Fleming, 2011). Schools should view their afterschool programs as an integral part of
students’ educational experience—not as mere extensions of the school day, but as
complementary in that they offer different strategies and activities to support common goals
(Fleming, 2001).

High-quality afterschool programs have been shown to improve students’ motivation,
social competence, and academic achievement (Mahoney et al., 2007). Researchers have actually
been able to predict students’ social competence and motivation by their engagement in
afterschool programs (Mahoney et al., 2007). Studies have also shown that students who attend
afterschool programs have significant higher academic achievement and motivational attributes
when compared to students who do not attend afterschool programs (Mahoney et al., 2005). To
achieve these gains, the authors specified that the afterschool programs in their study “provided a
structured, adult-supervised context; a curriculum aimed at promoting academic skill
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devlopment; resources to support the learning objectives; and staff who tended to hold a college
degree” (Mahoney et al., 2005, p. 820). Additional studies have yielded similar results. A meta-
analysis examining out-of-school-time programs for at-risk students found that studies have
shown that afterschool programs have a positive effect on students’ reading and math
achievement scores (Lauer et al., 2006). Furthermore, positive links have been suggested
between participation and increases in standardized test scores and work habits (Vandell, Reisner
in afterschool programs can help improve both standardized test school as well as school
attendance.

Although most studies on afterschool programs have been positive, some research has
yielded negative findings. While Cosden et al. (2004) agree that participation in afterschool
program helps students “maintain their academic standing, feel more bonded to their school,
reduce family stress and develop attitudes and skills that would facilitate their success in school
after the program is over” (p. 224), they express concern that program participation may interfere
with family time and thereby reduce parental involvement in program youth’s lives. In addition,
there appears to be contradicting findings on the impact of afterschool programs on students’
behavior. Studies such as the one conducted by James-Burdumy, Dynarski and Deke (2008)
suggested that participation in afterschool programs increased negative behaviors in elementary
school students. Again, one must consider the diversity of afterschool programs and their wide
variations in quality. Moreover, other studies such as Vandell et al. (2007) have found a decrease
in negative behaviors among students who participated in afterschool programs.

Despite some negative findings, there is a strong and growing body of evidence
suggesting that participation in afterschool programs appears to have mostly positive outcomes.
As noted in the research literature, however, availability of afterschool activities does not ensure participation; therefore, school districts must be aware of factors preventing students from participating. While little research has been conducted in this area, it appears that the three main reasons for nonparticipation are: limited resources, low program availability, and lack of interest in organized activities (Bandy & Moore, 2009). In addition, further research reports that there are three additional factors that prevent participation: child factors, family and parenting factors, and neighborhood and community factors. Child factors include child disability, low academic achievement, heavy technology usage, negative social behaviors and obesity. Family and parenting factors that depress afterschool program participation rates include lack of parental exercise, poor parental health, and low parental educational attainment. Finally, neighborhood and community factors encompass lack of neighborhood support, and unsafe surroundings (Bandy & Moore, 2008).

As a general rule, youth who would most benefit from high-quality afterschool experiences tend to be least likely to participate. For example, research suggests that youth of color—particularly Latino/a students—are less likely to participate in extracurricular activities than their European American peers (Brown & Evans, 2005). Therefore, an afterschool program seeking to, for example, boost student academic achievement cannot simply announce the availability of the program and enroll on a first come, first served basis. Districts and individual schools and programs must design culturally relevant recruitment strategies and enlist students, parents, teachers, and other school staff in identifying and encouraging struggling students to participate in the program being offered. Moreover, restrictive selection and attendance practices may exclude youth who would most benefit from program participation.
To achieve participation goals, program content must be considered. A dearth of activities that appeal to youth of color is a common complaint that is indicative of complex reasons (e.g., lack of staff diversity) for nonparticipation. Language barriers contribute to the underrepresentation of immigrant youth with limited English proficiency in virtually all in-school afterschool activities. Where many afterschool activities do not provide transportation home, well-founded fears of violence may discourage afterschool program participation among students who do not have access to private transportation. In particular, lack of transportation deters homeless youth from out-of-school-time program participation.

To date, there exists a gap in knowledge about the possible relationship between participation in a quality afterschool program and school engagement. This study is intended to begin to fill this gap in the literature by exploring how student participation in a high-quality school-based afterschool program may boost school engagement.
CHAPTER 3: RESEARCH DESIGN

Research and literature regarding the link between participation in afterschool programs and improved school engagement is somewhat limited. This is particularly true for the urban and Latino/a population. This research study will contribute to the investigation, and strive to fill the gap in this vital issue.

Case Study Method

A descriptive single-case study was used to explore the process by which an urban east coast public elementary school designed and implemented an afterschool program for third, fourth, and fifth grade students, that is built around positive youth development principled and practices. A descriptive single-case study design is used when “the research explores in depth a program, an event, and activity, a process for one or more individuals” (Creswell, 2009, p. 13). This approach is used when collecting information in real-world situations (Yin, 1993), and it allows the researcher to collect data utilizing a variety of data” (Creswell, 2009). According to Feagin, Orum and Sjoberg (1991), there are four important features afforded by a case study approach:

1. It permits the grounding of observations and concepts about social action and social structures in natural settings studies at close hand;

2. It provides information from a number of sources and over a period of time, thus permitting a more holistic study of complex social networks and of complexes of social action and social meanings;

3. It can furnish the dimensions of time and history to the study of social life, thereby enabling the investigation to examine continuity and change in life world patterns; and
4. It encourages and facilitates, in practice, theoretical innovation and generalization (p. 7).

A descriptive single-case study was chosen for this study because the study sought to describe the process by which the afterschool program at the site school was developed and implemented and to assess the relationship of participation in the afterschool program to school engagement. A case study approach was chosen because both qualitative and quantitative data from multiple stakeholders was needed to inform the process within the specific context and timeframe of the school-based afterschool program (Yin, 1993).

This case study utilized both qualitative and quantitative methods. Qualitative methods were utilized to gather descriptive information about the case study. Interviews, reflective memos, and participant observations are types of qualitative data and will provide the reader with an in-depth descriptions of the afterschool program and its process (Fraenkel & Wallen, 2003, p.241). Quantitative methods deals with numbers. Quantitative information will be presented using statistical data analysis (Fraenkel & Wallen, 2003, p.241). Results from the SEM, SAYO and APT-O are all forms of quantitative data.

Site and Participants

A school-based afterschool academic support and enrichment program was chosen for the site of this study. Purposeful sampling strategy was used as a method to select the study site. The school was chosen as the study site because of its ethnically diverse and low-income student population and because it offered a demonstrably high-quality afterschool academic support and enrichment program. Approximately 330 students, ranging from preschool to fifth grade, attended the site school. The school’s percentages of students of color and students living in low-income households were higher than the district and statewide percentages. Four out of five
(81.0 percent) students attending the school lived in low-income household. It was a feeder school for three public housing developments and a family homeless shelter. Nearly 70 percent of the school’s students were of color, with almost half (47.6 percent) being Latino/a. Nearly one out of three (31.0 percent) of students was an English language learner (Massachusetts Department of Elementary and Secondary Education, 2012).

With a population of nearly 100,000, the city in which the site school is located is the sixth largest in its state. While census figures indicate 71 percent of city residents are white, 13 percent Latino/a, and 6.5 percent Black, some Cape Verdeans and Puerto Ricans likely identified as white and thereby contributed to undercounting of African Americans and Latino/as (City of New Bedford, Massachusetts, 2012). As a result of deindustrialization, the city has the state’s third highest unemployment rate (16.4 percent in March 2011). In 2009, the city’s median household income was approximately half the statewide average—$33,451 compared to $64,081. Almost half (43.5%) of the city’s African American and over half (53.7%) of Latino/a children live in poverty. The city’s high unemployment and low median household income have been linked with residents’ low educational attainment. More than two out of five (42 percent) of adult residents have less than a high school population—almost three times higher than the statewide of 15 percent. The district high school’s on-time graduation rate is 56.6% for African Americans, 36.5% for Latino/as, and 58.9% for all students (Massachusetts Department of Elementary and Secondary Education, School/district profiles, 2012). The city in which the site school is located has the state’s highest rate of weapons-related injuries. Because there is wide variation in urban school student bodies, there may be limitations with respect to generalizing the findings of this study with other urban elementary schools with different contexts and demographics.
Protection of Participants

Throughout this study, every effort was made to protect the identity and well-being of the research participants, and all protocols were compliant with the Office or Institutional Review Board (IRB) at Northeastern University. Parents and guardians of all eligible students received a consent form and letter (Appendix B), providing information about the study, including sample questions. The consent form assured that the final report would withhold both the name of the school as well as the names of the research participants. Parents signed and returned the form granting permission for their child to participate in this study. The consent form and letters were sent home in the parent’s native language. Parents’ native language was determined in the beginning of the school year using a district-wide form. The superintendent and school principal granted permission to access this information.

Students who returned a signed consent form (either granting permission or not granting permission) received a mechanical pencil (color and/or design of their choice). This was used as a form of positive reinforcement to encourage students to bring back their consent form.

The students/participants were asked if they agreed to participate. A verbal assent script (Appendix C) was be delivered to all eligible participates. Students were then given the opportunity to decline participation. Participation is voluntary; therefore, even if a parent or guardian granted permission but the student did not want to participate, they were in no way pressured to participate. An alternative activity was available for these students during the time that their peers completed the survey.

Afterschool Participation

Participation in the afterschool program for students was determined using program records of afterschool program attendance compiled over the preceding three-year period. As
required by the funder and district, attendance information was recorded by hours of participation each program day.

Participation in the afterschool program was completely voluntary and open to all third, fourth and fifth grade students. All students in third, fourth and fifth grade were provided with an afterschool program application at the beginning of the school year. During the school’s open house and in the first school newsletter, the school principal advised parents about the availability of the program and the application process. As required by the district and the Massachusetts Department of Elementary and Secondary Education, the school made efforts (described later and largely successful) to ensure that special at-risk populations (e.g., students living in low-income households, students of color, English language learners, students in special education) were represented in the afterschool program at least in proportion to their presence in the school’s overall student population. The program objective was to enroll and retain 60 students.

**Instrument to Measure Afterschool Quality**

The quality of the afterschool program was assessed using the Assessment of Afterschool Program Practices Self Assessment Observation Tool (APT-O). This instrument was developed by the National Institute on Out-of-School Time and the Massachusetts Department of Elementary and Secondary Education. It measures observable program practices, which includes learning and skill building, program organization and structure, and supportive social environment.

The instrument design is a Likert scale, with rating from one to four, with one representing “not true” and four representing “very true.” A score of three or more was considered a measurement of quality programming (Yohalem et al., 2009). Intended to facilitate
programs’ self-study efforts, this observation tool is divided into 16 program-level features and can be encapsulated into five categories—program climate, relationships, approaches and programming, partnerships and youth participation (Yohalem, Wilson-Ahlstrom, Fischer, & Shinn, 2009).

Very little psychometric information is available for the APT-O; however, a research version of this instrument (APT-R) is available, it was found that the “interrater reliability was moderate and preliminary evidence of concurrent and predictive validity is available” (Yohalem et al., 2009, p. 20).

The APT-O was chosen because it has been designed specifically for quality assessment of afterschool programs, it is research-based, and has been scientifically tested, although data is very limited (APAS Evaluation System, 2010). The Massachusetts Department of Elementary and Secondary Education has required that all Massachusetts 21st CCLC grantees use the APT-O to support continuous program improvement. Advantages of this instrument are that is has been used to evaluate the program in the past, therefore, evaluators were comfortable with this instrument. The APT-O is “user-friendly”—not requiring training—and can readily be used to measure program improvements.

When compared to other assessment tools, the APT differs in that it “measures quality that research suggest promotes positive youth outcomes; allows programs to focus on assessing specific, observable practices rather than reflecting upon more general quality characteristics; Allows programs to examine how youth are experiencing and participating in the program” (The APAS Evaluations System developed by B. Miller). A limitation of this instrument is that ratings are based on personal observations and therefore may be susceptible for biases.
Teacher Instrument to Measure Afterschool Youth Outcomes

To gain insight into teacher perceptions of the impact of the afterschool program on student engagement, teachers were asked to complete the school-day teacher version of the Survey of After-School Youth Outcomes (SAYO) instrument, a companion tool with the APT-O. Like the APT, the SAYO was developed by the National Institute on Out-of-School Time and the Massachusetts Department of Elementary and Secondary Education in order to collect data about students from teachers, afterschool staff, and the students themselves about “intermediary youth outcomes that link to long-term healthy development and educational success” (Wilson-Ahlstrom, Yohalem, Dubois & Ji, 2011, p.33). There are three user-specific versions of the SAYO—the teacher-completed SAYO (SAYO-T), the afterschool program staff SAYO (SAYO-S), and the student SAYO (SAYO-Y). For the purpose of this study, only the SAYO-T was utilized. The SAYO-T collects pre-program participation and post-program information on student outcomes and consists of 30 questions rated in a five-point Likert scale. Completed by the school-day teacher of students enrolled in the afterschool program, the teacher SAYO, or SAYO-T, examines the following areas: behavior in the classroom, initiative, engagement in learning, analysis and problem solving, communication skills, homework, and academic performance. These areas are measured by asking the classroom teacher four to five questions related to observable behaviors in the classroom (The APAS Evaluation System). Afterschool programs do not generally request that teachers score all areas; instead, each program selects the areas they are most focused on and only score those respective areas (Wilson-Ahlstrom et al., 2011). For the purpose of this study, only ratings in engagement in learning and academic performance were reviewed.
According to Wilson-Ahlstrom et al. (2011), evidence exists that the SAYO is a reliable tool for male and female, ethnically diverse elementary, middle and high school students. The authors report that the reliability is substantial for these populations. They also report that moderate-to-substantial validity is also present in this survey. No further psychometric information has been published to-date.

SAYO surveys were completed by afterschool program participants’ classroom teachers in October and then again in June. This information was gathered and analyzed by the district and then reported to the Massachusetts Department of Elementary and Secondary Education.

**Student Instrument to Measure Student Engagement**

Students’ self-perceived levels of school engagement, cognitive engagement, behavioral engagement, and emotional engagement were measured using the School Engagement Measure (SEM). This instrument was developed by Dr. Phyllis Blumenfeld and Dr. Jennifer Fredricks as part of the MacArthur Network for Successful Pathways through Middle Childhood. The SEM is a self-report questionnaire (see Appendix A) that is available in both Spanish and English. This instrument was developed and normed for elementary school students (Fredricks et al., 2011).

This instrument was chosen because, unlike other published school engagement instruments, it measures all three types of school engagement: behavioral engagement, emotional engagement and cognitive engagement (Fredricks et al., 2011). According to its authors, “examining the components of engagement separately dichotomizes students’ behavior, emotion, and cognition, whereas in reality these factors are dynamically embedded within a single individual and are not isolated processes” (Fredricks et al., 2005, p. 3). In addition, the SEM corresponds with the main focus of the positive youth development approach—namely, to help
in the development of “young people’s strengths, skills and possibilities” (Benson et al., 2006, p.1).

The child survey portion of the School Engagement Measure is a self-report scale that is measured using a five-point Likert scale: one meaning “never” or “not at all true” to five representing “all of the time” or “very true.” It includes 19 questions; five of those questions measure behavioral engagement, six questions measure emotional engagement, and eight questions measure cognitive engagement. Cognitive engagement questions deal with “investment in learning, going beyond requirements and use of learning strategies”—for example, “I check my schoolwork for mistakes” (Cooper, Coll, Bartko, Davis & Chatman, 2005, p. 150). Questions intended to measure behavioral engagement address “conduct, attention, following rules and completing work”—for example, “I pay attention in class”—while questions that quantify emotional engagement look at “children’s feelings, interests, and the value they accorded to their schooling”—for example, “I like being at school” (Cooper et al., 2005, p. 151). These questions were mixed together and some were reversed. The questions on the survey were taken from an assortment of surveys and new items were created by the authors (Fredricks, et al., 2005). The survey took approximately 30 minutes to complete.

The SEM was developed over two waves of data collection. The first wave included 661 students ranging from third to fifth grade and the second wave included 294 fourth and fifth grade students. Participating students attended schools in Chicago, Milwaukee and Detroit—all urban, low-income, culturally diverse districts with high percentages of students of color, including high percentages of Latino/a students (Fredricks et al., 2005; Fredricks et al., 2011).

Reliability and validity analyses were completed and good reliability and validity were found. The authors report a Cronbach’s alpha of .72-.77 for behavioral engagement, .83-.86 for
emotional engagement, and .82 for cognitive engagement. The ranges are representative of the Cronbach’s alpha of both waves; because cognitive engagement yielded a low Cronbach’s alpha in the first wave, several changes were made before the second wave (Fredricks et al., 2005; Fredricks et al., 2011). The authors report that when analyzing validity, “the subscales correlated moderately with students’ perceptions of aspects of their academic and social context, school values and school attachment” (Fredricks et al., 2011, p. 40). In addition, it was found that girls experienced higher school engagement in all three categories, than boys did. The authors warn that the correlation was stronger when the scale is used as a whole rather than in parts (Fredricks et al., 2005).

The authors of the School Engagement Measure- MacArthur Network granted permission for their survey to be used in this study. The survey was made available to students via Survey Monkey. Participants completed the survey in the school’s computer room, with the survey being loaded onto computer screens prior to their arrival in the computer room. The researcher was present during the administration of the survey to answer any questions and ensure that students fully understood their rights. To ensure confidentiality, all participants were assigned an identification number. Only the researcher had access to the list of names and assigned identification numbers. This list was kept in a password-protected computer database.

**Threats to Internal Validity**

Internal validity threats are described as “experimental procedures, treatments or experiences of the participants that threaten the researcher’s ability to draw correct inferences from the data about the population in an experiment” (Creswell, 2009). Ten threats to internal validity have been identified—history, maturation, regression, selection, mortality, diffusion of treatment, compensatory/resentful demoralization, compensatory rivalry, testing and
instrumentation (Creswell, 2009). While the researcher attempted to decrease the threats to internal validity, this was not possible for every threat.

The threat of history is due to events that occur during the lapse in time from the beginning of the study until its end. In this study, all students were exposed to the same events during the study period; therefore, history does not play a role in the outcomes. Maturation also does not play a significant role in this study because the students who participated were all within three grade levels of each other. Developmentally, all the students matured at more or less equal rates.

Regression occurs when participants who have extreme scores change over time and regress towards the mean (Creswell, 2009). It has been suggested that researchers select students who do not have extreme scores; where only one survey was administered during this study, it was unknown whether any student would have had an extreme score at the commencement of the study and whether or not that regressed towards the mean.

In this study, selection does contribute to the threat of internal validity. Selection refers to the fact that participants have different characteristics and this may incline them to obtain certain outcomes (Creswell, 2009). One could argue that students who participate in the afterschool program have a higher school engagement prior to the commencement of the program than those who do not participate. Afterschool programs’ reliance on a first-come, first-served enrollment approach generally results in disproportionate representation of more motivated students with more empowered, more affluent parents, while students from low-income households and students of color are likely to be underrepresented (Brown & Evans, 2005). While enrollment in the afterschool program was open to all third, fourth, and fifth graders attending the school, the funder and district requirement that program conduct targeted outreach to encourage
participation from so-called hard-to-reach populations actually ensured a more representative and less socioeconomically and ethnically skewed student group and served to limit selectivity by the researcher.

Another threat to internal validity that was beyond the control of the researcher was “mortality” or program participant dropout. Although program retention was high, a few students drop out of the afterschool program each year. In most cases, it is involuntary—due to relocation to a different school or district. Nevertheless, a few students drop out each year for personal reasons that the researcher is usually not privy to.

The sixth threat to internal validity is diffusion of treatment. This occurs when two groups communicate with each other and influence each other’s responses or outcomes (Creswell, 2009). While the students have access to each other, questions on the survey were unknown to them until the moment the survey was administered. Therefore, diffusion of treatment was unlikely to occur. In the administration of the survey, the researcher witnessed no attempts for students to compare completed or contemplated responses.

Compensatory/resentful demoralization did occur, to a certain extent, during this study. This threat to validity arises when one group receives benefits from the study, while the other group does not (Creswell, 2009). Some students in the study participated in the afterschool program, while others did not; nonetheless, all students had the opportunity to participate in the afterschool program if they so chose. No student was discouraged or prevented from seeking enrollment in the program on account of this study. The same line of argument can be used to address the threat to internal validity known as compensatory rivalry, which occurs when “participants in the control group feel that they are being devalued, as compared to the experimental group, because they do not experience the treatment” (Creswell, 2009, p. 164).
Again, all students had the opportunity to enroll in the afterschool program. Moreover, the students were aware that the surveys were confidential and that program participant and nonparticipant groups were treated equally throughout the survey process.

The final two threats to validity are testing and instrumentation. Testing occurs when participants become familiar with the evaluation tool and recall their responses for later use. Instrumentation refers to the changes between pre-tests and post-test, and how these changes affect responses (Creswell, 2009). Students were only asked to response to one survey at one point in time; therefore, neither of these threats are relevant to this study.

**Reflective Memos**

The experience of the researcher in her professional capacity as afterschool program coordinator was documented through her preparation of several reflective memos. Reflective memos are also referred to as analytic memos or simply memos (Maxwell, 2005). According to Maxwell, reflective memos are “any writing that a researcher does in relationship to the research other than actual filed notes, transcription, or coding.” Memos are used as a method of reflection of the research study and a procedure to help the researcher develop ideas. Memos should be viewed as a manner to help researchers understand their “topic, setting, or study, not just as a way of recording or presenting an understanding that has already been reached” (Maxwell, 2005, p. 12). These reflective memos were developed from memory as well as reference to program records.

**Interviews**

In the interview process, a conversational approach was used in the way the questions were posed and were followed up with additional questions or clarifications in the form of probes for elaboration or continuation (Rubin & Rubin, 2005). Each interview was transcribed
and reflective memos were made at the end of each interview in order to shine light on the interview process. To become familiar with the text, the transcripts were read through twice before making an attempt to code them. Interview transcripts and reflective memos were analyzed using a coding method known as Evaluation Coding. Evaluation Coding is a common coding method used in case studies to analyze programs’ virtues and values. This coding method describes observations that assess the quality, explores program standards, and describes changes if needed. Given that the interviews were intended to describe changes and assess quality, this type of coding appeared to be the most appropriate. Evaluation Coding is a combination of Magnitude Coding, Descriptive Coding and In Vivo Coding (Saldana, 2009).

Coding the interview consisted of noting positive and negative remarks made by the interviews. A short phrase, such as increased academic achievement or increased emotional engagement, was used to label these positive or negative comments. Positive and negative remarks were then analyzed. A list was made of each, dividing them by topic, subtopic and then comment. Direct quotes were also used to add description to the analyses and ultimately the narrative.

**Participant Observation**

Participant observation was used to collect data about the daily routine of the afterschool program. It is the observation and participation in a group’s activities, within its own setting. It is used to describe what, how, when and where things occur in the afterschool program. Participant observation can be used to gather a descriptive narrative of the afterschool program in a naturalistic setting. Participant observation “aims to generate practical and theoretical truths about human life grounded in the realities of daily existence” (Jorgensen, 1989, p. 14). Its intent is to discover, make available, and make known the reason people use to gain meaning from
everyday life (Jorgensen, 1989).

Observation can occur in one of four different ways: complete observer role, observer-as-participant role, participant as observer role or complete participant. For this study, the observer took on the participant as observer role. In order words, the observer was viewed more as part of the program than an observer. The observer completed the duties as afterschool program coordinator, while observing students’ actions. For example, picking up the children at the end of the school day and helping them complete their homework is a typical duty of the afterschool coordinator. In addition, observing groups/activities is another standard duty. For the purpose of this participant observation, the program coordinator took careful notes while performing these tasks, whereas on a typical workday this would not be necessary.

Observational data was collected for three weeks during the afterschool program. Data was collected from the moment the children were picked up from their classrooms to the moment they walked out the door at the end of the day. Careful field notes were taken daily of students’ actions, behaviors, and descriptions of the surroundings. Once the observation was complete, the observations and reflections were recorded and descriptive analysis was conducted in order to study the patterns, regularities, and themes that emerged from the data (Angrosino, 2007). Descriptive coding is used to help the reader see and hear what the observer saw and heard (Angrosino, 2007). It is the most descriptive form of coding; therefore, the most appropriate for participate observations.

Field notes and reflections were analyzed and coded for patterns, regularities and themes. Examples of codes included, but were not limited to, homework, redirection, peer interaction, and adult interaction. A clear pattern that emerged was the routine of the afterschool program, and clear themes include behavioral engagement, cognitive engagement, and emotional
engagement. A descriptive narrative of the analyses will be provided in the result section.

Data Collection and Analysis

Central question 1. What is the process by which the elementary school implemented an afterschool program for third, fourth, and fifth grade students? This question was addressed by answering the several related sub-questions.

Sub-question 1. Why was the afterschool program at the urban, east coast public elementary school program developed and implemented?

This question was answered using interview data collected from the academic consultant of the district’s 21st Century Community Learning Centers initiative that has funded the school-based afterschool program under study. Employed by a community-based nonprofit organization partnering in this district-led afterschool program initiative, the academic consultant has advised and assisted 21st CCLC-funded program sites in curricular development and data collection and participated in overall program design, implementation, and evaluation as well as grant development and reporting. He was instrumental in the funding, design, implementation, and assessment of the afterschool program under study.

Sub-question 1b. What were the steps associated with the implementation of the afterschool program?

This question was answered using information derived from reflective memos by the afterschool program coordinator that documented program operations and the research described herein and program records were used to answer the research questions. These reflective memos drew on the researcher’s memories as well as program records. This research has benefited from the fact that the Massachusetts 21st CCLC program has had rigorous recordkeeping and archival records requirements that provide detailed documentation about the district’s 21st CCLC-funded
programs, including the program that is the subject of this research study.

**Sub-question 1c.** How is the quality of the school-based afterschool program evaluated?

This question was answered using data derived using two APT-O observations and participant observations. Mean scores for each APT-O observation was calculated to determine quality of the afterschool program.

Using the ethnographic practice of participant observation, the afterschool program coordinator systematically observed the program over a three-week period for the purpose of delineating its quality and process. Documented observations captured virtually every activity and transition that occurred within the afterschool program. Since there are four student groups within the program, the observer only had capacity to observe one group each program day, but every effort was made for eclectic representation of groups.

**Central question 2.** What are the activities offered by the school-based afterschool program under study and in what ways are they designed to enhance the school engagement of third, fourth, and fifth grade program participants?

This question was answered using data derived from reflective memos documenting the professional experiences of the researcher in her capacity as the afterschool program coordinator. The reflective memos drew from the afterschool coordinator’s notes and memories as well as program records. Program records included, but were not limited to, program informational flyers, program activity schedules, enrollment and attendance lists, program assessments (e.g., completed APT-O observation reports), district program evaluation reports.

**Central question 3.** Does participation in the afterschool program at the urban east coast public elementary school impact the school engagement of the third, fourth, and fifth grade students?
This question was addressed by answering seven related sub-questions. Answers to this question and its sub-questions drew from a semi-structured interview with the school principal, SAYO teacher survey results, and statistical analyses of the School Engagement Measure (SEM).

**Sub-question 3a.** What impact did the administrator perceive the school-based afterschool program had on participating students’ school engagement?

The school principal was asked a series of questions, and her answers were analyzed and coded using the Evaluation Coding method. The principal of the school was asked: How do you describe the impact of the afterschool program in students’ lives? What differences have you observed in the behavioral engagement of students at the school since the implementation of the afterschool program? What differences have you observed in the emotional engagement of students? What difference have you observed in the cognitive engagement of students since the implementation of the afterschool program?

**Sub-question 3b.** What impact did teachers perceive the afterschool program had on student engagement?

This question was answered using data derived from teachers’ completion of the SAYO-T for their students who were enrolled in the afterschool program. Since it is secondary data, the researcher only had access to the final results and not the raw data. For the purpose of this study, only scores in homework, engagement and academic performance were analyzed.

**Sub-question 3c to sub-question 3f.** These questions were answered using data derived from the SEM. Statistical analysis was used to determine if students who participated in the afterschool program reported higher scores of school engagement, cognitive engagement, behavioral engagement, and emotional engagement than those of students who did not participate in the afterschool program. Individual two-sample z-tests were used to analyze the
types of engagement differentiated in the four sub-questions above. A two-sample z-test is used when two independent sample from two populations are available. In this case, the two different samples were students who participated in the afterschool program and students who did not participate in the afterschool program. The sample size must be 30 or greater. The alpha level used for these two-sample z-tests was $\alpha=0.10$; in other words, the confidence level would be 90% (Voelker, Orton, Adams & Diehl, 2011).

**Sub-question 3g.** Is there a difference between scores of school engagement for Latino/a students who participated in the afterschool program when compared to Latino/a students who did not participate in the afterschool program?

A two sample t-test was performed to analyze whether Latino/a students who participated in the afterschool program scored higher on the school engagement scale than Latino/a students who did not participate in the afterschool program. The sample size consisted of 30 Latino/a students who participated in the afterschool program and 25 Latino/a students who did not participate in the afterschool program. Given that the sample size for the latter subgroup was less than 30, a z-test could not be performed. This form of analysis is used to “compare the mean scores of two difference, or independent, groups” (Fraenkel & Wallen, 2003, p.241). In this case, the two different, or independent, groups were Latino/a students who participated in the afterschool program and Latino/a students who did not participate in the afterschool program. An alpha level of 0.10 was used for this t-test.

**Limitations**

A limitation of the current study is the establishment of the directionality of any possible identified relationship between afterschool participation and engagement. That is to say, evidence of higher engagement of students who participated in the afterschool program
compared to engagement of students who did not participate in the program could not be used to definitively attributed to program participation as opposed to the contention that participation in afterschool programming was higher among more engaged students.

Sample size can also be considered a limitation of this study. Although researchers have not agreed on a number that can be considered an adequate sample size, some guidelines suggest a minimum of 100 participants should be obtained for descriptive studies (Fraenkel & Wallen, 2003). When analyzing school engagement, as well as cognitive, behavioral and emotional engagement, the sample size was exactly 100; however, when analyzing Latino/a students versus non-Latino/a students, the sample size was only 55. The sample size for the completion of the SAYO as well as interviews was also very small. Generalization of these scores must be cautioned owing to sample size. Only two people key to development of the afterschool program were interviewed. Despite these limitations, it is the hope of the researcher that this study will serve as a foundational step for future research to explore possible causality in the relationship between afterschool program participation and students’ school engagement.
CHAPTER 4: REPORT OF RESEARCH FINDINGS

This study explores the process by which an urban high-poverty public elementary school located on the east coast designed and implemented an afterschool program for third, fourth, and fifth grade students, utilizing the principles and approach of positive youth development theory to improve student success by increasing school engagement. This study collected and analyzed data to inform the following research questions.

Process of Implementation of the Afterschool Program

The process of implementation of the afterschool program was assessed by answering the following central questions and corresponding sub-questions:

Central Question 1: What is the process by which the site school implemented an afterschool program for third, fourth, and fifth grade students? This question was addressed by answering three related sub-questions.

Sub-question 1a. Why was the afterschool program at the site school developed and implemented?

Sub-question 1b. What were the steps associated with the implementation of the afterschool program?

Sub-question 1c. How was the quality of the school-based afterschool program evaluated?

Interview with academic consultant.

A major theme that emerged from the interview with the district’s 21st CCLC academic consultant was the fact that the site school is located in a high-need, low-performing urban district and the school itself is situated in a high-poverty neighborhood. At the start of the afterschool program, the school was low-performing with high numbers of students living in
low-income households, students in special education, students of color, English language learners, and students with low standardized (MCAS) ELA and mathematics test results. These students had low levels of school success, and appeared to have low levels of school engagement. The interviewee, under the direction from the school district’s Office of Federal and State Funded Programs, sought to bring in a resource to help the students turn their academic experience around (personal communication, August 27, 2012).

The interviewee spoke of developing an afterschool program that provided students with academic enrichment opportunities that complemented learning activities and objectives in their school day program, during after school hours. He stated that after much research, the implementation of the afterschool program would be done utilizing the positive youth development lens, given that literature on afterschool programs have found it to be optimal.

Under the Massachusetts Department of Elementary and Secondary Education, the Massachusetts 21st CCLC grant program called for academic support and enrichment for low-achieving students to be delivered in an afterschool program. Citing low MCAS ELA scores and the importance of literacy to access other content areas, the district established reading and writing as the district-wide 21st CCLC academic outcomes.

In the winter of 2008, the interviewee was asked by the district’s Office of Federal and State Funded Programs to help write the grant that would ultimately fund the school-based afterschool academic support and enrichment program under study (personal communication, August 27, 2012). In developing the grant application, the district incorporated the ten priorities identified by the Massachusetts 21st CCLC program initiative:

1. Integrate school-day and out-of-school-time programs to promote shared learning goals, teaching and support strategies, and staff recruitment and training activities;
2. Provide creative and innovative, hands-on, interdisciplinary, student-centered programming that complements the students' core school-day program and contributes to academic achievement and youth development for all students;

3. Provide programs that explicitly address appropriate grade-level state and local learning standards, support students' academic performance, and contribute to student performance goals outlined in school improvement plans;

4. Support children and youth in all domains of development;

5. Support local implementation of the Department's District Standards and Indicators and Department Priorities;

6. Develop and/or maintain a school- and community-based infrastructure that establishes procedures to improve outcomes for children and youth through successful program implementation and oversight;

7. Evaluate program effectiveness through the collection and analysis of data;

8. Promote efficient use of public resources and facilities through effective partnerships among schools, community-based agencies, adult community learning centers, and other public and private entities;

9. Address the multiple needs of children, youth, and their families through increased supervision, safety, and access to support services; and

10. Provide professional development opportunities that support continuous program improvement (Personal communication, August 27, 2012).

These priorities would be purposefully embedded in the afterschool program so that children attending this high-poverty, low-performing school could achieve academic success (personal communication, August 27, 2012).
Many tasks were required for the successful realization of the afterschool program. Informed by the district’s Office of Federal and State Funded Programs of the 21st CCLC grant initiative and the district’s prioritization of the site school to be an afterschool program site, the school principal conducted some initial planning regarding proposed program capacity. The major program budget line item was program staff compensation, principally district-employed professional educators’ salaries for time worked in the program. Heeding best practices in the literature, it was determined that group size would be limited to no more than 15 students, with one teacher. The goal of the afterschool program was to enroll half of all third, fourth and fifth grade students (60 students) in the afterschool program, divided into four groups. Four groups per day, with one teacher per group, for five afternoons weekly, multiplied by the contractual overtime pay for teachers gave the school principal and the then-prospective program coordinator an estimate of what was needed for funding for the afterschool program. The school principal then successfully advocated that the site school be included in the district’s request for the newest round of Massachusetts 21st CCLC afterschool program funding. The proposed afterschool program to be sited in the site school was part of a three-year grant award.

Once funding was secured, the school principal identified the afterschool program coordinator and charged her with program staff recruitment. The afterschool program coordinator was interested in any teacher who had a variety of expertise/interests and who had demonstrated good rapport with students during the school-day program. Because afterschool program participation would be voluntary, the teachers would be responsible for promoting students’ strengths, skills, and possibilities in a fun, interesting, engaging manner that would ensure consistent student participation. Bringing on program staff who would purposefully concentrate on competence, confidence, connection, character and caring was essential for the
successful implementation of the afterschool program. After program staff selection, the school principal held a staff meeting to inform all staff in detail about the state’s, district’s, and school’s expectations of the program. A great deal of time was spent on brainstorming manners in which the afterschool program could strengthen school engagement and in turn school success. Teachers then submitted proposals to provide project-based learning activities, which the program coordinator reviewed and changed as appropriate.

Once the afterschool staffing pattern had been established, the entire school staff was informed in a staff meeting about the new afterschool program, its purpose, priority populations, and requirements—which called on all teachers to participate in additional assessment of their students who enrolled in the program. Teachers were asked to begin informing all their students about the availability of the new afterschool program, while encouraging those who were part of priority groups to take part in the program. A few days following the staff meeting, flyers and applications were sent home with all third, fourth and fifth grade students notifying their parents of the availability of the new afterschool program. The program coordinator visited every third, fourth and fifth grade classroom and explained the afterschool program to the students. Questions were answered and all were encouraged to participate. Applications were collected over a week’s time. Again, the program coordinator visited the eligible classrooms to remind students of the afterschool program and the fun possibilities that were in store for them. Upon filling all 60 slots, welcome letters were sent to all students and their parents informing them of the start date and program information. The afterschool program began approximately one month after the commencement of school.

APT-O results.

To ensure quality programming, the Massachusetts Department of Elementary and
Secondary Education, in partnership with the National Institute on Out-of-School Time (NIOST), developed the Assessing After-School Program Practices Tool (APT) for use by Massachusetts 21st CCLC grantees. The development of this program assessment tool included a review of research from the arts, education, and afterschool literature, examination and appraisal of existing afterschool program observation tools, and perspectives from experts in the field. The draft instrument underwent extensive field testing, reviews by a variety of experts including grantees, and reliability testing.

Designed to help programs conduct self-studies and thereby inform program improvement, the Assessing After-School Program Practices Tool for conducting and documenting afterschool program observations (APT-O) was utilized in the assessment of the school-based afterschool program under study. The instrument design is a Likert scale, with rating from one to four; one representing “not true” and four representing “very true.” (Please refer to http://elo.ccsso.org/alfresco/d/d/workspace/SpacesStore/6fbc6efe-cb82-11dd-84ce-1bf8a914463c/MA_APT_TOOL.pdf for full scale). The developers of the scale established that a mean score of three or above was necessary for an afterschool program to be deemed high quality. The principal of the site school completed the APT-O in October 2011, while the district 21st CCLC academic consultant conducted an APT observation in January 2012. Table 1 displays the mean score of each section of the APT-O:
Table 1

*Means of APT-O scores*

<table>
<thead>
<tr>
<th>APT-O Program Components</th>
<th>School Principal</th>
<th>Academic Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival Time</td>
<td>3.25</td>
<td>4</td>
</tr>
<tr>
<td>Pick Up Time</td>
<td>3</td>
<td>3.67</td>
</tr>
<tr>
<td>Transition</td>
<td>3.57</td>
<td>4</td>
</tr>
<tr>
<td>Homework Organization</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Youth Participation in Homework Time</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Staff Effectively Manage Homework Time</td>
<td>3.33</td>
<td>4</td>
</tr>
<tr>
<td>Staff Provided Individual Homework Support</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Organization and Nature of Activity</td>
<td>4</td>
<td>3.82</td>
</tr>
<tr>
<td>Staff Promote Youth Engagement and</td>
<td>3.74</td>
<td>3.76</td>
</tr>
<tr>
<td>Stimulate Thinking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff Positively Guide Youth Behavior</td>
<td>3.73</td>
<td>4</td>
</tr>
<tr>
<td>Staff Build Relationships and Support</td>
<td>3.61</td>
<td>3.89</td>
</tr>
<tr>
<td>Individual Youth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Participation in Activity Time</td>
<td>3.42</td>
<td>3.29</td>
</tr>
<tr>
<td>Youth Relations with Others</td>
<td>3.43</td>
<td>3.95</td>
</tr>
<tr>
<td>Program Space Supports Goals of Programming</td>
<td>3.40</td>
<td>4</td>
</tr>
<tr>
<td>Overall Ratings of Program Scheduling and</td>
<td>3.40</td>
<td>3</td>
</tr>
<tr>
<td>Offering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Rating of Social-Emotional Environment</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

As discussed in the literature review and research design section, a mean score of three or more signifies a program of high quality (Yohalem, Wilson-Ahlstrom, Fischer & Shinn, 2009).

Changes would have to be made in any program area that was rated a mean below three.

According to the APT-Os completed by the school principal and the academic consultant, the afterschool program was considered to be of high quality during the 2011-2012 school year and no major changes were recommended—although the district is committed to the principle and practice of continuous program improvement. A plausible explanation for the two observers’
different ratings is that the afterschool program improved in the time period between the two observations.

**Participant observation.**

The afterschool program began when the regular-school day ended. At 2:30 p.m., the school principal announced over the intercom for all students who participated in the afterschool program to leave their classrooms and meet the afterschool program coordinator in the hall. Every day the students were talkative as they walked down the stairs to the cafeteria. In the cafeteria, the students were given a snack and completed their homework, with individualized assistance as needed from program staff. In the school basement, the cafeteria was well lit and in good repair, but plain and worn. On average, eleven students a day asked for individual help from one of three program staff present during homework time. Students required about three prompts daily to stay on task. The program coordinator, who was also the observer, would announce to the students, “Just a reminder, it’s homework time right now,” “Please let us know if you need help with your homework,” or “Let’s try to finish your homework now so you don’t have to go home and do it.” Students would then get back to their homework or raise their hands to ask for assistance.

Following homework time, group activities were conducted 3:00-4:20 p.m. each day. During the three-week period of structured participant observation, 12 different group activities were observed. These groups could be divided into academic groups and physical activity groups, although physical activities typically incorporated literacy-learning and/or mathematical elements. Similar patterns and themes emerged from both the academic and physical activities.

Since the afterschool program was based in an elementary school, all classrooms in which the afterschool academic activities were held were very colorful and welcoming. There
were posters on the walls, crates with books everywhere, and students’ work displayed throughout the room. The classrooms were more cheerful and inviting than the cafeteria. It was observed that during the academic groups, students were consistently engaged in the learning activity; they listened to the teacher as well as other students. When participating in project-based learning activities, students worked cooperatively to complete them. When differences of opinion emerged, students negotiated solutions; no arguments were observed.

In the physical group activities, students also exhibited high levels of engagement. All the activities were held in the gym, with the exception of Wii Fit (convened in a classroom). The gym was located adjacent to the cafeteria in the basement of the school. It was also well-lit, but more cheerful than the cafeteria. All of the group physical activities were very high energy. Students paid attention when teacher was giving instruction, and once the activity began, they appeared to be giving their all. In addition to teacher encouragement (“Just try your best, John; you can do this.”), student-to-student encouragement and praise (“Go get them, Sally.” “Good job Billy.”) were evident. In one group’s participation, Wii Fit, 13 out of 15 students were dancing to the video game, even though only four had controllers. The other students simply wanted to participate while waiting for their turn. The remaining two students who were not dancing were sitting at desks working on their game graphs.

Everyday at 4:20 p.m., the afterschool program coordinator announced, over the intercom, for teachers to bring their groups for dismissal. Students who had permission from their parents to walk home were dismissed. Program staff, including the teachers, program coordinator and secretary, acknowledged each student as they left at the end of the program day: “Have a good day”; “See you tomorrow”; “Have a good weekend”; or simply “Bye”. On any given day, about 50% of the students responded with some form of good-bye.
During this three-week observation period, it was noted that an average of 63 students attended the afterschool program each day it operated; the enrollment ranged from 59 to 66. Few instances of problem behavior were observed. The teachers and program coordinator dealt with problem behavior by addressing it as it occurred with the least amount of disruption possible. When utilizing the positive youth development lens, the afterschool program focused on being preventative and supporting the development of youths’ assets through redirection and other positive guidance techniques. For example a student was brought to the office because of being disrespectful to a teacher following a conflict with another student. By the time the student reached the office he was visibly upset, with clenched fists and jaw, looking down and answering questions in a defiant manner. The program coordinator instructed him to just take five minutes to relax. Once it was observed that he was calmer, the program coordinator asked him to help her with a very important task, stuffing envelops. While stuffing envelops, the program coordinator took the opportunity to discuss the issue that had occurred in the group. The student was able to express his feelings in a safe and non-threatening environment. By the end of the conversation, the student was able to identify alternative manners in which the problem could have been solved. He then asked permission to write the teacher and the student whom he had had a conflict with an apology letter. He wrote the letters, presented them to the teacher and student in the hall, away from other students, then went back to his group and had a successful end of the day. Recognizing that good afterschool programs can reduce problem behaviors, program staff were continually considering factors in the afterschool program that influence behavior and adjusting these factors to encourage desired behavior.

In conclusion, participating students exhibited high levels of engagement in the afterschool program as well as appeared to be having fun. High levels of behavioral engagement
were evident by the low level of disciplinary actions required during the afterschool program hours. Emotional engagement was apparent by good attendance and retention levels. Finally, high levels of cognitive engagement were noticeable by their investment in the academic activities during the afterschool program. According to the participant observation, it appeared that the afterschool program was having a positive effect on students’ lives.

**Activities Offered and Impact on School Engagement**

The activities offered and impact on school engagement were assessed by addressing central question 2, which stated: What are the activities offered by the school-based afterschool program under study and in what ways are they designed to enhance the school engagement of third, fourth, and fifth grade program participants?

**Reflective memos.**

Developing the afterschool program curriculum took the program staff into new pedagogical territory. The Department of Elementary and Secondary Education’s grant requirements called for the creation of a learning environment that sharply contrasted with the traditional teacher-directed practices that prevail in the regular-school day. The program offered a mix of learning strategies, including one-on-one as well as small-group learning activities, peer learning as well as cross-age experiences, outdoor as well as indoor activities, and project-based learning activities that complemented and extended the school-day program curriculum. The goal of the activities was to increase school engagement, thus improving school success. Delving into the research literature, the afterschool program staff learned that school engagement is composed of behavioral, emotional and cognitive engagement. Staff members also discovered that behavioral engagement is a predictor for the level of emotional engagement and, in turn, these levels help predict the level of cognitive engagement (Ladd & Dinella, 2009). To increase school
engagement as a whole, staff members realized that they would first need to address behavioral engagement, which would then influence students’ emotional engagement, followed by their cognitive engagement.

It was decided that the best manner to achieve this was to incorporate the “Five Cs,” aligned with positive youth development theory, into every program activity and experience: competence, confidence, connection, character, and caring. To this end, the afterschool program offered a wide range of activities in an attempt reach every student. Activities ranged from reader’s theater to reading and writing picture-book biographies to community-service learning to organized sports teams. Students and parents were provided with a full list of activities and a brief description of each (see Appendix D).

The activities offered in the afterschool program all aimed to instill a sense of competence and confidence by involving students in fun, interesting ways in learning academic skills and content needed to succeed in school. In addition, connection, character and caring were goals that staff incorporated into their daily interaction with the students during the afterschool program. The staff sought to develop a connection, or a positive relationship, with every student in the afterschool program by bonding on mutual interests or simply showing that they cared by expressing an interest in students’ lives outside of school. Cooperative learning experiences and the program culture, in general, promoted identification and a sense of belonging as a community of learners in which each student was acknowledged and affirmed as a contributing member. Character and caring were also developed through community-service learning activities. These activities showed the students that they too could make a positive difference in a palpably troubled world. In addition, homework help, which was offered daily,
aimed to increase students’ cognitive, behavioral, and emotional engagement by ensuring that they were prepared for school the following day.

What follows is a list of hypotheses, informed by the Positive Youth Development approached, used to organize and guide afterschool program implementation with an explanation of how they are utilized:

1. Change in contexts change young people, and we can intentionally change young people’s context(s) to enhance their developmental success.
   - The afterschool program aimed to improve students’ capacities to increase academic success. This in turn changed their contexts and enhanced their developmental success.

2. When youth themselves take action to improve their contexts, their efforts are empowering and also improve the contexts for themselves and their peers.
   - The afterschool program was a voluntary program. Just by signing up, students were taking the first steps to improving their contexts for themselves. Additionally, when other students saw their peers enroll in the afterschool program, they were more likely to join themselves; thus, some students were also helping improve the contexts for their peers.

3. Both the person and the context matter.
   - Through the development of rapport and familiarity with students, the afterschool program staff demonstrated that the students and their context were extremely important. For some students, this was the only place that they received this message.

4. Increasing the number of developmental nutrients across settings is what matters most, not increasing specific strengths or combinations of strengths in any single setting.
The main purpose of the afterschool program was to increase the number of developmental nutrients across settings—in the regular-school classroom, in the afterschool program, in the community, and eventually at home.

5. Building developmental nutrients can have an impact at the time of intervention as well as later in life.

6. Community-wide efforts to build developmental nutrients are as important as those of the organization, family and individual levels.

Community-service learning activities as well as field trips to visit and get to know community assets (e.g., historical sites, museums, cultural offerings) were an essential part of the afterschool program.

Afterschool Program and School Engagement

Afterschool program and school engagement were assessed by answering the following central question and sub-questions:

Central Question 3: Does participation in the afterschool program at the urban east coast public elementary school impact the school engagement of the third, fourth, and fifth grade students? This question was detailed in seven related sub-questions.

Sub-question 3a. What impact did the administrator perceive the school-based afterschool program had on participating students’ school engagement?

Sub-question 3b. What impact did teachers perceive the afterschool program had on student engagement?

Sub-question 3c. Is there a difference between scores of school engagement for students
who participated in the afterschool program when compared to those who did not?

*Sub-question 3d.* Is there a difference between scores of cognitive engagement for students who participated in the afterschool program when compared to those who did not?

*Sub-question 3e.* Is there a difference between scores of behavioral engagement for students who participated in the afterschool program when compared to those who did not?

*Sub-question 3f.* Is there a difference between scores of emotional engagement for students who participated in the afterschool program when compared to those who did not?

*Sub-question 3g.* Is there a difference between scores of school engagement for Latino/a students who participated in the afterschool program when compared to Latino/a students who did not participate in the afterschool program?

**Interview with school principal.**

In the semi-structured interview conducted with the school principal, she spoke enthusiastically about what she perceived to be the effects of the afterschool program on participating students. She described the program as a safe place for students to remain after school hours, a place where they were academically challenged, and a place where all were welcome. The school principal spoke in depth about the different activities offered in the afterschool program that students would not have otherwise been exposed to, she cited: science, dance, basketball, theater, and many more. She also made reference to homework time, where students received individualized help from teachers. She perceived that this was an essential part of the afterschool program since many of the students lived in non-English speaking homes where parents faced language barriers to providing homework assistance (personal communication, August 27, 2012).

The school principal viewed the afterschool program as a unique opportunity to promote
students’ behavioral engagement. The afterschool program was a setting in which the school’s student adjustment counselor and she could spend one-on-one time with students who presented difficult or disruptive behaviors. Making this time was sometimes difficult to do during the school day, but easily accomplished during the afterschool program. She stated, “In the last four years [coinciding with afterschool program implementation], behavioral issues have decreased tremendously.” She believed that the reduction in student problem behaviors was due to the additional role models the students now have in their lives, including the afterschool program staff and community partners who volunteered their time (personal communication, August 27, 2012).

The school principal also credited the changes she saw in students’ emotional engagement to the activities and experiences afforded by the afterschool program. Through the anti-bullying program and collaboration during homework time and group work, emotional engagement had improved. She also believed that the afterschool program had done “tremendous work to help increase students’ confidence and feeling of competence” (personal communication, August 27, 2012).

Cognitive engagement was perhaps the most evident change the school principal had observed in students who have participated in the school-based afterschool program. From the unwelcome status as the first designated underperforming school in Massachusetts, the site school was now matching and exceeding statewide MCAS score averages. Students had made enormous strides in their academic performance. The school principal believed that part of this dramatic changes occurred because the afterschool program “incorporates the academics of the school day into real-life activities”. She believed that a combination of what was being done during the school day and during the afterschool program had improved students’ academic
performance as well as their overall school engagement (personal communication, August 27, 2012).

**SAYO results.**

The SAYO teacher survey data aligned with the school principal’s interview responses. An increase of at least 10 percent in post-program teacher surveys from pre-program surveys was expected by afterschool program goals. According to the aggregate data, teachers observed an increase of 16.9 percent increase in homework, a 17.6 percent increase in engagement and a 15.9 increase in academic performance for students who participated in the afterschool program.

**The SEM results.**

Z-tests and a t-test were used to analyze the SEM results. To clearly understand the analyses, it is important to first comprehend the four main statistical outputs: the mean, standard deviation, p-value and alpha level. The mean, (\(\bar{x}\)), is simply the average of the scores. The standard deviation, (\(\sigma\)), represents the spread of a set of numbers. If the spread is large, then the standard deviation will be a large number, if the spread between the numbers is small, then the standard deviation will be a small number (Fraenkel & Wallen, 2003). For example, the set of number: 1,1,2,2,3,3, has a mean of two and a standard deviation of 0.89, while a set of numbers with a wider spread, such as: 1, 23, 55, 67,77,99, has a mean of 53.67 and a standard deviation of 27.78.

The p-value, \(p\), and the alpha, \(\alpha\), are compared to one another. The p-value is the probability that the statistic is due to chance. Therefore, if the \(p=.04\), there is a four percent change that the variables analyzed were due to chance. The alpha level is known as the confidence level. This level is a standard for how stringent the data must be in order for it to be found significant or not significant (Morgan, Reichert & Harrison, 2002). If an analyses
produces a p-value of 0.04, and it is compared to an alpha level of 0.10, it would be written as, 
\[ p < 0.10; \] meaning that the p-value (0.40) is smaller than the alpha level (0.10), thus implying 
significance. An alpha level of 0.10 was utilized for the following analyses.

When analyzing the school engagement scores for students who participated in the 
afterschool program, the mean score \( \bar{X} \) was 3.98 with a standard deviation (\( \sigma \)) of 0.595 and 
\( \bar{X} = 3.79 \) with \( \sigma = 0.766 \) for students who did not participate in the afterschool program. The 
sample size consisted of 45 students who participated in the afterschool program and 55 students 
who did not participate in the afterschool program. The z-test yields a score of \( z = 1.392, p < 0.10 \). The p-value suggests that there is a 90% change that students who participated in the 
afterschool program had higher school engagement when compared to those students who did 
not participate in the afterschool program. In other words, the probability that this result is due 
to chance, or a coincidence, is less than 10%.

The two sample z-tests for behavioral and emotional engagement yielded similar results 
to those of school engagement. The mean scores and standard deviations for students who 
participated in the afterschool program and those who did not participate, respectively, were \( \bar{X} = 4.26, \sigma = 0.561 \) and \( \bar{X} = 4.05, \sigma = 0.770 \) for behavioral engagement and \( \bar{X} = 4.14, \sigma = 0.745 \) and \( \bar{X} = 3.87, \sigma = 0.969 \) for emotional engagement. The sample size consisted of 45 students who 
participated in the afterschool program and 55 students who did not participate in the afterschool program. The z-test yielded a score of \( z = 1.56, p < 0.10 \) for behavioral engagement and \( z = 1.56, p < 0.10 \) for emotional engagement. These results suggest, with a 90% confidence level, that 
students who participated in an afterschool program scored higher on behavioral and emotional 
engagement when compared to those students who do not participate in an afterschool program.

Cognitive engagement measures did not yield similar results. The mean scores and
standard deviations for students who participated in the afterschool program were $\bar{x}=3.68$, $\sigma=0.825$ and $\bar{x}=3.57$, $\sigma=0.848$ for students who did not. The sample size was the same as for assessment of school engagement; it consisted of 45 students who participated in the afterschool program and 55 students who did not participate in the afterschool program. The z-test yielded a score of $z = 0.673$, $p >0.10$. Since the p-value was larger than the alpha level, these results suggest that students who participated in the after school program did not score statistically significantly higher on cognitive engagement when compared to those students who did not participate in the afterschool program.

Results for the Latino/a population were similar to the findings of cognitive engagement. The mean score and standard deviation for Latino/a students who participated in the afterschool program was $\bar{x}=3.95$, $\sigma=0.660$ and $\bar{x}=3.86$, $\sigma=0.750$ for Latino/a students who did not participate in the afterschool program. The sample size consisted of 30 Latino/a students who participated in the afterschool program and 25 Latino/a students who did not participate in the afterschool program. A t-test had to be performed because of the small sample size. The t-test yielded a score of $t = 0.45$, $p > 0.10$. In other words, the p-value was larger than the alpha, and a confidence level of 90% could not be achieved. This statistical analysis suggests that Latino/a students who participated in the afterschool program did not have statistically significantly higher levels of school engagement than their peers who did not participate in the afterschool program.

When completing statistical analyses, it is important to consider Type I and Type II errors. Type I error occurs when the research reaches a conclusion of a false positive. That is, when the researcher finds significance in the statistical analysis, by achieving significant results, when in fact there is no true significance. Type II error, is the opposite; the researcher reaches a
false negative conclusion. In this type of error a significant result is viewed as insignificant.

Both these errors were considered, and taken into consideration (Fraenkel & Wallen, 2003).
AFTERSCHOOL PARTICIPATION AND SCHOOL ENGAGEMENT

CHAPTER 5: DISCUSSION OF RESEARCH FINDINGS

Afterschool Programs in Urban Settings

Negative impact of urban setting.

Students at urban high-poverty schools are at risk for academic failure. Students within urban districts face many challenges such as domestic and/or neighborhood violence, gang activity, and family instability and dysfunction as well as coming from non-English speaking homes. Moreover, students may find themselves alone during after school hours (Gruman, Harachi, Abbott, Catalano, & Fleming, 2008; Perdue, Manzeske, & Estell, 2009). In the past, adult caregivers were more likely to be at home to provide supervision after school hours; however, with the increased financial demands on families and the trend toward smaller households, this is no longer the norm. It is estimated that one in ten children in the United States, regularly spend their afternoons home alone or caring for a sibling under the age of 13 (Capizzano et al., 2002).

Importance of afterschool programs.

The growth and evolution of afterschool activities in recent years has become a major research focus and topic of a rapidly expanding body of literature on evidence-based best practices. Given the increase in the number and range of afterschool activities, there has been a corresponding increase in realization of the possible functions that afterschool activities can serve. No longer is it enough for afterschool programs to keep children safe and supervised. Increasingly, custodial arrangements and informal recreational programs are viewed as missed opportunities. With growing national concern and dissatisfaction about the academic achievement of American students, afterschool programs have been spotlighted as settings that can boost academic performance—particularly in addressing the achievement gaps between the
performance of groups of students, especially groups defined by gender, race/ethnicity, and socioeconomic status.

Increasingly, students’ educational experience has been seen to encompass afterschool educational activities as well as the regular-school day. If this expansive conceptualization of education has been promoted, it has yet to be fully integrated into institutional support of education. A case in point is the Massachusetts Department of Elementary and Secondary Education’s differential treatment of regular-school and afterschool programs. While the Department’s 21st CCLC program initiative has created a groundbreaking vision of not only afterschool programming, but education in general, the Department-instituted funding formula for afterschool programs sharply differs from the vision of stable funding for schools. In the name of “sustainability,” Massachusetts 21st CCLC-supported afterschool programs receive progressively reduced funding, with the unrealistic expectation that districts can produce an increasingly burdensome match—unrealistic in view of state and municipal budgetary constraints and the inability of charitable organizations and the private-sector to fill the vast funding gaps. Would the state Department of Elementary and Secondary Education recommend a “sustainable” funding formula for schools—expecting schools to provide the same level of educational quality and services with a steadily declining funding base?

Although afterschool activities are extremely important to children of every socio-economic status, the importance of afterschool activities rises when dealing with students of urban high-poverty schools. These children have fewer resources than other children, which in turn decreases their chances of school success. Thus, afterschool programs are thrust into the role of educational equalizer—leveling the educational playing field for disadvantaged students.

Where the difference between academic performance of Latino/a and white children can be
observed as early as kindergarten (Nevarez & Rico, 2007), young Latino/a children would benefit from full-day kindergarten as well as out-of-school-time enrichment programs. Policy-makers could plausibly attempt to prevent this gap by offering quality afterschool programs to Latino/a children as young as preschool age.

**High quality afterschool programs.**

While all students can benefit from consistent participation in a high-quality afterschool program, students who are at greatest risk of school failure typically enjoy the greatest benefits. A great majority of students attending the site school presented multiple personal and environmental risk factors associated with high school non-completion and negative life outcomes. Where poverty has been documented repeatedly as a risk factor, the program has enrolled students from low-income households at least proportionally to their enrollment level in the school’s general student population (81 percent). Given that children with certain cultural and/or language backgrounds are at greater risk for poverty, including Latino/a children and children whose first language is not English, the afterschool program has served these groups generally at least in proportion to their numbers in the overall school population (Friedman, Neary & Wren, 2008; National Women’s Law Center, 2009).

As noted, for afterschool programs to facilitate student academic growth and healthy development—including strengthened school engagement—they must be of high quality (Mahoney et al., 2007). The school principal and the academic consultant both completed the APT-O, one in the fall and one in the spring, and all mean scores were a three or above, signifying a program of high quality. Results from the APT-O helps identify not only the positive features of the afterschool program, but also where the afterschool program needs
improvement—thereby informing program improvement efforts and staff development plans (Lucile Packard, 2004).

**Afterschool Programs and School Engagement**

**Positive youth development.**

As stated in the positive youth development approach, developing students’ strengths, skills and possibilities is essential for their full development (Benson et al., 2006). Further, it is crucial that positive characteristics be developed before negative ones are embedded in their being. Afterschool programs can help achieve this goal. Increasingly, afterschool programs are being recognized for not only increasing participating students’ knowledge base and academic skills, but also solidifying their engagement with school. By enjoying success in learning in afterschool settings, they can apply their increased confidence and investment in learning to the school day.

**School engagement and positive affects.**

School engagement has been found to positively correlate with school success, including academic achievement and educational attainment (Ladd & Dinella, 2009). School engagement is composed of behavioral engagement, emotional engagement and cognitive engagement. Although each of these components is individually important, their combination drives academic success. The positive youth development approach suggests that providing opportunities for youth to enhance their cognitive, behavioral, and emotional engagement can prevent youth from engaging in risky behaviors that can lead to academic failure (Benson et al., 2006).

The afterschool program under study incorporated elements associated with program quality and desired child outcomes, including student engagement. Since behavioral engagement is a predictor of emotional engagement and these levels in turn help predict cognitive
engagement (Ladd & Dinella, 2009), program staff focused on offering activities that would help engage students behaviorally, then emotionally, then finally academically. In accordance with evidence-based best practice, activity planning concentrated on conduct, involvement in learning, and participation. Having addressed behavioral engagement and emotional engagement, program staff was able to concentrate on the academic engagement components—that is, learning, self-regulation and being strategic (Fredricks et al., 2004).

At the time of the afterschool program opened its doors, the site school was low-performing. Not only did the afterschool program provide safe place for children be after school hours, away from neighborhood violence, but—aligned with research on the benefits of high-quality afterschool programs (Mahoney et al., 2007)—the afterschool program under study, according to the school principal—improved students’ motivation, social competence and academic achievement. Also in keeping with research findings, the school principal saw positive links between afterschool participation and increased MCAS scores (Vandell, Reisner & Peirce, 2007). Overall, an increase in school engagement was observed by the school principal over the time period that the afterschool program was in operation.

The purpose of the afterschool program under study was to provide students at risk of school failure with academic support and enriching activities not offered during the school day. Aligned with district goals, program activities were developed to have a strong literacy component (see Appendix E). Given that a positive correlation has been found between academic success and school engagement (Ladd & Dinella, 2009), strategies to increase school engagement were also embedded in program implementation, while utilizing the positive youth development approach.


**Staff selection.**

Key to program quality and fulfillment of the goal to promote students’ school engagement, program staff selection was crucial. It has been shown that teacher support has a positive impact on students’ school engagement (Gruman et al., 2008); therefore, when implementing the afterschool program and its learning activities, staff-student relationships were central to achieving goals for students. Studies have concluded that “the quality of the teacher-child relationship in the early school years have been associated with teachers’ rating of behavioral engagement, such as cooperative participation and self-defectiveness” (Fredricks et al., 2004, p. 74-75). Program goals for children and thereby program staff responsibilities achieve some clarity when considered through the lens of the Five Cs—competence, confidence, connection, character and caring. These attributes are essential because children with low levels of each are more likely to encounter difficulty in their personal and social lives. Child development experts propose that thriving children develop a sixth “C”—namely, contribution to self, family, community, and civic society (Lerner, 2004).

**School engagement outcomes.**

Cognitive engagement is perhaps the easiest to measure. The school principal had observed significant increases in cognitive engagement, as measured by MCAS scores. First in Massachusetts to be cited as underperforming, the site school emerged with the top MCAS results among the district’s elementary schools for the 2011-2012 school year. The school principal attributed this substantial increase to both school-day instruction and afterschool participation.

Teachers’ perceptions of the program captured in their SAYO reports suggested that the afterschool program was having a positive impact on engagement. Teachers saw an increase in
homework completion, engagement, and overall academic performance over the 2011-2012 school year for students who participated in the afterschool program. This indicates that results from the afterschool program were carrying over to the classroom and aiding with school success.

Student perceptions of the program captured through the SEM instrument provided further evidence that the afterschool program contributed to strengthened school engagement. The results of the student survey showed that students who participated in the afterschool program had higher school engagement than students who did not participate in the afterschool program. School engagement was then separated and analyzed into its three individual components. Results suggest that students who participated in the afterschool program had higher behavioral engagement and emotional engagement than their peers who did not participate in the afterschool program.

For the afterschool program under study, it appears that efforts to boost students’ behavioral and emotional engagement as well as their overall school engagement were effective. On the other hand, the program could be enhanced by the incorporation of additional activities to strengthen cognitive engagement. According to the findings of this study, no significant results were found for this type of engagement. These findings were surprising since, according to the literature and previous research, behavioral engagement influences emotional engagement and in turn these two levels help predict cognitive engagement (Ladd & Dinella, 2009). One would assume that a significant difference in cognitive engagement would be found, since significant results were found in behavioral and emotional engagement. Nonetheless, these results can be explained by the fact that as evident by MCAS scores, compared to their district and state peers, all students from the site school were high achieving already. Perhaps cognitive engagement of
all students was high to begin with, even prior to afterschool participation. Study findings on the impact of afterschool program participation on Latino/a students’ school engagement were inconclusive and out of step with previous research. A small sample size may have negatively affected the outcome of this analysis. A plausible reason for the apparent failure of the afterschool program to strengthen Latino/a students’ school engagement was the absence of program staff from their speech and cultural community. An afterschool program feature linked to program quality is the inclusion of staff with similarities in ethnicity, being from the community, and shared first language and experience with students. Even though 47.6 percent of its student population is Latino/a and 31.0 percent are English language learners (virtually all of who we can safely presume are native Spanish speakers), the site school had no Latino/a staff to recruit from for afterschool program staffing (Massachusetts Department of Elementary and Secondary Education school profile, 2012). The afterschool program would have benefited from the presence of Latino/a staff with first-language fluency in Spanish.

While preliminary in nature, these findings, along with previous research, suggest that increased investment in afterschool programs may be a way to increase students’ school engagement and reduce the risk of academic failure. It is estimated that the current federal investment for afterschool programs is well over three billion dollars. The 21st Century Community Learning Centers (21st CCLC) initiative is the only federal funding source earmarked exclusively to afterschool programs. Other federal funding sources include the Child Care and Development Fund, Temporary Assistance to Needy Families, Food and Nutrition programs, Title I Grants to Local Educational Agencies, Title I Supplemental Services, and Social Services Block Grant (The Financial Project, 2007). Each program services students in a different capacity, but all hold the same goal: providing high-quality afterschool programs to
increase academic achievement.

**Potential of afterschool programs.**

While it should not be regarded as a cure-all that will solve the problems of urban high-poverty schools and student underachievement, afterschool programming has the potential to not only provide critical academic support, but also to provide the conditions and experiences that lead to strengthened school engagement.

The effectiveness of high-quality afterschool academic support and enrichment programs in helping at-risk students improve their academic performance and strengthen their school engagement invariably begs the question why not incorporate afterschool program learning environments and approaches into regular-school programs.

**Implications for Educational Practice and Future Research**

**Implication for Educational Practice**

The findings of this research can serve as evidence to support the need to increased funding for afterschool program. The link between afterschool program and school engagement is limited, and more research is required, but this study is a good starting point to show the difference it can make, especially in an urban setting. Students in urban settings, particularly those of high-poverty, are in desperate need of help in order to make effective educational gains. Afterschool programs, if implemented properly, can be used as a worthwhile support. Agencies that have the capacity to fund such programs need to take an increased interest in the lives of our students.

**Future Research**

A plan for future formative assessment needs to be established which would incorporate more voices, including administrators, afterschool personnel, children and youth, and parents.
Further research is needed to flesh out the present and potential role of after-school programs in increasing academic achievement and school engagement. Perpetuating controversy regarding the benefits of after-school programs is their sheer diversity, disparate goals, and uneven quality. Evaluative studies that find minimal or no benefits from after-school program participation need to tease out program fidelity to accepted best practices, implementation problems, pervasive program underfunding, and the differential impact of different levels of participation (including identifying levels of diminishing returns).

This study’s finding of modest increases in school engagement linked to after-school program participation would be enhanced by tracking program participants’ school trajectories. In particular, a longitudinal study on the long-term effects of after-school programs on school engagement and educational attainment would also be beneficial. Also potentially enlightening would be further analysis of the relationship between after-school program participation and MCAS test results. Although this study suggests a causal relationship, future research would need to establish this. A comparison study between schools that offer after-school programs and those that do not offer after-school programs and their MCAS (or other statewide assessments) would be worthwhile. With the increased emphasis on statewide assessments, it would be valuable to study whether or not after-school programs have a positive effect on test scores.

Tracking students who participate in an after-school program from a young age until they finish high school, compared to those who never participated in an after-school program, would not only shed light on the long-term effects of after-school programs, but also close a gap in the literature. If participation in after-school programs does in fact increase school engagement, then students who participate in an after-school program for most of their academic career should have significantly higher school engagement and perhaps educational attainment than those who did
not participate.

Although the generalization of the findings of this study is limited due to context, it serves to further make the case for the provision of high-quality afterschool academic support and enrichment programs in high-poverty and underperforming schools. Further investigations in school engagement and afterschool program participation are warranted for a deeper and more complete understanding of its benefits.
REFERENCES

Afterschool Alliance. (2008, April). *Surveys and polls show strong support for afterschool.* Retrieved February 1, 2012, from Afterschool Alliance: Afterschool for All:

www.afterschoolalliance.org


www.afterschoolalliance.org


www.lpfch.org/afterschool/principle6.html


### APPENDIX A

Table 2

*School Engagement Measure (SEM)*

<table>
<thead>
<tr>
<th>Items</th>
<th>Behavioral</th>
<th>Emotional</th>
<th>Cognitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>I follow the rules at school.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get in trouble at school (reversed)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I am in class, I just act as if I am working (reversed)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I pay attention in class.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I complete my work on time.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like being at school.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel excited by my work at school.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My classroom is a fun place to be.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am interested in the work at school.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel happy in school.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel bored in school (reversed)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I check my schoolwork for mistakes.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I study at home even when I don’t have a test.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I try to watch TV shows about things we do in school.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I read a book, I ask myself questions to make sure I understand what it is about.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I read extra books to learn more about things we do in school.</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I don’t know what a word means when I am reading, I do</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
something to figure it out.

If I don’t understand what I read, I go back and read it over again.

I talk with people outside of school about what I am learning in class.
Dear Parent(s)/Guardian(s),

As many of you know, my name is Rafaela DeFigueiredo and I am the School Adjustment Counselor at the ****** School. I am currently working on a doctoral research project that will examine whether participation in an afterschool program will help increase the school engagement of our students. In order to do this I need your help! I have an 19-question survey that I am requesting all third, forth and fifth graders to complete. The survey should take only 30 minutes, and the students can skip any questions they do not feel comfortable answering. In addition, the answers to the survey will be confidential (students names will not be on the survey) and only my advisor, Dr. Conn from Northeastern University, and I will have access to the completed survey. Sample survey questions are:

I pay attention in class
1= never   2= almost never  3= sometimes  4= almost always  5= always
I feel happy in school
1= never   2= almost never  3= sometimes  4= almost always  5= always
I check my schoolwork for mistakes
1= never   2= almost never  3= sometimes  4= almost always  5= always

If you are willing to allow your child to participate in the survey, please complete the bottom of this letter and return it to school.

This information will be extremely helpful to better serve the students at the ****** School, as well as children throughout the country! I will be happy to share the results of this study once it is completed!

Thank you very much for your time and attention. If you have any questions please do not hesitate to contact me at 508-997-4511 ext. 2238. You may also contact the Northeastern University Human Subject Research Protection, 960 Renaissance Park, Northeastern University, Boston, MA 02115, 617-373-7570.

Sincerely,
Rafaela DeFigueiredo
School Adjustment Counselor

I, ___________________________, parent/guardian of __________________________,  ____ DO grant permission for my child to participate in the school engagement survey.  ____ DO NOT grant permission for my child to participate in the school engagement survey.

___________________________________________  ______ ________  
Parent/Guardian Signature      Date
APPENDIX C

Student Assent

“Good morning boys and girls. As most of you know my name is Ms. DeFigueiredo and I am the school adjustment counselor here at the ***** School and the coordinator of the afterschool program, but what you may not know is that I am also a student. As part of my studies I have to conduct a research project. My research project will see how our afterschool program helps students during school; in order to do that I am asking for your help. I have put together a survey that I will be asking you to take using the computers in the computer room. The survey will ask you simple questions and I want you to answer them as honestly as you can. Your answers are confidential, which means that no one will know what you answered. You will be given a piece of paper with your name and your number on it, and when prompted, you will use only your number to identify yourself, never your name. At the end of the survey, I will collect the piece of paper and I will shred it.

Your parents have signed a consent form, which granted permission for you to participate, but the ultimate decision is yours; you don’t have to participate if you don’t want to. If you do not want to participate, that is ok. Do you have any questions? Is there anyone who does not want to participate?

Ok, those students who want to participate please line up at the door, and those who have chosen not to participate will be able to stay in the classroom with your teachers completing a crossword puzzle or reading a book of your choice.”
APPENDIX D

Activities and Groups

Reader’s Theater
Become young actors and actresses as you develop your reading and oral presentation skills!

Basketball Team
Learn to dribble and shoot but perhaps more importantly learn to be part of a team!

Mind Games
Play your favorite board games with your friends or your favorite teacher, all while enhancing your reading and math skills!

Young Scientist
Come into the lab and begin experimenting for yourself. Science can be such fun!

Wii Play for Scores
Who doesn’t like video games?! But these video games come with statistical fun!

Biographies
Learn all you ever wanted to know about a famous person… and write your own biography for when you become famous!

Caring for Our Community
Let’s give back and have fun at the same time by volunteering at Gifts to Give

Dance
Get ready to boogie! Learn the hippest dance moves them show them off in front of your friends and families.

Young Authors
Read your favorite books, and then write your very own book! Maybe you’ll even be surprised by a visit from a famous author!!

Mind Games
Play your favorite board games with your friends or your favorite teacher, all while enhancing your reading and math skills!
APPENDIX E

“FOR THE LOVE OF LITERACY”
A selection of literacy-learning projects from
[District/School]
21st Century Community Learning Centers afterschool programs

Bookcraft/Biography: Reading and Writing Picture-book Biographies (Grades 2-5)

Bookcraft/Biography: Reading and Writing Picture-book Biographies maps out one route that teaches, engages, supports, and motivates elementary school children to write biographies. Introduced to a set of exemplary picture-book format biographies as models for their own writing, children research, write, illustrate, “publish,” and share stories about themselves, family members, and community people they admire. Connecting biography study with the child, their family, and community, the project establishes the relevance of writing and the importance of learning how to write. On their path to becoming skilled biographers, children explore the genre of biography and larger world of nonfiction, the qualities of good informational writing, and history and its interpretation. This hands-on, in-depth biography project culminates in celebrating the young biographers and their stories with family, friends, and community.

If you would like a Bookcraft/Biography curriculum guide and set of books, contact Bob French at rfrench@northstarlc.org.

Storytellers (Grades 3-5)

The Storytellers is a group of creative students who have fun with literature. Responding to a variety of children’s stories during the course of the school year, children compared and contrasted stories, invented their own endings, and extensively reworked the story lines of some classic fairytales. The students also created projects related to the stories that they were reading. For example, during the winter holiday season, students assembled a gingerbread house as a takeoff of the traditional story The Gingerbread Man. The students also had a great time eating fresh peaches while reading Sarah Kilborne’s Peach and Blue—feeding their bellies as well as their minds! Finally, students had a blast presenting their creative writings and exhibiting the knowledge that they gained though this group.

Students’ participation in Storytellers improved their reading comprehension, fluency, and oral presentation skills and enhanced their self-esteem.
Yearbook Club (Grade 5)

The Yearbook Club consisted of fifth grade students who collaborated to publish a school yearbook. In their last year at the elementary school, they interviewed every student in their grade level to write their profiles. The yearbook also featured photos they took of special events, student groups, and classes throughout the year. The students dedicated a page to two retiring teachers and wrote a dedication to each of them. With the help of their club advisors, the Yearbook Club members created a memorable keepsake to be treasured for a lifetime.


Reader’s Theatre (Grades 3-5)

The Reader’s Theatre group learned about and performed a variety of Reader’s Theater scripts. The students practiced different parts until they found a character that they felt comfortable playing. The group performed for an audience at a school literacy night and at our school’s 21st Century Spring Showcase. Our main objective was to increase the students’ fluency and expression.

The Reader’s Theater scripts performed included:
- All About Oceans
- SOS Titanic
- Tornado Warning
- Celebrate Diversity
- A Tribute to Martin Luther King, Jr.
- K.C.’s Dream
- The Grinch Who Stole Christmas
- My Rotten Redheaded Older Brother
- 3 Sideways Stories from Wayside School
- Goldie and the Three Bears

Newspaper Club (Grades 3-5)

The Newspaper Club members read and analyzed local newspaper articles and chose some favorites. In a whole-group setting, each club member presented their selections and highlighted their reasons for choosing them. When familiar with the “newspaper world,” they began writing their own articles and supported each other through peer editing. Their articles included:
- Special events at the school
- Highlights of games in professional sports
- Cartoons
- Restaurant reviews
- Holiday/seasonal stories
- Creative stories

The students selected and assembled their articles to create The Way We See It newspaper and distributed it throughout the school. Three issues have been published thus far and the students are eagerly working on their fourth issue.
Poetry Club (Grades 3-5)

Reading and writing poetry fosters a love for words and can provide tools to develop enthusiastic readers. The emphasis on sounds and rhythms of the language helps build phonemic awareness. Poetry's skillful use of language excites children of all ages and serves as an invitation to create their own.

In the Poetry Club, students enjoyed having opportunities to analyze and try out various poetry forms. The first poem the Poetry Club members created to introduce themselves to the group was an acrostic poem:

- N - descriptive words
- A - descriptive words
- M - descriptive words
- E - descriptive words

Next they tackled color poems, focusing on using words based on imagery and the five senses. Paint card samples were used to help spark student creativity.

Limerick poems—silly poems that always have five lines (lines 1, 2 and 5 rhyme, and lines 3 and 4 rhyme)—were published in individual poetry booklets.

The students’ fourth piece was called a kite poem where they made paper bag kites and used the form of poetry called tanka:

- Line 1 → 2 words
- Line 2 → 3 words
- Line 3 → 2 words
- Line 4 → 3 words
- Line 5 → 3 words

Free-form poems—written in any way students choose to write them—were created at will throughout the duration of the afterschool Poetry Club.

Students also performed poems by famous poets such as Shel Silverstein, Jack Prelutsky, and Robert Frost.

Students will present their work at a Poetry Party, where punch, popcorn, and pretzels will be served.

For more information: