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Examining Levels of Alignment Between School and Afterschool and Associations with Student Academic Achievement

DISSERTATION

submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in Education

by

Tracy Leeann Bennett

Dissertation Committee:

Dean and Professor Deborah Lowe Vandell, Chair Distinguished Professor. Greg Duncan Professor George Farkas UMI Number: 3565415

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DEDICATION

То

My THINK Together family; the most inspiring group of people I will ever work with.

Dr. Jenel Prenovost for never doubting the value of this work.

Randy Barth for investing in the idea of practical afterschool research.

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CURRICULUM VITAE

Tracy Leeann Bennett

2003	B.A. in Criminology, Law & Society University of California, Irvine
2004	M.A. in Educational Policy and Research University of Michigan
2004-2006	Program Evaluator, Center for Educational Partnerships University of California, Irvine
2006-2008	Research Consultant Santa Ana Unified School District
2008-2013	Manager of Program Evaluation, THINK Together Inaugural THINK Together / UCI Doctoral Fellow
2013	Ph.D. in Education, University of California, Irvine
2013	Director of Action Research, THINK Together

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ABSTRACT OF THE DISSERTATION

Examining Levels of Alignment Between School and Afterschool and Associations with Student Academic Achievement

By

Tracy Leeann Bennett

Doctor of Philosophy in Education

University of California, Irvine, 2013

Professor Deborah Lowe Vandell, Chair

In recent years, attention has been given to the academic impact of afterschool programs. Some schools collaborate with afterschool programs in an attempt to align the learning that occurs during the school day with the learning that occurs during afterschool hours, and thus maximize the potential to positively impact student academic achievement. However, very little research has sought to estimate the associations of alignment practices with academic achievement. This dissertation proposes a conceptual framework of alignment between school and afterschool programs that incorporates measuring academic resources, communication and a sense of partnership. It reviews the research on such practices, and synthesizes the work within the proposed framework. In the statistical study, survey data were collected from principals and afterschool staff at 78 schools across eleven school districts in Southern California. Respondents reported their perceptions of alignment between the school administrators and the afterschool program on three scales: academic resources, communication, and partnership. Highly aligned schools were defined as those in which both the principal and the afterschool staff reported high levels of alignment on all three scales. Misaligned schools were defined by an absolute

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difference in scores between principals and afterschool staff. Both measures were associated with relative changes in the average academic achievement of over 8,000 students who were included in the analysis sample. Results indicate a positive association between high alignment between principals and afterschool staff on academic achievement of students in both English Language Arts and Math, when compared with lower aligned sites. Significant negative associations were detected in Math when sites were misaligned. Findings document the need for more research in this under-studied area.

Keywords: alignment, misalignment, afterschool, academic achievement

Chapter 1:

Introduction

Afterschool programming is playing an increasingly active role within the education system (Bodilly & Beckett, 2005). While the initial goal of afterschool programs was to provide a safe place for children to be after the school bell rings, the accountability measures in education transformed the purpose of some afterschool programs from basic supervision to being responsible for contributing to the academic achievement of students (Mahoney, Parente & Zigler, 2009). Specifically in the past decade, societal interest in afterschool programming has increased and efforts to expand the field have grown (Halpern, 2006). In an effort to promote development and learning during afterschool hours, schools may collaborate with afterschool programs. The overall goal of such efforts is to provide a complementary learning environment that provides students an opportunity to reinforce and practice skills (Afterschool Alliance, 2011). Complementary learning refers to afterschool programs collaborating with schools to align and maximize learning for students (Weiss et al., 2009). As the responsibility of afterschool programs grows, so does the need to examine which levels and types of alignment make programs effective at contributing to the academic success of students.

For the purposes of this research, the term "alignment" is used to describe specific collaboration practices between afterschool programs and schools that attempt to coordinate student learning as they transition from the regular school day to the afterschool program. These intentional alignment efforts have several dimensions including the degree of effort by either or both entities, resources available, and time dedicated to collaboration. The studies conducted

within this dissertation conceptualize alignment across such varied levels as academic resources, communication and partnership, and then empirically examine the relationship between of varied levels of alignment practices on student academic achievement.

Before presenting the conceptualization and existing research on the alignment practices between schools and afterschool programs, it is necessary to provide the context in which alignment occurs, and the background as to why some schools are beginning to see afterschool programs as a resource to implement practices and strategies that promote student academic achievement. Some schools collaborate with their afterschool programs and other communitybased organizations to create programs that can reach student achievement goals by capitalizing on each entity's assets, resources, and perspectives (Ashcraft, 2002). There are multiple potential benefits to partnerships with schools that focus on afterschool time. Little, Wimer, and Weiss (2008) assert that afterschool partnerships can provide and support diverse, quality services for students that the school may not have the capacity to sustain during the regular school hours such as tutoring, academic enrichment or physical fitness. Collectively, a school and afterschool program can develop a set of common capacities that will enable afterschool programs to be high-performing and adaptable entities that create new opportunities for students, and a plan for learning that extends beyond the hours of the traditional school day.

Even though the afterschool hours can be used to promote learning, it does not necessarily mean that the afterschool hours look and feel like those of the regular school day. In fact, afterschool programs may support academic achievement not by mimicking schools, but instead by supplementing the schools' academic focus with a more integrative approach, targeting positive youth outcomes across multiple domains of student development (Adger,

2001). For example, an afterschool program that targets the health and wellness of students can also influence the math achievement of students by implementing lessons that reinforce concepts in a creative way such as through a cooking class where students measure materials, temperature, and time. Although the goal of the class may be to teach healthy eating habits, the students are also learning about fractions, measurement, and time. Some research affirms this approach, indicating that these programs can benefit students by decreasing their risk-taking behaviors and supporting the development of a range of non-academic competencies that in turn support academic learning and achievement (Hall, Yohalem, Tolman, & Wilson, 2003; Honig, Kahne, & McLaughlin, 2001).

An aligned afterschool program is connected to the school and would maximize learning for students (Weiss, et. al, 2009). This intentional alignment would require a strong partnership between the school and afterschool program and would be expected to positively associate with student academic outcomes. To date, the hypothesis that high alignment between schools and afterschool programs will yield benefits for student academic achievement has not been tested. In such an effort, the main purpose of this dissertation is to:

- Develop a conceptual framework of alignment between school and afterschool that accounts for various levels of alignment practices.
- Empirically test a measure of alignment as a predictor of student academic achievement within a single school district.
- 3) Replicate the single-district study using data for multiple districts and expand the statistical analyses to incorporate more robust modeling and degrees of alignment.

Chapter 2:

Conceptualization of Alignment Between School and Afterschool

A growing body of research documents positive outcomes associated with afterschool programming. When compared with non-participants, afterschool program participants in several recent studies demonstrated significant positive changes in academic achievement (Lauer, Akiba, Wilkerson, Apthorp, Snow, & Martin-Glenn, 2006; Reisner, White, Birmingham, & Welsch, 2001; Klein & Bolis, 2002; Vandell, Reisner & Pierce, 2007). Academic outcomes include improvements in reading and math scores, higher rates of homework completion, and higher grades. Positive socio-emotional and developmental outcomes have also been associated with afterschool programming. Recent studies have reported significant findings associated with lower levels of behavioral problems, gains in social competencies (such as confidence and leadership skills), and increased levels of civic engagement (Durlack & Weissberg 2007; Lauer et al. 2006; Harvard Family Research Project 2008; Mahoney et al. 2009; Riggs & Greenberg 2004; Vandell et al. 2005). The positive results within the studies mentioned are all associated with the attendance rates of afterschool programs. In other words, attendance in an afterschool program was able to significantly predict positive changes in student-level outcomes.

A more limited number of studies have examined the relationships that exist within programs that can also affect student outcomes. For example, adult-child relationships are documented in some studies as a key element of a high-quality afterschool program, and one that can impact student achievement (Smith et al., 2010). While this relationship may be an important component of a high-quality afterschool program, most research tends to overlook the adult

relationships themselves; specifically the relationship between afterschool program staff and school administrators.

Afterschool programs can vary greatly across schools and therefore, it is important to situate afterschool research within a model that provides varying levels of context and relationships. Such contexts and relationships can potentially impact programming and in turn, student outcomes. Mahoney, Parente and Zigler (2010) proposed a developmental ecological model that builds on earlier bioecological views (Bronfenbrenner & Morris 2006; Riggs & Greenberg 2004; Vandell & Posner 1999). Figure 1 depicts this model in which each of four contexts can impact student outcomes over time: youth characteristics, social ecologies, afterschool program features, and afterschool program participation. This perspective takes a more comprehensive approach to understanding the developmental effects of afterschool programs, as it is likely that there are interactions between multiple contexts over time that can affect how afterschool programs impact youth outcomes. As previously mentioned, afterschool research has tended to focus on single domains, while neglecting the interactions and relationships between them. Using the current study as an example, investigating the impact of alignment between schools and afterschool programs on student outcomes speaks to the interaction between social ecologies (school) and afterschool program features (staff characteristics and content).

Additionally, the model proposed by Mahoney and colleagues (2010) offers three principles for framing afterschool research that focus on student developmental outcomes. First, it is important to incorporate multiple domains and contexts that can impact afterschool programming and hence, academic achievement. The second principle is to understand that

youth development is "multiply determined by factors within and outside individuals that include the interactions that occur between multiple environments/contexts" (p. 288). Lastly, the contexts that can impact youth development during the afterschool hours are bidirectional; over time, youth can also influence the environment that they are in. With such principles in mind, an afterschool program has the opportunity to contribute to a student's development in addition to the student learning that occurs during the school day; whether it is academically, emotionally or socially.

Afterschool programs can create in-depth and flexible relationships, invite families and community members to participate in programming, and have the potential to function as an "essential environment, connecting the multiple worlds of children" (Noam et al., 2009). As the focus shifts away from simply supplemental supervision to extended learning in the afterschool realm, some afterschool programs are attempting to collaborate directly with schools to organize efforts that promote learning in the afterschool hours. For some providers, this includes aligning academic efforts with those that occur during the school-day. There are many contexts in which this can occur, and many approaches programs can take to establish such alignment. By taking a developmental ecological perspective on afterschool research, the alignment between principals and afterschool staff would be one of the many interactions across contexts that can potentially impact student outcomes, and has yet to be studied.

Before testing the hypothesis that alignment between school and afterschool programs will yield improved academic outcomes, it is necessary to create a conceptual framework for what is meant by "alignment", and to review relevant research that has already examined

alignment between schools and afterschool programs. The main purpose of this chapter is to develop this conceptual framework. Specifically, this chapter sets out to address the following questions:

- 1) What is a useful conceptualization of alignment between school and afterschool?
- 2) What alignment practices have already been studied and how do they fit into the conceptual framework proposed?
- 3) What considerations are needed to pursue future studies of alignment?

Conceptual Framework of Alignment

In their book "Afterschool Education: Approaches to an Emerging Field," Noam, Biancarosa, and Dechausay (2003) present a framework that delineates levels of relationships that can occur between afterschool programs and schools. Noam et al. view afterschool programs as a bridge between different worlds within a student's life; connecting the learning that occurs during school with the learning that occurs afterschool. These different levels of alignment are indicative of the intensity with which schools and afterschool programs implement certain practices (or not). The strength of these practices places a program on a continuum of alignment. When a program is completely separate from a school, Noam and colleagues consider it a *self-contained* program. In this case, both the program and the school make no effort to connect with each other. It is likely due to the fact that the philosophy of either entity does not include the other in its overall purpose and goals. A program is considered to be *associated* when the school designates a small role for a program, but there is not a strong connection between the two entities. There is limited interpersonal (mostly spontaneous) communication. A *coordinated* program is one in which the afterschool program dedicates a significant amount of its work time to establishing a connection with the school. Typically, the program will have identified a school liaison with whom it communicates directly, and those communications are intentional in nature.

If a program is *integrated*, both the school and afterschool program engage systematically with each other, and identify one another as a partner in advancing the academic achievement of students. The afterschool program makes it an organizational priority to allow time for collaboration between staff and school administrators. Furthermore, the school administrators invite the afterschool program staff to attend various meetings (leadership, staff, parent) and school administrators are involved in afterschool program planning. Based on the framework Noam et al. provide for alignment, an integrated afterschool program would be considered highly aligned. The last program that Noam et al. reference is a *unified* program. This refers to an afterschool program that is indistinguishable from the regular school program. It would be a true extension of the school day, and all activities afterschool would mirror those that occur during the normal school hours. A unified program contains no individualized characteristics distinct from the school.

Noam et al. provide broad levels and categories of alignment that are important to have when conceptualizing alignment as a relationship between school and afterschool. While this work is foundational in understanding alignment as a relationship between school and afterschool programs, it does not offer specific practices of alignment that can be implemented or studied by researchers.

Expanding the Framework

Building on the framework provided by Noam and colleagues, this dissertation focuses on three particular alignment practices: academic resources, communication, and sense of partnership, which can be measured and studied. These areas of practice can vary depending on the degree of effort and intention that both the school and the afterschool program put into the relationship and alignment practices. Figure 2 displays this expanded conceptual framework that incorporates the levels articulated by Noam et al., and the types of alignment practices proposed here. It demonstrates that as the intensity and intentionality of alignment practices increase, an afterschool program would progress from self-contained (not aligned) to integrated (highly aligned). A unified program is not included in the framework because it implies no distinction between a school and an afterschool program (and is therefore inapplicable to this research). Under each level are examples of the types of practices within each level of alignment (academic resources, communication, and partnership). The arrows that run across the three areas represent alignment as a continuum, with practices progressing from less aligned (self-contained) to highly aligned (integrated). Next, these three proposed areas of alignment are discussed.

Academic Resources. This framework proposes that a key alignment practice is to coordinate the use of academic resources between the school and the afterschool program to ensure there is alignment of academic goals and strategies when students transition from school to afterschool. Curriculum design should be intentionally aligned to program goals (Huang & Dietel, 2011). Most often, schools have access to materials, facilities, and resources that could be made available to the afterschool program. A measure of alignment on academic resources

would include an examination of which resources the afterschool program has access to, and which resources are used in programming. Specifically, academic resources could include curriculum materials in both English Language Arts and Math, computer lab use for online curriculum, curriculum pacing guides, student level data (such as assessment scores and course grades) and teacher instructional guides.

Communication. The framework discussed here suggests that the frequency and purpose with which schools communicate with afterschool programs is an important component of alignment. Regular and intentional communication provides school and afterschool staff with access to common information that will improve how each supports the development of students (Bosland, et al., 2012). A measure of alignment would need to be able to examine the frequency and content of such communication efforts. Based on the alignment practices discussed in this chapter, a measure of communication should address specific types and frequency of communication topics including: academic concepts, student needs, facility use, program and school policies, and goal setting. Also, it is important to understand the ways in which administrators and afterschool staff address these topics; whether it be via meetings, phone calls, electronic correspondence, etc. so that it can inform practitioners in the field of specific communication practices that may link to student academic achievement.

Sense of Partnership. The framework proposed here notes a sense of partnership as a component of alignment between school and afterschool. This is especially important since many school-based administrators consider afterschool programs as an afterthought and may not connect it to the traditional school day (Norris-Holmes, 2008). Alignment includes the need for a

strong relationship between the school and afterschool program that incorporates trust, shared vision, and common goals for students. Therefore, a measure of alignment should include an assessment of the relationship between the school and afterschool program, how that relationship builds alignment, and the process by which efforts are translated into programmatic efforts afterschool.

Categorizing alignment between schools and afterschool programs along a continuum of practices (such as the one proposed here) is a helpful way to situate the research on alignment between schools and afterschool programs. It provides a baseline and trajectory for goals of afterschool programs. Themes from Noam et al. (2003) indicate that afterschool staff desire more collaboration with schools, however ideological and practical barriers can prevent progress on such efforts. Furthermore, most afterschool programs operate with part-time, paraprofessional staff and they are unable to dedicate significant amounts of times to alignment efforts (in addition to handling day-to-day operations). By providing varying degrees of alignment within the levels, it allows for an interpretable and researchable framework.

By incorporating these three proposed elements of alignment practices between school and afterschool programs into a measure that is applicable across varying programs and contexts, researchers can establish a foundation for future studies on alignment. This can provide valuable insight into the varying degrees of alignment that occur and the potential impact on student achievement. Table 1 provides examples of survey items under each component that a study could potentially use. For example, under *academic resources*, Table 1 demonstrates that a survey could ask whether the afterschool program has access to curriculum materials, pacing

guides, and assessment data. *Communication* includes a list of potential topics of discussion (such as curriculum concepts and policies). The survey could assess the degree to which these topics are discuss, and how often. Under the *sense of partnership* column, Table 1 displays that survey questions could probe the feelings of the relationship such as trust, value and perceived effectiveness. Researchers can examine the components individually, or as a comprehensive measure. Furthermore, researchers can use the measure as a statistical predictor to student academic outcomes. Results would be comparable across multiple programs and contexts, which is a feature that is currently lacking in afterschool alignment research. As the field learns more about which practices contribute positively (if any) to student academic achievement, practitioners can adjust programs accordingly to best serve the needs of the students.

Defining Alignment Practices

A handful of studies explore specific practices of alignment, and offer recommendations of how to establish alignment between school and afterschool. Table 2 displays how each of the proposed elements are incorporated across the main studies that will be discussed within this section (Beckett et. al, 2009; HFRP, 2006; NAESP, 2006). As Table 2 demonstrates, all of the alignment practices discussed within these studies can be placed within one of the categories of academic resources, communication, or sense of partnership.

The *Harvard Family Research Project* (HFRP, 2006) reviewed multiple evaluations of afterschool programs from within their database, and from those reports generated recommendations of how afterschool programs can align with schools to best serve students.

HFRP recommended that afterschool programs communicate to schools that they are capable of enhancing student achievement. They point out that programs need to be persistent with school administrators in their alignment efforts, in order to maintain a sense of collaboration. They offer multiple strategies of how to do this. First, they recommended a shared vision, shared space and shared staff. As can be seen in Table 2, these recommendations fit within the proposed areas of alignment to measure. Under a shared vision, each stakeholder would be clear of what the goals of the afterschool program are, and how the goals can align with the school. Shared space eliminates any transportation issues and allow for the afterschool staff to be more present at the school site to build relationships with students. The sharing of staff between schools and afterschool programs creates a system of influence for the both school and afterschool staff. Through this influence, the afterschool staff can benefit from professional development opportunities, lesson modeling from school faculty, and sharing staff will also engage administrators and teachers to invest in student learning during afterschool hours. Students may also benefit. A national evaluation study of 21st Century Community Learning Centers showed that teachers felt that their skills and relationships with students improved after becoming involved with the afterschool program (Little, 2006).

Another recommendation from HFRP is that schools provide *supportive leadership* that promotes *effective communication systems*. Supportive leadership means that the school administrators engage in a reciprocal, collaborative relationship with the afterschool program. Diedrich et al. (2005) assert similarly that supportive leadership is the most important factor in creating afterschool programs that link to positive outcomes for students. Effective communication systems entail the facilitation of intentional conversations and information sharing between the school and afterschool program, and fit well within the conceptual framework presented earlier (under communication in Table 2). Lastly, HRFP recommends that afterschool curricula *align with, not replicate* the school-day curricula. Specifically, HFRP recommends that afterschool curricula still be standard-based (by grade level), but be more of a simplified individual education plan for students that can allow for a different approach to the structure of the regular school day. As mentioned before, this report provided recommendations based on program evaluations, yet did not offer rigorous research-based evidence to support the ways in which such practices link to student academic achievement.

The *National Association of Elementary School Principals* (NAESP, 2006) released a book in an effort to help principals understand the value of afterschool programs and the potential positive impacts that afterschool programs can have on student achievement. Four of the six strategies that NAESP discusses in the book pertain directly to the proposed conceptualization of alignment discussed already in this paper. Similar to the HFRP recommendation of a shared vision, NAESP recommends for school administrators to *expand the school vision* of learning for students to include high-quality afterschool experiences. This is an important first step acknowledged by both sources because without the acknowledgment of the afterschool program as a contributor to student learning, it would be difficult to align the program. Without such acknowledgement, an afterschool program would seemingly not advance beyond the self-contained level of the conceptual framework developed earlier, and therefore not be considered aligned.

Additionally, NAESP advises principals to *support linkages* between the school day and afterschool program, similar to the recommendation of aligning not replicating the school day that was given by HFRP. This means that principals support connections and relationships between the school and afterschool program, to ensure that program content delivered afterschool meets the needs of the academic students. Next, NAESP recommend school administrators *collaborate* with the afterschool program management in order to manage resources that support a full day of learning. Both of these recommendations are similar to those presented in HFRP in regard to effective communication systems. The conceptual framework presented here (see Figure 1) also considers the intentionality of communication between schools and afterschool programs, noting that the varying degrees of communication distinguish aligned programs (integrated) from those that are less aligned (self-contained). Just as with the HFRP study, the practices discussed within the NAESP report are recommendations based on a review of expert opinions and formative program evaluations (not rigorous research) and do not statistically link any of the practices with student academic outcomes.

More recently, the Institute for Educational Sciences (IES) released a report that synthesized best practices of afterschool programs that focus on the academic achievement of students (Beckett, et al., 2009). The authors synthesized results from 22 afterschool program evaluation studies nationwide that met IES-specified standards of low, moderate, or strong research evidence. Although IES classifies the evidence as low, the first recommendation they offer for structuring afterschool programs is to *align* the afterschool program with the school day and each strategy they discuss relate to recommendations from both HFRP and NAESP.

Beckett et al. (2009) offer four strategies for schools to use when setting out to align with an afterschool program. First, *connect* afterschool instruction to school instruction by identifying school-based goals and learning objectives that can be implemented afterschool. As mentioned earlier, both HFRP and NAESP also recommended a form of linkage or common goal between school and afterschool programs. In order to help facilitate and support that effort, Beckett et al. assert that schools should designate a school staff person to coordinate communication with OST programs and help them support student needs. Schools should also use their afterschool program staff to *develop relationships* with the school, in order to ensure that the instructional goals of the afterschool program align with those of the school day. Lastly, Beckett et al. (2009) advise schools and afterschool programs *coordinate staffing* of the afterschool program with staff from the school as well, much like HFRP recommended sharing staff between school and afterschool. Since both entities play a role in alignment, both should be included in the implementation of program. This is a main point of the proposed conceptual framework as well, since alignment is conceptualized as an intentional relationship between school administrators and afterschool programs (see Table 2).

As discussed above, there are studies that cite alignment as important to contributing to student achievement and have provided recommendations for how to do it. Fewer studies however, have statistically linked alignment efforts to growth in academic outcomes for students. This is further proven when Beckett et al. (2009) list alignment as the first recommendation for structuring afterschool programs to promote student academic achievement, yet cite the evidence

as low. The next section reviews the limited research available on alignment practices and academic achievement.

Alignment Practices and Student Academic Achievement

There are no experimental studies of the impact of alignment practices between schools and afterschool programs on student academic achievement, yet evidence of such positive impacts will likely become an essential element of program sustainability (Stonehill et. al, 2011). In the few studies that do correlate alignment practices with academic outcomes, alignment was not the original focus of the research. Rather, alignment was a byproduct of other quality indicators that the study originally intended to measure. Therefore, there are no conclusive links between alignment practices and academic achievement. In an effort to identify potential alignment practices that can contribute to student academic achievement, Beckett et al. (2009) synthesized these few studies to examine if any displayed characteristics of the alignment recommendations made in their report.

Only three studies represented the alignment practices recommended such as the coordination of communication and staffing, shared space and relationships but the structure and purpose of the programs varied across the studies (Jacob & Lefgren, 2004; Langberg et. al, 2006; McKinney, 1995). In two of the studies, the alignment efforts were frequent and structured; content and skills taught in the afterschool program were intentionally designed (through collaboration) to support lessons that occurred during the school day. Langberg et al. (2006) evaluated a middle school afterschool program that targeted students with behavioral issues.

Counselors at the school implemented the program afterschool, and worked closely with the teachers on the specific academic needs of the students. Results indicated a positive academic impact for students in the program. McKinney (1995) studied an afterschool learning program implemented for first and second grade students who were achieving at below grade level. Afterschool staff worked with teachers to deliver a curriculum that was specific to the needs of the students. Treatment and control group students were evaluated using pre and post-test administrations of the Stanford Achievement Tests. Treatment students participated in the program after-school over the course of two eleven-week sessions. Results indicated there were no statistically significant differences between groups.

The third program that demonstrated alignment efforts was a supplemental summer program for third and sixth graders, and therefore the alignment practices were not as consistently structured due to the timing and duration of the program. Regardless, Jacob and Lefgren (2004) found that the program demonstrated significant and persistent positive impacts on both English Language Arts and Math for third graders, but not sixth graders. Again, these studies did not link the alignment practices directly with student outcomes, but the programs showed characteristics of what IES defined as alignment.

Another eight programs contained potential practices of alignment as assessed by Beckett et al. (2009), however the alignment practices were not evident enough to assume linkages to any form of academic achievement. One program still showed positive effects (August, et al., 2001), two showed mixed effects (Black et al., 2008; Borman & Dowling, 2006), and the remaining five showed no demonstrated associations with academic achievement (Goldschmidt,

Huang, & Chinen 2007; Bissell et al., 2002; U.S. Department of Education, 2003; Udell, 2003; Ross et al., 2008; McKay et al., 2008; Muñoz, Potter, & Ross, 2008). As this lack of intentional and rigorous research on alignment indicates, there is a need within the field to develop a conceptualization of alignment that future researchers can use to situate studies that directly link alignment practices with student academic outcomes. The conceptualization needs to be versatile enough to incorporate varied styles of alignment, as well as multiple types of afterschool programming. The conceptualization presented earlier can serve as such a framework. Upon establishing a conceptualization, a necessary next step in future research is to develop a measure of alignment that incorporates the types of practices that are perceived as important elements of alignment. The next section addresses considerations in doing that.

Measuring Alignment

As the previous sections documented, there are multiple recommendations on how to align afterschool programs with schools, yet little research that conclusively links such efforts with student academic achievement. By using the conceptual framework presented across these studies, future research would benefit from a tool that measures specific practices of alignment that could designate a program as aligned (or not) and then link practices (or lack thereof) to student academic outcomes in order to examine which alignment practices yield results. This section discusses the necessary considerations for future alignment research.

Considerations in Measuring Alignment

The first step in measuring the association of alignment is to understand the type of alignment that is desired and also what degree of implementation is realistic for the goals of the

school and afterschool program (ranging from self-contained to unified). This can vary depending on the type of partnership that exists between the school and afterschool program, however, it is important for researchers to understand the continuum of alignment and have a strong sense of where the program seeks to be along it. For example, within the integrated level of the conceptual framework of alignment presented here, schools and afterschool programs have structured and frequent communication. An effective measure of alignment therefore, would collect data that defines what "structured" and "frequent" signify in terms of content, time, and quality. As Table 1 shows, items within such a measure could address specific content discussed, the amount of time that collaboration takes, materials used, the frequency at which administrators and afterschool program staff collaborate, and the perceived value in such practices. There are various structural and contextual constraints that can inhibit schools from integrating afterschool programs into their day-to-day efforts to support students, not least a lack of time, the instructional demands of high-need students, and high-stakes assessments; therefore, the following conditions should be explored and identified before measuring alignment.

Challenges. There are notable challenges to establishing alignment between school and afterschool, and those must be placed in context when setting out to measure alignment. Alignment can look different across programs, and there are many factors that could affect the measurement and potential link to student achievement. As Donahue (2006) points out, programs remain challenged by "many competing interests when it comes to vying for the attention, skills and time of regular day teachers and administrators". Furthermore, Vandell and Posner (1999) assert that many afterschool programs are not formally aligned with what the student learns

during the school day, but a "lack of formal link does not mean that the school environment does not influence children's afterschool experiences or vice versa" (p. 171). This lack of formal alignment does not imply that there is no alignment, but rather suggests a lack of tools to measure the types of strategies and practices that might be implemented. The measure presented here serves as such a tool.

Goals. Minimally, a research study on alignment should address the ways in which schools and afterschool programs articulate the goals of afterschool programming. Weiss et al. (2009) assert that there should be common goals among both the school and afterschool program. Although a measure of alignment between two entities that each define the purpose and goals of the program differently might seem to be lacking obvious alignment practices, measuring alignment efforts would still be informative. It can be just as valuable to learn what is not being practiced and the ways in which those practices (or lack thereof) link to student academic achievement. An example would be a school that identifies the goal of the afterschool program as promoting physical health amongst the students, but the afterschool program believes the goal is to raise academic test scores. If the conceptual framework presented here is applied, then this example might fall within the interpersonal domain and self-contained level of alignment (see Figure 1 for reference). If both the school and the afterschool program share a common goal and vision however, their practices might fall further along the continuum. Researchers must take goals in context when assessing such designation.

Program differences. In order for an alignment study to include a sample of multiple programs across various settings, the differences across programs must be considered, and

possibly controlled for in any statistical analyses. Staffing structures can vary greatly across programs. Some programs employ staff on a full-time basis, which allows for more time and energy to be spent on alignment efforts. Other programs can only afford (or chose) to employ staff on a part-time basis, which limits the amount of time and resources dedicated to establishing alignment with the school. Another difference researchers need to account for is program structure and dosage. This is especially important to consider if a measure of alignment will be statistically associated with student achievement. Although a program might demonstrate strong and consistent alignment practices with the school, the associations of alignment on student academic outcomes may be moderated by the amount of time students actually spend in the program.

Alignment as a relationship. Alignment is conceptualized as a relationship between the school and afterschool program, and therefore both entities must be involved in the research. In its truest form, alignment entails a sense of understanding and dedication from both the school and afterschool program. Understanding the differences and varied approaches from both sides of the relationship will produce the most useful research for the field. Researchers must implement a measure of alignment with the intent to measure the efforts put forth by both the school and afterschool program.

Implications for Current Studies

In this chapter, alignment between school and afterschool programs is conceptualized as a set of practices between the two entities. This conceptualization operates under the hypothesis

that strong alignment can positively link to student academic outcomes. Teachers and principals in schools have expressed support for these efforts (Goldschmidt, Huang, & Chinen, 2007, Bissell et al., 2002). As this chapter demonstrated, there are plenty of recommendations of how to align schools with afterschool programs, yet very little research that draws conclusive evidence on associations of such practices to student academic achievement. Beyond the need for more research that tests this hypothesis and connects alignment practices with student achievement, there is an even greater need to develop effective means to measure such alignment between schools and afterschool programs. This limited research is due to a lack of conceptualization and measure of alignment.

This chapter expands the conceptual framework created by Noam and colleagues to include measurable practices that incorporate varying degrees of academic resources, communication, and sense of partnership as integral components of alignment between school and afterschool. The next steps for research on the relationship between alignment practices on student achievement are to develop a measure of alignment that incorporates the core elements proposed here and implement it across different programs in order to produce more rigorous and robust studies of alignment. While this chapter does not imply that a measure of alignment will not require continual adaptations and revisions, it does lay a foundation for research in understanding the potential link of alignment practices between school and afterschool programs on student academic achievement.

Building on the conceptual framework presented in this previous chapter, the next two chapters study the relationship between alignment practices and academic achievement.

Alignment is measured through surveys administered to principals and site coordinators of an afterschool program. Alignment scores were created by computing the levels of agreement between principals and afterschool site coordinators in three areas: academic resources, communication, and partnership. Academic resources refer to the types of student data, materials, facilities, and resources that the afterschool program has access to for use in the afterschool time. Communication indicates the frequency of interactions between principals and site coordinators centering on specific concepts and topics such as curriculum, classroom management, discipline, and student needs. Partnership concerns the perceptions of reliability, trust, planning and information dissemination between the principals and afterschool site coordinators.

Alignment is conceptualized as principals and afterschool site coordinators being in agreement about academic resources, communication, and partnership with the afterschool program at their school. A school is considered *highly* aligned if both the principal and the site coordinator report that they work together closely on all three types of alignment practices. Misalignment is conceptualized as those schools in which principals and site coordinators are not in agreement on all three of those categories. The studies within this dissertation empirically test a measure of alignment as a predictor of student academic achievement. The first study examines alignment between principals and afterschool staff within a single school district. The second study will replicate the single-district study using data for multiple districts. It implements the same measure, and expands the statistical analyses to incorporate more robust modeling and accounts for program attendance and varying types of alignment.
Chapter 3: Examining the Relationship Between Alignment and

Student Academic Achievement (Study 1)

All of the afterschool program sites in this study are located in southern California. The afterschool programs are administered by a large statewide non-profit organization that specializes in afterschool programming, in addition to other educational support services for schools. Funding for the program is obtained by the State of California under the After-School Education and Safety program (California Education Code 8482). The afterschool program is located on the school campus and services are offered from the dismissal bell of a school until 6:00 p.m. every day that the schools are open. Program participants are required to attend for the entire time period, which is a minimum of three hours. Programming includes a healthy snack, a brief opening activity for all students centered on team-building, and then students are placed in classroom rotations with their grade-level counterparts at a student to staff ratio of 20:1. Students rotate between three core areas of programming: homework, academic enrichment, and physical fitness (for 30 to 45 minutes each). Homework help is offered on an as-needed basis, however the academic enrichment area of programming is an implementation of standards-based lessons for each grade level, and switches between different subjects (depending on the school-level program goals). Physical fitness activities are usually done outside, and vary in terms of content (e.g. coordination skills, group sports, timed relays).

The first study uses the conceptualization from the previous chapter to examine the relationship of alignment between school and afterschool programs and the academic impact on students within a single school district. Alignment is measured via a survey to principals and

afterschool program site coordinators at each site. A school is considered *highly* aligned if both the principal and the site coordinator report that they work together closely on all three types of alignment practices (academic resources, communication, and partnership). Misalignment is conceptualized as occurring in those schools in which principals and site coordinators are not in agreement on all three of those categories. In this first study, two questions are considered:

- 1) Is high alignment between principals and site coordinators associated with student academic achievement scores in English Language Arts and Mathematics?
- 2) Is misalignment between principals and site coordinators associated with student academic achievement scores in English Language Arts and Mathematics?

It was predicted that if principals and afterschool staff were highly aligned, there would be a positive association with student academic achievement in both English Language Arts and Math. Furthermore, it was predicted that misalignment would be associated with a decrease in student achievement in both English Language Arts and Math.

Methods

Participants

Survey Samples. All principals and site coordinators for the afterschool program provider within the districts were given the survey. Principals in this study are full-time administrators at their respective schools, and are employed by the school district. Sitecoordinators for the afterschool program are also at the school full-time (during regular school hours), but are employed by the non-profit afterschool program provider. Site coordinators are responsible for all elements of afterschool program implementation, including the supervision of part-time staff who work directly with students within the program rotations. A total of 38 sites

within a single school district were given the survey and of those, 29 principals and 32 site coordinators completed the survey. Between those, 25 schools completed surveys for both respondent groups (65% overall response rate).

Student Samples. The sample consisted of afterschool participants from 25 schools in a large urban public school district in Southern California (21 elementary and four intermediate). After reductions due to missing data, the English Language Arts outcome sample consisted of 4,365 students and Math outcome sample consisted of 4,399 students. Table 3 displays the descriptive statistics for the student samples in this study. As shown, the student sample consisted of students in grades three through eight. There were slightly more males (52%) than females (48%) and a majority of the students in the sample are Hispanic (81%) and classified as English Language Learners (66%).

Measure

Alignment was assessed with a 21-item survey developed by Vandell and colleagues (2007). The survey was administered online to principals and site coordinators. All respondents received an email that provided a direct web link to the survey during the spring of 2011. Both respondent groups received the same correspondence and survey. During the 30-day window of administration, four reminder emails notifications were sent to potential respondents to ensure the highest possible response rate. In order to be included in the analyses, both principal and site coordinator responses were required at each school. Table 4 provides the item-level descriptives

as well as the reliability ratings within each scale (by type of respondent), which are reviewed next. A copy of the entire survey can be found in Appendix A.

Academic Resources. This five-item scale measured how often the afterschool programs had access to academic resources for use in the afterschool hours (as reported by principals and site coordinators). The specific resources addressed here included how often the afterschool program has access to resources such as curriculum materials in both English Language Arts and Math, computer lab use for online curriculum, curriculum pacing guides and district benchmark scores. Responses were entered using a 3-point scale (1= Never, 2= Sometimes, and 3= regularly). Reliability analysis conducted on these items yielded moderate alpha levels for principals (α = .75) and site coordinators (α = .71).

Communication. This eight-item scale measured the frequency that principals and site coordinators reported communicating about specific topics of programming including academic concepts, student needs, facility use, and school policies. Responses were entered using a 4-point scale (1 = Never, 2 = One to two times a semester, 3 = Once a month, 4 = At least two to three times a month). Reliability analysis conducted on these items yielded high alpha levels for both respondent groups (Principal α = .89, Site Coordinator α = .84).

Sense of Partnership. This eight-item scale addressed the perceived partnership between the afterschool program and the school-day program, as reported by principals and by site coordinators. These items measured the strategies that both principals and site coordinators used to collaborate, reinforce school concepts in the afterschool program, disseminate important information and coordinate the program. Responses were entered using a 4-point scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree). Reliability analysis conducted on these items yielded high alpha levels for both respondent groups (Principal α = .91, Site Coordinator α = .87).

High and Low Alignment. The first analysis tested whether having *high* alignment between principals and site coordinators was associated with reactive gains in scaled scores in ELA and Math, when compared with sites with low alignment. The first step in testing this was to designate sites as having either high or low alignment; for each survey scale, and also overall. The scores for each principal and site coordinator on the alignment scales of academic resources, communication and partnership were coded as high or low. This delineation was based on the mean of response choices in each scale. To be considered "high" alignment, the mean score on the resources scale had to be greater than or equal to two, and greater than or equal to three on the communication and partnership scales. For academic resources, a mean that is greater than or equal to two indicated that respondents reported that the school "regularly" shared academic resources. A mean greater than or equal to three on the communication scale indicated frequent communication between principal and site coordinators on various concepts. For the partnership scale, it meant that respondents felt that there was a strong partnership between the school and the afterschool program. Each scale was coded as either high or low mean for principals and site coordinators. A cross-tabulation was run to determine which sites had both principals and site coordinators report high on every scale. Of the 25 included sites, 16 sites had both the principal

and site coordinator reporting high alignment. Those 16 sites were coded as having high alignment and the other nine sites were coded as low alignment (Align High= 1, Align Low = 0).

The rationale behind turning a possible composite score into a categorical (high/low) variable is to account for the sites that had composite scores that fell within the middle of the score range. While some of these sites may have had higher scores than the other sites, many are still be considered to have low alignment because the score for their school represents one respondent reporting high alignment while the other reports low (hence the mid-level composite score). If both respondents are not reporting high alignment, then the site should not be considered to be highly aligned, and are placed in the low alignment category.

Misalignment. Difference scores were computed for each site (Principal Alignment Score minus Site Coordinator Alignment Score) to create a measure of *misalignment*. The absolute value of each difference was used as a variable of misalignment. The larger the difference score, the less aligned the respondents were. Perfect alignment for example, would produce a zero as the difference score. As another test of misalignment, difference scores were also computed for each of the survey scales (academic resources, communication and partnership). A significant negative regression coefficient would affirm that the more "misaligned" a site is, the greater the decrease in achievement for students. The misalignment variable as an overall difference score, and also one for each scale were used as a predictor in regression analyses (clustered by school).

Student Outcome Variables

2011 California Standards Test Scaled Scores (CST). These variables come in the form of a scaled score, ranging from 150 - 600. The individual student was the unit of analysis and the scaled score was the key dependent variable. The intent is to measure achievement growth, as there can be significant growth in scaled scores that would not be captured if only looking at proficiency level designation. The CSTs are a major component of the *Standardized Testing and Reporting* program in the state of California. The assessments are developed by educators and test developers specifically for California Educational Standards. They measure students' progress toward achieving California's state-adopted academic content standards (what students should be able to do in each grade/subject that is tested). Scaled scores for both English Language Arts (ELA) and Math were used as outcomes.

Covariates

Student-Level. Students' CST scaled scores from the prior school year were included in the analysis in order to control for prior achievement level. In addition, the grade level of each student from the 2011 school year was obtained from district records. The data set includes students in grades three through eight, as those are the students who would have two years of CST data (as to provide a control for prior achievement). Each student was dummy-coded as male or female, based on district records from the 2011 school year (Male=1, Female=0). Student records from the districts indicate whether the student is of Hispanic descent or not. The variable was dummy-coded (Hispanic =1, Not Hispanic = 0).

Site-Level. Three school-level covariates are used in the analyses. First, as a potential indication of economic status, the percent of students who receive free/reduced lunch (FRL) at the school. In the entire sample, 92% receives free/reduced lunch. Secondly, the percentage of students at each school who are designated English Language Learners (ELL) is used as a covariate. In the entire sample, 67% of the students are ELLs. Both the FRL and ELL covariates are entered into the models as continuous variables for each school (representing the proportion of each student population). Lastly, as an indicator of school-level academic achievement, each school was coded as "in" Federal Program Improvement status or not. Records from the California Department of Education indicate whether the school is or is not, and the variable is dummy-coded (In Program Improvement = 1, Not in Program Improvement = 0). Within the entire sample, 100% of schools were in program improvement, and therefore this was not entered into the regression models.

Analysis

Multiple regression analyses were used to examine the relationship between alignment and misalignment on student academic achievement scores. To account for variability within schools, analyses were clustered at the school level for each analysis. For each analysis, an alignment (or misalignment) variable is entered as a predictor, along with the covariates discussed earlier. It is important to note that the alignment variables (overall and subscales) were entered into separate regressions. This is to control for multicollinearity, since the overall score is composed of the subscales. The models are as follows: Student Achievement = $a + b_1 2010$ Student Achievement + b_2 Male + b_3 Grade + b_4 Hispanic + $b_5FRL + b_6ELL + b_7PI + b_8$ HighAlignment + $b_9AcadRes + b_{10}Comm + b_{11}Partner$

Student Achievement = $a + b_1 2010$ Student Achievement + $b_2 Male + b_3 Grade + b_4 Hispanic + b_5 FRL + b_6 ELL + b_7 PI + b_8 Degree Misalignment + <math>b_9 AcadRes + b_{10}Comm + b_{11}Partner$

Results

High Alignment. The first research aim of this study was to examine the association of high alignment between principals and afterschool staff to student academic achievement outcomes. It was hypothesized that high alignment sites would be linked to higher scores for students, when compared to less aligned sites. Table 5 shows these results. As can be seen, three separate regressions were run for each subject area (English Language Arts and Math). The first model within each subject represents the associations between the covariates and the outcome of student academic achievement. The second model examines the associations between overall high alignment and student academic achievement scores. The third model within each subject represents the associations were run to address multicollinearity between the scales and overall alignment scores.

As seen in Table 5, results from the first regression model indicate a positive significant association of overall high alignment on student outcomes for English Language Arts (B=3.961, p<.00). There were also significant findings for every individual survey scales of

academic resources (b=0.034, p<.05), communication (b= 0.042, p<.01) and partnership (b=0.075, p<.00) for English Language Arts. In other words, being highly aligned on just one of the three scales was associated with student achievement and there is a positive association with English Language Arts achievement if a student attended an afterschool program where both the principal and site coordinator reported high alignment on all three scales, when compared with students who attended less aligned sites. Also, Table 5 shows that there were no significant associations found for high alignment for Math achievement in either model (overall or individual scales).

Misalignment. The second research aim of this study was to examine the association of misalignment between principals and afterschool staff to student academic achievement outcomes It was predicted that higher misalignment scores would be associated with a relative decline in student achievement. Table 6 displays the findings for misalignment predicting student achievement outcomes. Analyses examined misalignment as an overall score, and also with a misalignment score for each of the survey scales: academic resources, communication and partnership. As with the previous analyses, Table 6 shows that the first model within each subject represents the association between the covariates and the student academic achievement. The second model shows the association between overall misalignment and student academic achievement scores. The third model within each subject represents the association of misalignment on each individual scale of practices.

As shown in Table 6, results from the regression analysis did not indicate any significant associations in achievement when examining the overall misalignment score. However, results from the second model in the regression analysis on the individual survey scales indicate a

significant negative association on two of the scales. Under the second model for Math, Table 6 shows that higher misalignment on academic resources is linked to a statistically significant decrease in student outcomes in Math (b= -0.035, p<.01). Also, under the second model for Math, higher misalignment on communication is linked to a significant decrease in student outcomes for Math (b= -0.016, p<.05). While there was not a significant association for the overall misalignment score, there was for two of the survey subscales. This would indicate that misalignment between principals and site coordinators on communication, and on the perceived strength of their partnership, are associated with significant decreases in academic achievement in Math for students in the afterschool program.

Discussion

This study examined reported levels of alignment and misalignment between afterschool staff and principals, and the relative associations with student academic achievement outcomes. While it has been asserted that the relationship between principals and afterschool programs at their sites is important, research up until this point has yet to examine it in association with student academic achievement outcomes. Since the effects of afterschool programs on academic achievement have been mixed (Grossman et al., 2002; Vandell & Pierce, 1995), this study proposes a new lens to examine afterschool research. Results from this study indicate that high alignment between principals and site coordinators of afterschool programming has a significant positive association with student achievement scores in English Language Arts, when compared with sites with lower reports of alignment.

A possibly even more informative finding is that there were significant negative associations of misalignment; specifically on the individual scales of academic resources and communication (for Math). This is worthy of further investigation as to why those particular two scales were negatively associated with student achievement in the respective subject areas. For example, English Language Arts lessons may be particularly challenging for afterschool coordinators, especially within a district that is predominantly comprised of English Language Learners. Therefore, if there is misalignment on communication, it could influence the quality of lessons that are implemented afterschool. A lack of communication could imply that the afterschool site coordinator has less help from the principal (and teachers) in designing curriculum that reinforces concepts taught during the school-day. While it makes theoretical sense that high alignment between after school programming and principals can have positive effects on students, it is even more important to note that misalignment can negatively impact student achievement. While there is an apparent benefit to being aligned, there is also a significant risk to *not* being aligned on specific practices.

Interesting to note, is that although the predictions for the relationship of alignment and misalignment were accurate in terms of the type of associations with academic achievement (positive and negative, respectively), it did not hold true across both academic subject areas. High alignment was associated with relative gains for English Language Arts but not for Math, and no significant associations were found for the separate scales of the measure. However, misalignment was associated with a relative decline for Math, but only on specific scales (as opposed to overall). This split on the academic impact of alignment and misalignment could speak directly to the types of practices that are currently being implemented in afterschool programs, and can serve to inform future program development. Specifically for high alignment,

this study identifies alignment practices that contribute to significant positive gains for English Language Arts achievement. This can potentially be translated into a form of staff development for afterschool site coordinators. For example, the practices within each scale can be reviewed with the site coordinators in order to make them aware of the various strategies to aligning on academic resources, communication and partnership. This would be especially useful for those sites that reported not using such alignment practices.

The lack of impact of high alignment on Math achievement however, calls for more research. Further investigation is necessary into why the misalignment on the partnership scale produced significant negative associations, yet being highly aligned on partnership was not associated with Math achievement. It is possible that there are other alignment practices not thought of in this study, that can positively contribute to Math achievement.

Limitations

A limitation to this study is that it does not include the potential moderator variable of program attendance. This is important because it is possible that the relative changes in academic scores for alignment or misalignment could be moderated by the participation rate of students within the afterschool program. Specifically, a student who attends a highly aligned afterschool program at a higher rate could potentially have greater gains in academic achievement when compared to students who attended the program less. Also, the afterschool programs in the study are all implemented by one provider, and only involves a single school district. Therefore, the results cannot be generalized to other types of programs. Lastly, this study does not account for when only one respondent (principal or site coordinator) report high alignment. It is possible that one respondent's perception of alignment can have an effect on student achievements. For

example, if the site coordinator believes that they are making strong alignment efforts, it is possible that there is an effect on student achievement; regardless of the principal perception.

While the study presented in this chapter laid a strong foundation for studying alignment via the survey measure, important limitations need to be addressed in the next study. The next chapter will expand this study across a larger sample size across multiple districts to examine if the same associations are found, and will also account for the previously mentioned limitations of the this study.

Chapter 4:

Expansion in Multiple Districts (Study 2)

In order to validate the findings, it is important to implement the survey measure of alignment across other districts to examine whether there are similar associations found for the relationship between alignment and student academic achievement. In this study, the same survey measure of alignment was administered in 11 school districts to determine if similar findings occur in different school settings. As in the first study, all of the afterschool program sites in this study are located in southern California. The afterschool programs are administered by the same large statewide non-profit organization that specializes in afterschool programming, in addition to other educational support services for schools. The study within this chapter addressed the following questions:

- 1) Is alignment / misalignment between principals and site coordinators associated with student academic achievement scores in English Language Arts and Mathematics?
- 2) Is the perception of alignment by a single respondent (principal or site coordinator) associated with student academic achievement scores in English Language Arts and Mathematics?
- 3) Is the interaction of program attendance and alignment / misalignment associated with student academic achievement scores in English Language Arts and Mathematics?

It was hypothesized that alignment would be positively associated with student achievement and that misalignment will be negatively associated with student academic achievement (corresponding to the previous study). It was also hypothesized that individual reports of high alignment will have a positive association on student academic achievement. Lastly, it was

predicted that the interaction of program attendance would have significant associations with student academic achievement (positively for high alignment and negatively for misalignment).

Methods

Participants

Survey Sample. Surveys were administered to principals and site coordinators at 116 schools across 11 districts. Some 84 principals and 91 site coordinators completed the survey. In 78 schools, surveys were completed for both sets of respondents (68% overall response rate). It is important to note that this sample does not include any sites from the district in the previous study. Table 7 provides a breakdown of the number of schools within each district. As shown in the first column of the table, the number of schools within each school district ranges from 2 (min) to 16 (max).

Student Sample. The sample consisted of afterschool program participants within grades three through eight at 78 schools (67 elementary and 11 intermediate) across 11 districts. Table 8 displays the demographic descriptive statistics of the student sample. After accounting for missing data, the student outcome sample consisted of 8,129 students. A majority of the student sample was Hispanic (54%), and there were more females than males (56%).

Measure

Alignment was assessed with the same 21-item survey developed by Vandell and colleagues (2004) that was used the in first study. The survey contained three subscales:

Academic resources, Communication, and Partnership. For additional reference, Table 9 provides the item-level descriptives as well as the reliability ratings within each scale. As Table 9 shows, the reliability analysis conducted on each scale yielded similar alpha levels to the first study. Reliability analysis yielded moderate alpha levels for Academic Resources (Principal α = .76, Site Coordinator α = .71), high alphas for Communication (Principal α = .89, Site Coordinator α = .84) and also high alpha levels for Partnership (Principal α = .91, Site Coordinator α = .87).

Covariates

Student-Level. Students' CST scaled scores from the prior school year were included in the analysis in order to control for prior achievement level. In addition, the grade level of each student from the 2011 school year was obtained from district records. The data set includes students in grades three through eight, as those are the students who would have two years of CST data (as to provide a control for prior achievement). Each student was dummy-coded as male or female, based on district records from the 2011 school year (Male=1, Female=0). Student records from the districts indicate whether the student is of Hispanic descent or not. The variable was dummy-coded (Hispanic =1, Not Hispanic = 0). Lastly, afterschool program attendance rates for students will be added as a covariate, in the form of a continuous variable (ranging from 1 to 180 days).

Site-Level. Three school-level covariates are used in the analyses. Table 10 provides the descriptive for these variables by district. For a complete breakdown by school, please see

Appendix B. First, as a potential indication of economic status, the percent of students who receive free/reduced lunch (FRL) at the school. As Table 10 shows, 82% of the entire sample receives free/reduced lunch. Secondly, the percentage of students at each school who are designated English Language Learners (ELL) is used as a covariate. As can be seen in Table 10, 33% of the sample are ELLs. Both the FRL and ELL covariates are entered into the models as continuous variables for each school (representing the proportion of each student population). Lastly, as an indicator of school-level academic achievement, each school was coded as "in" Federal Program Improvement status or not. Records from the California Department of Education indicate whether the school is or is not, and the variable is dummy-coded (In Program Improvement = 1, Not in Program Improvement = 0). Within the entire sample, 74% of schools were in program improvement.

Program Attendance

This study includes afterschool program attendance as a moderator variable. Table 11 displays the mean and ranges of afterschool program attendance for each district. The average afterschool program attendance for the entire sample is 87 days (SD=66.03).By creating an interaction variable (program attendance x alignment), analyses can explore whether program dosage moderates the association of alignment (or misalignment) on student academic achievement. In Table 9, it can be seen that program attendance is significantly correlated with both English Language Arts and Math student outcomes. An interaction variable will assess whether the association of alignment on student academic achievement is different for a student

who attends a highly aligned (or misaligned) afterschool program at a higher rate. The interaction variable was added to each regression model in this study.

Student Outcome Variables

2011 California Standards Test Scaled Scores (CST). These variables come in the form of a scaled score, ranging from 150 - 600. The scaled score was the unit of analysis. Scaled scores for both English Language Arts (ELA) and Math were used as outcomes. Table 12 shows the means and standard deviations for the outcome variables within each district. As Table 12 shows, scores for ELA range from 327.13 (min) to 357.18 (max), and scores in Math range from 332.29 (min) to 381.48 (max). The mean scaled score for the entire sample in ELA was 343.39 (SD=52.72) and 359.78 (SD=74.59) for Mathematics.

Table 13 displays the bivariate associations between each covariate and the student outcome variables in both ELA and Math. As table 12 shows, there are significant correlations for a majority of the covariates with both outcome variables. Notably, afterschool program attendance was positively correlated with both outcome variables. In terms of the alignment predictors, the correlations were mixed in significance, depending on the subject. In terms of high alignment, only the partnership scale was correlated with ELA student achievement. For Math achievement however, all scales (academic resource, communication and partnership), in addition to high alignment were correlated with the outcome variable. For misalignment, every scale and overall score were negatively correlated with both outcome variables of ELA and Math.

Analysis

With the exception of the additional school-level controls and the interaction variable, these analyses are the same that were conducted in the first study. Table 14 displays the bivariate associations of the survey subscales with the alignment and misalignment scores. The survey scales are all each highly correlated to the overall scores of alignment and misalignment. This is not surprising, considering the overall scores are composed of the scales. For this reason however, the overall scores and the scales will not be entered into the same statistical models (due to multicollinearity) For greater detail of preliminary analyses that created these alignment and misalignment scores, please refer to Chapter 3 (pages 29-32). Multiple regression analyses were used to assess the relationship between alignment and student academic achievement scores. The following sections detail the rationale of each approach and how the data for each analysis were prepared. The subsequent section will document the results of the analyses.

High Alignment

In replication of the first study, alignment scores were computed for each site (overall and by each survey scale). The alignment predictor variables indicate whether a site is designated as having "high alignment" between principal and afterschool staff reports. With the addition of school-level controls and the program attendance interaction, the regression models for the alignment are as follows:

Student Achievement = $a + b_1 2010$ Student Achievement + b_2 Male + b_3 Grade + b_4 Hispanic + $b_5FRL + b_6ELL + b_7PI + b_8ProgAttn + b_9Alignment$ + $b_{10}AcadRes + b_{11}Comm + b_{12}Partner + b_{13}Alignment x ProgAttn$

Misalignment

The misalignment predictor variables are a difference score between principals and afterschool staff, and a higher difference score indicates a higher rate of misalignment between the two respondent groups. The regression models for the misalignment analyses are as follows:

Student Achievement = $a + b_1 2010$ Student Achievement + b_2 Male + b_3 Grade +

 $b_4Hispanic + b_5FRL + b_6ELL + b_7PI + b_8ProgAttn + b_9Misalignment$ + $b_{10}AcadRes + b_{11}Comm + b_{12}Partner + b_{13}Misalignment x ProgAttn$

Individual Reports of Alignment

In addition to the high and low alignment predictor variables mentioned earlier, this study also examined the association of alignment at those sites in which only one respondent reported alignment efforts. For example, a site can have an afterschool program site coordinator that reports alignment efforts, yet the principal at the same site does not. This is a potentially important distinction not accounted for in the previous study because there may still be an association of alignment on student academic achievement, even if alignment efforts were onesided. Related to the conceptualization presented in the first paper, this type of site could be considered associated or coordinated; an example of when there are alignment efforts made by one side, but with varied response by the other. Therefore, in addition to the alignment and misalignment analyses, additional regression models will be used to account for these types of sites. Those models are as follows: Student Achievement = $a + b_1 2010$ Student Achievement + b_2 Male + b_3 Grade +

 $b_4Hispanic + b_5FRL + b_6ELL + b_7PI + b_8ProgAttn + b_9PrincipalAlign + b_{10}ASPAlign + b_{13}PrincipalAlign x ProgAttn + b_{13}ASPAlign x ProgAttn$

To account for variability within schools, analyses were clustered at the school level. For each analysis, an individual report of alignment variable is entered as a predictor, along with the interaction variables of individual reports and program attendance. The next section reviews the results.

Results

In order to examine the associations of alignment and misalignment on student achievement, five regression models were run within each subject area (ELA and Math). The first model within each analysis represents the associations between only the covariates and student academic achievement. The second model within each examines the associations between afterschool program attendance and student academic achievement. The third and fourth models examine the associations between alignment and student academic achievement; with the third model including the overall alignment score, and the fourth model only including the scales of the survey (academic resources, communication and partnership). As mentioned earlier, separate regressions were run in order to avoid multicollinearity between the scales and the overall score. The fifth (and last model) in these analyses examines the interaction of program attendance and overall alignment.

High Alignment. The first analyses of this study examined the association of high alignment between principals and afterschool staff to student academic achievement outcomes

(in English Language Arts and Mathematics). Table 15 displays the findings for Alignment and English Language Arts. As with first study, it was predicted that high alignment sites would be linked to higher scores for students, when compared to sites with lower alignment. As can be seen in model two, there was a significant positive association between afterschool program attendance and student academic achievement in ELA (b= 0.016, p< .05). Furthermore, results from the regression analysis (model four) indicate a significant positive association of the subscale of Academic Resources on English Language Arts (b= 0.036, p<.01).

Table 13 displays the findings for Alignment and Mathematics. Similar to the results from ELA, model two indicates a positive association between afterschool program attendance and achievement in Math (b=0.064, p<.00). Under model three, results indicate a significant positive association for overall High Alignment (b=.019, p<.05). Additionally, results indicate a significant a significant positive association for all three subscales of Academic Resources (b=.008, p<.00), Communication (b=.014, p<.00) and Partnership (b=.032, p<.00) in model four.

Misalignment. Analyses examined misalignment as an overall score, and also with a misalignment score for each of the subscales of academic resources, communication and partnership. Table 16 displays the findings for Misalignment and English Language Arts. As with the first study, it was predicted that higher misalignment scores would be associated with a relative decrease in student achievement. In model two, positive associations were found between afterschool program attendance and academic achievement in English Language Arts (b= 0.016, p<.05). When examining the overall misalignment score and subscales however,

results from the regression analysis did not indicate any significant differences in achievement scores for English Language Arts.

Results from the regression analysis for Mathematics are displayed in Table 18. As could be expected in model two, positive associations were found between afterschool program attendance and academic achievement in Math (b= 0.064, p<.00). Results in model three indicate a significant negative association of overall misalignment (b= -.027, p<.01). Higher misalignment on the subscale of Partnership also resulted in a statistically significant negative effect (b= -0.028, p<.05), as can be seen in model four. Furthermore in model five, the interaction of program attendance and misalignment also resulted in a significant negative association with academic achievement (b= -.062, p<.01). This would indicate that students who attend misaligned afterschool programs at higher rates experience a greater decrease in Mathematic achievement when compared with students who have a lower attendance rate in the program.

Individual Reports of Alignment. It is possible that one respondent's perception of alignment can have an association with student achievement. For example, if the site coordinator believes that they are making strong alignment efforts, it is possible that there is a positive association on student achievement; regardless of the principal report. In order to examine the associations of individual reports of alignment on student achievement, five regression models were run within each subject area (ELA and Math). The first model within each analysis represents the associations between only the covariates and student academic achievement. The second model included afterschool program attendance as a predictor. The third and fourth

models examine the associations between principal and site coordinators' reports (respectively) of high alignment and student academic achievement. The fifth and sixth model examines the interaction of each individual report (principal and site coordinator) with program attendance. Results will indicate whether there is an association with student achievement for one respondent's perception of alignment, regardless of the other's responses.

Results from the regression analysis for English Language Arts are displayed in Table 18. Models four and five indicated a significant positive association for both Principal (b= .048, p< .01) and Afterschool Staff (b =.019, p<.05) reports of alignment. This implies that when either the principal of afterschool staff feels that they are aligned (regardless of the other's response), there are significant positive gains on student academic achievement in English Language Arts. There were no significant associations found for interactions with program attendance.

Results from the regression analysis for Mathematics are shown in Table 19. As can be seen, models two and three show no significant associations for either Principal or Afterschool Staff perceptions of alignment on student academic achievement. However, there was a significant association found for the interaction of program attendance and Afterschool Staff report of alignment (b= .176, p<.01) in model six. This finding implies that students who attend more days in an afterschool program that has a site coordinator that believes they are aligned with the school, there is a significant positive gain on their academic achievement in Mathematics when compared with students with less attendance.

Discussion

The current study is an expanded follow-up to the study presented in the previous chapter that examined reported levels of alignment and misalignment between afterschool staff and principals, and the associations with student academic achievement outcomes. The current study replicated the same analyses, while adding more covariates and the moderator variable of program attendance (as an interaction with alignment).

Results from both studies indicated that high overall alignment between principals and afterschool program staff has a significant positive association on student achievement scores, when compared to sites with low reports of alignment. Table 21 provides a summary of findings that pertain to alignment measure within each study. The current study validated the positive associations of overall alignment, however the associations were found in Mathematics, and none were found for overall alignment in English Language Arts. Furthermore, positive associations for Mathematics were also found for each of the alignment subscales (academic resources, communication, partnership), which were not found in the first study.

Both studies found significant negative associations for student academic achievement in Mathematics at sites that had reports of misalignment on the subscale of partnership. The followup study also found significant negative associations of overall misalignment in Mathematics. The second study also found that the interaction between program attendance and misalignment had a significant negative association with student achievement in Mathematics. This would imply that the more a student attends a misaligned afterschool program, the greater of a decrease they will see on in their Mathematics achievement. Correspondingly, there were no associations

found for Mathematics at sites in which only one respondent reported high alignment (either principal or afterschool staff). This is a finding worthy of further investigation, as it could be hypothesized that only when both principals and afterschool program staff are aligned with each other, one can expect to see positive gains in Mathematics.

While the positive association between alignment and achievement, and negative association between misalignment hold true in this follow-up study, further research is also needed as to why more effects were found in Mathematics in the follow-up study. Similarly, more investigation is needed into the lack of findings for English Language Arts that occurred in the follow-up study. A possible explanation is that there are notable differences in the study samples. For example, the first study had almost double the proportion of English Learners and Hispanic students in the sample. This example, along with any other differences between samples could also imply various differences in strategies employed based on student needs with a school or district. Although the follow-up study attempted to control for more at the schoollevel, a more robust study in the future could include even more controls such as curriculum, teacher experience, or other such covariates.

Limitations

The students in this sample all received afterschool programming from one provider, and were compared with other students who also received programming from the same provider. Therefore, it is unknown whether the same associations would be found across other types of program providers. It is also unknown whether the sites that did not have both respondent groups for the survey are aligned or not. That is important data to collect in future studies. Also, there is

a selection bias within the data, as students who were in the afterschool program self-selected into the program, and therefore the sample is not random. A future, more robust study could include multiple comparison groups including other providers, students who did not receive any programming at all, and/or a waitlist comparison group.

Chapter 5:

Conclusion and Recommendations

In this dissertation, alignment between school and afterschool programs is conceptualized as collaborative practices between school administrators and afterschool program staff in attempt to promote the academic achievement of students. Although there were many prior recommendations of alignment practices that are believed to contribute to academic learning afterschool, very little research had been done to assess the impact of such efforts. The development of a measurable conceptual framework of was an important first step in assessing the potential impact of afterschool programs on student achievement; especially at schools in which the alignment efforts are intentional. The studies presented within this dissertation are of the first to examine the relationship of alignment efforts and academic achievement.

Under this conceptualization, there are varying degrees of alignment practices that can occur between the two entities. As was proposed here, alignment practices can vary in type and also level of intentionality. The types of alignment practices examined within the previous chapters include the categories of *academic resources* (sharing of materials), *communication* (frequency of collaboration, and subjects covered), and *partnership* (feelings of trust, sense of value). Through the conceptual framework and research presented here, the degree to which principals and afterschool staff reported participating collaboratively in these practices designated the level of alignment (or misalignment) occurring at their respective site. The primary focus of this research was to examine whether there were any associations between alignment (or misalignment) with student academic achievement scores in both English Language Arts and Math. As seen in this research, there were in fact significant associations

between alignment and student academic achievement. These findings can lead to a greater base of research on this topic, and also have potential policy implications.

There term "alignment" can have varied definitions within the educational system. The most likely perception of alignment is from a literal perspective; linking curriculum and teaching to academic assessments. This is a literal form of aligning teaching materials and practices to assessments within the school day. When referring to the alignment between schools and afterschool programs however, this conceptualization refers to relationship-building that is a less obvious form of alignment. It refers to an adult-to-adult relationship as opposed to standards or curriculum. Much research within the afterschool field examines the impact of direct relationships with students; whether it is teacher-to-student, staff-to-student or student-to-student. Very little research has explored the potential associations between adult-to-adult relationships with student academic achievement.

While these adult-to-adult relationships may be indicators of a program's operational quality, few (if any) studies have hypothesized that the intentionality of this relationship has associations with academic outcomes of students in the afterschool program. Both studies showed that schools that are highly aligned between principals and afterschool staff could have a positive association with student academic achievement for the students within the program. While it is seems logical (in theory and practice) that schools which align effectively with their afterschool programs have the potential to boost student achievement, it is not as obvious to assume that a school that is misaligned with their afterschool program can actually negatively affect student achievement. As the field builds knowledge around the impact of alignment efforts, it can have substantial policy implications. Given the negative associations of

misalignment, alignment practices could transform from recommendations into requirements for funding.

As we saw with the research presented here, there are differential associations for English Language Arts and Mathematics. This is worthy of further investigation. While these studies create a framework and foundation for studying the alignment between school and afterschool programs, much more research is needed to garner a true understanding of the most important strategies, concepts and practices that can positively impact student academic achievement. Future research needs to examine how aligning specific academic concepts, as taught through afterschool curriculum and lessons, contribute to achievement in certain subject areas. In other words, once the types of alignment practices between administrators and afterschool staff that contribute to academic achievement are known, it seems that the next step in research would be to explore the specific concepts, lessons, and program implementation that are being practiced by the afterschool staff who work directly with the students. Specifically, it is important to examine the types of lessons and strategies employed within subject area.

With such high-stakes accountability tied to results on student outcomes, many schools are beginning to see their afterschool program as an opportunity to bolster student achievement. An integral strategy in undertaking such an endeavor is to ensure that programming that occurs afterschool supports the standards, themes and management strategies being used during the school day. While the research evidence indicating the impact of afterschool programs on student academic outcomes is growing, there is still little discussion and evidence about alignment efforts between afterschool staff and principals. This lack of alignment discussion is

important to note because state and federally funded afterschool programs have deliverables linked to growth in standardized test scores and positive youth development, yet do not have a strategic framework to use that facilitates building a bridge between afterschool programs' and schools' efforts to achieve these goals. In fact, as Donahue points out, programs remain challenged by "many competing interests when it comes to vying for the attention, skills and time of regular day teachers and administrators" (2006). The more that is known about how to effectively align afterschool programming with efforts already occurring in schools, the better chance there is to see a positive impact on student achievement.

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Example Items of Proposed Alignment Measure

Academic Resources	Communication	Sense of Partnership
The afterschool program has access to:	There is regular discussion between school and afterschool program on the following topics:	The school and afterschool program staff believe that:
Site based curriculum materials for ELA	Curriculum concepts being taught in school	There is a strong partnership between the afterschool program and the school
Site based curriculum Homework assignments The after materials for MATH school ad importan related to		The afterschool program staff keep school administration informed of important decisions and issues related to program policy
Computer labs for use of technology-based curriculum	The needs or progress of individual students	Teachers are willing to collaborate with the afterschool program staff
Curriculum pacing guides	Issues related to classroom/shared space	Afterschool program staff are responsive to ideas and suggestions from school staff
District benchmark scores	Planning program content	Afterschool staff reach out to teachers to identify the needs of students
School day lesson plans	Enrollment / Registration levels and policies	Afterschool staff transmit important information about children and parents to appropriate school staff in a timely fashion
	Student discipline issues / policies	Curriculum and instruction in the afterschool program reinforce concepts taught during the school day
	Staffing of program	The program is well coordinated with other afterschool activities at the school

Synthesis of Alignment Practices and Alignment Measure Components

	Academic Resources	Communication	Partnership
Harvard Family Research Project (2006)	Shared Space: schools allow afterschool programs to utilize school space for programming.	Effective Communication systems: schools facilitate intentional conversations with afterschool programs to	Shared vision: both school and afterschool program are aware of the goals.
	Align, not replicate curriculum: ensure afterschool lessons correspond to school day.	program.	Shared staff: create a system of influence, in which afterschool staff learn from school staff.
			Supportive Leadership: school administrators promote a collaborative and reciprocal relationship with the afterschool program.
National Association of Elementary School Principals (2006)	Support linkages: school administrators support the relationships, and access to resources to endure that programming afterschool	Collaborate: school administration to support and manage resources to support a full day of learning.	Expand School Vision: school administrators see afterschool programs as a value in promoting learning for students.
	relates to academic needs of students.		Evaluate: routinely examine whether program goals for student learning have been met.
Institute of Educational Science, Beckett, et al. (2009)	Connect: identify school- based academic goals that can be implemented afterschool, and provide resources to help address	Coordinate Communication: schools establish regular communication with afterschool programs to support goals of program.	Coordinate Staffing: schools are involved in staffing decisions of afterschool program to ensure that qualified persons are involved.
()	those.		Develop relationships: afterschool program purposefully develops relationships with teachers and school day staff to align curriculum

Components of Alignment Measure

	Ν	M or %	SD
Duion Achieven out			
	1000	222	50
English Language Arts	4,365	332	52
Mathematics	4,399	365	74
Student Outcomes			
English Language Arts	4,820	331	54
Mathematics	4,811	366	75
Covariates			
Male	2,529	52%	-
Grade 3	995	21%	-
Grade 4	1,007	21%	-
Grade 5	926	19%	-
Grade 6	568	12%	-
Grade 7	559	11%	-
Grade 8	793	16%	-
English Learner	3,179	66%	-
Hispanic	3,903	81%	-

Table 3 Descriptive Statistics for Analysis Sample: Outcome and Covariate Variables (Study 1)

Survey Item-Level Descriptives and Reliability Ratings by Scale (Study 1)

	Principal (N=25)		Site Coordir	nator (N=25)
	M	SD	М	SD
Academic Resources				
Site based curriculum materials for ELA	2.7	0.56	2.16	0.8
Site based curriculum materials for MATH	2.68	0.56	2.3	0.74
Computer labs for use of technology-based curriculum	2.52	0.75	2.17	0.85
Curriculum pacing guides	2.44	0.77	2.12	0.79
District benchmark scores	2.21	0.8	1.96	0.79
Item Means	2.	51	2.	14
Cronbach's Alpha	0.	.75	0.	71
Communication				
Curriculum concepts being taught in school	2.93	1.04	2.76	1.01
Homework assignments	2.91	1.05	3.08	1.04
The needs or progress of individual students	3.18	0.97	3.19	0.92
Issues related to classroom/shared space	3.2	0.93	2.95	1.05
Planning program content	2.7	1.04	2.6	1.03
Enrollment / Registration levels and policies	3.03	0.9	2.81	0.99
Student discipline issues / policies	3.3	0.88	3.21	0.92
Staffing of program	2.68	1.05	2.34	1.1
Item Means	2.	.99	2.	87
Cronbach's Alpha	0.	.89	0.	84
Partnership				
There is a strong partnership between the afterschool program and the school	3.51	0.65	3.25	0.73
The Site Coordinator keeps administration informed of important decisions and issues related to program policy	3.68	0.61	3.53	0.58
Teachers are willing to collaborate with the afterschool program staff	3.25	0.59	3.09	0.67
Afterschool program staff are responsive to ideas and suggestions from school staff	3.49	0.61	3.44	0.56
Afterschool staff reach out to teachers to identify the needs of students	3.15	0.74	3.19	0.62
Afterschool staff transmit important information about children and parents to appropriate school staff in a timely fashion	3.44	0.6	3.36	0.59
Curriculum and instruction in the afterschool program reinforce concepts taught during the school day	3.23	0.69	3.2	0.57
The program is well coordinated with other afterschool activities at the school	3.54	0.59	3.24	0.66
Item Means	3.	41	3.	29
Cronbach's Alpha	0.	.91	0.	87

Means computed based on the following response scales: Academic Resources (3-point), Communication (4-point) & Partnership (4-point).

	English Language Arts			Math		
	(1)	(2)	(3)	(1)	(2)	(3)
High Alignment						
Dringingland Staff		3.961***			0.007	
rincipal and Stari		(1.096)			(0.706)	
Alignment: Subscales						
Academic Resources			0.034*			0.005
Academic Resources			(1.955)			(0.274)
Communication			0.042**			0.027
Communication			(2.699)			(1.819)
Partnershin			.075***			0.023
i artifership			(4.494)			(1.454)
Student-Level Covariates						
2011 Prior Achievement	0.699***	0.697***	0.672***	0.669***	0.668***	0.661***
2011 Prior Achievement	(63.653)	(63.429)	(60.830)	(67.034)	(66.821)	(64.170)
Male	-0.037***	-0.038***	-0.038***	0.010	0.010	0.013
Wate	(3.815)	(3.857)	(3.634)	(1.079)	(1.077)	(1.295)
Grada	-0.011	-0.008	0.004	-0.183***	-0.182***	-0.178***
Glade	(1.135)	(0.845)	(0.353)	(18.979)	(18.872)	(18.872)
Hispania	052***	052***	051***	052***	052***	052***
Inspane	(5.296)	(5.313)	(4.909)	(5.397)	(5.397)	(5.152)
School-Level Covariates						
Free/Deduced Lunch	-0.040*	-0.24*	-0.039*	-0.025*	-0.051***	-0.051***
Flee/Reduced Lunch	(2.305)	(1.863)	(2.294)	(1.952)	(5.397)	(5.397)
English Learner	0.032*	0.032*	0.010	-0.022	-0.022	-0.022
English Leather	(1.950)	(1.950)	(0.560)	(1.447)	(1.455)	(1.455)
R^2	0.549	0.549	0.550	0.550	0.551	0.551
R ² Change	.001***	0	.001**	0	.001**	0

 Table 5

 Multiple Regression Results for Alignment and Student Achievement in English Language Arts and Math (Study 1)

Unstandardized coefficients reported for High Alignment with standard error in parenthesis; Standardized regression coefficients reported for all other variables; T-statistic in parenthesis. ***P<.00 **P<.01, *P<.05, P <.10

Table 6

Multiple Regression Results for Misalign	glish Language Arts and Math	
(Study 1)		
	English Language Anta	Math

	Engl	ish Language	e Arts	Math		
	(1)	(2)	(3)	(1)	(2)	(3)
Misalignment: Overall						
		0.377			-0.275	
Frincipal and Stari		(0.451)			(0.639)	
Misalignment: Subscales						
Academic Pesources			0.028			-0.029*
Academic Resources			(1.805)			(1.986)
Communication			-0.020			-0.035**
Communication			(1.445)			(2.629)
Partnershin			-0.021*			-0.016
T arthership			(1.964)			(0.134)
Student-Level Covariates						
2011 Drive Ashievement	-0.699***	-0.675***	-0.669***	0.669***	0.664***	0.659***
2011 Thoi Acine venient	(63.653)	(61.55)	(58.273)	(67.034)	(64.716)	(62.925)
Male	-0.037***	-0.038***	-0.038***	0.010	0.013	0.013
white	(3.815)	(3.670)	(3.698)	(1.079)	(1.251)	(1.295)
Grade	-0.011	0.000	0.001	-0.183***	-0.180***	-0.181***
Giude	(1.135)	(0.033)	(0.101)	(18.979)	(17.678)	(17.764)
Hispanic	052***	051***	050***	052***	052***	051***
mspanie	(5.296)	(4.878)	(4.805)	(5.397)	(5.150)	(5.065)
School-Level Covariates						
Free/Reduced Lunch	-0.040*	-0.07	-0.017	-0.025*	-0.011	-0.024
Free/Reduced Editen	(2.305)	(0.481)	(1.058)	(1.952)	(0.780)	(1.561)
English Learner	0.032*	0.021	0.024	-0.022	-0.017	-0.014
	(1.950)	(1.334)	(1.533)	(1.447)	(1.192)	(0.978)
R^2	0.549	0.549	0.550	0.550	0.551	0.551
R ² Change	.001***	0	.001**	0	.001**	0

Unstandardized coefficients reported for Overall Misalignment with standard error in parenthesis; Standardized regression coefficients reported for all other variables; T-statistic in parenthesis. ***P<.00 **P<.01, *P<.05, P <.10

	N (Schools)
Overall Sample	78
By District	
District 1	9
District 2	16
District 3	7
District 4	3
District 5	6
District 6	11
District 7	6
District 8	8
District 9	2
District 10	3
District 11	7

Table 7Survey Sample: Number of Schools by District (Study 2)

Table 8 Descriptive Statistics for Student Analysis Samples (Study 2) (N=8,129)

	Principal (N=78)		Site Coordinator (N=78)	
	M	SD	M	SD
Academic Resources				
Site based curriculum materials for ELA	2.7	0.57	2.15	0.79
Site based curriculum materials for MATH	2.68	0.58	2.31	0.74
Computer labs for use of technology-based curriculum	2.52	0.76	2.24	0.84
Curriculum pacing guides	2.44	0.77	2.10	0.77
District benchmark scores	2.2	0.79	2.01	0.78
Item Means	2.	.51	2.	16
Cronbach's Alpha	0.	.76	0.	71
Communication				
Curriculum concepts being taught in school	2.92	1.05	2.79	1.01
Homework assignments	2.9	1.05	3.08	1.03
The needs or progress of individual students	3.17	0.97	3.20	0.89
Issues related to classroom/shared space	3.19	0.93	2.95	1.05
Planning program content	2.72	1.02	2.62	1.03
Enrollment / Registration levels and policies	3.07	0.88	2.88	0.97
Student discipline issues / policies	3.31	0.87	3.25	0.88
Staffing of program	2.68	1.05	2.34	1.08
Item Means	3.	.00	2.	89
Cronbach's Alpha	0.	.89	0.	84
Partnership				
There is a strong partnership between the afterschool program and the school	3.47	0.66	3.31	0.68
The Site Coordinator keeps administration informed of important decisions and issues related to program policy	3.66	0.63	3.51	0.58
Teachers are willing to collaborate with the afterschool program staff	3.23	0.61	3.13	0.65
Afterschool program staff are responsive to ideas and suggestions from school staff	3.47	0.62	3.43	0.56
Afterschool staff reach out to teachers to identify the needs of students	3.11	0.75	3.17	0.62
Afterschool staff transmit important information about children and parents to appropriate school staff in a timely fashion	3.42	0.61	3.36	0.55
Curriculum and instruction in the afterschool program reinforce concepts taught during the school day	3.22	0.71	3.17	0.57
The program is well coordinated with other afterschool activities at the school	3.50	0.61	3.25	0.66
Item Means	3.	.39	3.	29
Cronbach's Alpha	0.	.91	0.	87

Table 9 Survey Item-Level Descriptives and Reliability Ratings by Scale (Study 2)

Means computed based on the following response scales: Academic Resources (3-point), Communication (4-point) & Partnership (4-point).

	N (Students)	English Language Learners	Free / Reduced Lunch	Program Improvement
		(% students)	(% students)	(% schools)
Overall Sample	8.129	33%	82%	74%
By District	•,		0270	/ 4 / 0
District 1	699	42%	85%	49%
District 2	1,113	34%	92%	87%
District 3	1,097	38%	86%	88%
District 4	215	31%	80%	100%
District 5	461	29%	72%	54%
District 6	1,289	42%	86%	40%
District 7	792	29%	78%	52%
District 8	774	19%	71%	88%
District 9	138	47%	100%	65%
District 10	935	17%	80%	100%
District 11	616	39%	75%	100%

Descriptive Statistics for Analysis Sample: District-Level Variables (Study 2)

Percentages reported for English Language Learners and Free/Reduced Lunch represent the proportion of students within each district. Percentages reported for Program Improvement represent the proportion of schools in the sample within that district that are in Program Improvement.

Alterschool Program Altendance Rates by District (Study 2)						
	Afterschool Program Attendance					
	M	SD	Min	Max		
Overall	87	66.03	1	180		
By District						
District 1	119	64.50	1	180		
District 2	101	66.10	1	180		
District 3	46	36.61	1	111		
District 4	133	51.46	3	177		
District 5	114	64.88	1	180		
District 6	63	63.56	1	175		
District 7	90	64.04	1	175		
District 8	113	63.25	1	176		
District 9	110	61.09	1	175		
District 10	55	56.22	1	179		
District 11	116	60.48	1	175		

Table 11Afterschool Program Attendance Rates by District (Study 2)

Afterschool program attendance is reported in days.

	English Language Arts					Math	ematics	
	Prior Achievement 2011		nt Student Pri- Outcomes 2012 201		Prior nievement 2011 Ou		Student Dutcomes 2012	
	M	SD	М	SD	М	SD	М	SD
Overall	342.19	54.93	343.39	52.72	363.34	74.73	359.78	74.59
By District								
District 1	337.49	58.63	339.68	53.61	377.37	83.39	373.06	84.65
District 2	343.79	53.14	347.35	53.64	363.87	75.90	360.83	75.16
District 3	320.69	50.12	327.13	48.54	345.92	76.26	350.14	77.00
District 4	373.00	76.65	349.42	55.17	344.42	55.31	377.02	76.64
District 5	356.84	58.37	352.41	58.15	381.48	76.89	372.89	80.43
District 6	340.99	52.58	344.99	51.56	361.43	71.33	356.71	69.66
District 7	343.90	52.21	343.12	50.75	365.60	68.93	361.88	65.79
District 8	359.58	52.53	357.18	49.61	380.33	73.32	377.80	69.12
District 9	350.36	49.96	345.58	49.33	374.99	69.50	367.35	64.47
District 10	342.69	50.13	341.33	51.20	354.61	70.97	332.29	63.04
District 11	336.09	54.17	342.19	55.71	360.32	76.62	366.17	81.45

Descriptive Statistics for Analysis Samples: Outcome Variables by District (Study 2)

Achievement means computed from standardized scaled scores (min 200, max 600)

	2012 English Language Arts	2012 Mathematics
Student Level Covariates	Acmevement	Achievement
Prior Achievement	0 741**	0 708**
Male	-0.087**	-0.011
Grade	0.041**	-0.25**
Hispanic	-0.078**	-0.003
School Level Covariates		
Free / Reduced Lunch	-0.073**	-0.042**
English Learner	-0.066**	0.086**
Program Improvement	-0.017	0.008
Afterschool Program Attendance		
Continuous (1 to 180 days)	0.077**	0.164**
Alignment Measures		
High Alignment Overall	0.009	0.024*
Academic resources	0.001	0.062**
Communication	0.003	0.021*
Partnership	0.034**	0.067**
Misalignment Measures		
Misalignment Overall	-0.035*	-0.020*
Academic resources	-0.028**	-0.071**
Communication	-0.043**	-0.108**
Partnership	-0.02*	-0.070**

Table 13

Bivariate Associations of Predictor and Outcome Variables (Study 2)

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

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

	High Alignment	Misalignment
Alignment Subscales		
Academic resources	.0404**	0.413**
Communication	0.608**	0.535**
Partnership	0.427**	0.156**

 Table 14

 Bivariate Associations of Subscales and Alignment / Misalignment (Study 2)

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

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

	(1)	(2)	(3)	(4)	(5)
Afterschool Program Attendance					
Continuous (1 to 180 days)		0.016*	0.015^	0.015^	0.009
Continuous (1 to 180 days)		(1.899)	(1.782)	(1.696)	(0.890)
High Alignment					
Principal and Staff			1.115		0.225
Alignment: Subscales			(1.055)		(1.500)
A andomia Pasauraas				0.035**	
Academic Resources				(3.319)	
Communication				0.012	
Communication				(1.022)	
Partnershin				0.01	
1 artifership				(0.864)	
Interaction					
Alignment x Program					0.024
Attendance					(0.715)
Student-Level Covariates					
2011 Prior Achievement	0.736***	0.735***	0.736***	0.736***	0.736***
	(90.468)	(90.221)	(90.210)	(90.127)	(90.106)
Male	-0.03***	-0.029***	-0.03***	-0.029***	-0.029***
	(3.741)	(3.606)	(3.644)	(3.534)	(3.57)
Grade	0.033**	0.037***	0.036**	0.036**	0.036**
Giude	(3.195)	(3.482)	(3.436)	(3.400)	(3.394)
Hispanic	-0.028**	-0.026**	-0.025**	-0.026**	-0.026**
Inspanie	(3.187)	(2.852)	(2.811)	(2.828)	(2.845)
School-Level Covariates					
Free/Reduced Lunch	-0.029**	-0.025*	-0.026*	-0.023^	-0.022^
Tree/Reduced Editeri	(2.667)	(2.233)	(2.352)	(1.895)	(1.835)
English Learner	0.05**	0.048**	0.049**	0.033*	0.033*
	(3.870)	(3.697)	(3.739)	(2.194)	(2.174)
Drogram Improvement	-0.012	-0.011	-0.009	-0.007	-0.007
i iogram improvement	(1.352)	(1.274)	(0.997)	(0.799)	(0.810)
R^2	0.549	0.549	0.549	0.55	0.55
R ² Change		0	0	.001**	0

Table 15Multiple Regression Results for Alignment and Student Achievement in English Language Arts (Study 2)

Unstandardized coefficients reported for High Alignment with standard error in parenthesis; Standardized regression coefficients reported for all other variables; T-statistic in parenthesis. ***P<.00 **P<.01, *P<.05, P <.10

	(1)	(2)	(3)	(4)	(5)
Afterschool Program Attendance					
Continuous (1 to 180 days)		0.064*** (7.393)	0.062*** (7.139)	0.059*** (6.682)	0.168** <i>(2.504)</i>
High Alignment					
Principal and Staff			3.334* (1.501)		3.706 (1.979)
Alignment: Subscales					(
Academic Resources				0.008*** (0.706)	
Communication				0.014*** (1.127)	
Partnership				0.032** (2.733)	
Interaction					
Alignment x Program Attendance					0.111^ (1.639)
Student-Level Covariates					
2011 Drive Ashievement	0.683***	0.68***	0.681***	0.68***	0.68***
2011 Prior Achievement	(81.354)	(81.251)	(81.291)	(81.175)	(81.193)
Mala	-0.013	-0.008	-0.009	-0.008	-0.007
Male	(1.534)	(1.015)	(1.101)	(0.905)	(0.890)
Grada	-0.149***	-0.136***	-0.137***	-0.139	-0.139
Glade	(13.880)	(12.469)	(12.544)	(12.653)	(12.630)
Uignonio	-0.024**	-0.014	-0.013	-0.016^	-0.015
Hispanic	(2.646)	(1.477)	(1.393)	(1.699)	(1.593)
School-Level Covariates					
Eroo/Doducod Lunch	-0.045***	-0.028**	-0.031**	-0.019	-0.022^
Flee/Reduced Lunch	(4.082)	(0.2.505)	(2.767)	(1.562)	(1.755)
English Learner	0.023^	0.015	0.016	0.001	0.002
	(1.767)	(1.145)	(1.240)	(0.073)	(0.149)
Program Improvement	-0.004	-0.001	0.004	0.006	0.006
r togram improvement	(0.402)	(0.105)	(0.400)	(0.642)	(0.694)
R^2	0.524	0.528	0.528	0.529	0.529
R ² Change		.004***	0	.001*	0

Table 16Multiple Regression Results for Alignment on Student Achievement in Mathematics (Study 2)

Unstandardized coefficients reported for High Alignment with standard error in parenthesis; Standardized regression coefficients reported for all other variables; T-statistic in parenthesis. ***P<.00 **P<.01, *P<.05, P <.10

	(1)	(2)	(3)	(4)	(5)
Afterschool Program Attendance					
Continuous (1 to 180 days)		0.016* (0.2.071)	0.019* (2.176)	0.018* (2.112)	0 (0.030)
Misalignment: Overall					
Principal and Staff			-0.488 (0.540)		-1.811 (1.090)
Misalignment: Subscales					
Academic Resources				0.013 (1.33)	
Communication				-0.01 (0.882)	
Partnership				-0.004	
Interaction					
Misalignment x Program Attendance					-0.033 (1.786)
Student-Level Covariates					
2011 Prior Achievement	0.736*** <i>(90.391)</i>	0.735*** <i>(90.149)</i>	0.737* (90.032)	0.736* <i>(89.734)</i>	0.736* <i>(89.736)</i>
Male	-0.03*** (3.767)	-0.029*** (3.627)	-0.03* (3.679)	-0.031* (03.745)	-0.03* (3.640)
Grade	(3.637)	$(0.027)^{***}$ $(0.037^{***})^{***}$	0.041^{***}	0.044^{***}	0.043***
Hispanic	-0.028**	-0.026**	-0.024	(4.042) -0.022 (2.320)	-0.022
School-Level Covariates	(3.040)	(2.001)	(2.030)	(2.329)	(2.302)
Free/Reduced Lunch	-0.029^{**}	-0.025*	$-0.021^{(1.870)}$	$-0.018^{(1.533)}$	$-0.019^{(1.597)}$
English Learner	0.05**	0.048**	0.047***	0.042**	0.042**
-	(3.865)	(3.662)	(3.582)	(3.110)	(3.115)
Program Improvement	-0.012 (0.947)	-0.011 (0.844)	-0.008 (0.966)	-0.009 (1.037)	-0.007 (0.761)
\mathbf{P}^2	0.552	0 552	0 552	0.552	0.552
R ² Change	0.332	0.552	0.552	0.552	0.552

 Table 17

 Multiple Regression Results for Misalignment on Student Achievement in English Language Arts (Study 2)

Unstandardized coefficients reported for Overall Misalignment with standard error in parenthesis; Standardized regression coefficients reported for all other variables; T-statistic in parenthesis. ***P<.00 **P<.01, *P<.05, ^P<.10

Table 18

3 6 1/	1 D	•	D 1/	·	1	C 1 1	A 1 *		.1	(G, 1	2)
VI1111111	πε κεσ	ression	Reculte	or 1/1192	llonment	on Student	Achievemer	it in M	athematics	1 Study	- / 1
Iviuiui	JIC ICCE	10331011	itcourto.	.01 111150	unginnent	on bluucht	1 tonic v onnor	11 111 111	amonatios	Dunay	41

	(1)	(2)	(3)	(4)	(5)
Afterschool Program Attendance					
Continuous (1 to 180 days)		0.064*** <i>(7.458)</i>	0.062*** <i>(6.974)</i>	0.06*** (6.731)	0.027*** (1.953)
Misalignment: Overall					
Principal and Staff			2.406** (0.784)		-0.482 (1.580)
Misalignment: Subscales					
Academic Resources				0.009 (0.938)	
Communication				-0.011 (1.008)	
Partnership				-0.028** (3.222)	
Interaction					
Misalignment x Program Attendance					-0.062** <i>(3.237)</i>
Student-Level Covariates					
2011 Prior Achievement	0.683***	0.68***	0.68***	0.68***	0.679***
2011 Thoi Memevement	(80.674)	(80.593)	(80.699)	(80.501)	(80.426)
Male	-0.013	-0.008	-0.007	-0.007	-0.005
	(1.478)	(0.977)	(0.777)	(0.778)	(0.604)
Grade	-0.149	-0.136	-0.132***	-0.126***	-0.128***
	(13.732)	(12.292)	(12.021)	(11.258)	(11.373)
Hispanic	-0.024**	-0.014	-0.014	-0.016	-0.016
	(2.592)	(1.400)	(1.544)	(1.647)	(1.709)
School-Level Covariates					
Free/Reduced Lunch	-0.045***	-0.028**	-0.034**	-0.029**	-0.03**
	(4.078)	(2.440)	(2.950)	(2.427)	(2.545)
English Learner	0.023^	0.015	0.018	0.009	0.009
C	(1.804)	(1.131)	(1.361)	(0.649)	(0.653)
Program Improvement	-0.004	-0.001	0.004	0.002	0.007
~ 1	(0.364)	(0)	(0.442)	(0.254)	(0.732)
R^2	0.523	0.527	0.527	0.528	0.529
R ² Change		.004***	.001**	.001**	.001**

Unstandardized coefficients reported for Overall Misalignment with standard error in parenthesis; Standardized regression coefficients reported for all other variables; T-statistic in parenthesis. ***P<.00 **P<.01, *P<.05, P <.10

Table 19

	(1)	(2)	(3)	(4)	(5)	(6)
Afterschool Program Attendance						
Continuous (1 to 180 days)		0.016*	0.015^	0.016^	0.071	0.056
Alignment of Principal		(1.099)	(1.705)	(1.054)	(1.117)	(0.774)
Principal Perception			0.024** (2.729)		0.048** (3.047)	
Alignment of Afterschool Staff			· /			
Staff Perception				0.019*		0.025
				(1.703)		(1.521)
Principal Interaction						
Principal Alignment x Program					0.089	
Attendance					(1.377)	
Afterschool Staff Interaction						0.02
Afterschool Staff Alignment x Program Attendance						0.03 (0.432)
Student-Level Covariates						
2011 Prior Achievement	0.736***	0.735***	0.735***	0.735***	0.735***	0.735***
2011 Thoi remevement	(90.468)	(90.221)	(90.259)	(90.212)	(90.190)	(90.185)
Male	-0.03***	-0.029***	-0.031***	-0.032***	-0.032***	-0.032***
	(3.741)	(3.606)	(3.805)	(3.859)	(3.882)	(3.878)
Grade	0.033**	0.037***	0.038***	0.037***	0.037***	0.037***
Since	(3.195)	(3.482)	(3.611)	(3.518)	(3.506)	(3.519)
Hispanic	-0.028**	-0.026**	-0.024**	-0.024**	-0.025**	-0.025**
mspanie	(3.187)	(2.852)	(2.682)	(2.689)	(2.764)	(2.751)
School-Level Covariates						
Free/Reduced Lunch	-0.029**	-0.025*	-0.027*	-0.023*	-0.02^	-0.02^
	(2.667)	(2.233)	(2.399)	(2.023)	(01.790)	(1.796)
English Learner	0.05**	0.048**	0.044**	0.042**	0.041**	0.041**
	(3.870)	(3.697)	(3.324)	(3.238)	(3.127)	(3.117)
Program Improvement	-0.012	-0.011	-0.005	-0.005	-0.004	-0.004
	(1.352)	(1.274)	(0.568)	(0.586)	(0.491)	(0.447)
\mathbf{R}^2	0.549	0.549	0.550	0.550	0.551	0.551
R ² Change	.001***	0	.001**	0	.001**	0

Multiple Regression Results for Principal and Afterschool Staff Individual Reports of Alignment on Student Achievement in English Language Arts (*Study 2*)

Standardized regression coefficients reported; T-statistic in parenthesis. ***P<.00 **P<.01, *P<.05, ^P<.10

Multiple Regression Results for Principal and Afterschool Staff Individual Reports of Alignment on Student Achievement in Mathematics (*Study 2*)

	(1)	(2)	(3)	(4)	(5)	(6)
Afterschool Program Attendance						
Continuous (1 to 180 days)		0.064***	0.065***	0.064^{***}	0.123*	0.21** (2.824)
Alignment of Principal		(1.393)	(7.401)	(7.555)	(1.000)	(2.824)
Principal Perception			0.003		0.021	
Alignment of Afterschool Staff Staff Perception			(0.554)	0.014	(1.517)	0.016
Principal Interaction				(1.498)		(0.966)
Principal Alignment x Program Attendance					0.06 (0.915)	
Afterschool Staff Interaction						
Afterschool Staff Alignment x Program Attendance						0.176** (2.439)
Student-Level Covariates						(=::::))
2011 D . A L.	0.683***	0.68***	0.68***	0.68***	0.68***	0.68***
2011 Prior Achievement	(81.354)	(81.251)	(81.254)	(81.233)	(81.237)	(81.232)
Mala	-0.013	-0.008	-0.008	-0.008	-0.008	-0.007
Wate	(1.534)	(1.015)	(0.985)	(0.932)	(0.916)	(0.899)
Grada	-0.149***	-0.136***	-0.136***	-0.135***	-0.135***	-0.134***
Grade	(13.880)	(12.469)	(12.470)	(12.367)	(12.358)	(12.274)
Hispanic	-0.024**	-0.014	-0.014	-0.014	-0.013	-0.013
	(2.646)	(1.477)	(1.497)	(1.489)	(1.433)	(1.371)
School-Level Covariates						
Free/Reduced Lunch	-0.045***	-0.028**	-0.028**	-0.031**	-0.033**	-0.033**
	(4.082)	(2.505)	(2.478)	(2.724)	(2.831)	(2.868)
English Learner	0.023^	0.015	0.016	0.017	0.018	0.017
	(1.767)	(1.145)	(1.181)	(1.257)	(1.321)	(1.270)
Program Improvement	-0.004	-0.001	-0.002	-0.002	-0.002	0
-	(0.402)	(0.105)	(0.188)	(0.167)	(0.228)	(0.010)
R^2	0.524	0.528	0.529	0.529	0.529	0.529
R ² Change	.001***	.004***	.001	0	0	0

Standardized regression coefficients reported; T-statistic in parenthesis. ***P<.00 **P<.01, *P<.05, ^P<.10

	Stud	<u>dy 1</u>	Stu	<u>dy 2</u>
	ELA	Math	ELA	Math
High Alignment	3.961***			0.019*
Academic Resources	0.034*		0.035**	0.008***
Communication	0.042**			0.014***
Partnership	0.075***			0.032***
Overall Misalignment				
Academic Resources		- 0.029***		-0.027**
Communication		-0.035**		
Partnership				-0.028**
Alignment x Attendance				
Misalignment x Attendance				-0.062**
Principal Report Alignment			0.048**	
Afterschool Staff Report Alignment			0.019*	
Principal Report x Attendance				
Afterschool Staff x Attendance				0.176**

Table 21Comparative Summary of Regression Results (Study 1 and Study 2)

Unstandardized coefficients reported for High Alignment and Overall Misalignment; Standardized regression coefficients reported for all other variables. ***P<.00 **P<.01, *P<.05, P <.10

Figure 1. Ecological Model: demonstrating the ways in which multiple contexts influence student outcomes. *Source: Mahoney, Parente and Zigler (2010)*





Figure 2. Expanded Conceptual Framework of Alignment of Schools and Afterschool Programs

Appendix A.

Alignment Survey

Please take 15-20 minutes to answer the following questions about afterschool programming at your site. Thank you for your time, we realize it is valuable.

Your answers will remain confidential, and your candidness is appreciated.

Please indicate your role:

• Principal

O Site Coordinator

Please indicate your school District: _____

Name of your School: _____

Please indicate to what degree each of the following practices have been implemented in the afterschool program at your site. The Site Coordinator has the access to:

	Never	Sometimes	Regularly	N/A at my site
Site based curriculum materials for ELA	О	Ο	О	Ο
Site based curriculum materials for MATH	0	0	0	0
Computer labs for use of technology-based curriculum	О	О	О	0
Curriculum pacing guides	O	0	0	0
District benchmark scores	О	О	О	О

	Never	1 to 2 times a semester	Once a month	At least 2 to 3 times a month
Curriculum concepts being taught in school	О	О	О	O
Homework assignments	О	О	О	О
The needs or progress of individual students	О	О	О	О
Issues related to classroom/shared space	O	O	O	О
Planning program content	0	O	O	O
Enrollment / Registration levels and policies	0	0	0	О
Student discipline issues / policies	0	0	0	О
Staffing of program	0	0	0	O
Other	•	Ο	Ο	О

We are interested in learning about communications with the afterschool program at your school. How often do administrators talk with Site Coordinators about:

Do you agree or disagree with the following statements about the relationship between the afterschool program and your school?

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
There is a strong partnership between the after-school program and the school	O	O	О	О	o
The Site Coordinator keeps administration informed of important decisions and issues related to program policy	0	O	O	O	0
Teachers are willing to collaborate with the after- school program staff	0	0	o	0	0
After-school program staff are responsive to ideas and suggestions from school staff	o	0	O	0	0
After-school staff reach out to teachers to identify the needs of students	0	0	O	O	0
School staff are encouraged to visit the program	О	О	O	О	O
After-school program staff follow through with the commitments they make to school staff	O	0	0	0	0
After-school staff transmit important information about children and parents to appropriate school staff in a timely fashion	0	O	О	0	0

(Continued...)

Do you agree or disagree with the following statements about the relationship between the afterschool program and your school?

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
After-school staff take care of the space the school provides for the program	0	О	0	О	0
Curriculum and instruction in the after-school program reinforce concepts taught during the school day	0	О	0	О	О
The after-school program has enough capacity to serve all interested students	O	О	O	О	О
The program is well coordinated with other after-school activities at the school	0	О	O	Ο	О

	Ν	English Language Learners	Free / Reduced Lunch	Schools in Program Improvement	Average Afterschool Program Attendance (In days)
District 1	699	42%	85%	49%	119
School 1	89	49%	83%	Yes	87
School 2	74	33%	84%	No	137
School 3	81	46%	87%	No	126
School 4	66	24%	71%	No	153
School 5	86	48%	90%	No	141
School 6	81	36%	80%	Yes	123
School 7	126	62%	93%	Yes	98
School 8	37	31%	85%	Yes	124
School 9	59	26%	85%	Yes	100
District 2	1,113	34%	92%	87%	101
School 10	198	31%	85%	Yes	106
School 11	8	18%	99%	Yes	69
School 12	151	17%	95%	Yes	45
School 13	22	13%	97%	Yes	39
School 14	145	16%	91%	Yes	95
School 15	3	45%	98%	Yes	42
School 16	70	50%	97%	Yes	125
School 17	14	48%	94%	Yes	117
School 18	104	42%	94%	Yes	98
School 19	9	45%	94%	Yes	115
School 20	52	46%	94%	Yes	133
School 21	71	40%	95%	Yes	117
School 22	80	49%	92%	Yes	121
School 23	43	38%	90%	Yes	115
School 24	73	44%	94%	Yes	127
School 25	70	53%	97%	Yes	117
District 3	1,097	38%	86%	88%	46
School 26	152	41%	87%	Yes	53
School 27	127	51%	93%	No	46
School 28	176	35%	84%	Yes	38
School 29	119	43%	87%	Yes	51
School 30	199	32%	80%	Yes	47
School 31	211	39%	89%	Yes	41
School 32	113	26%	87%	Ves	49

Appendix B. Descriptive Statistics for Analysis Sample: School-Level Variables

	Ν	English Language Learners	Free / Reduced Lunch	Schools in Program Improvement	Average Afterschool Program Attendance (In days)
District 5	461	29%	72%	54%	114
School 36	75	39%	80%	Yes	114
School 37	66	43%	84%	Yes	140
School 38	58	60%	89%	Yes	137
School 39	62	12%	55%	No	154
School 40	51	22%	57%	Yes	142
School 41	149	16%	67%	No	67
District 6	1,289	42%	86%	40%	63
School 42	92	57%	94%	Yes	73
School 43	82	49%	80%	No	81
School 44	76	48%	85%	Yes	89
School 45	111	54%	88%	Yes	61
School 46	118	54%	90%	Yes	56
School 47	57	33%	70%	No	136
School 48	66	43%	80%	Yes	107
School 49	52	49%	84%	Yes	90
School 50	104	58%	95%	No	70
School 51	121	21%	71%	No	66
School 52	410	34%	89%	Yes	30
District 7	792	29%	78%	52%	90
School 53	116	51%	93%	No	81
School 54	220	29%	80%	Yes	63
School 55	100	48%	89%	No	88
School 56	192	8%	68%	Yes	91
School 57	86	30%	70%	No	130
School 58	78	27%	74%	No	137
District 8	774	19%	71%	88%	113
School 59	82	26%	77%	Yes	123
School 60	82	15%	67%	Yes	134
School 61	58	28%	76%	Yes	138
School 62	81	23%	69%	Yes	120
School 63	92	31%	80%	No	80
School 64	102	25%	69%	Yes	132
School 65	125	10%	69%	Yes	99
School 66	152	10%	67%	Yes	103

Descriptive Statistics for Analysis Sample: School-Level Variables...(continued)

	Ν	English Language Learners	Free / Reduced Lunch	Schools in Program Improvement	Average Afterschool Program Attendance (In days)
District 9	138	47%	100%	65%	110
School 67	90	54%	100%	Yes	78
School 68	48	35%	100%	No	169
District 10	935	17%	80%	100%	55
School 69	310	21%	83%	Yes	62
School 70	255	16%	81%	Yes	63
School 71	370	15%	77%	Yes	43
District 11	616	39%	75%	100%	116
School 72	66	60%	81%	Yes	138
School 73	72	39%	74%	Yes	140
School 74	87	49%	83%	Yes	110
School 75	28	58%	80%	Yes	143
School 76	78	32%	70%	Yes	133
School 77	129	43%	74%	Yes	117
School 78	156	20%	70%	Yes	86

Descriptive Statistics for Analysis Sample: School-Level Variables...(continued)