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# The Impact of After School Remediation Programs on Student Achievement

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**THE IMPACT OF AFTER SCHOOL REMEDIATION PROGRAMS ON STUDENT  
ACHIEVEMENT**

**CHRISTIE W. HALL**

**EDCI 590 INDIVIDUAL RESEARCH PROJECT**

**APRIL 28, 2013**

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**Signature of Project Advisor**

**Dr. Beverly Epps**

## **Abstract**

The purpose of this research was to identify key elements of after school remediation programs which impact student learning and increase student achievement as measured by standardized test scores. The goal of this research was to discover the essential components of effective after school programs, compare these findings to our current local after school program, and make recommendations for future improvement of after school remediation programs in our local school division. The research began with a review of literature concerning best practices for developing effective after school programs. After the key elements of effective after school programs were examined, the research findings were compared to current practices in my local elementary school. Benchmark test data of students who attended the after school remediation program in the 2010-2011 school year were examined and compared to end of the year standardized test scores in math and reading in order to measure the impact of the local after school program on student achievement. Finally, the information from the research was used along with the test data to make recommendations for improving the local after school remediation program.

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## Introduction

The researcher currently teaches third grade and is working on a masters in educational leadership. Throughout the masters program many classes emphasize the importance of instructional leadership, shared decision making, and collaboration through professional learning communities in order to impact student learning and achievement. According to one study, “school leadership has a substantial effect on student achievement and provides guidance for experienced and aspiring administrators alike” (Marzano, Waters, & McNulty, 2005, p. 12). In the present era of high stakes testing and accountability, many school leaders are charged with creating and implementing effective after school remediation programs that will bolster student achievement in addition to administering the instructional program of the regular school day.

Many school divisions across the nation spend thousands of dollars each year implementing after school programs in response to federal and state mandates to increase student achievement in math and reading. Unfortunately, many after school programs are thrown together abruptly and haphazardly implemented without regard to individual students’ needs and lack a clear vision and purpose for impacting student achievement. This results in a waste of time, resources, and funding in an era where fiscal responsibility is critical to the mission of school divisions. Just last year alone, in a local school division, a few elementary schools overspent their budget for after school programs. These programs were implemented in a variety of ways across the division depending on the preference of the schools’ administration. Some programs impacted student achievement on the end of the year Standards of Learning or SOL tests, while others appeared to be a waste of time for students and faculty. This type of situation, which commonly occurs in local school divisions, is motivation for the following research of

best practices in the development and implementation of after school remediation programs and their impact on student achievement.

### **Literature Review**

*What are the essential components of effective after school remediation programs?*

Researching and evaluating the impact of after school remediation programs is vital to the educational community because of the growing responsibility of school leaders in providing students with additional academic support and interventions during out of school time. Over the past decade of testing accountability brought on by No Child Left Behind Act (2001), federal legislation mandated after school remediation and instruction for students attending low performing schools (Farmer-Hinton, Sass, & Schroeder, 2009). Since the inception of No Child Left Behind, billions of dollars in federal funding have been authorized and appropriated to support the 21<sup>st</sup> Century Community Learning Centers Federal Afterschool Initiative (“Afterschool Alliance,” 2012). Federal funding for this initiative was made available through highly competitive grants issued by state education agencies, leaving many school divisions across the nation left to fund their own local after school remediation programs.

Since school leaders are tasked with developing, implementing, and assessing after school remediation programs that will increase student achievement on standardized tests, it is important to consider the key elements of effective programs. According to research, three essential components for school administrators to consider when developing after school programs that will impact student achievement include collaboration and planning with key stakeholders in the school community, alignment with current instructional objectives from the

regular school day curriculum, and ongoing evaluation and assessment of these programs based on student data.

### *Collaboration and Planning*

The first key element in creating an effective after school program, according to several articles, is collaboration and planning with key stakeholders in the school community (Sherman & Catapano, 2011; Walker, Kronick, & Diambra, 2007; Lee & Hawkins, 2008). According to several research studies, principals who exercised a collaborative style of leadership created more effective afterschool programs that truly impacted student learning and achievement while remaining closely linked to the overall school improvement plan (Noam, Biancarosa, & Dechausay, 2003; Walker et al., 2007; Lockwood, 2008; Sherman & Catapano, 2011).

Collaboration and planning with key stakeholders such as local universities, classroom teachers, retired teachers, parents, and after school directors can help school leaders administer effective after school programs by establishing clear goals, objectives, and assessment practices.

Several research studies mentioned the importance of school administrators seeking support and partnerships from local universities. One study of an urban elementary school's after school math program demonstrated a strong relationship between its success and the involvement of community volunteers, university faculty, high school student volunteers, and elementary school teachers (Sherman & Catapano, 2011). By building positive working relationships with university faculty and undergraduate students interested in the teaching profession, a school can gain added human resources to lower student teacher ratios in after school programs (Sherman & Catapano, 2011). Undergraduate students can gain valuable teaching experiences and schools can benefit from the latest research acquired by university faculty. Forming partnerships with local universities can also be cost effective because

undergraduate students may need volunteer hours to fulfill class requirements which could save school divisions money.

It is also imperative that administrators collaborate with classroom teachers to set up after school programs that will compliment the regular school day's instruction. Feedback and input from classroom teachers is critical to the success of the students attending after school programs. Hiring classroom teachers to staff the afterschool program increases the possibility of fluid instruction and can provide clear connections to the regular school day curriculum (Noam et al., 2003; Lockwood, 2008). Several studies, however, cautioned principals to recognize the challenges in hiring classroom teachers including substantial costs, teacher burn out, and lack of commitment to afterschool objectives (Fashola, 2002; Noam et al., 2003; Lockwood, 2008). Therefore, it is necessary for principals to collaborate and plan with classroom teachers who are hired for the afterschool program in order to establish goals and objectives that are relevant to students' needs and have the strongest possibility of impacting achievement.

Principals should also consider including retired teachers and parents when planning after school programs. According to one study, "More attention needs to be paid to recruiting from the ranks of retirees in particular, who want to give something back to public education, would like to stay current in their field, and enjoy working with students" (Lockwood, 2008, p. 39). Retired teachers and parents can provide rich resources of warmth to an after school program because they are willing to volunteer their time to support the overall mission of the school.

Finally, research supports the practice of hiring and collaborating with an after school director to oversee and administer after school programs inside of schools. Due to the nature and complexity of the principal's job within a school, time can be a huge constraint to effective implementation of after school programs. By hiring a central figure, such as an after school



director, principals can share the leadership responsibilities involved with after school programs and ensure that programs are matched to the school improvement plan (Barr, Birmingham, Fornal, Kein, & Piha, 2006; Lockwood, 2008). After school directors are effective when they collaborate with principals and after school staff to establish clear goals, develop curriculum targeted to students' needs, and assist in providing professional development for staff in the after school program (Lockwood, 2008).

When local school budgets prohibit the hiring of an after school director and the principal must take on a more active role in administering the after school program, it is imperative to exercise a collaborative leadership style. By collaborating with key stakeholders in the school community, effective after school programs can be developed and sustained through positive working relationships (Barr et al., 2006). In several studies, after school programs were more successful and effective when school administrators collaborated and planned together with a team of key stakeholders who were committed to the program and the students (Barr et al., 2006; Walker et al., 2007; Lockwood, 2008; Sherman & Catapano, 2011).

#### *Alignment to School Curriculum*

A second important component for developing effective after school programs indicated by research is the importance of aligning after school remediation programs to the objectives of the regular school day curriculum in order to support the overall mission of the school. Several articles provided evidence for increasing student achievement when the after school programs were aligned with regular classroom instruction (Farmer-Hinton, Sass, & Schroeder, 2009; Sherman & Catapano, 2011; Walker et al., 2007; Nelson-Royes & Reglin, 2011). Alignment to school objectives can be achieved when a collaborative culture is established and stakeholders work together to create a program that is tailored to the needs of the students being served.

Administrators need to have a firm understanding of the current school curriculum and areas of student need in order to develop successful after school programs that will impact student learning. One study states, “For the after school program to become much more tightly connected to the instructional component of the school day, particularly for students at risk of academic failure, the principal needs to exert instructional leadership that includes the after school program in a two-way communications program to ensure that all staff are tightly connected to common goals,” (Lockwood, 2008, p. 13). Therefore it is essential that principals align the after school program’s goals and objectives to the regular school day curriculum by completing a needs assessment and making the after school program a part of the school improvement plan.

After school remediation programs such as Chicago’s Lighthouse Program showed positive effects for elementary students when it introduced an alternatively conceptualized program aligned with the learning objectives of the regular school day (Farmer-Hinton et al., 2009). In the Lighthouse Program, success was achieved because it was a district wide remediation effort, regular full time classroom teachers were hired, and curriculum materials aligned to state mandated testing were utilized (Farmer-Hinton et al., 2009). Although studies of middle school participants in the Lighthouse Program showed mixed results and some not impacting overall student achievement, the elementary program showed small to moderate increases in academic achievement on standardized tests (Farmer-Hinton et al., 2009). Research studies such as this one suggest that the tighter the alignment to the regular school day curriculum, the stronger the impact on students who attend after school programs. Students benefit from a variety of instructional techniques, grouping strategies, and instructional formats that are synchronized with regular school day instruction.

### *Evaluation and Assessment*

Finally, after school programs should be evaluated and assessed frequently using student data to measure their impact on student achievement. One research study explained the development of a Scale for Program Facilitators, or SPF, to assess the effectiveness of after school programs (Zhang, Smith, Fleming, & Connaughton, 2006). School administrators need to research and discover ways to measure the effectiveness of their after school programs, such as using an SPF, in order to improve these programs. Many articles discussed the importance of evaluating after school programs in order to make improvements and boost achievement (Farmer-Hinton et al., 2009; Zhang et al., 2006; Hynes & Sanders, 2011). Student needs should be evaluated frequently and classroom teachers need to share multiple measures of student data with administrators, tutors, and other instructors in after school programs.

School administrators should also participate in ongoing evaluation and assessment of after school remediation programs in order to increase sustainability. According to Lockwood (2008), ongoing evaluation and assessment of after school programs is important for principals as a way to make improvements in the program and seek additional funding from central office. In order for programs to continue serving students in need of remediation, principals need to have data that the after school program is effective and successful, especially when receiving grants. Student, parent, and staff surveys provide valuable information on the internal effects of after school programs, while pretests and posttests provide academic data to measure program success.

The results of several studies concluded that open communication and reflection was necessary for an after school program to truly make a difference in student achievement (Zhang et al., 2006; Farmer-Hinton et al., 2009; Hynes & Sanders, 2011). Studies indicated that student

achievement increased when the key elements of collaboration and planning, alignment to school curriculum and objectives, and ongoing evaluation and assessment were established and practiced on a regular basis in after school remediation programs.

*How can after school remediation programs increase student achievement on standardized tests?*

Although many studies indicated improvements in academic achievement for students who participated in after school remediation programs, the research results were often mixed, inconclusive, and lacked strong empirical evidence. Some studies showed positive effects of after school programs on academic achievement, while others like one study of the 21<sup>st</sup> Century Community Learning Centers Program, showed few effects (Hynes & Sanders, 2011). Another study of the 21<sup>st</sup> CCLC Program actually concluded that negative behaviors were observed in elementary students attending the after school remediation program (James-Burdumy, Dynarski, & Deke, 2008). Despite the evidence presented in these studies, other studies indicated positive impacts of after school remediation programs on student achievement, social-emotional development, physical well-being, long term educational attainment, and future occupational success (Mahoney, Levine, & Hinga, 2010). The best indicator of a positive impact on student achievement was program quality and staff competencies in leading the after school remediation programs (Mahoney et al., 2010). Although it is difficult to pinpoint the magnitude of impact on student academic achievement in many after school remediation programs, principals can learn from the outcomes of several successful studies of after school programs that made a difference in achievement for their student populations.

According to one educational research scientist, structure is essential to impacting student academic achievement in after school remediation programs (Fashola, 2002). After school

remediation programs must have clear goals, well developed procedures for accomplishing those goals, and provide extensive professional development for staff (Fashola, 2002; Noam et al., 2003; Lockwood 2008). According to Fashola (2002), school administrators can also consider subscribing to various prepackaged programs such as Voyager, Junior Great Books, Books and Beyond, and Project Success Enrichment which offer highly structured materials, curriculum development, and training. These programs have been studied and replicated in various diverse locations with positive success rates.

Several after school remediation programs have produced positive gains in academic performance according to research studies. According to one study (Fashola, 2002), low income minority students in four types of after school care situations were studied. In this particular study, third graders were investigated who either had maternal after school care, informal adult supervision, self-care, or formal after school remediation programs. Results stated, “Controlling for mother’s education, child’s race, and family income, students who attended after school formal programs performed better academically in mathematics, reading, and other subjects ( $p < .01$ ), and had better conduct ratings than did children who were either in mother care or in informal arrangements” (Fashola, 2002, p. 72).

In another longitudinal study of LA’s BEST (Los Angeles’ Better Educated Students for Tomorrow), researchers discovered the frequency and length of participation in this after school remediation program were related to achievement gains in math, reading, and language arts over the gains of non-participants (Farmer-Hinton et al., 2009). Students who attended another after school program entitled, TASC (The After School Corporation), showed substantially greater gains in math than non-participants (Farmer-Hinton et al., 2009). The Promising After School Programs Study analyzed seventy-three studies and concluded that “regular participation in high-

quality after school programs is linked to significant gains in standardized test scores and work habits, as well as reductions in behavior problems among disadvantaged students” (LaFontan & Orcena, 2011, p. 4). Consistent attendance was vital to improved reading achievement in another research study of after school programs (Nelson-Royes & Reglin, 2011). Therefore, school administrators should place a high emphasis on boosting attendance of after school remediation programs in order to increase academic achievement on standardized tests.

### *Summary*

Although a significant amount of empirical evidence to quantify the actual impact of after school remediation programs on student achievement is lacking, there is a large amount of research available to support the key elements of effective programs. Most successful after school remediation programs which lead to increased student achievement on standardized tests shared the following key components:

1. Evidence of collaboration and planning between administrators and key stakeholders.
2. Alignment of goals and objectives to the regular school day curriculum.
3. Evidence of ongoing evaluation and assessment of student learning.

Using these key components as a guideline, school administrators can create, implement, and evaluate effective after school remediation programs that will impact student achievement on standardized tests. After school remediation programs have the best chance of impacting student learning when they are a seamless part of the overall school improvement plan. When school leaders exercise a collaborative, shared, and instructional leadership approach to creating after school remediation programs, students will benefit from targeted assistance that will increase academic achievement.

## **Methodology**

A case study and data analysis of a local elementary school's after school remediation program was conducted for the purposes of this research study. This study focused on a review of the elementary school's 2010-2011 After School Remediation Plan and the changes that were made to the program as a result of 2009-2010 standardized test data. Pertinent standardized testing data was reviewed and analyzed from mid-year benchmark testing in math and reading and end of the year Standards of Learning, or SOL assessments in math and reading in order to determine the impact of the after school remediation program on student achievement. The elementary school's 2010-2011 After School Remediation Plan and the 2010-2011 Comprehensive School Improvement Plan were reviewed and analyzed in order to compare research findings from the literature review to after school remediation practices in this elementary school.

The case study included a close examination of the local elementary school's goals and objectives for the after school remediation program, use of funding from the local school division, staffing for the program, coordination efforts, and methods for progress monitoring. The data analysis included a review of overall school performance for third, fourth, and fifth grades on the 2010 Standards of Learning, or SOL Tests in math and reading in comparison to pass rates for students who attended the after school remediation program in 2009-2010. The data analysis also included a comparison of overall school performance for third, fourth, and fifth grades on the 2011 SOL Tests in math and reading in comparison to pass rates for students who attended the after school remediation program in 2010-2011. The evolution of the after school remediation program in this elementary school over this two year period was examined closely due to significant changes that occurred in the program during that time.

## **Analysis of Results**

The elementary school in this case study is a suburban school located just outside of a small city in Virginia. It is the newest of 17 elementary schools in its local school division and recently opened in the fall of 2008. In the first year the school opened, there was no after school remediation program for students struggling in math and reading. Remediation in math and reading was provided during the school day for struggling 3<sup>rd</sup>-5<sup>th</sup> grade students through a pull-out program during an Intervention/Enrichment, or IE block in the master schedule. For this research study, the evolution of the after school program from its inception in the 2009-2010 school year until the 2011-2012 school year was analyzed and compared to research findings in the literature review.

In the 2009-2010 school year, a total of 29 out of 34 recommended students from grades 3-5 attended the after school program. Students were recommended by classroom teachers based on performance on first and second quarter benchmarks and teacher observation in math and reading. The program was held two days per week after school for 1.5 hours from January, 2010 to April, 2010. The after school remediation program was coordinated by a brand new assistant principal and staffed by three licensed teachers from the school, one for each grade level 3<sup>rd</sup>-5<sup>th</sup>. Due to budgetary constraints in the local school division, transportation was not provided to students. Therefore, only 29 out of 34 recommended students were able to attend due to transportation conflicts. All students who attended the after school remediation program in 2009-2010 received remedial assistance in both math and reading. The teachers were required to plan and conduct remedial sessions for both subjects each of the two days per week. There was no plan for progress monitoring of students in the after school program in 2009-2010 and the program was not included in the overall school improvement plan that year. Quarterly



benchmark data was not archived in 2009-2010 and not available for analysis in this section of the case study.

Overall school performance results from annual SOL testing for 3<sup>rd</sup>-5<sup>th</sup> grades in the Spring of 2010 are indicated in the figure below. These results are followed by analysis and pass rates of students who attended the after school remediation program in the 2009-2010.

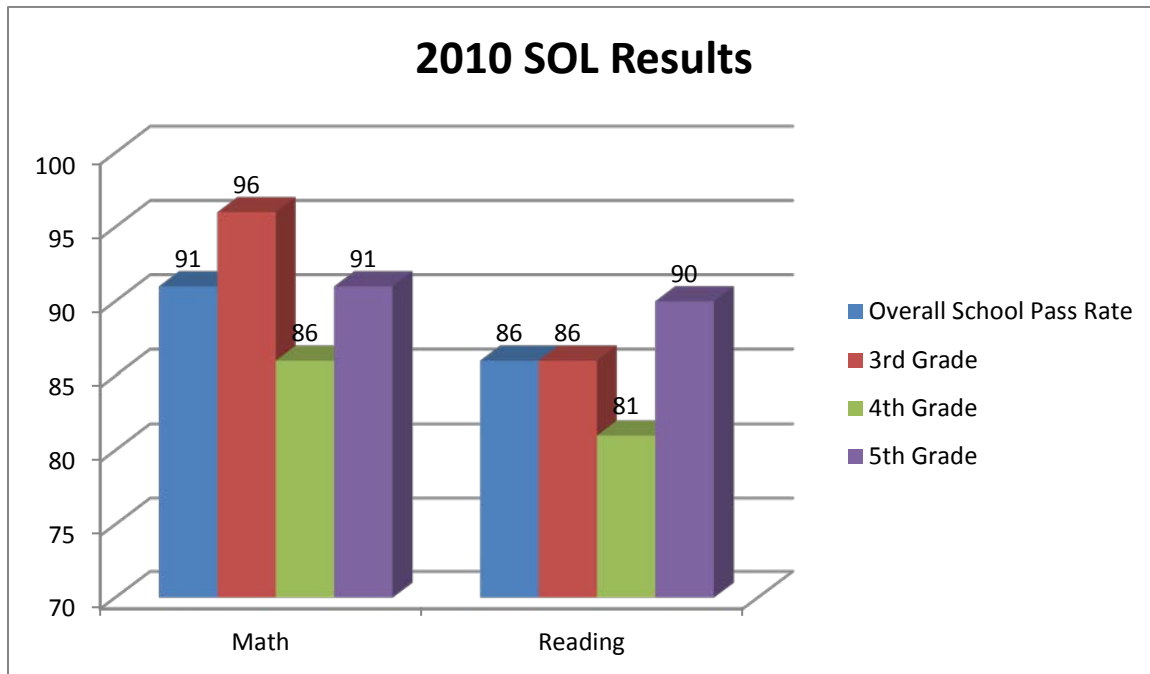


Figure 1. Bar graph showing pass rates for grades 3, 4, and 5 according to 2010 SOL Results.

As a result of overall student performance on the 2010 SOL Tests in math and reading, this elementary school remained fully accredited by the Virginia Department of Education. 3<sup>rd</sup> and 5<sup>th</sup> grades remained at or above the overall school pass rate in math and reading with 4<sup>th</sup> grade falling just below the overall school pass rate. The overall school performance for grades 3-5 indicated a strong academic instructional program in math with overall pass rates above 90%. The overall pass rate of 86% in reading indicated a solid instructional program for most

students in this elementary school, but 14% of the population in grades 3-5 needed additional remediation as a result of these reading tests.

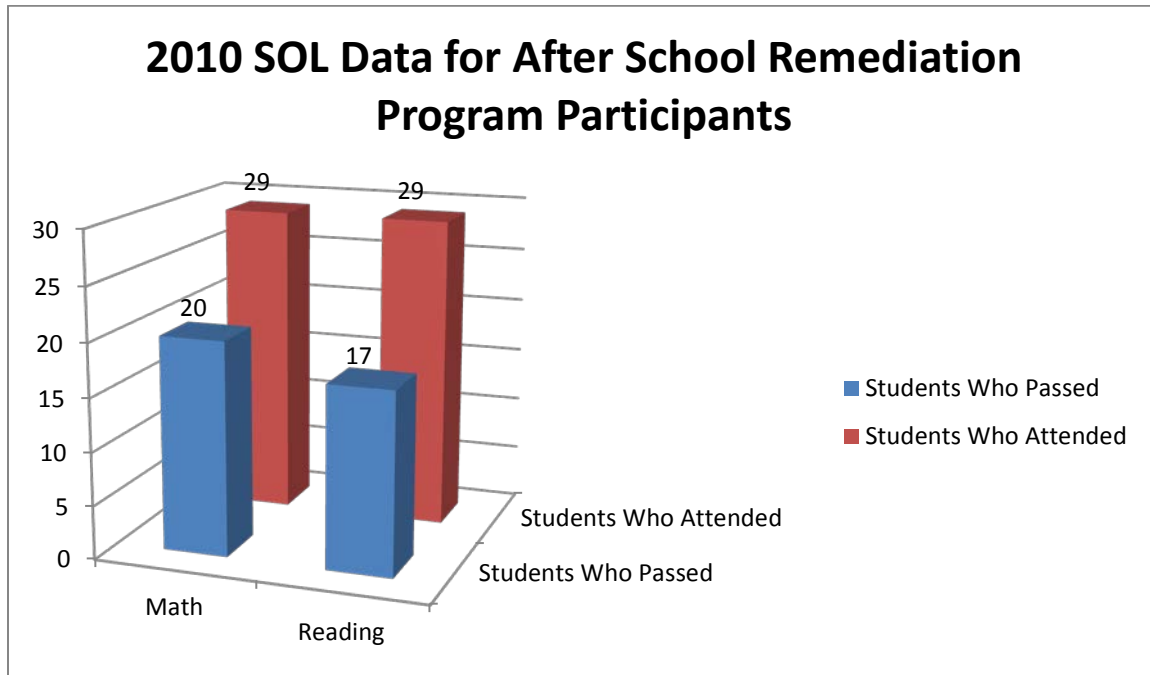


Figure 2. Bar graph showing the number of students who passed the math and reading SOL compared to the number of students who attended the after school program.

According to SOL results in Figure 2 for after school remediation participants in the 2009-2010 school year, 20/29, or 69% of students who attended the program passed the math test and 17/29, or 59% of students who attended passed the reading test. These results indicated that the after school remediation program was successful in assisting over 50% of the students who attended in passing both the math and reading SOL tests in 2010. Almost 70% of students who attended the after school remediation program passed the math SOL tests. Perhaps the licensed teachers who provided after school remediation were stronger in math content expertise than in

reading that year, although no data is available on the content expertise of the after school staff for that year.

Several significant changes took place in the after school remediation program in 2010-2011 as a result of the SOL testing data from 2010 and a change in the school administration that year. A new assistant principal became coordinator of the after school remediation program in the 2010-2011 school year and implemented several changes to the after school program in an effort to reach more students. Although the school division still could not provide transportation due to more budgetary constraints, the new assistant principal made an effort to maximize the funds made available to the elementary school by using all allocated funding for staff salaries and zero funding for materials. Materials from the regular school day were utilized in the after school program so that more staff could be hired.

The first documented change consisted of the development of a comprehensive after school remediation plan which outlined the overall goal for the program and included evidence based practice objectives for its implementation. A careful review of this document revealed a clear delineation between best practices in after school remediation versus what the program at this elementary school would not contain (CFES After -School Remediation Plan, 2010). This document listed division objectives for after school remediation consistent with the research findings. They included: provide remediation/intervention when possible during the school day in addition to after school, align instruction with the school program, staff with the most effective teachers, adapt instruction to meet individual student needs in small groups, design engaging and differentiated activities, and assess the program to make improvements as needed. The remediation goal outlined in this plan was to improve student performance on county-wide benchmark and annual SOL assessments in reading and math by 5% while maintaining a 90%

attendance rate in the program. There was no evidence of a remediation plan containing goals and objectives in the 2009-2010 school year, so this document was an improvement in establishing an instructional focus for the after school program.

The second significant change in the after school remediation plan for the 2010-2011 school year included attendance rate tracking and increased time for the program. The after school program for 2010-2011 started earlier in the school year in November compared to the January start date in the previous school year. A total of 33 days were allocated for after school remediation from November, 2010 to May, 2011 for 1.5 hours per day. A total of 4 licensed teachers and 2 para-educators were added to the staffing of the after school program in 2010-2011, which increased the capacity for assisting more students in math and reading.

The third significant change in the program included more targeted assistance in math and reading for students who participated. The remediation services were targeted specifically for what students needed. For example, students who only needed reading assistance did not need to attend math remediation sessions and vice versa. Students only attended remediation sessions in the areas needing improvement that year, although some students did attend sessions for both math and reading when needed. This was an improvement from the previous school year as students who attended the after school program were required to participate in both math and reading sessions. In 2010-2011, 71 students received reading remediation and 64 students received math remediation after school.

The fourth significant change in the program included the addition of progress monitoring dates for collaboration between the assistant principal/coordinator and the after school teachers and increased parental communication efforts. Three meeting dates were scheduled for November, January, and April for the assistant principal/coordinator to meet with

the teachers of the after school program to discuss instructional plans, monitor student progress, and reflect on the goals of the program. Teachers were required to contact parents of the students they worked with and submit progress reports in January and April. Teachers also communicated with parents by making phone calls to students who were absent in an effort to maintain high attendance rates. This increased home and school communication in the after school program and strengthened relationships with parents of students who attended.

Although several significant changes occurred in the after school remediation program in the 2010-2011 school year, the detailed plan for remediation was not included in the overall school improvement plan that year. In subsequent years, the school's leadership team included after school remediation as part of its strategies for overall school improvement. The leadership team made steps suggested by the research to make the after school remediation plan a seamless part of the school improvement plan in 2011-2012.

More students, however, were recommended in 2010-2011 and enrollment increased significantly from 29 in 2009-2010 to 71 total students. Figure 3 displays relevant data followed by analysis to provide a picture of overall student achievement in the elementary school in 2011 and then to measure the impact of the after school remediation program on student achievement in the 2010-2011 school year.

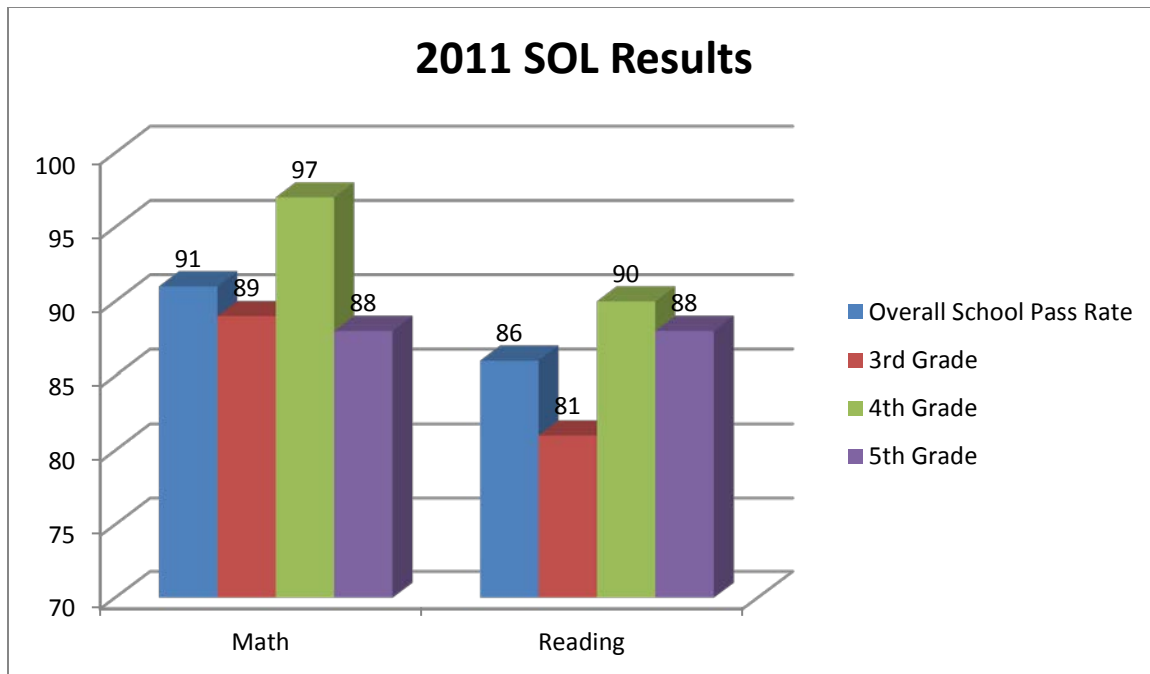
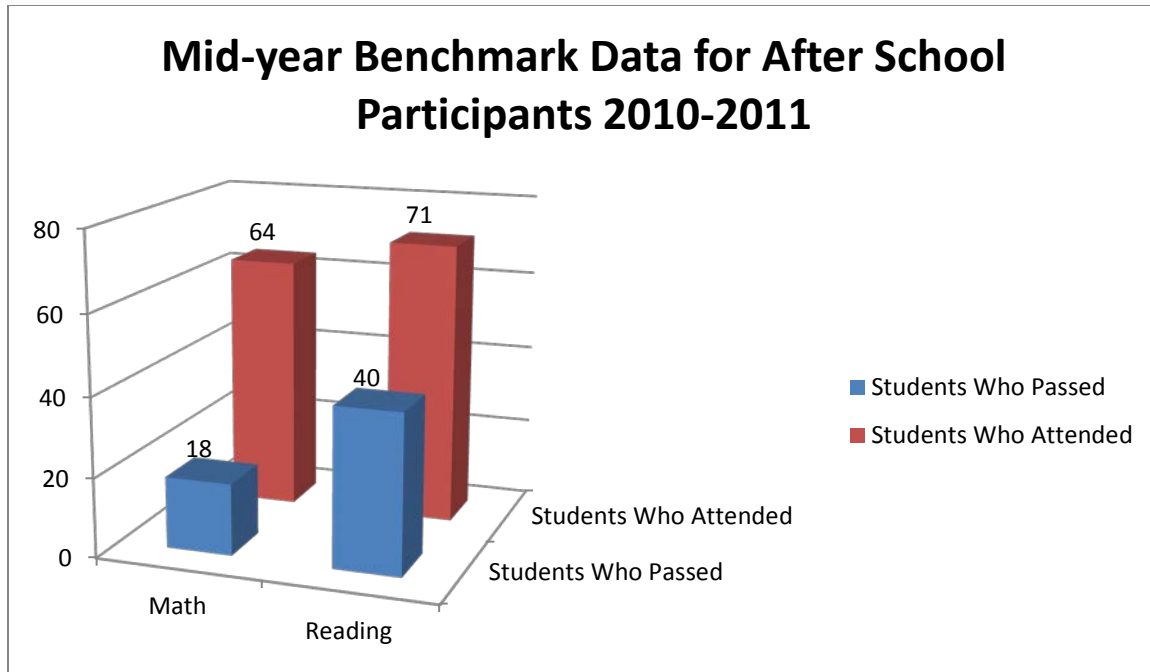


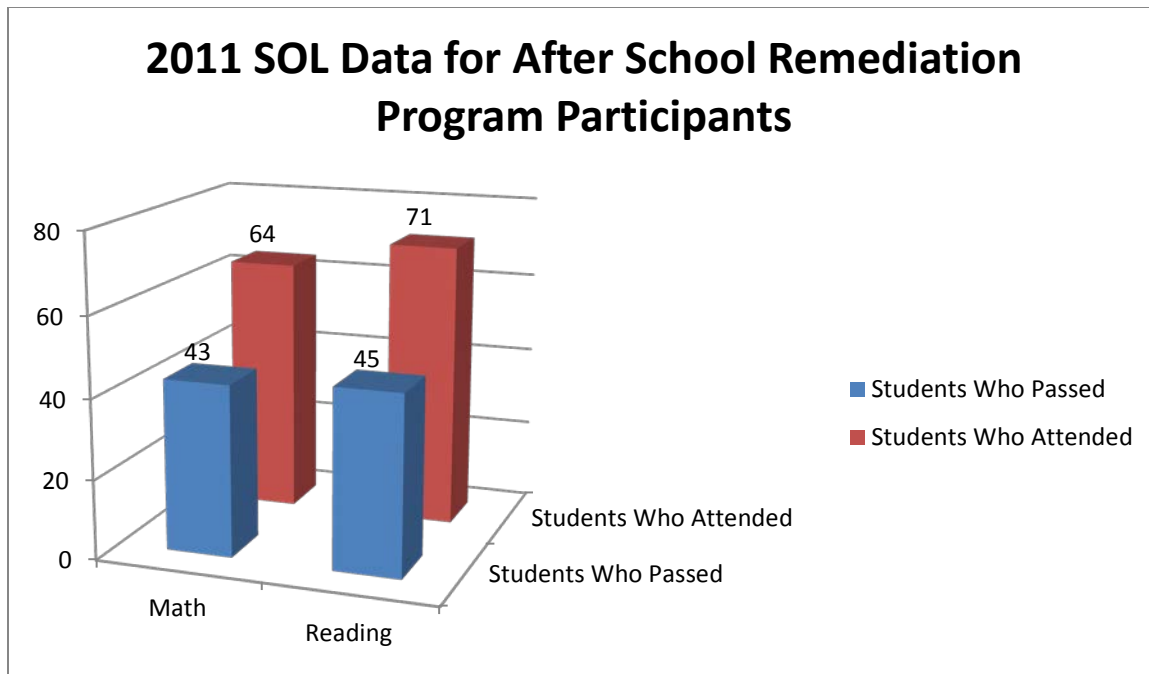
Figure 3. Bar graph showing pass rates for grades 3, 4, and 5 for math and reading SOL tests in 2011.

According to 2011 SOL data, overall student pass rates for math and reading stayed the same as 2010 SOL results. 4<sup>th</sup> grade pass rates in math and reading increased significantly from the previous year and surpassed the overall school pass rate. This showed positive trend data in an upward climb since the 4<sup>th</sup> graders in 2011 were 3<sup>rd</sup> graders in 2010. Despite the drop in student pass rates for 5<sup>th</sup> grade math and reading from the previous year, the data showed a positive trend upward for 5<sup>th</sup> graders in 2011 compared to their data from 4<sup>th</sup> grade in 2010. The drop in 3<sup>rd</sup> grade pass rates in math and reading indicated an increased need for remediation in math and reading for 11% of students who did not pass math and 19% of students who did not pass reading.



*Figure 4.* Bar graph showing mid-year benchmark data for after school participants comparing the number of students who passed to the number of students who attended in 2010-2011.

Figure 4 displays mid-year benchmark pass rates for students who attended the after school remediation program. The mid-year benchmark tests were given in January, 2011 after students had received 9 days of after school remediation services. Only 28% of students participating in the math after school sessions passed the mid-year benchmark, which indicated to after school staff that more intense interventions were needed in math. 56% of students participating in the reading after school sessions passed the mid-year benchmark which proved that over half of the participants were responding to the reading interventions provided in the after school program. Tracking the mid-year benchmark data aided the staff in the after school program because they were able to monitor and adjust the interventions they provided. This was an improvement from the previous school year because no benchmark data was used for progress monitoring during the after school program.



*Figure 5.* Bar graph showing the number of students attending the after school program who passed the math and reading SOL tests in 2011 compared to the number of students who attended.

Final SOL data for 2011 end of year tests in math and reading showed a positive trend for the after school remediation program. 67% of students who attended the program passed the math SOL test which marked a 39% increase from the mid-year benchmark data. 63% passed the reading test which marked a 7% increase from the mid-year benchmark data. Overall data for students who attended the after school program was just shy of the goal for reaching the 5% increase in pass rate reading with a 4% increase from 2009-2010 SOL results. Despite the 2% decrease in pass rate percentage for math from 69% in 2009-2010 to 67% in 2010-2011, the after school program doubled the amount of students who passed in 2011 by reaching 43 total students versus only 20 from the previous year. It was evident that the increase in enrollment benefitted



these students and the staff was able to provide interventions that assisted over half of the participants in passing the math and reading SOL tests. The data showed a positive impact on student achievement in the after school remediation program over the course of these two years.

Attendance in the after school program was another indicator of the impact of the overall program on student achievement as measured by the SOL tests. Although the 2010-2011 was the first year attendance data was tracked in the after school remediation program, the program maintained an 89% attendance rate. This percentage rate was only 1% from reaching the established goal for the after school program that year. This was a positive attendance rate for the after school program considering the fact that the school division did not provide transportation for students who attended. The 89% attendance rate was possibly due to the parental commitment involved in providing remediation to students and reflected the strong efforts of the assistant principal/coordinator and staff for maintaining an emphasis on attendance.

### **Conclusion and Recommendations**

Many school divisions across the nation struggle every year to provide after school remediation services for students who struggle in math and reading. Public school systems are under intense pressure to increase student achievement as measured by standardized test scores in response to federal and state education mandates. After school remediation programs have been created in response to these mandates as a way to provide students with more time for developing math and reading proficiencies. Research proves that effective after school remediation programs demonstrate evidence of collaboration and planning between administrators and key stakeholders, alignment of goals and objectives to the regular school day curriculum, and evidence of ongoing evaluation and assessment of student learning.

It is important for elementary schools to consider these components of effective after school remediation programs when designing programs that will benefit their own school community. In order to maximize the benefits to students and the funding provided by school divisions, careful planning, alignment, and evaluation is necessary to provide a structure for success. When these elements are ignored, after school remediation programs are a waste of time, money, and resources.

It is evident from this case study and data analysis that this local elementary school impacted student achievement on end of the year standardized tests as a result of the significant changes made to the after school remediation program in 2010-2011. Through the creation of an after school remediation plan which outlined goals and objectives for the program, use of funding, staff allocations, methods for progress monitoring, and evaluation strategies, the elementary school was able to create a stable structure for students to receive math and reading interventions. The increase in enrollment and specific staff allocations of licensed 3<sup>rd</sup>-5<sup>th</sup> grade teachers and para-educators resulted in an increase in student achievement on the 2011 SOL tests. Maintaining an attendance rate of 89% also benefitted student learning and demonstrated parental commitment to the program despite transportation challenges. The remediation plan reflected efforts for collaboration, alignment to school curriculum through teacher lesson planning, and assessment strategies to monitor student progress. Even though the responsibility of the after school coordinator fell on the assistant principal instead of a separate position as suggested by research, the after school program became a seamless extension of the school day for participants.

When considering the research from the literature review, the only recommendation for improving the after school remediation program in this elementary school would be for the

administrators to include the program as an integral part of the overall school improvement plan. The after school remediation plan was not a part of the school improvement plan in 2010-2011. In subsequent years, administrators added the after school plan as a strategy for meeting student achievement goals, but the plan should be a more integral part of the school improvement process. By emphasizing the after school remediation plan more specifically in the school improvement process, it will demonstrate a stronger commitment to student learning and reaching students who are at risk.

After school remediation programs can impact student achievement on standardized tests when the key elements of effective programs are in place for elementary schools. Success in student achievement is a result of careful collaboration and planning, alignment to core curriculum objectives, and ongoing evaluation of student progress. When these elements are considered and implemented, elementary schools can bolster student achievement on federal and state mandated assessments.

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