

# Center for Research & Evaluation Office of Accountability

Interim Report

# Effectiveness of Strategic Staffing Schools: Year 1

March 2010

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# Effectiveness of Strategic Staffing Schools: Year 1 – Interim Report

March 2010

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# **EXECUTIVE SUMMARY**

As districts around the United States work toward finding solutions to turn low performing schools into high performing schools, Charlotte-Mecklenburg Schools (CMS) began an initiative called Strategic Staffing in 2008-2009. The existing research does not point to one effective strategy, method, or philosophy to turn around a school successfully. However, most experts agree that leadership is a key factor in a successful school. Therefore, the initiative within CMS focused on reconfiguring key leadership and staff within selected low-performing schools.

In 2008-2009, the Strategic Staffing Initiative (SSI) began with cohort 1, which included seven CMS schools (six elementary schools and one middle school). Principals in these schools took over the schools July 1, 2008. The seven principals in cohort 2 began during the spring semester of 2008-2009 in order to give new principals time to get to know their schools and staff prior to the 2009-2010 school year.

The purpose of this interim report is to provide information and results on cohort 1's first year. Quantitative and qualitative analyses were performed to determine what had been done during that first year, what types of leadership styles were present, what had been the various philosophies of the principals, and what had been the effect on student achievement and the school environments during this first year.

Quantitative results indicate that all Strategic Staffing schools had between 1 - 14 percentile point increases in proficiency in reading (without retests) from 2007-2008 to 2008-2009. Six of the SSI schools had increases in percentage of students proficient in math ranging from 5 – 23 percentile points. When compared to the previous year, one SSI school had a decrease in the percentage of students proficient in math. Important findings are highlighted below:

- Bruns Avenue Elementary, Devonshire Elementary, Sterling Elementary, and Ranson Middle Schools demonstrated much progress in student achievement during the first SSI year.
  - a. In reading, Bruns Elementary, Devonshire Elementary, and Sterling Elementary Schools made significant progress during 2008-09.
  - b. In math, Devonshire Elementary, Sterling Elementary, and Ranson Middle Schools made significant progress during 2008-09.
- In comparing individual students' 2007-08 achievement levels to these students' 2008-09 levels, students at Devonshire Elementary, Sterling Elementary, and Ranson Middle Schools showed statistically significant improvement in both reading and math.
- When comparing the percentage of students who met growth expectations in 2007-08 to the percentage meeting growth expectations in 2008-09, several SSI schools improved significantly.
  - a. In reading, Bruns Avenue Elementary, Devonshire Elementary, and Sterling Elementary Schools each increased the percentage of students meeting growth



- expectations in 2008-09 by at least 10 points over its 2007-08 percentage.
- b. In math, Devonshire Elementary, Reid Park Elementary, Sterling Elementary, and Ranson Middle Schools each increased the percentage of students meeting growth expectations in 2008-09 by at least 20 points over its 2007-08 percentage.
- Finding closely matched comparison schools was challenging; however, using the best comparisons available, Devonshire and Sterling Elementary Schools statistically outperformed their paired schools in math proficiency as well as growth expectations in math and reading.
  - a. In math, Devonshire Elementary statistically outperformed Comparison School 3 and Sterling Elementary outperformed Comparison School 5.
  - b. Devonshire and Sterling Elementaries also statistically outperformed their paired school in the percentage of students meeting growth expectations in math and reading.
- The Strategic Staffing Initiative does not appear to have yet positively impacted student attendance; however the initiative may have played a part in decreasing student suspensions. Bruns Avenue Elementary and Ranson Middle Schools appear to have decreased the number of student suspensions during 2008-09.

Teacher survey data indicate Westerly Hills had the highest desirable mean scores of all SSI schools on all constructs: Principal Standards, Safety and Behavior - Consistency by Administration, Safety and Behavior - Consequences, Safety and Behavior - Expectations and Perceptions, and School Problems. For all schools, the construct with the most undesirable mean scores was School Problems.

Qualitative findings indicate each SSI principal had his/her own unique style and focus in leading the school. An overarching conclusion that emerged was that the SSI principals seemed to accomplish their goals based on where they placed their focus. For instance, each principal who stated his/her sole focus was increasing student achievement, succeeded in increasing student achievement. Each principal who focused on changing the culture, appeared to have succeeded in making the culture more positive. The leadership styles and themes that emerged from the interviews were varied across all seven principals (ranging from Directive to Distributive). The two biggest initial challenges named by the principals were discipline and/or student achievement. Most took steps to clean up the schools, replace teachers and staff, and restructure the schedules. Opinions about bringing in new programs varied. A couple of principals brought in new curriculum programs, a couple brought in programs to supplement existing CMS sponsored curriculum, and a couple did not bring any new programs. Lastly, all principals provided professional development, albeit differently at each school (e.g. some sent teachers to training, some brought the training to the school, and some focused on training from within).



# **INTRODUCTION:**

In the Leandro Case, brought in 1994 by five school districts against the state of North Carolina, Judge Howard Manning found the state had failed to meet its constitutional obligation to provide all students with a sound, basic education. Again in 2005, he accused the Charlotte-Mecklenburg Schools (CMS) of committing "education genocide" against at-risk, low-income students. While Judge Manning's comments were aimed at the District's high schools, several of the middle schools and elementary schools were among the lowest performing schools in the state and had feeder patterns leading into these high schools. Charlotte-Mecklenburg Schools knew the solution must begin there.

While limited empirical research exists with respect to informing school systems of effective strategies and philosophies on redesigning schools (Elmore, 2002; Malen, Croninger, Muncey, & Redmond-Jones, 2002), efforts typically have been around the restructuring of school leadership and staff (Camburn, Rowan, & Taylor, 2003; Elmore, R., 2000;). In CMS, this type of restructuring initiative is referred to as strategic staffing.

Strategic staffing is also referred to as reconstitution policies (Malen, et al., 2002) and comprehensive school reform (Camburn et al., 2003). The main focus with this initiative is replacing the principal. The principal is allowed to build his/her team and implement strategies of his/her choice to improve student achievement. Roles of principals vary depending on the philosophy of the district and/or the named principal. Some view the role of the principal as a manager; others view the role of a principal as an instructional leader. Both have positive and negative outcomes.

One research study by Malen et al. (2000) suggests that principals who lack administrative experience may hinder the growth of staff and students. The manager must be able to handle things such as hiring, managing staff, managing the school budget, and ensuring a safe and orderly environment - all of which impacts the effectiveness of the school. Some studies have found that "principals devoting significant time and energy to becoming instructional leaders in their schools are unlikely to see improvement unless they increase their capacity for organization management as well (Grissom & Loeb, 2009)." Grissom and Loeb conclude in their work that while instructional leadership is presently a major focus in education, it must be more than simply observing in a classroom. It must include organizational management skills such as understanding instructional needs of the school, hiring great teachers, providing needed resources, and keeping the school running effectively (Grissom & Loeb, 2009).

The discussions and implementation of turnaround initiatives have been heard loud and clear throughout our country due in part to U.S. Secretary of Education Arne Duncan's call to turn around the country's 5,000 lowest-performing schools (5% of the schools). The turnaround he calls for is not for incremental school improvement, but is instead for large-scale reform efforts in individual schools. In fact, Duncan has stated he is proposing that the price for receiving part of the US Department of Education's \$3.5 billion in new school improvement aid to the nation's lowest performing schools will hinge on a District's adoption of a radical reform plan.

Duncan has offered four models to turn around the schools – each focused on school leadership and instructional strategies. One of his four proposed models is the Turnaround Model. If a District uses this model for its low-performing schools, the principal and at least half the staff members would be replaced and a new instructional program would be adopted (McNeil, 2009). In return for implementing one of these options, these schools could apply for a waiver from the Department of Education to have the calendar for improvement restarted under No Child Left Behind, and thus, they would not have to provide some of the supplemental educational services or school choice.

Prior to Duncan's proposed options to turn around low performing schools but consistent with the philosophy of these options, to turn around several of the District's lowest performing elementary and middle schools, CMS created an initiative that focused on school leadership, both instructional and operational leadership. In 2008, CMS selected seven schools to be part of its *Strategic Staffing Initiatives* (SSI). As part of the initiative, a principal who had been deemed highly successful was named to lead each of these seven schools. Each of these principals, who began serving in those schools July 1, 2008, could bring an assistant principal, a behavior management technician, and facilitators to be part of his or her instructional and organizational management leadership team. In addition to these individuals, the principal could bring up to five teachers who had demonstrated success in growing their students. Each principal as well as the selected leaders and teachers committed to three years at this school. Teachers who agreed to teach in a Strategic Staffing school received a \$10,000 bonus for the first year and a \$5,000 bonus for the next two years. Principals who relocated to a Strategic Staffing school received a 10% pay increase. In addition, to raise student achievement these principals were given more autonomy than most to put initiatives and policies in place.

At the end of the three years these SSI schools are in place, we seek to answer three questions:

- 1. What has been the impact of SSI on student achievement within these schools?
- 2. What have been the changes in the culture of the school?
- 3. Does the principal's own background and experiences impact the practices and policies for students and adults and thus impact student achievement in those schools?

In this report and subsequent reports, quantitative and qualitative analyses were and will be used in examining each of the research questions. We will:

- Assess the impact of SSI on student achievement by:
  - comparing the SSI school's performance during 2008-09 to the school's performance prior to the initiative
  - comparing the performance of the SSI school to that of its paired school, a school that is demographically similar to the SSI school

<sup>&</sup>lt;sup>1</sup>The following are the other three options: School Closure whereby the school is shut down; Restart Model where the school is reopened under independent management; or Transformation Model where specific measures are adopted including replacing or rewarding principal and staff based upon student performance, implementing instructional reform strategies, and providing operation flexibility and support.



- Assess the impact of SSI on changes in the culture for students and faculty and staff by:
  - comparing student attendance and suspension rates from previous years
  - comparing teachers' perceptions as indicated through survey data for the school
- Assess the practices and policies put into place within the SSI by:
  - interviewing each SSI principal concerning biggest challenges and initial actions
  - comparing practices and policies among the SSI schools to determine differences

The analyses in this report only reflect one year of Strategic Staffing Leadership. Thus, this is an interim report. One year is an extremely short amount of time to see dramatic changes, and we know lasting school reform takes more than a year to demonstrate effectiveness. These SSI schools will be followed for the remaining 2 years in order to gain insight about the initiative and to investigate whether gains made in some of the schools are sustainable.

In this interim study, we sought to examine changes in student achievement and culture and to determine whether school outcomes in this first year were the result of differences in focus and initiatives put into place by the principal. We also investigated whether specific practices and policies a principal put into place were dependent upon his or her philosophy for turning around a school, his or her leadership style, and the principal's own background. Determining these factors and efforts will help us contextualize long-term outcomes and sustainability for all Strategic Staffing schools.



# **METHOD**

Given the number of SSI schools in CMS, the resources committed to the initiative, and the high expectations of the named SSI principals, the Center for Research and Evaluation (CRE) in CMS was asked to conduct a long-term evaluation. In standing with current CRE policy, an outside researcher, the Public Education Research Institute at Queens (PERIQ), was named to be a co-researcher on the project. After drafting a plan and gaining commitment from PERIQ, in the Fall 2009, the evaluation began on cohort 1 in their first year.

#### Data Used

In this study, the researchers have used both quantitative and qualitative methods to analyze SSI. Included in the study were student achievement data, student attendance and suspension data from the schools, and results from the teacher surveys. In addition, information about the principals and their initiatives during the first two years of leadership in these schools was gathered through interviews.

## Selection of the Schools for the Study

To evaluate the effectiveness of this initiative, each of the seven SSI schools was paired with a school as close as possible in demographics. This proved to be challenging for the researchers, as many of the most closely matched schools were named SSI schools for the 2009-2010 school year.

Table 1 indicates each of the SSI and paired schools in the first cohort.

Table 1 Charlotte-Mecklenburg Schools Included in Study

Strategic Staffing School	Paired School
Briarwood Elementary School	Comparison School 1
Bruns Avenue Elementary School	Comparison School 2
Devonshire Elementary School	Comparison School 3
Reid Park Elementary School	Comparison School 4
Sterling Elementary School	Comparison School 5
Westerly Hills Elementary School	Comparison School 6
Ranson Middle School	Comparison School 7



## **School Demographics**

Demographically, the student populations within the SSI schools and their paired schools were very similar. Tables 2, 3, and 4 compare the demographics of the SSI and paired schools. Included in the tables are: gender of students, percentage of students who are economically disadvantaged, race of the students, and percentage of the student body classified as Limited English Proficient, Exceptional Children students, or Academically or Intellectually Gifted students. The SSI school is in **bold** and each paired school is listed below the SSI school and is indented. The *n* is the total number of students in the school.

Table 2 School Demographics: Gender and Economic Status

	Ger	nder	Economically 1	Disadvantaged?
	Male	Female	No	Yes
Briarwood Elementary (n=337)	54.0%	46.0%	5.0%	95.0%
Comparison School 1 (n=302)	50.3%	49.7%	11.3%	88.7%
Bruns Avenue Elementary (n=262)	48.5%	51.5%	6.5%	93.5%
Comparison School 2 (n=597)	52.8%	47.2%	25.6%	74.4%
Devonshire Elementary (n=271)	51.3%	48.7%	7.0%	93.0%
Comparison School 3 (n=287)	52.6%	47.4%	9.4%	90.6%
Reid Park Elementary (n=308)	49.0%	51.0%	4.2%	95.8%
Comparison School 4 (n=266)	45.5%	54.5%	15.8%	84.2%
Sterling Elementary (n=236)	51.7%	48.3%	10.6%	89.4%
Comparison School 5 (n=262)	55.7%	44.3%	7.3%	92.7%
Westerly Hills Elementary (n=168)	45.8%	54.2%	6.5%	93.5%
Comparison School 6 (n=231)	51.1%	48.9%	26.8%	73.2%
Ranson Middle (n=1219)	48.3%	51.7%	23.3%	76.7%
Comparison School 7 (n=1156)	52.9%	47.1%	34.8%	65.2%



Table 3 School Demographics: Race

		Race					
	American Indian	Asian	Black	Hispanic	Multi- Racial	White	
Briarwood Elementary (n=337)	0.0%	1.2%	62.0%	34.1%	1.5%	1.2%	
Comparison School 1 (n=302)	0.0%	8.3%	39.7%	44.0%	4.3%	3.6%	
Bruns Avenue Elementary (n=262)	0.8%	1.5%	85.9%	8.4%	1.9%	1.5%	
Comparison School 2 (n=597)	2.2%	5.5%	65.8%	16.9%	5.0%	4.5%	
Devonshire Elementary (n=271)	0.0%	3.3%	58.7%	34.3%	1.8%	1.8%	
Comparison School 3 (n=287)	0.0%	0.7%	46.3%	45.6%	4.2%	3.1%	
Reid Park Elementary (n=308)	0.3%	1.9%	89.3%	5.2%	2.6%	0.6%	
Comparison School 4 (n=266)	1.5%	2.3%	82.7%	6.4%	5.3%	1.9%	
Sterling Elementary (n=236)	1.3%	1.3%	64.8%	27.5%	3.0%	2.1%	
Comparison School 5 (n=262)	0.0%	1.1%	56.1%	39.7%	2.7%	0.4%	
Westerly Hills Elementary (n=168)	0.0%	14.9%	74.4%	6.0%	1.8%	3.0%	
Comparison School 6 (n=231)	0.4%	4.8%	61.0%	14.7%	3.0%	16.0%	
Ranson Middle (n=1219)	1.0%	2.8%	75.2%	13.5%	2.8%	4.7%	
Comparison School 7 (n=1156)	0.3%	3.3%	65.2%	10.1%	3.3%	17.7%	

Table 4 School Demographics: Special Programs for Students

	Percentage Identified as Limited English Proficiency		Percentage Identified as Exceptional Children		Percentage Identified as Academically or Intellectually Gifted	
	No	Yes	No	Yes	No	Yes
Briarwood Elementary (n=337)	68.2%	31.8%	87.8%	12.2%	96.4%	3.6%
Comparison School 1 (n=302)	47.0%	53.0%	90.7%	9.3%	96.7%	3.3%
Bruns Avenue Elementary (n=262)	89.3%	10.7%	90.8%	9.2%	95.4%	4.6%
Comparison School 2 (n=597)	81.6%	18.4%	89.6%	10.4%	96.6%	3.4%
Devonshire Elementary (n=271)	65.7%	34.3%	79.0%	21.0%	97.4%	2.6%
Comparison School 3 (n=287)	57.8%	42.2%	89.9%	10.1%	95.5%	4.5%
Reid Park Elementary (n=308)	93.8%	6.2%	84.1%	15.9%	98.1%	1.9%
Comparison School 4 (n=266)	94.0%	6.0%	89.8%	10.2%	94.0%	6.0%
Sterling Elementary (n=236)	75.0%	25.0%	88.6%	11.4%	97.9%	2.1%
Comparison School 5 (n=262)	62.2%	37.8%	87.0%	13.0%	98.5%	1.5%
Westerly Hills Elementary (n=168)	81.0%	19.0%	85.7%	14.3%	94.6%	5.4%
Comparison School 6 (n=231)	85.7%	14.3%	90.0%	10.0%	96.1%	3.9%
Ranson Middle (n=1219)	87.5%	12.5%	87.9%	12.1%	95.7%	4.3%
Comparison School 7 (n=1156)	90.3%	9.7%	89.3%	10.7%	95.3%	4.7%



Ideally, each paired school would also have been comparable in student achievement prior to the Strategic Staffing Initiative being put into place; yet this was not always possible. Many of the District's lowest performing schools had already been named as Strategic Staffing schools, either in this first cohort of schools or in the second cohort named in Spring, 2009. Schools already named as SSI schools were disqualified to be a paired school. Thus, many of the paired schools had a higher baseline in student achievement.

In addition, there were several other issues in pairing the schools. Comparison School 6 only opened in 2008-09; thus there were no 2007-08 data for Comparison School 6. However researchers did have access to 2007-08 data from Comparison School 6 students in their prior schools. An additional complication in comparisons occurred with Reid Park, which was paired with Comparison School 4, a magnet school. Therefore, in those instances, the results should be interpreted with caution. Nevertheless, in many instances, showing the results of the comparison school analyses provides important information for certain schools. Therefore, we felt it was important to include the results in the report.

#### **Data Sources and Methods**

Student demographic and achievement data. From its data warehouse, Charlotte-Mecklenburg Schools provided a database of individual student records with no distinguishing identification for individual students at each of the SSI schools and the paired schools during the 2008-09 school year. Students included in this study were those who took the end-of-grade tests in May 2009.

Three years of data were provided for these students. Included in the database were all end-of-grade results for three years, the academic change<sup>2</sup> for the past two years, and the student attendance and suspension records for the three years. Also included were student demographic data such as economic status, race, sex, and whether the student had been identified as a Limited English Proficiency (LEP) student or as an Exceptional Children's student or as an Academically or Intellectually Gifted student.

Extensive data analyses were completed on reading, math, and science test results to determine whether there had been changes in student achievement since the beginning of SSI. Attendance and suspension records were used to analyze the number of students who increased or decreased the number of absences and suspensions since the inception of SSI. For comparison purposes, the same analyses were completed on students within the SSI schools and the paired schools. In comparing progress of individual schools, the 2007-08 school year was used as the baseline year. In all analyses, a p-value ≤.05 is considered statistically significant.

SPSS for Windows, Version 17, was used for most analyses. Chi-Square analysis was used for all categorical data. Wilcoxon Matched Pairs Signed Ranks Tests were carried out on ordinal data and used in analyzing differences between 2007-08 and 2008-09 achievement levels in math and reading. SAS, Version 9.2 was used only for the One-Way ANOVA with Repeated Measures analysis of reading and math scale scores.

<sup>&</sup>lt;sup>2</sup> Academic change is the metric used by North Carolina in the state's ABCs growth model to determine whether a student has made "a year's worth of growth in a year's worth of time." For information on how academic change is calculated see http://www.ncpublicschools.org/docs/accountability/reporting/abc/2008-09/academicchange.pdf

Teacher survey data. Charlotte-Mecklenburg Schools provided results from the 2008-09 teacher surveys developed by the CRE. Data included degree of agreement with specific statements related to the teachers' perception of the principal's leadership and performance, safety and behavior within the school, and the school environment as a whole. Throughout most of the survey, teachers indicated whether they strongly disagreed, disagreed, agreed, or strongly agreed with each statement. Degree of agreement was translated to a numerical equivalency ranging from strongly disagree being a 1 to strongly agree being a 4. One group of items had a 3-point scale (always, sometimes, and never) and another group of items had a 4 point scale that consisted of serious problem, moderate problem, minor problem, and not a problem at all.

These surveys were administered in all CMS schools during March, 2009, the first year of the principal's leadership at that school. The return rate for these surveys in the District was 64%; the average for SSI schools was 60%.

**Practices and policies of the SSI principals.** Jointly, the Curry School of Education and the Darden Business School, both located within the University of Virginia, developed a unique Virginia School Turnaround Specialist Program. Within that program researchers have examined what it takes to reverse schools with a large number of students with low performance. In one study to determine common characteristics of successful "turnarounds," the researchers analyzed 15 schools that had been deemed as "turnaround schools" and had sustained student achievement improvements for at least two years (Duke, 2005). The study found that major changes in these successful schools clustered themselves into eight categories: leadership, school policy, programs, organizational processes, staffing, classroom practices, parent and community involvement, and school facilities. In another study, Dr. Daniel Duke (2004) concluded that successful turnaround principals concentrate on motivating teachers and helping them refine their skills, increasing instructional time for struggling students, continually using data to monitor student progress, and sustaining an orderly learning environment.

Largely based upon this University of Virginia (UVA) work to examine practices of effective principals, PERIQ and CRE developed interview questions to probe into specific SSI principals' practices and policies. Between November 13 and December 10, 2009, the researchers conducted individual interviews with the seven principals comprising the first cohort of SSI schools.

The interviews focused on the following areas: the principal's philosophy for turning around a school as well as his or her leadership style, the initial challenges at the school, the principal's initiatives or policy changes instituted to address the focus during the first and second years, and what the principal saw as future challenges.

Results of these interviews were documented, coded, categorized, and summarized to determine similarities and differences.



# **RESULTS**

The following summarizes results found in analyzing student achievement (both in proficiency and growth rates), suspension and absenteeism rates, teachers' perceptions of their school, and specific initiatives and policies implemented by the SSI principals.

#### **Student Achievement: Proficiency**

Comparing 2007-08 proficiency to 2008-09 proficiency. In North Carolina, a student is considered to be proficient in a subject if he or she scores a Level III or IV on the end-of-grade tests. For the elementary and middle schools, students are tested in reading and math each year from grades 3 through 8, and they are tested in science only in grades 5 and 8.

Figure 1. Reading Proficiency 2007-08 and 2008-09 and Figure 2. Math Proficiency 2007-08 and 2008-09 indicate how well the SSI schools performed compared to each paired school in reading and in math in terms of the percentage of students considered proficient – that is scored a Level III or IV in reading and in math. Each graph shows the comparison between the percentage of students proficient in 2007-08 at the school and the percentage of students proficient in 2008-09 based upon the end-of-grade tests.

This analysis compared the student body of one year to the student body of the next year. Because some students left the school before 2008-09 and others came only in 2008-09, individual students within these student bodies were not necessarily the same.

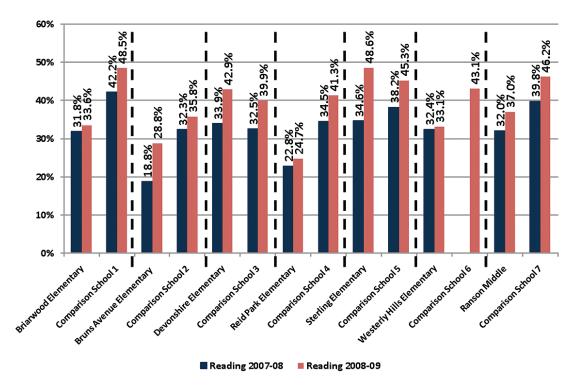
Retests were not used in calculations in 2007-08; thus no retests were used in the 2008-09 calculations. Results from the regular multiple choice end-of-grade tests and all alternative assessments were used for both years.<sup>3</sup> Alternative assessments include the NC Checklist of Academic Standards and the extended versions of the End-of Grade tests.

Below these figures is Table 5 which indicates how many students were tested each year in each subject. In the table, the SSI schools are indicated in **bold**.

<sup>&</sup>lt;sup>3</sup> The same analyses were completed including only students assessed using the multiple choice tests. While the percentages changed slightly, there were no appreciable differences from the findings using all tests.



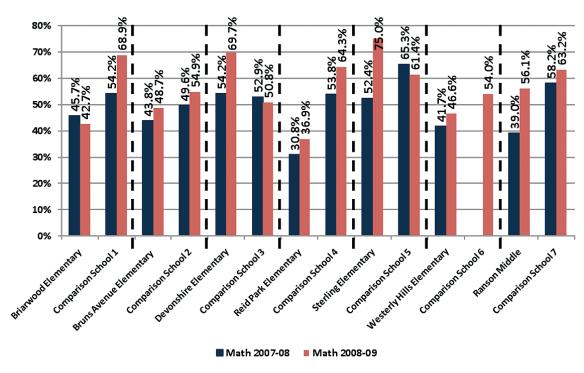
Figure 1 Reading Proficiency 2007-08 and 2008-09



Source of the data for 2007-08: North Carolina Department of Public Instruction found at http://disag.ncpublicschools.org/2009/app/disag/disag-public.cgi; Charlotte-Mecklenburg Schools provided data for 2008-09



Figure 2 Math Proficiency 2007-08 and 2008-09



Source of the data for 2007-08: North Carolina Department of Public Instruction found at http://disag.ncpublicschools.org/2009/app/disag/disag-public.cgi; Charlotte-Mecklenburg Schools provided data for 2008-09

Table 5 Number of Students Tested By Year and By Subject

	Reading 2007-08	Reading 2008-09	Math 2007-08	Math 2008-09
Briarwood Elementary	280	280	307	307
Comparison School 1	270	277	262	270
Bruns Ave. Elementary	256	258	236	236
Comparison School 2	514	514	548	550
Devonshire Elementary	248	249	254	254
Comparison School 3	240	240	258	258
Reid Park Elementary	272	273	283	284
Comparison School 4	235	236	252	252
Sterling Elementary	266	267	210	212
Comparison School 5	251	251	245	246
Westerly Hills Elementary	179	180	163	163
Comparison School 6*			211	211
Ranson Middle	1150	1154	1135	1136
Comparison School 7	1137	1137	1080	1082

\*Comparison School 6 was not open in 2007-08.

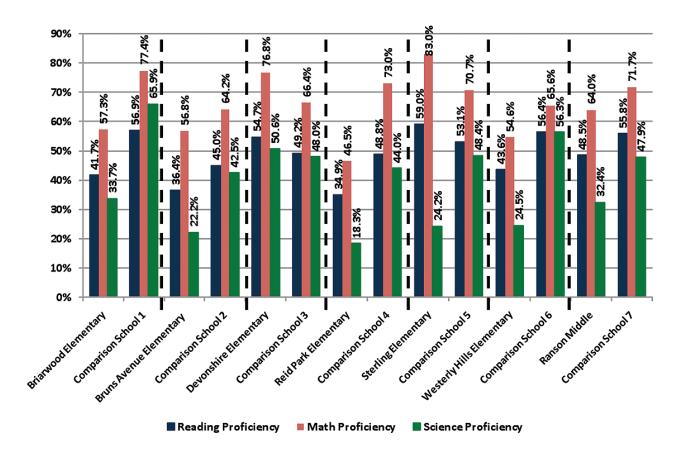
Comparing 2008-09 strategic staffing schools and paired schools in proficiency percentages in reading, math, and science. Researchers used the End of Grade (EOG) test results for 2008-09 to compare proficiency rates in reading, math, and science in the SSI schools to the proficiency rates in the paired schools. Reading and math percentages included students in grades 3 through 5 or 6 through 8, while science included only grades 5 and 8. Because North Carolina included retests beginning that year, the analysis included retests and used both the regular multiple choice EOG and all alternative assessment test results.

Figure 3 indicates the proficiency rates on all assessments at the SSI and the paired schools. While in most cases the proficiency rate at the SSI school lagged behind the proficiency rate at its paired school, Devonshire Elementary (in reading, math, and science) and Sterling Elementary (in reading and math) outperformed their paired schools.

Science scores lagged behind math and reading for all schools; for several of the SSI schools the percentage of students demonstrating proficiency in science lagged significantly behind math and reading. For example, at Sterling Elementary there was a 35 point difference between the percentage of students proficient in reading and the percentage proficient in science, and there was a 59 point difference between the math and science proficiency percentages.



Figure 3 Percentage of Students Proficient in Reading, Math, and Science Proficiency Based on End-of-Grade Tests: 2008-09



The number of proficient students versus the number not proficient in each of the SSI schools and the paired school was examined using a Chi-Square analysis to see if there were significant differences between them.

For our analysis, a p-value ≤.05 is considered statistically significant meaning the difference between the proficiency rate of the Strategic Staffing school and its paired school is larger than would be expected to have occurred due to chance.

As would be expected due to the complexities in finding matched schools for comparison purposes, in most cases the difference between the SSI school and the paired school was statistically significant with the paired school outperforming the SSI school.

However there were some exceptions that should be noted given the issues around finding matched comparison schools:

- The following indicate specific cases where the *Strategic Staffing school statistically* outperformed the paired school:
  - *Math:* Devonshire Elementary outperformed Comparison School 3
  - Math: Sterling Elementary outperformed Comparison School 5
- The following specifies cases where there was *no statistically significant difference in* the results for EOGs, meaning that the differences were small.
  - **Reading:** Devonshire Elementary and Comparison School 3 Schools
  - **Reading:** Sterling Elementary and Comparison School 5 Schools
  - Science: Devonshire Elementary and Comparison School 3 Schools

All p-values are given in Table 6. In this table the Strategic Staffing school is in **bold**. If there was a significant difference between the SSI school and its paired school, there is an asterisk beside the p-value and the school that had a statistically significant higher proficiency rate is indicated beside the p-value.

Table 6 Specific P-Values for Reading, Math, and Science End-of Grade Tests

	Reading	Math	Science
<b>Briarwood Elementary</b> and Comparison School 1	p<.01*	p<.01*	p<.01*
	(Comparison School 1)	(Comparison School 1)	(Comparison School 1)
Bruns Ave. Elementary and	p=.025*	p=.05*	p<.01*
Comparison School 2	(Comparison School 2)	(Comparison School 2)	(Comparison School 2)
<b>Devonshire Elementary</b> and Comparison School 3	p=.213	p<.01*( <i>Devonshire</i> )	p=.806
Reid Park Elementary and	p<.01*	p<.01*	p<.01*
Comparison School 4	(Comparison School 4)	(Comparison School 4)	(Comparison School 4)
Sterling Elementary and Comparison School 5	p=.20	p<.01* (Sterling)	p<.01* (Comparison School 5)
Westerly Hills Elementary	p=.014*	p=.034*	p<.01*
and Comparison School 5	(Comparison School 6)	(Comparison School 6)	(Comparison School 6)
Ranson Middle and	p<.01*	p<.01*	p<.01*
Comparison School 7	(Comparison School 7)	(Comparison School 7)	(Comparison School 7)

\*Indicates statistical significance.



This analysis was also completed for students taking only the regular multiple choice tests. The results were generally the same with Devonshire Elementary outperforming Comparison School 3 in math and with Sterling Elementary outperforming Comparison School 5 in math (both with  $p \le .01$ ). In that analysis there was also no statistical difference in reading between Devonshire and Comparison School 3 or between Sterling and Comparison School 5. However using only the regular multiple choice test results in science, fewer schools had statistical differences; also when using only multiple choice test results there were no statistical differences in science for Devonshire and Comparison School 3, Sterling and Comparison School 5, and Reid Park and Comparison School 4 Schools.

# Comparing Individual Students' 2007-08 and 2008-09 Achievement Levels

Each of the above analyses looked at the schools as a whole and examined differences in student proficiency. The researchers also examined records to analyze changes in the achievement levels by individual students. That is, the researchers investigated whether individual students were able to move up a level even if it did not change whether they were proficient. For example, a student could have improved achievement as demonstrated by moving from Level I to Level II on his or her end-of-grade (EOG) tests. However since Level II is considered not proficient, this change would not have been reflected in previously presented results. The researchers used the Wilcoxon Matched Pairs Signed Rank Tests to compare each individual student's 2007-08 achievement levels in reading and math to his or her 2008-09 achievement levels.

For each school, students used in the calculation were students who took the 2008-09 EOGs at the strategic staffing school or paired school. It did not include any student not taking the EOGs during 2008-09 at one of those schools. For example, if a student was enrolled at Briarwood Elementary in 2007-08 but then transferred to Cotswold Elementary the next year, that student's scores were not used. However if the student had been at Cotswold Elementary in 2007-08 and then was a student at Briarwood Elementary in 2008-09, he or she was included. For this analysis to be a true comparison, no retests were used in the calculation and all assessments for students were used for both years in math and reading.

The results of this analysis are shown in Table 7. *Positive Ranks* indicates the number of students who scored a higher achievement level on their 2008-09 EOG than on their 2007-08 EOGs. Negative Ranks indicates the number of students who scored a lower achievement level on their 2008-09 EOGs than on their 2007-08 EOGs. Ties indicates the number of students who received the same achievement level on both the 2008-09 and 2007-08 EOGs. *Ties* are not included in the calculation of significance.

There was a statistically positive difference in the some of the SSI schools. This means there were significantly more students who scored a higher achievement level on the 2008-09 EOGs versus on the 2007-08 EOGs than who scored a lower achievement level. In each of these schools, significantly more students scored higher levels than scored lower levels both in reading and math.

- **Devonshire Elementary**
- **Sterling Elementary**
- Ranson Middle

Two SSI schools had a statistically negative difference meaning significantly more students scored a lower achievement level in 2008-09 than scored a higher achievement level:

- Bruns Avenue Elementary<sup>4</sup> significantly more students scored lower levels in reading in 2008-09 than in 2007-08
- Reid Park Elementary significantly more students scored lower levels in reading and math in 2008-09 than in 2007-08

Three SSI schools had no statistically significant differences:

- Briarwood Elementary No significant difference in the number of students who scored higher than scored lower in math and in reading
- Bruns Avenue Elementary No significant difference in the number of students who scored higher than scored lower in math
- Westerly Hills Elementary No significant difference in the number of students who scored higher than scored lower in math and in reading

For each of the SSI schools and the paired schools, Table 7 indicates the number of students who raised their achievement level (positive rank), the number whose achievement level fell (negative rank), and the number of students who scored at the same achievement level (tie). The Strategic Staffing Initiative school is in **bold**; its paired school is indented and below it.

<sup>&</sup>lt;sup>4</sup> This finding may seem counterintuitive to earlier findings of significant increases in reading scores at Bruns Avenue Elementary. However, note that for this Wilcoxon Matched Pairs Signed Rank test, only students whose achievement levels changed from 2007-08 to 2008-09 were included in the calculations to determine whether there were differences between the number of students with positive changes and those with negative changes. For Bruns Avenue, of the 262 students taking the tests in 2008-09, 78 did not have achievement level scores for both years and 62 had the same score. They were not included. Thus only 122 students were included in the analysis (46.5%). Of those in the study, some did drop from a Level 4 to a Level 3 - thus they were still considered proficient. In addition, some had increases in their scale scores, but did not raise their achievement levels.



Table 7 Changes in Achievement Levels: From 2007-08 to 2008-09

		Reading		Math			
School				Sum of			Sum of
(SSI school is in bold.)	Rank	N	Mean Rank	Ranks	N	Mean Rank	Ranks
	Positive						
Briarwood Elementary	Ranks	76	79.44	5402.00	68	76.80	5836.50
	Negative						
	Ranks	81	81.28	7478.00	92	81.07	6566.50
	Ties	72			73		
				p=.510			p=.065
	Positive	0.2	F0.22	C 407 00	0.1	(5.60	F21 6 00
Comparison School 1	Ranks	82	79.23	6497.00	81	65.63	5316.00
	Negative Ranks	64	66.16	4234.00	37	46.08	17.05.00
	Ties	43	00.10	1231.00	74	10.00	17.03.00
	1105	43		p=.023*	74		p<.001*
				p=.023			p<.001
Bruns Avenue	Positive						
Elementary	Ranks	48	52.13	2502.00	46	54.02	2485.00
	Negative		7 - 1.11			7 -117	
	Ranks	74	67.58	5001.00	64	56.56	3620.00
	Ties	62			76		
				p<.001**			p=.079
							_
	Positive						
Comparison School 2	Ranks	131	144.47	18926.00	139	131.67	18301.50
	Negative						
	Ranks	150	137.97	20695.00	117	124.74	14594.50
	Ties	107			135		
				p=.504			p=.103
	Positive		<b>F</b> 0.22	<b>5000</b> 50		<b>50.10</b>	<226.00
Devonshire Elementary	Ranks	75	70.98	5323.50	85	73.18	6220.00
	Negative Ranks	E0	61.05	3587.50	48	56.06	2601.00
		58	61.85	3307.30		56.06	2691.00
	Ties	59		- 042*	60		m < 001*
				p=.043*			p<.001*
	D						
Comparison School 3	Positive Ranks	69	71.91	4961.50	69	67.41	4651.50
Comparison School 3	Ranks	09	/ 1.91	4901.30	09	07.41	4031.30



		Reading		Math			
School (SSI school is in bold.)	Rank	N	Mean Rank	Sum of Ranks	N	Mean Rank	Sum of Ranks
(661 6416 61 16 111 6 6141)	Negative	- 1	2/20022 200222		- 1	2/20022 2100221	1441110
	Ranks	61	58.25	3553.50	59	61.09	3604.50
	Ties	52			54		
				p=.091			p=.188
Reid Park Elementary	Positive Ranks	57	58.08	3310.50	60	62.50	3750.00
	Negative Ranks	81	77.54	6280.50	81	77.30	6261.00
	Ties	72			69		
				p=.001**			p=.007**
	Positive						
Comparison School 4	Ranks	82	72.35	5932.50	89	77.07	6859.00
	Negative Ranks	57	66.62	3797.50	54	63.65	3437.00
	Ties	61			60		
				p=.021*			p<.001*
Sterling Elementary	Positive Ranks	68	59.11	4019.50	69	56.03	3866.00
	Negative Ranks	46	55.12	2535.50	37	48.78	1805.00
	Ties	29			42		
				p=.03*			p=.001*
Comparison School 5	Positive Ranks	67	65.30	4375.00	78	65.57	5114.50
	Negative Ranks	57	59.21	3375.00	49	61.5	3013.50
	Ties	56			53		
				p=.198			p=.008*
XA74I XX*II	D						
Westerly Hills Elementary	Positive Ranks	42	46.83	1967.00	44	41.52	1827.00
	Negative Ranks	47	43.36	2038.0	41	44.59	1828.00
	Ties	46			52		
				p=.881			p=.998



			Reading			Math	
School (SSI school is in bold.)	Rank	N	Mean Rank	Sum of Ranks	N	Mean Rank	Sum of Ranks
Comparison School 6	Positive Ranks	61	57.99	3537.50	53	47.20	2501.50
	Negative Ranks	48	51.20	2457.50	40	46.74	1869.50
	Ties	46			61		
				p=.093			p=.207
Ranson Middle	Positive Ranks	339	309.88	105048.00	349	301.78	105321.50
	Negative Ranks	264	291.89	77058.00	241	286.4	69023.50
	Ties	254			268		
				p=.001*			p<.001*
Comparison School 7	Positive Ranks	381	308.27	117451.50	363	283.46	102895.00
	Negative Ranks	216	282.65	61051.50	180	248.89	44801.00
	Ties	204			258		
				p<.001*			p<.001*

<sup>\*</sup> indicates statistical significance positive difference in achievement levels for 2007-08 versus 2008-09

<sup>\*\*</sup> indicates statistical significance negative difference in achievement levels for 2007-08 versus 2008-09

<sup>&</sup>lt;sup>5</sup> As stated in the August 20, 2009 North Carolina Department of Public Instruction document *The ABCs of Public Education* Academic Change for Schools: 2008-09: " . . . a student's scores are placed on the c-scale[and] the individual student is expected to perform at least as well on the end-of-grade (EOG) assessment for the current year as she or he did, on average, during the previous two years. The current [N.C.] accountability model operationalizes 'growth' as academic change. The academic change is based on an average of the previous two years' assessments. If there is only one previous year's EOG test data available, the expectation for change will be based on one previous assessment. [The formula] factors in an adjustment for regression to the mean (a student who performs above or below the mean score on one EOG will likely score closer to the mean on a subsequent EOG)." Retests are not included in growth formulas.



#### Student achievement: Growth

For our analysis, growth was measured by whether the student met expected growth goals during the school year as measured by academic change. Academic change is defined by the North Carolina Department of Public Instruction.<sup>5</sup>

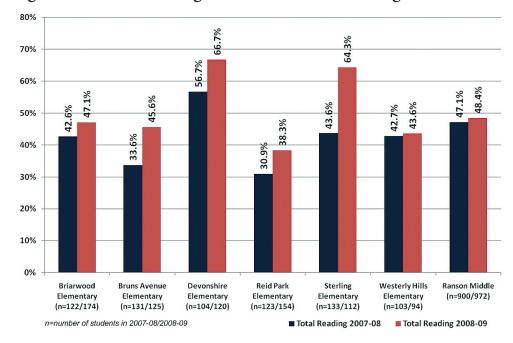
On the reading end-of-grade tests, the percentage of students at Bruns Avenue, Devonshire, and Sterling Elementary Schools who met growth expectations in 2008-09 compared to the percentage meeting those growth expectations in 2007-08 increased by at least 10 points.

On the math end-of-grade tests, the percentage of students at Devonshire Elementary, Reid Park Elementary, Sterling Elementary, and Ranson Middle Schools who met growth expectations in 2008-09 compared to the percentage meeting those growth expectations in 2007-08 increased by at least 20 points.

Figures 4 and 5 indicate the percentage of students in each SSI school who met growth expectations in reading and in math in 2008-09 compared to the percentage in 2007-08. The students included were the students who had valid growth scores for both years and were at the SSI school in 2008-09. Students at these schools in 2007-08, but not in 2008-09, were not used in the comparison.

For the 2007-08 year, growth was not calculated for reading for 3<sup>rd</sup> graders since reading pre-tests were not given that year. Therefore for 2008-09 in reading, only 4<sup>th</sup> and 5<sup>th</sup> graders were used (not 3<sup>rd</sup> graders) in order to have an accurate comparison with 2007-08. For the comparison of students meeting growth goals in math, 3<sup>rd</sup> through 8<sup>th</sup> graders were used since all grades had growth calculated in both years. In the graphs, *n* is the total number of students in the school.

Figure 4 Percentage of Students Meeting Growth Goals in Reading: 2007-08 and 2008-09





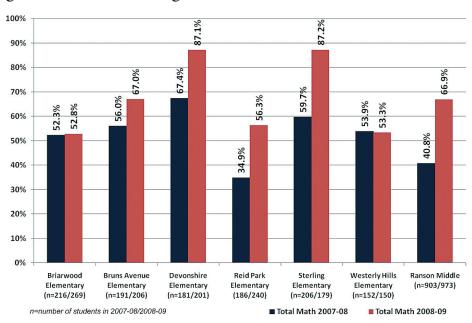


Figure 5 Percentage of Students Meeting Growth Goals in Math: 2007-08 and 2008-09

The percentage of students meeting growth expectations in each SSI school and in its paired school was compared to see if there were significant differences.

The following summarizes the results:

- When comparing <u>all</u> students at SSI schools with <u>all</u> students at paired schools, there was no statistically significant difference between the numbers of students who met expected growth in math. Chi-square analysis indicated the results were not significantly different from what would be expected due to chance (p=.83). However, when looking at specific pairings of schools, there often were differences:
  - In two cases the SSI school statistically outperformed the paired school in the number of students who met growth expectations in math:
    - Devonshire Elementary and Comparison School 3 (p<.01)
    - Sterling Elementary and Comparison School 5 (p<.01)
  - There was no statistically significant difference between the following SSI and paired schools:
    - Bruns Avenue and Comparison School 2 (p=.149)
    - Ranson Middle School and Comparison School 7 (p=.735)
  - For all other schools, results of the chi-square analysis concerning the number of students meeting growth expectations in math at a specific SSI school compared to the number of students at its paired school were significantly different from what would be expected due to chance. In each of those cases, the paired school performed significantly higher than the SSI school.



When comparing students at <u>all</u> SSI schools with students at <u>all</u> paired schools, there was a statistically significant difference between the numbers of students who met expected growth in reading during 2008-09 school year. The difference was greater than would be expected due to chance with the paired schools scoring higher (p=.02).

In addition when looking at individual pairings, differences were also noted:

- The following indicates the specific case where the *Strategic Staffing school statisti*cally outperformed the paired school in the number of students who met growth expectations in reading:
  - Sterling Elementary and Comparison School 5 (p<.04)
- There was no statistically significant difference between these schools:
  - Bruns Avenue and Comparison School 2 (p=.414)
  - Devonshire Elementary and Comparison School 3 (p=.148)
  - Reid Park Elementary and Comparison School 4 (p=.198)
- For all other schools, results of the chi-square analysis concerning the number of students meeting growth expectations in reading at a specific Strategic Staffing Initiative school compared to the number of students at its paired schools were significantly different from what would be expected due to chance. In each of those cases, the paired school performed significantly higher than the SSI school.

2008-09 growth by 2007-08 achievement levels. Whether students met growth expectations in math and reading during the 2008-09 school year was analyzed based upon the students' 2007-08 Achievement Levels. By grouping students according to their 2007-08 Achievement Levels (i.e. Levels I, II, III, IV) and then examining the percentage of students within each group who met growth in 2008-09 enabled the researchers to see whether the percentage of lower level students meeting growth was consistent with the percentage of higher level students meeting growth.

The percentage of students meeting growth expectation was generally consistent across all Achievement Levels both in SSI schools and their paired schools.

A larger percentage of students met growth expectations in math than in reading. Results for both math and reading are seen in Tables 8 and 9. Results also indicate that typically the percentage of SSI students meeting growth in each Achievement Level mirrored the percentage of paired school students.

Overall math growth. Of the total 1,319 students who were at SSI schools for 2008-09 math EOG testing and for whom we had 2007-08 Achievement Levels, 65.8% met expected growth in math while 34.2% did not.

Of the total 1,434 students who were at the *paired schools* for 2008-09 math EOG testing and for whom we had 2007-08 Achievement Levels, 65.4% met expected growth in math while 34.6% did not.

*Math by achievement levels.* As table 8 indicates, the majority of students in both SSI schools and the paired schools did meet growth expectations at every Achievement Level for math. While performance was quite similar overall, the SSI schools performed slightly better than the paired schools in Levels II and III while the paired schools performed slightly better than the SSI in Levels I and IV.



Table 8 Percentage of Students Meeting Math Goals: By 2007-08 Achievement Levels

			2007-08 Level I	2007-08 Level II	2007-08 Level III	2007-08 Level IV
Strategic Staffing Schools						
	Met Growth in Math in	No	39.5%	34.4%	31.6%	34.2%
	2008-09	Yes	60.5%	65.6%	68.4%	65.8%
	Number of students by 200 Achievement Level	7-08	210	488	525	101
Paired Schools						
	Met Growth in Math in	No	37.7%	36.2%	32.1%	33.1%
	2008-09	Yes	62.3%	63.8%	67.9%	66.9%
	Number of students by 200 Achievement Level	7-08	228	528	551	127

Overall reading growth. Of the 1,306 students who were at the SSI schools for 2008-09 reading EOG testing and for whom we had 2007-08 Achievement Levels, 53.0% met expected growth in reading while 47.0% did not.

Of the 1,425 students who were at the *paired schools* for 2008-09 reading EOG testing and for whom we had 2007-08 Achievement Levels, 49.7% met expected growth in reading while 50.3% did not.

**Reading by achievement levels.** Table 9 indicates that in reading, approximately ½ of students in both SSI schools and their paired schools met growth expectations in reading at all Achievement Levels. Performance was slightly better in the paired schools at all the Levels.

Table 9 Percentage of Students Meeting Reading Goals: By 2007-08 Achievement Levels

			2007-08 Level I	2007-08 Level II	2007-08 Level III	2007-08 Level IV
Strategic Staffing Schools						
	Met Growth in Reading in	No	54.2%	50.8%	53.8%	52.7%
	2008-09	Yes	45.8%	49.2%	46.2%	47.3%
	Number of students by 2007 Achievement Level	7-08	493	378	342	93
Paired Schools						
	Met Growth in Reading in	No	49.5%	47.1%	52.0%	52.4%
	2008-09		50.5%	52.9%	48.0%	47.6%
	Number of students by 2007 Achievement Level	7-08	228	527	412	383

## Repeated Measures ANOVA in Math and Reading

Using prior year performance as the time one measure, repeated measures ANOVA was used to determine whether there was significant movement in developmental scale scores in math and reading. In both analyses, only students who had not been retained in the prior year were used. Analyses were conducted at each grade level. For instance, 5th grade students in each school were entered into the repeated measures analysis using their 4th grade scores as the time one measure. Each SSI school was compared to the paired school.

In math, the results indicate that Devonshire had significant positive results at all three grades. Sterling had significant positive results in grades 4 and 5, Bruns had positive results in grade 5, and Westerly Hills had positive results in grade 4. Conversely, Briarwood had significant results in the undesirable direction in all three grades. Westerly Hills had significant results in the undesirable direction in grade 5. Table 10 below provides results for the repeated measures for all schools in math.

The repeated measures analysis of reading scores presented in Table 11 show several significant results. Sterling's 4th graders showed significant positive differences. Conversely, 3rd and 4th graders at Briarwood and 5th graders at Westerly Hills showed significant differences in the undesirable direction.



Repeated Measures ANOVA By Grade in Math

			-	-							
			Strategic Devel	Staffing In lopmental	Strategic Staffing Initiative School: Developmental Scale Scores		Pai Developn	Paired School: Developmental Scale Scores	ol: le Scores		
Subject	Grade	School	2007-08	2008-09	Change	School	2007-08	2008-09	Change	Difference	p-value
Math	5	Briarwood	345.01	350.62	5.61	Comparison School 1	348.49	357.77	9.29	-3.68	*00.0
		Bruns Ave.	342.95	351.41	8.46	Nat Alex	345.40	351.19	5.79	2.68	*00.0
		Devonshire	347.46	357.96	10.50	Comparison School 3	345.69	352.95	7.26	3.24	*00.0
		Reid Park	341.55	348.97	7.42	Comparison School 4	347.57	355.18	7.61	-0.19	0.81
		Sterling	346.61	356.53	9.92	Comparison School 5	347.94	353.19	5.25	4.67	*00.0
		Westerly Hills	344.00	348.54	4.54	Comparison School 6	347.89	355.44	7.55	-3.01	*00.0
	4	Briarwood	338.56	345.53	6.98	Comparison School 1	338.83	350.10	11.27	-4.29	0.00 <sub>*</sub>
		Bruns Ave.	335.38	342.87	7.48	Nat Alex	340.72	346.85	6.13	1.36	0.13
		Devonshire	337.49	350.87	13.38	Comparison School 3	339.69	345.31	5.63	7.75	*00°0
		Reid Park	335.53	342.80	7.27	Comparison School 4	338.48	347.52	9.05	-1.78	90.0
		Sterling	340.86	350.98	10.12	Comparison School 5	343.40	345.59	2.19	7.93	*00°0
		Westerly Hills	338.47	347.37	8.91	Comparison School 6	338.66	345.12	6.47	2.44	0.04*
	3	Briarwood	320.87	335.06	14.19	Comparison School 1	324.45	343.07	18.62	-4.43	*00.0
		Bruns Ave.	320.64	338.76	18.12	Nat Alex	323.79	340.49	16.70	1.42	0.11
		Devonshire	323.31	344.82	21.51	Comparison School 3	325.65	341.94	16.29	5.22	*00.0
		Reid Park	318.84	336.33	17.49	Comparison School 4	324.50	341.13	16.63	0.86	0.39
		Sterling	327.66	347.93	20.27	Comparison School 5	325.30	345.54	20.23	0.04	0.98
		Westerly Hills	319.47	336.80	17.33	Comparison School 6	323.41	338.94	15.53	1.80	0.14

\* Indicates a statistically significant difference



Repeated Measures ANOVA By Grade in Reading

				_							
			Strategic S Develo	ategic Staffing Initiative Scho Developmental Scale Scores	Strategic Staffing Initiative School: Developmental Scale Scores		Pa Developr	Paired School: Developmental Scale Scores	l: e Scores		
Subject	Grade	School	2007-08	2008-09	Change	School	2007-08	2008-09	Change	Difference	p-value
Reading	5	Briarwood	339.58	344.88	5.30	Comparison School 1	344.29	349.67	5.39	-0.09	0.93
		Bruns Ave.	336.73	344.44	7.71	Nat Alex	339.26	345.57	6.31	1.40	0.11
		Devonshire	341.38	349.66	8.28	Comparison School 3	339.25	345.73	6.48	1.80	0.09
		Reid Park	338.28	342.89	4.61	Comparison School 4	342.58	347.38	4.80	-0.19	0.83
		Sterling	339.73	346.96	7.24	Comparison School 5	339.80	347.31	7.51	-0.27	0.80
		Westerly Hills	339.19	343.36	4.17	Comparison School 6	342.69	349.26	6.56	-2.39	0.03*
	4	Briarwood	333.07	340.24	7.17	Comparison School 1	333.51	343.08	9.58	-2.40	0.02*
		Bruns Ave.	328.20	336.62	8.42	Nat Alex	333.13	339.94	6.80	1.61	0.12
		Devonshire	331.58	341.98	10.41	Comparison School 3	332.32	342.10	9.78	0.63	0.60
		Reid Park	331.31	338.31	7.00	Comparison School 4	333.24	341.77	8.54	-1.54	0.15
		Sterling	333.44	344.02	10.58	Comparison School 5	333.59	339.85	6.26	4.32	0.00*
		Westerly Hills	332.49	340.88	8.40	Comparison School 6	333.76	341.40	7.64	0.76	0.57
	3	Briarwood	319.08	330.3	11.22	Comparison School 1	320.98	335.38	14.40	-3.18	0.01*
		Bruns Ave.	321.68	332.2	10.52	Nat Alex	322.12	334.34	12.22	-1.70	0.13
		Devonshire	321.09	334.7	13.61	Comparison School 3	323.21	335.31	12.10	1.51	0.26
		Reid Park	318.13	329.16	11.03	Comparison School 4	324.12	334.16	10.04	0.99	0.57
		Sterling	326.63	339.73	13.10	Comparison School 5	325.49	339.12	13.63	-0.53	0.72
		Westerly Hills	320.02	330.75	10.73	Comparison School 6	322.48	332.83	10.35	0.38	0.80

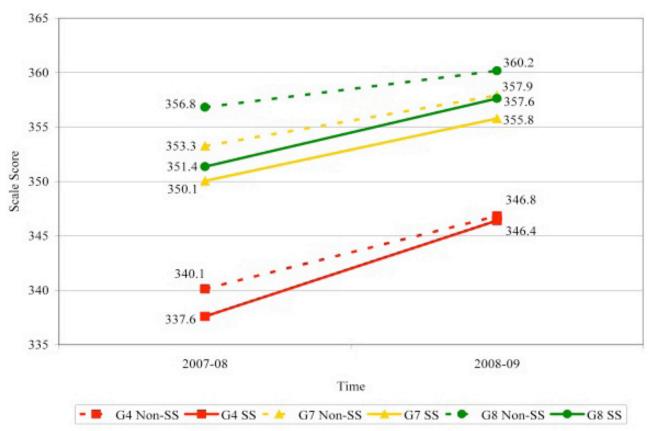
\* Indicates a statistically significant difference



Figure 6 graphically depicts the significant results found when conducting the repeated measures analysis on math developmental scale scores collapsed across individual schools at each grade level. The effect at grade 4 is the most pronounced, as the gap between SSI and non-SSI schools (paired schools) present in 2007-08 was closed based on the scores for 2008-09. While the closing of the gap in the 8th grade scores was not as pronounced as that seen in the 4th grade, the gap present in 2007-08 was noticeably smaller based on the scores from 2008-09. The smallest effect was noted for grade 7; however even in the 7<sup>th</sup> grade the gap present at 2007-08 was smaller based on the scores from 2008-09.

In the following graph, SS represents SSI schools while the Non-SS represent the paired schools. Grades 4, 7, and 8 are shown.

Figure 6 Math Repeated Measures Least Square Means for 2007-08 and 2008-09



# Impact on Student Attendance and Suspensions

It appears that during the first year the Strategic Staffing Initiative was in place, overall there was little positive impact on student attendance. In fact, analysis of absenteeism during the 2008-09 school year for students in all SSI schools combined indicates the mean number of days absent per child increased slightly from 2007-08 (increasing 0.32 days). On the other hand, the mean number of days absent per child in all paired schools combined declined slightly from 2007-08 (decreasing 0.43 days).

However, overall in both SSI schools and paired schools, there appear to have been fewer suspensions in 2008-09 than in 2007-08. For example, at Ranson Middle School, 22% of the students had fewer suspension days in 2008-09 compared to only 8% who had more suspension days; at Bruns Avenue 15% of the students had fewer suspension days while only 1% had more.

**Attendance.** Table 12 indicates the mean number of days students in SSI schools and the paired schools missed each of the past three years. The number includes excused and unexcused absences but does not include out-of-school suspensions. The median is also provided due to the potential influence of outlier values, as the range of days across schools varied greatly in some instances.

Table 12 Mean, Median, and Range for the Number of Days Absent: 2006-07 through 2008-09 School Years

	,	2008-2009	2007-2008	2006-2007
SSI Schools	Mean	5.62	5.30	6.47
	Median	4.00	3.00	4.00
	Range	0-101	0-145	0-72
Paired Schools	Mean	5.80	6.23	6.64
	Median	4.00	4.00	5.00
	Range	0-64	0-86	0-45

For the SSI schools overall the mean number of days absent per child in 2008-09 was lower than it was in 2006-07, but the mean increased from 2007-08 to 2008-09.

However, as seen in Table 13, for some SSI schools, the percentage of students with fewer absences in 2008-09 than in 2007-08 was actually higher than the percentage of students with more absences. For example, the percentage of students with *fewer* absences in 2008-09 than 2007-08 was more than 10 points higher than the percentage with *more* absences at Briarwood Elementary, Reid Park Elementary, Sterling Elementary, and Westerly Hills Elementary. Therefore, the mean number of absences having increased indicated several students in those schools had many more days absent in 2008-09 than they did in 2007-08. While one year is not enough time to determine if a trend is sustainable, the improvement should be watched.



Table 13 indicates by school the percentage of students with fewer absences in 2008-09 than 2007-08, the percentage with more absences, and the percentage of students with no change in the number of absences. The percentages in the table reflect the absentee records for students who were at these schools in 2008-09. Thus the analysis includes absentee records for students who were in an SSI school or a paired school in 2008-09 and their absentee records no matter which Charlotte-Mecklenburg School they were enrolled in during the 2007-08 year. The number of students in the analysis may be less than the actual enrollment in the school since students were included only if we have records for them for the 2007-08 and 2008-09 school years.

Table 13 Percentage of Students in the Schools with Fewer, More, or the Same Number of Absences in 2008-09 than 2007-08

			No Change in Number of
	Fewer Days Absent in	More Days Absent in	Days Absent in the 2 Years or No Absences Either Year
	2008-09 than 2007-08	2008-09 than 2007-08	or No Absences Eitner Year
Briarwood Elementary			
(N=204)	49.0%	33.8%	17.2%
Comparison School 1			
(N=187)	48.1%	41.2%	10.7%
Bruns Avenue Elementary			
(N=153)	47.7%	40.5%	11.8%
Comparison School 2			
(N=343)	50.4%	39.4%	10.2%
Devonshire Elementary			
(N=164)	47.0%	43.3%	9.8%
Comparison School 3			
(N=156)	46.2%	39.1%	14.7%
Reid Park Elementary			
(N=198)	51.0%	37.9%	11.1%
Comparison School 4			
(N=163)	46.0%	36.8%	17.2%
Sterling Elementary			
(N=141)	49.6%	37.6%	12.8%
Comparison School 5			
(N=163)	46.0%	41.1%	12.9%
Westerly Hills Elementary			
(N=112)	50.0%	37.5%	12.5%
Comparison School 6			
(N=142)	57.7%	32.4%	9.9%
Ranson Middle			
(N=1091)	31.7%	54.6%	13.7%
Comparison School 7			
(N=1023)	43.7%	44.9%	11.4%

Strategic Staffing schools are in **bold**. The paired schools are indented. Students included in the analysis were in grades 3-8 during the 2008-09 year.



Suspensions. Table 14 indicates by school the number of students with fewer suspensions (both inschool suspensions and out-of-school suspensions combined) in 2008-09 than in 2007-08. In addition, it indicates the number of students with more suspensions in 2008-09 than in 2007-08 and the number with no change in the number of absences. Only suspension records for students who were at these schools in 2008-09 were used.

Table 14 Number of Students in the Schools with Fewer, More, or the Same Number of Suspensions in 2008-09 than 2007-08

	Fewer Suspensions in 2008-09 than 2007-08	More Suspensions in 2008-09 than 2007-08	No Change in Number of Suspensions for the 2 Years or No Suspensions Either Year
Briarwood Elementary (N=204)	8	3	193
Comparison School 1 (N=187)	3	0	184
Bruns Avenue Elementary (N=153)	23	2	128
Comparison School 2 (N=343)	23	9	311
Devonshire Elementary (N=164)	4	3	157
Comparison School 3 (N=156)	8	1	147
Reid Park Elementary (N=198)	19	10	169
Comparison School 4 (N=163)	9	3	151
Sterling Elementary (N=141)	5	1	135
Comparison School 5 (N=163)	8	7	148
Westerly Hills Elementary (N=112)	5	0	107
Comparison School 6 (N=142)	0	1	141
Ranson Middle (N=1091)	245	87	760
Comparison School 7 (N=1023)	99	27	897

Strategic Staffing schools are in **bold**. The paired schools are indented. Students included in the analysis were in grades 3-8 during the 2008-09 year.



#### Findings from the Teacher Surveys

During March, 2009, teachers at each CMS school were encouraged to complete an anonymous survey via K12 Insight (an online survey company). The items were developed by the Center for Research and Evaluation at CMS and combined to form five constructs:

- 1) Principal Standards Items were generated to align to the North Carolina standards for principal evaluations. On a 4-point Likert scale (Strongly Agree - Strongly Disagree), strongly agree equated to a 4, agree to a 3, disagree to a 2, and strongly disagree to a 1.
- 2) Safety and Behavior: Consistency by Administration Items were created based on aspects of the CMS definition of a safe and orderly school. The 3-point scale included *always*, *sometimes*, and never.
- 3) <u>Safety and Behavior: Consequences</u> Items were created based on aspects of the CMS definition of a safe and orderly school. As with the principal standards construct, a 4-point Likert scale, strongly agree to strongly disagree, was used.
- 4) <u>Safety and Behavior: Expectations and Perceptions</u> Items were created based on aspects of the CMS definition of a safe and orderly school and perceptions of safety by the teachers. Strongly agree to strongly disagree was used (4-point scale).
- 5) <u>School Problems</u> Items were created to provide context about certain problems each school may be facing. The scale had 4 points ranging from serious problem, moderate problem, minor problem, and not a problem at all. A 4 was assigned to not a problem at all, 3 was equal to minor problem, 2 equated to moderate problem, and 1 represented serious problem.

Overall the response rate for the entire District was 64%. The following indicates the response rate for each of the SSI schools:

- Briarwood Elementary School 59%
- Bruns Avenue Elementary School 72%
- Devonshire Elementary School 59%
- Reid Park Elementary School 78%
- Sterling Elementary School 98%
- Westerly Hills Elementary School 80%
- Ranson Middle School 49%

**Principal standards.** In the Principal Standards section, teachers completing the survey indicated their agreement with statements concerning their perceptions of whether the principal is an effective leader, is innovative in implementing needed changes, encourages faculty/staff to take leadership roles, empowers teachers to do what is necessary to improve student achievement, is able to resolve conflicts effectively, and has high expectations for students and staff. The combined results for this section of the survey are indicated by SSI school in Figure 7. The principal with the highest mean score on the Principal Standards construct was Westerly Hills. Given the 80% response rate at Westerly Hills, we are confident in this finding.



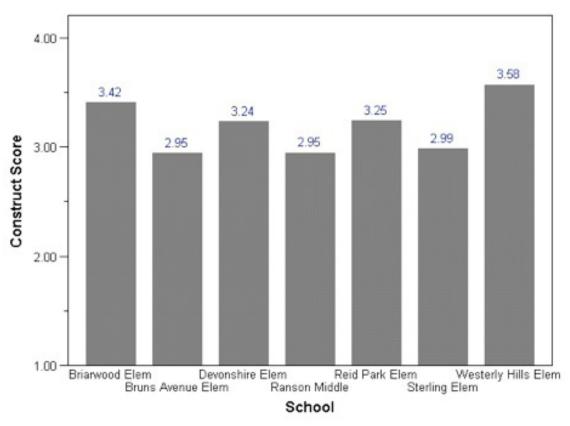


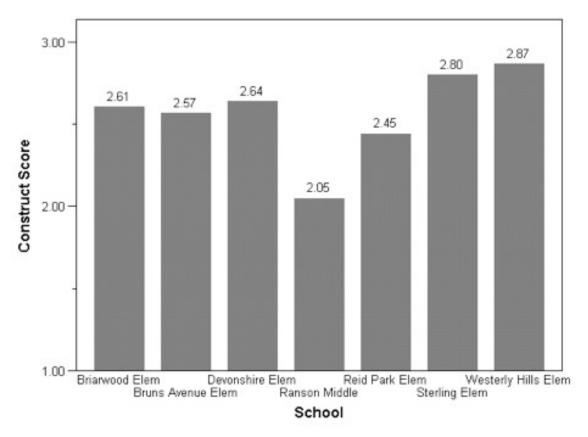
Figure 7 Principal Standards - Mean Scores by School

**Safety and behavior: Consistency by administrators.** In this section of the survey, teachers were asked to indicate how consistent the administrators have been in the way they handle safety and behavior issues, how quickly and consistently issues are handled, whether rules are consistently enforced, and whether security and/or resource officers are visible: *always*, *sometimes*, and *never* (3-point scale).

The results for each of the SSI schools are indicated in Figure 8. Again, the teachers at Westerly Hills rated their school highest among the SSI schools on the items that made up the Safety and Behavior: Consistency by Administration construct.



Figure 8 Safety and Behavior: Consistency by Administration - Mean Scores by School



Safety and behavior: Consequences. The statements concerning safety and behavior consequences include whether the consequences for behavior are known by the students and whether the consequences are handed out in a consistent manner. The scale ranged from strongly agree to strongly disagree (4-point scale). The results by SSI school are indicated in Figure 9. Westerly Hills teachers' mean score again was the highest among the SSI schools on the Safety and Behavior: Consequences construct.



1.00

Briarwood Elem

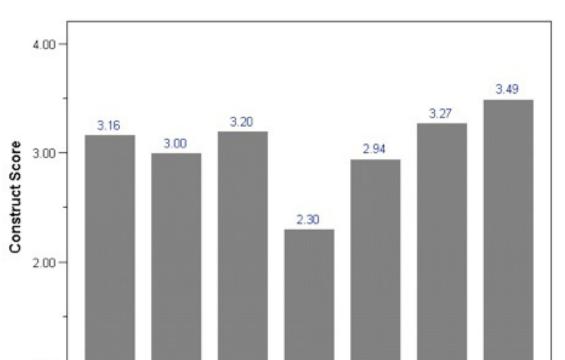


Figure 9 Safety and Behavior: Consequences - Mean Scores by School

**Safety and behavior: Expectations and perceptions.** The statements concerning safety and behavior expectations and perceptions comprise topics concerning whether students know the expectations for their behavior, what should be done in case of an emergency, whether effective strategies are in place to catch students with weapons, and whether discipline policies in general are effective in curtailing unwanted behavior. The SSI schools' results are indicated in Figure 10. The school with the highest construct score on Safety and Behavior: Expectations and Perceptions was again Westerly Hills.

Ranson Middle

School

Reid Park Elem

Westerly Hills Elem

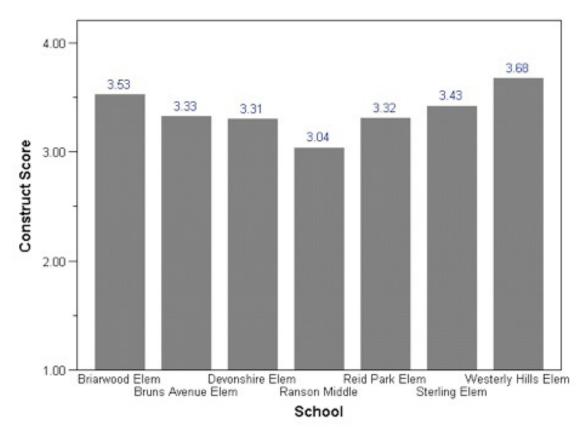
Sterling Elem

Devonshire Elem

Bruns Avenue Elem



Figure 10 Safety and Behavior: Expectations and Perceptions – Mean Scores by School



School problems. The section concerning school problems include statements about teacher and student absences, student tardies, student apathy, and whether teachers and students are shown respect by students. The responses ranged from serious problem to not a problem at all (4-point scale, serious problem = 1, not a problem at all = 4). The results for the SSI schools are indicated in Figure 11. As with the other constructs, Westerly Hills had the most desirable responses from their teachers for the *school* problems construct. However, not one school had a mean score that was at the minor or not a problem at all level.



4.00 Construct Score 3.00 2.64 2.46 2.45 2.34 2.02 1.94 2.00 1.84 Briarwood Elem Devonshire Elem Reid Park Elem Westerly Hills Elem Sterling Elem Bruns Avenue Elem Ranson Middle School

Figure 11 Severity of School Problems - Mean Scores by School

### Findings from the Interviews

From November 13, 2009, through December 10, 2009, the researchers interviewed all seven principals of the first cohort of the SSI schools.

**Background of the principal.** All SSI principals in this first cohort have at least five years experience as a principal. Only one has more than 20 years. Table 15 indicates the number of principals in each range of years of experience.

Table 15 Number of Years as a Principal

Years of Experience as Principal	Number of Principals
< 5 years	0
5-10 years	3
11-20 years	3
> 20 years	1



Four of the principals had prior experience as a principal in a school with demographics similar to their current SSI school; that is they had been a principal in a Title I school previously. For three of the principals this is their first experience leading a Title I school.

**Staffing brought with principal.** Each SSI principal had the opportunity to bring key personnel with them in order to build a leadership team. While each could bring an assistant principal, facilitators, behavioral management technician, and five teachers, not all did. Some brought educators from a former school; others did not. Table 16 indicates the number of principals who brought various educators with them.

Table 16 Leadership Team Members Brought to the SSI School

Leadership Style	Number of Principals Bringing Specific Leadership Staff with Them
Assistant Principal from former school	5
Facilitator(s) from former school	6
Teacher(s) from former school	4
Teachers from list of high growth teachers in district	7
Behavior Management Technicians	3

**Philosophy for turning around a school.** Each principal was asked what he or she believes are key factors in turning around a school. Table 17 summarizes the factors mentioned. The total number of principals is greater than seven since some indicated more than one factor.

Table 17 Key Factors Needed to Turn Around a School

Key Factors Needed to Turn Around a School	Number of Principals Indicating the Factor
Setting high expectations and holding students and faculty/staff accountable	4
Putting fundamental structures and policies in place for effective organizational management	3
Emphasizing improved instruction for increasing student achievement	2
Building relationships and growing the capacity of faculty/staff	2

One principal who had emphasized the importance of focusing on increasing student achievement summarized his/her philosophy of turning a school around as having the common sense to know what is right to do for students and having the courage to do it.



**Leadership style of principal.** Based upon each principal's responses to various questions about his or her leadership style and upon specific actions he or she had taken since becoming principal of that SSI school, we categorized each principal's leadership style as Directive, Distributive, or Directed Distributive. The results are shown in Table 18.

For our analysis, *Directive style* indicates the principal has used a top-down management style in leading the school; all major decisions have been made by the principals with little to no input from the faculty. The leadership team brought to the school by the principal may have been consulted. As an example, one principal walked through the school prior to becoming the leader of that school, determined what the key issues were, wrote all the school's policies and procedures, and created the planning schedule and lesson plan forms for teachers all prior to meeting individually with staff.

Distributive style indicates the principal is inclusive in decision-making and shares responsibilities. In this style, the principal leaves many decisions to the classroom teacher or other staff members while holding them responsible for results. As an example of this leadership style, one principal enabled her staff to determine how to fill two positions when the school gained staff positions based on average daily membership. Another indicated the faculty as a group agreed upon their perceptions and their dreams to determine where the focus should be first in order to turn the school around.

Directed distributive style indicates that while the principal may prefer a more distributive leadership style, the present situation influenced his or her decision-making style during that first year. In this leadership style, principals who had enabled any decisions to be made by faculty had led them step by step through the decision-making process. In two of the SSI schools, the principal indicated a more directive style was needed because of the multiple issues within the school, the past low academic performance of students, and the lack of staff capacity. However in both of these schools, the principal indicated he/she would move to a more distributive style as the faculty was able to take on more leadership. For example, one principal enabled teachers in one grade level to departmentalize only after guiding them every step of the way in developing the rationale for making the change, structuring what departmentalization would look like, and developing plans for implementation.

Table 18 Leadership Styles of the Principals

Leadership Style	Number of Principals
Directive	2
Distributive	3
Directed Distributive	2

**Biggest challenges principal saw when arriving at the school.** Each principal was asked what he or she saw as the school's biggest challenges as he or she became principal of the SSI school. Results are indicated in Table 19. Several of the principals cited multiple issues, but each was able to specify the one or two issues identified as most needing immediate attention. The total is greater than seven since most of the principals named more than one issue.



In addition, even though only a few may have mentioned a condition as being one of the biggest challenges, this does not imply that other principals did not find that particular condition in their schools as they began the turnaround efforts. For example, while only one principal named a dirty school as an immediate primary challenge, almost all seven principals told the interviewers that when they arrived at their schools they found the facility dirty and unappealing. As another example, only one mentioned the weakness of the Exceptional Children's (EC) department at the school as being one of the biggest initial challenges; yet several talked at length about the need to replace the EC or Talent Development teachers due to ineffectiveness.

Table 19 **Initial Challenges Facing the SSI Principals** 

Initial Challenges	Number of Principals Naming Issue as One of the Biggest Initial Challenges
Discipline/unsafe school	4
Low student achievement	3
Ineffective instruction	2
Too much emphasis on behavior and too little on engaging students	2
Low expectations and little accountability for teachers and students	2
Teachers' attitudes	2
Ineffective Exceptional Children's department	1
Dirty facilities	1

Initial actions taken by principal. During the interview, the researchers asked the principals what their first actions were after becoming principal. While some of these actions addressed specific challenges that had been identified, others did not. These principals took over the leadership of the schools on July 1, 2008, a time when teachers were typically not at the school. Therefore while not indicative of all, several of the principals indicated their first actions were those they could do by themselves or with the help of a few of their leadership team. As Table 20 indicates, most of the actions focused on policies, professional development, and building relationships.



Table 20 **Initial Actions Taken by SSI Principals** 

Initial Actions	Number of Principals Indicating the Initial Action
Created structure and developed policies and procedures	4
Provided professional development; in house taught by principal or by outside experts or professional development provided off campus	
Building relationships through individual meetings with teachers and/or staff retreats	3
Addressed curriculum issues through training and implementation of specific curriculum	2
Had facilities cleaned and/or painted	2

**Major initiatives taken by principal during the first year.** Much of the interview centered on all the specific initiatives that the principals had taken throughout their first year as an SSI principal. These initiatives were then categorized into actions taken concerning facilities, staffing, instruction, and operational issues.

**Major initiatives concerning facilities.** One common concern expressed by almost all the principals dealt with the lack of cleanliness in the buildings and the evidence of prior neglect in maintaining the school. In addition to the physical facility, several said that the buildings were filled with outdated supplemental resources, much of which had never been used but had cluttered classrooms and storage spaces. All indicated they believe all children deserve a clean, orderly school in which to learn.

As Table 21 shows, in addition to cleaning and painting, some principals mentioned other actions they took concerning the facilities. One moved teachers so that all teachers in the same grade level were in close proximity to enable more effective collaboration. Several set up planning rooms with centralized supplemental materials. Two principals reallocated how rooms were used. For example, one took away whole classrooms used as offices and turned them back into classrooms.

Table 21 Initiatives Focused on the Facility Taken by SSI Principals

Initiatives on the Facility	Number of Principals Indicating Use of Initiative
Cleaning and painting	5
Replacing cleaning staff	2
Reallocating how rooms are used	2
Moving teachers for more effective collaboration	1



Major initiatives concerning staffing. All the principals stressed that quality instruction was important to them and that during their first year they often found ineffective teaching occurring in the classroom. As a result, during their first year at the SSI school, all of the principals made changes to their faculty. The majority placed several teachers on action plans. In some cases teachers were replaced, and in others positions were eliminated. Table 22 points out these various changes made by the principals.

Table 22 Initiatives Focused on Staffing Taken by SSI Principals

Initiatives Focused on Staffing	Number of Principals Indicating Use of Initiative
Placed teachers on action plans	6
1 placed 1 teacher on action plans	1 principal placed teachers on
1 placed 3 teachers on action plans	"plans of action" prior to action plans
1 placed 4 teachers on action plans	the 2 <sup>nd</sup> year
1 placed 5 teachers on action plans	
2 placed 6 teachers on action plans	
Hired classroom tutors for all levels	1
Eliminated Title I tutor positions	2
Replaced custodians	2
	2
Replaced exceptional children's teachers	1 is still trying to replace the EC teacher
Replaced Talent Development teacher	1
Placed some of the existing staff in teacher leadership roles	1

Major initiatives concerning the school's instructional program taken by principal. As shown in Table 23, the approach taken to improve instruction and thus improve student achievement varied widely among the principals. Several of the principals expressed deep concern at what they had found when they arrived at the school. One told of children in all grade levels coloring almost all day. Another told of teachers' constant use of worksheets for instruction. Still another told of the practice of letting the students have "Freedom Friday" where they watched movies and played games all day on Friday if they had behaved and had done their work Monday through Thursday.

A few of the SSI principals specifically said they were not program people and therefore did not bring in any new programs aimed at enhancing the instruction at the school. They believed their teachers needed "to get back to the fundamentals." On the other hand, several of the principals brought in programs to strengthen reading and math – programs they had used successfully in other like schools.

Several principals repeated key messages continually through the year. One of these principals told the faculty that there were three priorities for the year: (1) literacy, (2) literacy, and (3) literacy. Others told their faculty that in the past too much emphasis had been placed on behavior and clearly too little had been placed on academics. Therefore throughout the year, a couple of the principals repeatedly emphasized that engaging students is key to discipline. In fact, one of those principals put a teacher on an



action plan – a teacher who felt his/her problems stemmed from a lack of good classroom management skills. In the action plan however, the principal included only items specifying student engagement, not discipline per se. Another continually told his/her faculty that they must have "purposeful instruction" in every class every day to decrease behavioral issues and increase student achievement.

Some of the SSI principals explicitly told their faculty that they would be expected to follow the principal's instructional mandates; if they could not, they should plan their exit from the school.

Table 23 Initiatives Focused on the Instruction Taken by SSI Principals

	Number of Principals Indicating
Initiatives Focused on Instruction	Use of Initiative
Brought in specific programs:  Orton & Gillingham Reading Program  AIMSWeb and Maze Reading  STAR  Lucy Caulkins Writing Workshhop  Kathy Richardson Math for K-2  Word Study program for K-2  AVID school wide  Think Maps school wide	3
Had teachers use fundamental CMS curriculum, such as Accelerated Reader (teachers in that school had not been using a lot of CMS curriculum)	1
Used intervention models: Response to Intervention and Pyramid of Support	2
Provided extensive professional development  Brought in outside experts in instruction  Staff retreat – Love and Logic  Sent staff away for professional development (including Harvard class on Instructional Rounds and Universal Design for Learning)	5
Created assessment tools  Created assessment tools to measure progress in K-1 math  Created common assessment by modeling questions from released End-of-Grade tests	1
Gave common assessments and use results extensively in planning  Ranged from every 10 days to once a quarter  Some were school created and others used ClassScapes	4
Had teachers use Data Wise in planning	5
Created a standards-based report card so parents can have meaningful information; beside each objective the goal for the year, the quarter, and where the child is at this time are listed	1
Principal/Facilitators model effective lesson planning and instruction	2
Principals examine all lesson plans	3



*Major initiatives concerning the school's operations.* To improve student achievement all the principals made changes in how the school's master schedule was structured. Most of the changes were made to increase time for reading and math and to provide more time for skills grouping. As one principal put it, "Our students are now in reading or math all day in some form or other." The specific amount of time spent in reading or math and methods of grouping varied from school to school. The following indicates some of the variations used in redoing master schedules

- 3<sup>rd</sup> through 5<sup>th</sup> grade all have literacy at the same time to enable better skills grouping
- Literacy for each grade level held at different times during the day to enable teaching assistants and other staff to be better utilized in the classrooms
- Math skills grouping held every Friday
- Math taught for 90 minutes a day with the instruction during the first 60 minutes at grade level and the last 30 minutes (Math Club) being used for grouping/remediation
- Literacy taught 120-150 minutes a day; math taught 90 minutes a day
- Reading and math taught at grade level each day; with additional time each day devoted to math and literacy by grouping students according to individual skills needed; all teachers in school work with skills groups each day for 3 week blocks
- Lowered class size by changing how some former support staff were used putting more support personnel into the classroom

The majority of the principals described significant changes made in the teacher planning process. Most created much more structure to the planning process. The following indicate some of these various changes to the planning process made by the principals.

- Planning sessions are highly structured with a set agenda, objectives, and norms; includes what planning is to occur each day of the week
- Planning sessions are centered on "how to teach" and not on content
- Teachers now must bring to planning sessions their lesson plans in specific format and copies of materials they will use in their classes must be turned in weekly to the facilitators; facilitators once a week will have all materials copied
- Various grade levels have different amount of planning a week: 3<sup>rd</sup>-5<sup>th</sup> team plan every day, 1st and 2nd grade teachers team plan 3 or 4 days a week, and kindergarten teachers plan as a team for 90 minutes a week
- Planning time, particularly with team members, has been increased -- in one school, all teachers have 90 minutes team planning a week and 45 minutes individual planning on the other days of the week; in another school, all teachers now have 90 minutes a week to work with their grade level for planning in reading and 90 minutes a week for math planning
- Facilitators lead all planning sessions; facilitators teach faculty how to use data in planning lessons for individual students
- Data Wise process is used extensively in planning process

- Teachers are allowed to do some team planning off site
- On a wall-sized data board in the planning room, extensive and organized records of achievement for each individual student in the school; this enables teachers to visually see where students are as they plan

In addition, as indicated in Table 24, other initiatives aimed at increasing operational effectiveness were put into place by several of the principals.

Table 24 Initiatives Focused on the School's Operations Taken by SSI Principals

Initiatives Focused on School Operations	Number of Principals Indicating Use of Initiative
Changed master schedule	6
Restructured how teachers do planning	6
Changed how Title I money is spent	
Eliminated tutors paid by these funds	
Used funds for professional development	
Used funds to buy needed classroom resources	2
Single gender classes	2
Reorganized how teachers were used in order to lower class sizes	1
Changed ESL and EC instruction to an inclusion model	1
Creation of Miracle School - an after school achievement blitz	1

*Major initiatives concerning the school's culture taken by principal.* From the beginning of their first year at the SSI school, some of the principals consciously focused on ways to change (a) the culture of the school to one of trust and collaboration and (b) the environment to one conducive to improving student achievement and data-based decision-making. Many began to change the culture by doing simple things such as leaving their office doors open. Others made certain that all decisions were completely transparent. Others gave teachers more time for collaboration through longer team planning. Others worked with parents so they could be more effective in the school's environment. Still others made use of data, particularly through the Data Wise process, a centerpiece in decision-making.

One principal emphasized how slowly cultures are changed. In fact, that principal indicated that after one year his/her faculty is complying with policies and collaboration but has not really bought into the changes. That principal is in hopes that by next year the changed culture will be internalized, and the faculty will have bought into the "way we do business."

Several principals continually talked about the changing culture of the school. On the other hand, the principal of one of the other schools never mentioned the word "culture" throughout the entire interview; yet it could be argued that the changes he/she made in order to increase student achievement changed the culture to one that is collaborative and data-driven.



Table 25 shows some specific efforts some SSI principals indicated they took to change the culture at their schools.

Table 25 Initiatives Focused on the School's Culture Taken by SSI Principals

	Number of Principals Indicating
Initiatives Focused on the School Culture	Use of Initiative
Make Data Wise process an integral part of the decision-mak-	
ing and planning processes	5
Counseled educators who were not a good fit for the desired culture of the school; eliminated "professional bullying"	4
Made decisions by administration transparent; kept principal's door open for teachers	3
Increased parent involvement – educating parents about effective involvement	2
Provided incentives to encourage teachers to collaborate more	1
Provided teachers with training on working with each other and problem-solving (Love & Logic)	1
Increased focus on tardies and absences; provided incentives to parents for getting students to school and to school on time	2
Made and enforced dress code for all	1
Converted school to a uniform school	1
Began each faculty meeting praising a teacher or teachers for job well-done	1
Continually asked faculty "Would you want your child here?"	1
Created a pledge for students to say each morning to set the tone for the day:	
I will be Respectful	
I will be Responsible	
I am Ready to learn	
Posters with the 3R's are posted throughout building	1
Listened more to students enabling them to become stakeholders in their school	1
Established club Fridays for 5th graders to increase pride in	1
school	1

Major focus for the principal in year 1 and year 2. The principals were asked to sum up what had been the single major focus during their first year at the SSI school. Then they were asked what the major focus was for the current year, year 2. Table 26 summarizes the focus for each year. Keep in mind totals for each year may be more than seven since a couple of the principals gave more than one focus for a year.

Table 26 Focus by the SSI Principals During the First Two Years

	Number of Principals	Number of Principals
Focus for Years 1 and 2	in Year 1	in Year 2
Improving discipline	2	
Improving instruction	3	1
Ensuring meaningful work being done by students		1
Increasing student achievement; growing students	2	2
Increasing professionalism for staff	2	
Ensuring fundamentals in place for curriculum	1	1
Changing school's culture	2	1
Increasing expectations and accountability for adults and		
students	2	
Improving quality of work begun first year		2

Many of the principals talked about the large challenges that remain for their schools. Several cited the population of students they serve as a potential barrier to increasing student achievement. Many of their students come to school each day with hunger, clothing, and health issues, and often those same students must deal continually with anger management issues. Many of these schools are in very transient areas, and therefore the student body is constantly changing. Yet all the principals expressed confidence that they could make a positive difference in the school.

What would the principal like to do after three years. At the close of each interview, the principal was asked what he/she would like to do at the end of the three year commitment: (1) stay at the school to continue to reform what he/she had begun or (2) move to another school in order to turn it around.

Two of the principals quickly and emphatically indicated they enjoyed the change agent role and would like to try another school. In fact, one of these individuals has even developed a succession plan for the present school so that all the gains can be sustained.

On the other hand, two principals with little hesitation said they would like to stay to continue the work.

Three of the principals gave qualified answers. One of these indicated the decision would depend upon whether he/she felt that all that could be done in fact had been done. Another stated that he/she would like to remain at the present school but would certainly be willing to move if it were to a Title I school.



## SUMMARY AND CONCLUSIONS

Districts around the United States are working toward finding solutions to turning low performing schools into high performing schools. The methods, strategies, and philosophies on how to do this vary, and there is no consensus in the research about what is the best approach. Nevertheless, one approach that has gained momentum is reconfiguration of key leadership and staff within low-performing schools. This is the approach that Charlotte-Mecklenburg Schools is studying. Because the initiative has been in place for only one year, this report is only an interim report.

Analysis of the data seem to indicate that after one year, most of the SSI schools saw changes in student achievement and/or the culture of the school. As seen in Figure 12, what types of results were seen largely depended upon the focus for the initiatives the principal and his or her leadership team brought to the school that year.

Some principals determined the focus for year one needed to be changing the culture to one of collaboration and a more positive teaching and learning environment. Those schools typically had higher scores on the teachers' surveys. Other principals immediately focused on increasing student achievement by bringing in specific programs, emphasizing improving instruction through more structured lesson planning and professional development for engaging students, and holding the adults more accountable for results. Those schools generally had greater improvement in student achievement.

It appeared the principal's past experiences in a school such as his or her SSI school as well as his or her own leadership style and general philosophy on turning around a school influenced their initial initiatives and focus throughout that first year.

Turning a School Around: Strategic Staffing Initiative Principal Principal's Leadership Principal's Philosophy for Background Turning Around a School **Focus for Turning Around** School Initiatives Staffing Curriculum & Operations **Facilities** Instruction Results Impact on Student Impact on Culture Achievement

Figure 12

#### Student Achievement Results

Quantitative results indicate:

- All Strategic Staffing schools had between 1 and 14 percentile point increases in proficiency in reading (without retests) from 2007-2008 to 2008-2009
- From 2007-2008 to 2008-2009, six of the SSI schools had increases in percent proficient in math, with increases ranging from 5 percentile points to 23 (Bruns Avenue Elementary, Devonshire Elementary, Reid Park Elementary, Sterling Elementary, Westerly Hills Elementary, and Ranson Middle Schools); one SSI school had a decrease in the percentage of students proficient in math from 2007-08 to 2008-09
- For three of the SSI schools, in both reading and math, there was statistically significant positive movement in achievement levels over the two years (Devonshire Elementary, Sterling Elementary, and Ranson Middle Schools)
- Two SSI schools statistically outperformed their paired schools in the percentage of students demonstrating proficiency in math as well as the percentage of students meeting growth expectations in both reading and math (Devonshire Elementary and Sterling Elementary Schools)
- There appears to have been minimal impact on absenteeism or suspensions

#### Teacher Survey Results

Teacher survey data indicates that Westerly Hills had the highest desirable mean scores of all SSI schools on all constructs: Principal Standards, Safety and Behavior: Consistency by Administration, Safety and Behavior: Consequences, Safety and Behavior: Expectations and Perceptions, and School Problems. For all schools, the construct with the lowest mean scores was School Problems. This indicates teachers as a whole in the SSI schools believe there are significant problems in the schools.

#### **Principal Interview Results**

An overarching conclusion that emerged was that each principal seemed to accomplish what they focused on. Qualitative findings indicate that each SSI principal had their own unique style and focus in leading their school. Several principals stated their sole focus was increasing student achievement, and they appear to have succeeded in that during the first year. Other principals focused on changing the culture and they appear to have succeeded in making the culture more positive.

The leadership styles were varied across the seven principals (ranging from Directive to Distributive). The two biggest challenges named by the principals were discipline and/or student achievement. Most took steps to clean up the schools, replace teachers and staff, and restructure the schedules. As far as programs, a couple of principals brought in new curriculum programs as the primary program, while a couple brought in programs or curricula to supplement CMS sponsored curricula, and some didn't bring any new programs. Lastly, all principals provided professional development differently (e.g. some sent teachers to training, some brought the training to the school, and some focused on training from within).

This is only an interim report, and thus the schools will be closely followed for two more years to see if gains made during the initial year are sustainable and/or if other changes occur after the foundation was laid during the first year.



## REFERENCES

Camburn, E., Rowan, B., & Taylor, J.E. (2003). Distributed leadership in schools: The case of elementary schools adopting comprehensive school reform models Educational Evaluation and Policy Analysis, 25, 347-373.

Duke, D. (September/October 2004). Turnaround principal: High-stakes leadership. National Association of Elementary Principals, 12-20. Retrieved on November 15, 2009 from http://www.naesp.org/resources/2/Principal/2004/S-Op12.pdf.

Duke, D. (2005). Keys to sustaining successful school turnarounds. Darden-Curry Partnership for Leaders in Education, University of Virginia. Retrieved on November 15, 2009 from http://www.darden.virginia.edu/uploadedFiles/Centers\_of\_Excellence/PLE/KeysToSuccess.pdf.

Elmore, R. (Winter 1999-2000). Building a new structure for leadership. American Federation of Teachers, 23, 16-23.

Grissom, J.A. & Loeb, S. (2009, November). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals identify the central importance of managerial skills. Unpublished manuscript. University of Missouri, Columbia, Missouri & Stanford University, Stanford, California.

Malen, B., Croninger, R., Muncey, D., & Redmond-Jones, D. (2002). Reconstituting schools: "Testing" the "theory of action". Educational Evaluation and Policy Analysis, 24, 113-132.

McNeil, M. (September 2, 2009). Tight leash likely on turnaround aid. *Education Week*. 29, 1-21.

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