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Cornerstone Literacy Initiative

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FOURTH YEAR EVALUATION REPORT FOR THE CORNERSTONE LITERACY INITIATIVE

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TABLE OF CONTENTS

INTRODUCTION	1
EVALUATION GOALS	2
CONTEXT	2
CORNERSTONE LOGIC MODEL	6
IMPLEMENTATION	8
FINDINGS	10
Fulfilling Schools.....	11
Implementing Schools	16
Partially Implementing Schools.....	19
Low Implementing Schools	23
IMPACT	27
INTERMEDIATE IMPACTS.....	27
Impact on School Culture	28
Impact on Parent Engagement	29
Impact on Classroom Practice	29
Impact on Academic Growth.....	30
Impact on Student Social/Emotional Development.....	31
Perceptions Regarding Cornerstone’s Impact on Test Scores	32
IMPACT ON STUDENT OUTCOMES	33
Jackson Outcomes.....	35
Talladega Outcomes.....	39
Bridgeport Outcomes	42
Greenwood Outcomes.....	46
New Haven Outcomes	49
Springfield Outcomes	52
Horry County Outcomes	55
Summary of Student Testing Outcomes	60
FACTORS THAT FOSTER OR CHALLENGE IMPLEMENTATION.....	61
SCHOOL-LEVEL FACTORS AND CORNERSTONE SUPPORTS	61
DISTRICT-LEVEL FACTORS	64
OTHER LITERACY PROGRAMS AND PERCEPTION OF CORNERSTONE	66
SUMMARY OF FINDINGS	69
CONCLUSION.....	72
APPENDICES.....	74

INTRODUCTION

The 2004-05 school year marked the fifth year of the implementation of the Cornerstone National Literacy Initiative. By the end of this fifth year, Cornerstone activities were being carried out in 22 schools in 7 districts¹. Since the New York Institute for Special Education awarded the evaluation of Cornerstone to the New York University Institute for Education and Social Policy (IESP) in 2001, IESP has tracked both Cornerstone implementation and Cornerstone outcomes at participating school sites. This fourth evaluation report summarizes findings from data collected during the 2004-05 school year, including surveys, interviews, standardized student test score outcomes, and results of the Developmental Reading Assessment (DRA).

The report is organized into five sections. An introductory section explains the goals of the evaluation, the context in which the Cornerstone reform is operating, and lays out our understanding of the Cornerstone theory of action and a description of the Cornerstone model. The section that follows examines the implementation of Cornerstone in the schools by clustering them along four levels of implementation. The impact of Cornerstone on school culture, classroom instruction, and on students' social-emotional and academic growth as well as test score growth is analyzed in the third section. In the fourth section we consider the lessons learned from the preceding analysis in terms of factors that foster or challenge Cornerstone implementation. A concluding section summarizes the major findings of our report and offers recommendations for Cornerstone's ongoing and future work. The appendices include an addendum report that explores the first year of the Foundation school model, background information on the schools participating in Cornerstone as well as technical information about our analysis.

As we write, Cornerstone's sixth year is well underway. Many of the lessons learned from the early years of implementation have already been integrated into current Cornerstone operations. Cornerstone has reflected on its work and learned from both successes and challenges in the wide variety of contexts within which it works. Our report offers systematic analysis of data from participating Cornerstone sites to contribute

¹ We distinguish between four types of Cornerstone schools: Cornerstone-supported schools which include the Foundation schools, district-supported schools that have been brought on in existing Cornerstone districts where Cornerstone support is paid for by the district, partner sites that have teamed with Foundation schools and are also supported with district funds, and one school that is supported by outside funding.

to the organization's knowledge base and enhance its efforts to strengthen future work in the schools.

EVALUATION GOALS

Our evaluation seeks to document and understand the implementation and impact of the Cornerstone Initiative in participating schools. Three research questions continue to frame our evaluation:

- To what extent have participating schools and districts implemented the Cornerstone model?
- To what extent has implementation made an impact on school culture, classroom instruction, and students' social-emotional and academic growth?
- To what extent have student test scores and DRA levels in participating schools and districts changed as a result of Cornerstone's implementation?

We address the first two questions by collecting and analyzing survey and interview data from all participating sites and districts, and from Cornerstone staff. We address the third question by analyzing the results of district and state standardized test scores administered to students in Cornerstone schools, and by analyzing the outcomes of the Developmental Reading Assessment (DRA), an instrument used in Cornerstone schools to evaluate student literacy growth.

CONTEXT

Instructional practices in literacy have changed dramatically over the last 25 years, through the introduction of schema theory, new research on comprehension and metacognition, a shift toward literature-based instruction, integrated approaches to language arts, and process approaches to teaching writing. In 1998, the National Research Council, based on a meta-analysis of the empirical research on early literacy, found that the most effective literacy instruction combines explicit instruction in skills such as phonics and phonemic awareness embedded in enjoyable and motivating reading

and writing activities that emphasize comprehension and meaning. This combination, usually defined as the balanced literacy approach, is generally accepted as best practice by the major professional education associations and is required by state and federal policies.

Despite the many changes in instructional strategies, as well as in curriculum and materials, elementary school reading achievement has remained relatively stable. Moreover, too many students leave school lacking the skills needed to succeed in today's society, and a disturbing achievement gap exists between middle-class white students and low-income and/or minority students. Growing public concern has defined providing better literacy instruction a national priority for improving the nation's education. When policymakers and educators turned to research to discover what reforms would promote better student literacy, one of the most compelling findings was that the quality of the classroom instruction that children receive in reading—irrespective of the specific curriculum, program or materials—has the greatest impact on reading achievement.²

The primary vehicle for advancing the quality of classroom instruction is improving teacher practice and effectiveness through professional development. Improving teacher practice and effectiveness, however, requires teachers to do much more than rearrange their classrooms into learning centers, adopt new teaching techniques, or use different reading materials. For many teachers, successful practice involves examining, and perhaps changing, some of their most fundamental and often unarticulated values and beliefs about the nature of teaching and learning. There is consensus that effective professional development takes substantial time, is driven by a long-term coherent plan, is based on knowledge of human learning and change, and requires ongoing in-classroom support. Effective professional development is supported by collegial and collaborative relationships among teachers, and depends on strong instructional leadership from school administrators.

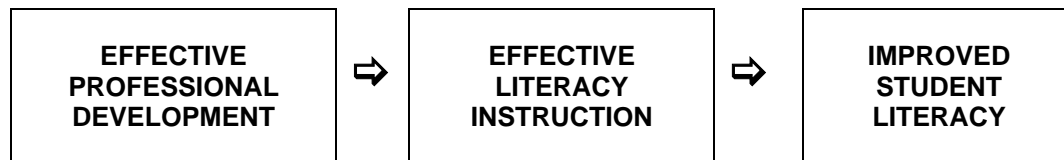
² Pressley, M. Allington, R., Morrow, L., Baker, K., Nelson, E., Wharton-McDonald, R. (1998). *The Nature of Effective First-Grade Literacy Instruction*. Report Series 11007. Albany, NY: CELA. Retrieved from <http://cela.albany.edu/reports/1stgradelit/main.html>.

THE CORNERSTONE NATIONAL LITERACY INITIATIVE

Cornerstone is a national initiative designed to improve the quality of literacy instruction in low-performing, high-poverty elementary schools. In the Cornerstone model, continuous professional development is defined as most essential to this effort, as indicated in the organization's mission statement, "*Ensuring student literacy through professional development.*" Cornerstone's goal is to ensure that all children reach an acceptable standard of literacy by third grade.

The Cornerstone Theory of Action is shown in Figure 1.

Figure 1. Cornerstone Theory of Action



CORNERSTONE PROGRAM COMPONENTS

Cornerstone professional development is firmly rooted in social learning theories that emphasize the importance of social interaction and modeling in human growth and development. These theories hold that, rather than passively receive information, learners actively construct their own understanding based on what they learn observationally through modeling, as well as from their own previous knowledge and experiences. The Cornerstone model makes extensive use of scaffolding, an instructional strategy in which the teacher models the desired strategy or task to be learned, then gradually shifts responsibility for accomplishing the task over to the learner.

The Cornerstone Initiative consists of the following program components:

Support for School-Based Professional Development and Teacher Learning

Each Cornerstone school selects **two teacher coaches**, usually from among the school faculty, to provide leadership in improving literacy knowledge and teaching practice within their school. Each coach is released from their teaching responsibilities half time to work as a Cornerstone coach.

Cornerstone assigns a **staff team** to each school to provide in-school literacy support, technology support, leadership development, parent/community development support, and support in working with the district. Staff team members help the coaches develop expertise in student and adult learning, literacy, and professional inquiry. Other members of the staff team provide support for the school principal and parent involvement.

Cornerstone coaches lead a wide range of professional development activities designed to enhance teacher content knowledge including **whole faculty professional development, grade-level meetings, school-based workshops, and book study. In-classroom modeling, demonstrations, and peer coaching** are essential elements in the Cornerstone model.

To enhance professional learning, Cornerstone provides each school with **information technology equipment** including laptops, videoconferencing equipment, digital cameras, and multimedia projectors, as well as technical support.

At the beginning of each school year, Cornerstone team members work with the whole school faculty on strategic planning. Teachers and administrators develop an **asset map** that identifies school strengths and challenges, leading to the creation of school goals and a **literacy action plan**.

Each school establishes a **leadership team** consisting of the Cornerstone coaches, the school principal, other school administrators, supervisors or teachers, and parents/community members. The leadership team meets regularly to discuss implementation and address literacy issues and concerns.

Cornerstone coaches and school principals participate in **Cornerstone national and regional meetings**.

The Cornerstone staff team works with the school leadership team to plan school-based professional development experiences based on the unique needs of the school and district. Cornerstone provides individualized support and development to principals, coaches, family/community representatives, district strategy managers, and superintendents.

Cornerstone Literacy Framework

Cornerstone provides a comprehensive, research-based **literacy framework** that defines the essential elements of literacy learning. The literacy framework describes two types of cognitive strategies: surface structure systems (grapho-phonetic, lexical, syntactic, and word problem solving strategies) and deep structure systems (semantic, schematic, pragmatic, and cognitive strategies for comprehending.) Cornerstone's professional development activities often have focused on the deep structure systems to meet a perceived need in the field.

Family and Community Development

Literacy learning takes place both in and out of school, within social, personal, and instructional contexts. Cornerstone staff team members assist schools in working in partnership with parents to support children's literacy development. Schools are able to apply for additional funds for **parent involvement activities**.

School Review and Self-Assessment

Each year, **school review** teams, composed of peers from other districts and led by Cornerstone staff, visit each school for several days to analyze school progress in implementing the Cornerstone approach. They subsequently prepare a written report for each school visited. Annually, Cornerstone coaches and school principals participate in at least one review visit. These visits serve as professional development opportunities for review team participants.

Foundation Status

Schools that have been successful at implementing Cornerstone over the course of the four-year implementation cycle apply for and can be awarded three additional years of support, and become **Foundation schools**. Foundation schools partner with other district schools to spread the Cornerstone work.

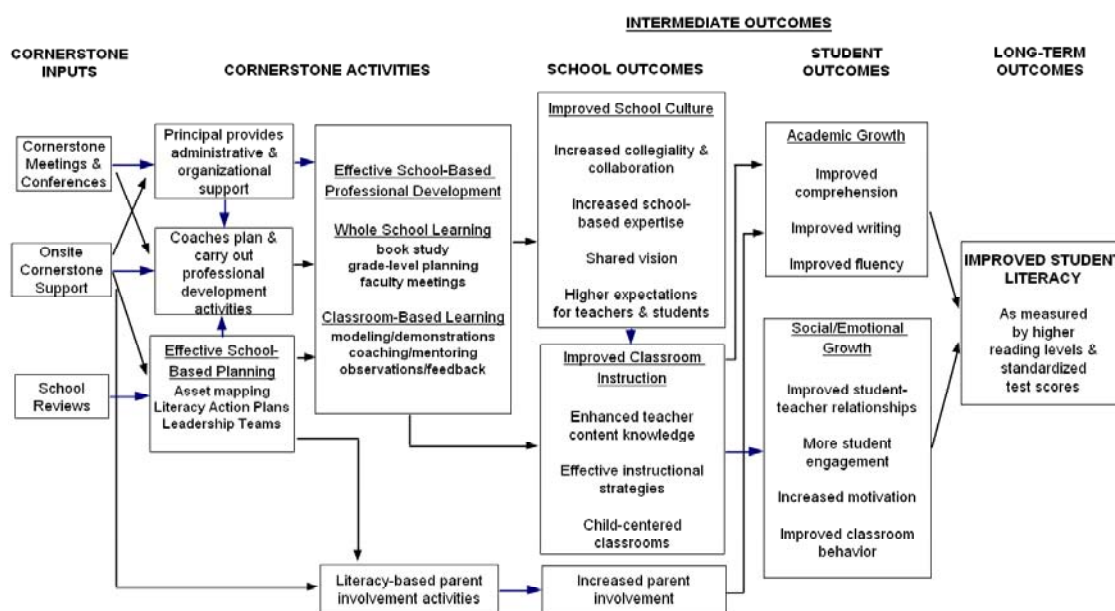
CORNERSTONE LOGIC MODEL

The Cornerstone staff team works to build school-based expertise throughout the four years of program participation. The logic model presented in Figure 2, describes Cornerstone's intended program inputs, activities, outputs and resulting benefits. The model makes explicit the expected links between program investments and intended outcomes and helps further articulate Cornerstone's theory of action by showing exactly how the Initiative is expected to produce the desired results. The links between professional development and student achievement in the logic model are not direct. Within each school, the two literacy coaches, supported by the school principal, are the key actors in planning and implementing the various professional development activities. Professional development influences teacher knowledge and practice and helps build a shared philosophy about teaching and learning within the school. Improved teacher knowledge and practice, in turn, results in more effective classroom instruction that brings about increased student knowledge and skills leading to better student achievement.

Two types of variables can facilitate or hinder program implementation and the accomplishment of program goals. Antecedent variables are influences present before the program intervention. They include teacher and administrator knowledge of literacy

instruction and philosophies about teaching and learning, school or district reading approaches, existing school culture, and previous experience with embedded professional development. Mediating variables operate at the same time as the intervention. These can include district-level support for Cornerstone; teacher, coach and principal turnover; competing priorities within the district or school; and student mobility. We consider the influence of these variables in the following sections.

Figure 2. Cornerstone Logic Model



All of the work above occurs against the backdrop of the school district context.

The Sample

During 2004-05, Cornerstone staff worked directly with 18 schools within seven school districts. Table 1 provides a list of the 2004-05 Cornerstone schools included in the analysis presented in the sections below and indicates when they joined the Initiative.³

³ Williams Elementary in Greenwood, MS was not considered in the analysis for this report. The school experienced a tumultuous 2004-05 school year. Williams' new principal was under investigation for fiscal wrongdoing while in a previous position at another district, and because of this issue, there was a hiatus in Cornerstone support during the fall of 2005. Ultimately, there was another change in school leadership mid-year and Cornerstone resumed working with the school. The data we collected this year reflect the instability: the information was contradictory and often inaccurate--and was thus not usable.

Table 1. Cornerstone Districts and Schools in the *Fourth Year Evaluation Report*

DISTRICT	Schools	Year Joined Cornerstone				
		2000	2001	2002	2003	2004
Bridgeport, CT	Marín		✓			
	Maplewood Annex		✓			
Greenwood, MS	Threadgill		✓			
Horry County, SC	Aynor					✓
	North Myrtle Beach Elementary (NMBE)					✓
	South Conway				✓	
	Waccamaw				✓	
Jackson, MS	Lake	✓				
	Watkins	✓				
New Haven, CT	Bishop Woods			✓		
	Dwight					✓
	Martin Luther King (MLK)			✓		
	Ross-Woodward					✓
Springfield, MA	Freedman			✓		
	Harris			✓		
Talladega, AL	Stemley Road	✓				
	Sycamore	✓				

IMPLEMENTATION

In this report, we create clusters of schools ranked by their level of implementation, and then examine the implementation of Cornerstone components within each cluster. In previous reports, we analyzed our data in terms of the length of time cohorts of schools had participated in Cornerstone. One of our primary findings was that schools participating in Cornerstone the longest were implementing the Initiative at higher levels than schools that had joined more recently. Although the length of engagement with the Initiative plays a role in the level of implementation schools exhibit, the level of uniformity among cohorts was not consistent, and there was much less uniformity among cohorts in 2004-05 than in past years. In addition, using a time-cohort method to group schools limited understanding of the unique conditions at each site that have contributed to or threatened implementation. The implementation ranking presented in this report improves upon the implementation index presented in our *Third Year Report* because it considers both quantitative and qualitative measures. The previous implementation index relied exclusively on survey data from K-3 teachers and ranked schools only relative to one another.

Cornerstone's primary mission is "to ensure that all children reach an acceptable level of literacy by 3rd grade." Given that mission, Cornerstone staff originally emphasized K-3 literacy instruction in its work with schools. But not all participating schools concentrated their resources on these early grades, and since those first years, Cornerstone has increasingly defined itself as a whole-school reform with a literacy focus. Consequently, Cornerstone activities have expanded to include fourth grade and beyond in many of the schools participating in the Initiative. Because of this whole-school emphasis, our analysis includes information gathered from teachers in grades four and above in addition to early grades to determine the overall implementation ranking of a school.

Additionally, Cornerstone defines program success as the expansion of Cornerstone practices to other schools within participating districts. At the conclusion of the 2004-05 school year, two models for expanding the Cornerstone work were in place: two districts had completed their first year of supporting a foundation school-partner model and two districts had completed the first year of district-supported Cornerstone schools. The first year of Foundation schools' work with their partner schools is examined in Appendix A.

Implementation Ranking

To analyze schools' Cornerstone implementation level, we used both survey and interview data, and included data from teachers in all elementary grades within each school from 17 Cornerstone schools, including the four Foundation schools. We examined each school along important components of the Cornerstone model: school-based planning including asset mapping, leadership team meetings, and development of literacy action plans; whole-school professional learning activities such as book study groups and grade-level meetings (common planning time); classroom-based learning such as coaching, demonstrations, modeling, and observations; and the amount of coach contact with faculty. Within each cluster, we examined school-level factors that contribute to or hamper implementation such as school leadership and principal support for the Initiative as well as staff turnover. (More detailed information about the implementation ranking methodology is provided in Appendix B).

Implementation varied depending on a number of school-level factors. Given the range of organizational and contextual differences among the schools participating in the Initiative, and because of the non-prescriptive and adaptable nature of the Cornerstone model, such variation is predictable. However, our analyses of these 17 sites identified four clusters of schools, ranked according to their level of implementation:

Fulfilling Schools: Cornerstone implementation was evident across the school, was fully developed; and signs of institutionalization were also evident. Cornerstone was embedded into school culture and organization and transcended mere continuation of activities.⁴

Implementing Schools: The majority of teachers were regularly implementing Cornerstone components and those components were well developed.

Partially Implementing Schools: Cornerstone components and practices were being implemented by some teachers with some students, but had not been fully developed.

Low Implementing Schools: Some elements of Cornerstone were being implemented by a segment of faculty and students, but implementation faced significant internal and external challenges that impeded the spread of the Initiative.

Each cluster represents a range of implementation. However, within each cluster we found commonalities that led to a number of insights about indicators of effective implementation.

Findings

In 2004-05, the majority of Cornerstone schools (12 out of 17) were categorized as either Fulfilling (six schools) or Implementing schools (six schools) that were either progressing toward institutionalization or were institutionalizing Cornerstone practices. We characterize the nature of implementation in these clusters in more depth below.

⁴ Miles, M. &. Huberman, A.M. (1984). *Innovation Up Close: How School Improvement Works*. NY: Plenum Press.

Fulfilling Schools

There were six schools that met the criteria of Fulfilling. These schools were located in both northern and southern districts, and ranged in size from small to large. Fulfilling schools conducted planning activities including the asset map (with the exception of one school), and continued to use the asset map throughout the year. Fulfilling schools also held regular leadership team meetings. Professional learning opportunities were also in place: schools had regular book studies and common planning time. This cluster of schools also implemented an uninterrupted literacy block across the school at the K-3 level. Coaches in Fulfilling schools were released from classroom responsibilities to do Cornerstone work, and teachers reported working with those coaches.

Planning

Careful and deliberate planning was a feature common to Fulfilling schools. Plans for an entire year of continuous, integrated professional development were developed in Fulfilling schools before school started, and were adapted to meet changes that arose, including results from self- and school reviews. School-wide planning activities at Fulfilling schools included the asset mapping exercise, and the asset map goals were revisited several times throughout the year during faculty meetings. Both the practice of asset mapping and continual reference to the goals helped foster a collective sense of responsibility for the work. Commitment to both the process and content of the asset mapping among coaches and principals, as well as faculty, was seen across Fulfilling schools. Among Fulfilling schools, the asset map was displayed and accessible.

Planning for Cornerstone activities largely took place during leadership team meetings. The composition of leadership teams across Fulfilling sites varied—all included the principals and coaches, while most tried to achieve representation from all grade levels and include other literacy specialists and parent representatives. However their charge to guide Cornerstone work in the building was consistent. Among Fulfilling schools in their third and fourth years of implementation, leadership teams met weekly.

Among their foundation counterparts, these meetings were held bi-weekly. One foundation school reported convening the full leadership team monthly, but supplemented this with more frequent meetings between the coaches and the principal to coordinate work within their school and with the partner school.

Fulfilling schools typically had a planning or management unit in place before their participation in Cornerstone began. Once Cornerstone was initiated, these schools either held separate meetings or combined the groups. As part of their planning, principals and leadership teams drew on student data to identify the professional development needs at their schools. Data from other sources such as the asset map, teacher surveys, and standardized test results also contributed to development of their plan.

Professional Learning

Coaching

In all Fulfilling schools coaches were released half time to pursue their coaching responsibilities and develop their own capacities. The majority of coaches at Fulfilling sites were classroom-based teachers who shared classroom responsibilities with a co-teacher who could take over during their “Cornerstone time.” In Fulfilling schools, coaches modeled effective instructional practice for other teachers, conducted demonstration lessons, visited classrooms, participated in grade level meetings, and worked with Cornerstone staff through on-site meetings or videoconferences. How their time was spent varied at each site and depended on needs as assessed by the literacy action plan. Coaches also led school-wide professional development activities such as extended-day professional development sessions.

Survey data⁵ indicates that coaches at all Fulfilling schools were perceived by their colleagues as knowledgeable, helpful, open, and approachable. Most teachers (81%) reported consistent communication with coaches, and 90% of teachers indicated that they receive valuable feedback on their literacy instruction from a Cornerstone coach (see Appendix C).⁶

⁵ Survey data throughout the report includes all teachers in elementary grades within the Cornerstone schools.

⁶ Survey responses from 146 teachers from the six Fulfilling schools were included in our analysis.

Book Study

Among Fulfilling schools, regular book study groups met during staff meetings or during grade-level meetings (and were thus mandatory) or were sometimes held during time before or after school (and were voluntary). Book studies were seen as helpful by staff and enjoyed high levels of participation (78% of teachers report attending a Cornerstone book study once a month or more) (see Appendix C). Study groups among Fulfilling schools were often facilitated by teachers, rather than by the coaches or the principal. Having other teachers run the groups was described as capacity building by many Fulfilling sites. Principals and coaches participated in these meetings which they regarded as important learning opportunities.

Grade-Level Meetings & Staff Meetings

Commitment to Cornerstone was evident in the prominent role accorded Cornerstone within school grade-level meetings, staff meetings, and common planning time. Principals created schedules that accommodated regular common planning time for teachers and worked to ensure that this time was not consumed with non-Cornerstone work. Principals in Fulfilling schools not only mandated regular grade-level meetings, but also regularly attended these meetings. In the words of one principal, “If I’m in the building, I’m in the meeting.”

Uninterrupted Literacy Block

Administrative support not only secured time for coaches to implement Cornerstone activities, and provided teachers with time to collaborate and develop as professionals, it also provided an uninterrupted literacy block for children across Fulfilling schools. While every school in the Cornerstone Initiative had a literacy block in place, the Fulfilling schools provided an uninterrupted time in which to teach literacy to grades K-3.

Staff Perceptions of Cornerstone

Cornerstone practices were being used in classrooms across all grade levels in each Fulfilling school. Schools with formerly resistant teachers reported that those

teachers had abandoned their opposition. Principals in Fulfilling schools made their expectations about Cornerstone implementation explicit to their staff. As a result, teachers were uniformly aware that they were in a Cornerstone school, and that Cornerstone was not a “program” optionally added to their existing work. In every Fulfilling school, staff had very positive views of Cornerstone. As one fifth-grade teacher explained: “Almost everybody has heart-feltedly bought into this program. As long as I teach literacy... I will continue using Cornerstone because I really think it has a foundation, it has meaning, and it is effective with the students. I've never seen a program like this where it's covered all the bases.”

School-Level Factors

The Cornerstone logic model highlights the two prime supports for effective Cornerstone implementation: the principal must lay the groundwork through administrative and organizational support, and coaches and teachers must fully participate in strategic planning via asset mapping, developing a literacy action plan, and attending leadership team meetings. Among schools considered Fulfilling, these two categories of support were firmly in place.

Leadership

Principals in Fulfilling schools not only provided administrative support to the Cornerstone work, they were also firmly connected to classroom instruction. Principals articulated a clear instructional vision to teachers that incorporated Cornerstone. They spent time in classrooms and reviewed lessons; they expected teachers to implement the Cornerstone work; and they gave instructional feedback accordingly. Cornerstone was integrated with existing literacy programs in these schools, and principals and coaches articulated the relationship between Cornerstone and the district literacy plan and requirements. The principals in Fulfilling schools limited the number of competing claims on teachers' time by integrating disparate demands and illustrating how these demands connected to an overall vision of literacy instruction. Staff, in turn, described Cornerstone as integrated with or complementing the district plan. Finally, leaders in Fulfilling schools understood the connections between the various components of

Cornerstone, from the book study to the school review to the asset map to the activities of the literacy block. They saw value in each of the separate activities and wove them into an integrated vision for improving literacy instruction at their school.

Stability

Staff and, in particular, leadership stability is often seen as contributing to the consistency of reform efforts over time. However, among the Fulfilling schools, only two have had the same principal throughout their Cornerstone tenure. All four of the Foundation schools have experienced leadership changes. Two principals were new to their schools during the first two years of beginning the Cornerstone work, the other schools had new principals during their third year of implementation. Similarly, few of the Fulfilling schools have had the same coaches throughout.

The continuation of Cornerstone work in these schools, despite site team disruptions, was attributable to several factors including capacity building, leadership, and strategic management of transition periods. For example, the change in leadership within one of the foundation districts was managed strategically by the district such that a principal was moved from one Cornerstone school to the other and a teacher who had been at the school and was familiar with Cornerstone was promoted to the principal position. The potential disruption of a transition in school leadership in this case was mitigated by the district's strategic response.

Institutionalization

A distinguishing characteristic of Fulfilling schools was the extent of institutionalization of Cornerstone practices that went beyond the implementation of specific activities. Principals created schedules that accommodated regular common planning time for teachers, and worked to ensure that this time was not consumed with non-Cornerstone work. In Fulfilling schools, the underlying philosophy of Cornerstone had become part of the fabric of school life; one teacher explained: "Cornerstone is in every aspect of our school." Teachers in these schools reported that Cornerstone had helped to create a common language among staff from different grades, and that full implementation had bridged differing pedagogical approaches to different subjects.

Fulfilling schools had fostered the expanded use of Cornerstone strategies to other areas of learning, so that Cornerstone was not only being used in language arts, but in science, math, social studies, and bilingual and ESL classrooms.

Implementing Schools

The six schools in the Implementing cluster were located in two school districts, one in the North and the other in the South. Site team members at all six schools reported that the fundamental components of Cornerstone were operating in their schools and expressed enthusiasm for the Initiative in interviews and surveys. However, particular challenges in each school impeded full implementation. The first- and second-year schools confronted issues common to schools new to the Initiative, such as developing functional co-teaching schedules for their literacy coaches, structuring an uninterrupted literacy block, and countering the resistance of teachers suspicious of new programs.

Planning

All schools participated in the asset mapping at the beginning of the year and most found it useful in guiding their Cornerstone activities. In some cases the process revealed important issues with which the school staff had to grapple. As one teacher at a first-year school explained, “It was very interesting to see...the wide range of opinions that everybody has. It’s given us some areas that we realize that we need to clarify so that everybody is more on the same page and [it’s given us] some objectives to work on.”

Most of these schools held frequent leadership team meetings. However, two schools reported that the number of meetings that included the whole leadership team had decreased. These schools held smaller meetings that included just the coaches and the principal.

Professional Learning

Coaching

In four Implementing schools, coaches were provided release time through the acquisition of a co-teacher. Two of the newer schools were still struggling to establish an

adequate schedule for coaches that allowed them to balance their teaching time with their coaching time.

Teachers in all six schools reported that their coaches were helpful and effective. Unlike the Fulfilling schools, site team members at the majority of these Implementing schools report that coaches had not yet worked with all grade levels. In addition, while staff in all schools reported observing coaches model lessons, teachers in four of the six schools wanted more coach assistance in their classrooms.

Whole School Learning

Book study groups were established in all six schools, and teachers in Implementing schools report the highest levels of book study attendance. Grade-level and general faculty meetings in Implementing schools took place on a weekly or bi-weekly basis, and teachers report that Cornerstone was discussed frequently at these meetings.

Uninterrupted Literacy Block

Five of the six schools have successfully established an uninterrupted literacy block for grades K-3. Two of the six schools began an uninterrupted literacy block this year, and continue to work out the scheduling details.

Staff Perceptions of Cornerstone

Despite general support for Cornerstone among teachers in all six schools, site team members noted small pockets of resistance or anxiety among teachers regarding Cornerstone. This may be due to the newness of Cornerstone in most schools in this cluster. In contrast to Fulfilling schools, site team members also reported somewhat lower levels of positive attitudes toward Cornerstone among staff. A few veteran teachers in two new schools, for example, feared that focusing on comprehension strategies might bring down their students' test scores. A staff member commented, "Second grade hasn't been as easy to get on board...our teachers, a lot of them are older and have been teaching for a long, long time and their scores are always awesome."

School level factors

Leadership

The leadership of Implementing schools was characterized as strong, consistent, and essential to the implementation of Cornerstone. Interviews and survey data indicate that the overwhelming majority of staff in all six schools described their principals as instructional leaders, committed to Cornerstone, and supportive of their staff. Indeed, 100% of teachers at Implementing schools agreed that their principal supports and promotes Cornerstone, and 95% agreed that their principal was an instructional leader.⁷

Stability

As in the case of Fulfilling schools, Implementing schools benefited from comparatively high rates of principal, coach, and teacher stability.⁸ One first year school, though, had already experienced a change in leadership and coaches at the start of the 2004-05 school year.

Institutionalization

Key components of Cornerstone are well on their way to being institutionalized in Implementing schools. Assuming continued district support—and barring external shocks such as high student or teacher turnover or leadership change—Cornerstone practices will likely continue to grow in these schools, eventually reaching all grades and all teachers. This pattern of incremental spread through all grade-levels reflects the path taken by many of the Fulfilling schools.

District-supported schools among this group did not face different implementation challenges than the Cornerstone-supported schools. Districts' decisions to add schools to the Initiative reflect district commitment to Cornerstone and district recognition that teachers and principals in the first cohort of Cornerstone schools were positive about the Initiative's impact.

⁷ Survey responses from 176 teachers from the six implementing schools were included in our analysis.

⁸ Because three of the schools in this cluster were first year schools, stability over time will become evident in subsequent years.

Partially Implementing Schools

The three schools we define as Partially Implementing in 2004-05 were located in three school districts that also had higher and lower implementing Cornerstone schools. Partially Implementing schools were implementing most components of the Cornerstone program, but also struggled with how to integrate the Cornerstone Initiative with other district programs and directives. Site team members reported that leadership team meetings, uninterrupted literacy blocks, book study groups, and coach demonstrations and observations were all taking place in each of their schools. Yet staff also reported that these components were being implemented in their schools to less than full effect.

Planning

Planning was inconsistent in Partially Implementing schools, as was oversight of the Cornerstone Initiative within the school. Site team members reported using the asset mapping process at the beginning of the school year to set school-wide goals, but did not use it as a tool to guide subsequent staff meetings or activities. While leadership team meetings involving principals, coaches, and teachers in Partially Implementing schools did take place, they were held more infrequently and did not enjoy the staff representation seen at other schools. Coaches and principals in Partially Implementing schools admitted that other topics and issues often impinged on meetings originally dedicated to Cornerstone. Compared to higher implementing schools, Cornerstone planning was an uneven process at the beginning of the year and remained inconsistent throughout the year, resulting in uneven implementation across grade levels.

Professional Learning

The main components of the Cornerstone model are being implemented in most Partially Implementing schools. Coaches are being released to train teachers. Teachers report that coaches demonstrate lessons and observe classes. Uninterrupted literacy blocks have been formed and book study groups are being held. However, in each of these cases, site team members have observed that not all staff fully participates in each of these components.

Coaching

Coaches in Partially Implementing schools had release time and the support of co-teachers. Coaches in these schools focused their coaching time on certain grade-levels, or on particular groups of teachers (such as new teachers), where there was reported to be “the most need.” This focus solely on particular grades or groups reflects a difference from the coaches’ role in the Fulfilling schools, where coaches were typically available as a resource to all teachers in all grades.

Staff at the two small schools in this cluster reported high frequency of contact with their Cornerstone coaches. However, on the whole, the Partially Implementing schools reported lower levels of satisfaction with their coaches and less impact from their collaboration with coaches. (see Appendix C)

Book Study

All three Partially Implementing schools held book study groups, but they were voluntary and in every case the site team members noted that not all teachers participated in them. Only 45% of teachers in these schools report attending a book study once a month or more. (see Appendix C).⁹ Principals in Partially Implementing schools (in contrast to principals in the highest implementing schools) did not consistently attend book studies or other Cornerstone activities.

Grade-Level Meetings and Staff Meetings

Staff in Partially Implementing schools report Cornerstone literacy strategies being integrated into grade-level and other staff meetings at least once per month. Compared to higher implementing schools however, these meetings were less frequently attended by the principals, less formally structured, and reported to have less impact on the teaching staff as a whole.

Uninterrupted Literacy Block

Two out of three Partially Implementing schools have uninterrupted literacy blocks for some grades, but not for the entire school. In the third school, this is the first

⁹ Survey responses from 60 teachers from the three Partially Implementing schools were included in our analysis.

year an uninterrupted literacy block has been established for all grades. Unlike their counterparts in higher implementing schools, principals in Partially Implementing schools have not succeeded in establishing this central Cornerstone structure at a school-wide level.

Staff Perceptions of Cornerstone

In Partially Implementing schools, some staff still viewed Cornerstone as competing or at cross-purposes with other district initiatives. Principals in Partially Implementing schools have not yet successfully convinced all their staff that Cornerstone should be the centerpiece of literacy instruction (and may not be convinced themselves of its central role). Staff in these schools often described Cornerstone as one of a number of literacy initiatives that run parallel to each other. As one coach explained, "...we had professional development in this building, and then we'd have it at the district and the teachers would hear something different at the district." A teacher in a different school reported that staff in her building is confused and overwhelmed by the different initiatives: "...there's a lot of people who are like, 'enough!' It's really been demanding this year. And we're trying to prep for our tests.... 'I'm tired of my room being a three ring circus.'"

School-level factors

Leadership

Staff in Partially Implementing schools report that their principals support Cornerstone, support their staff, and are seen as instructional leaders in the building. While there had been recent change in the principal leadership at two of the three schools, the new leaders were considered an improvement over their predecessors. This satisfaction with the principals was reflected in both the interview and survey data (see Appendix C). But these principals had not yet made Cornerstone a school-wide priority. For example, the principals in these schools did not consistently attend book studies and/or professional development activities dedicated to Cornerstone, even though they had each expressed concern about partial attendance and participation by teachers. In

contrast, principals in higher implementing schools are reported to monitor Cornerstone classroom activities and actively participate in Cornerstone professional development.

Stability

Each Partially Implementing school experienced a high level of instability in their teacher population and/or leadership roles, which made full implementation and participation in Cornerstone activities challenging. Additionally, two of the three Partially Implementing schools reported either high student turnover or rapid student growth, and the third school reported a recent surge in student disciplinary problems. Finally, two of the three Partially Implementing schools had a change in principal in the middle of the school year. This overall lack of stability in all three schools may explain both the lack of full participation among all teachers in Cornerstone and the lack of consistent implementation of Cornerstone by principals.

This instability is reflected in the difficulty all three principals had in defining Cornerstone's impact on test scores or student literacy. One principal explains, "I can't articulate a degree...I don't have a before and after." Another discloses, "we have no clear-cut picture because of...the revolving school population" In the one school where the principal believed Cornerstone had improved student literacy, her answer remained equivocal: "I think it has impacted a great deal on learning, but it is not showing in test scores that their writing is getting better....it is not showing where it counts—in the test scores."

All of the Partially Implementing schools have experienced a moderate to high degree of literacy coach stability. In each school, at least one coach has remained in their position for a consecutive number of years, lending a degree of continuity to the Cornerstone activities.

Challenges to implementation

In every partially implementing school, principals described other district programs (such as test prep strategies, reading programs, and professional development programs) as interfering with rather than complementing Cornerstone. As a principal explained "...we have a district that—it tries to be very prescriptive. That, in a way,

hinders people from feeling they can be creative because they've got to cover X amount of materials...it is [difficult] getting people to see that they are not asking us to do things that we aren't already doing." In contrast, principals of Fulfilling and Implementing schools portray Cornerstone as integrated with other literacy programs in the building.

Two of the three principals in Partially Implementing schools were appointed in the middle of each school's third year of implementation, thus inheriting Cornerstone from their predecessors. They acknowledge that starting with a limited knowledge of the Cornerstone program has slowed their ability to present Cornerstone as part of an integrated school-wide literacy program. Similarly, coaches in each partially implementing school admit it has been a challenge for them to present Cornerstone as complementing other district initiatives. The perception of competing district priorities, along with ongoing issues of staff and student turnover, creates a sense of uncertainty about Cornerstone's long-term future in each of these schools. This uncertainty may encourage a sense of stasis or foot-dragging among some teachers who may be waiting to see whether Cornerstone will be sustained, and therefore whether it is worth investing in. In these schools, the future impact of Cornerstone may depend on principal leadership, the degree of stability in the school population, and the extent of perceived district support of the Cornerstone Initiative.

Low Implementing Schools

In 2004 – 2005, there were two low implementing Cornerstone schools, spanning grades pre-K to 6, in two different school districts, with populations ranging from 300 – 700 students.

Planning

Unlike counterparts in higher implementing schools, Low Implementing schools inconsistently used the asset map throughout the year. At both schools, the goals developed were referred to in staff and grade-level meetings early in the school year, but less emphasis was placed on those goals over time. Staff perceptions of the process at the Low Implementing schools varied. While some school staff believed that the asset map was engaging and viewed it as a helpful tool that provides a clear picture of the

school's strengths and weaknesses, some teachers were less positive and did not understand the significance and usefulness of the process. At Low Implementing schools, 62% of teachers reported that the asset map created common goals for their school (compared to over 80% in schools at higher implementation levels); 56% felt that the asset map process was useful, compared to 75% of teachers at Fulfilling schools.¹⁰

At both schools, the leadership teams included representation from all levels of the school, but at one site the assistant principal and not the principal led the meetings. When meetings were held, school improvement issues, rather than literacy issues, dominated the discussions.

Professional Learning

Coaching

In spite of limited leadership support and inconsistent school-based planning, interviewees overwhelmingly identified Cornerstone coaches as the core provider of professional development and as most influential in spreading Cornerstone practices. Three of four coaches in the Low Implementing schools were new to the position in 2004-05: two because they were in a first year Cornerstone school, and one because of turnover in the position. Thus these coaches were still learning about their positions while they were trying to spread Cornerstone practices to other teachers.

The Cornerstone coaches in both schools had co-teachers to cover their classes, but in one school the co-teachers were retired teachers who the coaches felt did not provide adequate classroom instruction. In the other school, one of the co-teachers quit mid-year and was not replaced, which left the coach unable to take on her coaching responsibilities. When compared to higher implementing schools, coaches in Low Implementing schools were more likely to work with a limited number of teachers and to focus their support only in grades K-3. Moreover, unlike full and Partially Implementing schools, they conducted the majority of their professional development activities during grade-level and full staff meetings, and offered only limited in-classroom modeling and support.

¹⁰ Survey responses from 39 teachers at the two Low Implementing schools were included in our analysis.

Coaches in Low Implementing schools also reported being asked to carry out non-Cornerstone duties, including working on other district mandates and writing grant proposals. These activities took time away from the coaches' Cornerstone responsibilities.

Book Study

In Low Implementing schools, book study groups were held, but they were not as formal as in higher implementing schools and had little to no involvement from principals. In one school, book study groups were held during grade-level meetings for the K-3 teachers, but none were planned for upper grade teachers. In the other school, voluntary book studies were held after school and were poorly attended.

The survey data reflects minimal staff participation: only 32% of teachers in low implementing school reporting taking part in a book study once a month or more, in contrast to 78% in the Fulfilling schools. However, 77% of teachers in Low Implementing schools said they found the book study groups very useful or somewhat useful. Thus, the book study groups were perceived as a catalyst for useful conversations about literacy instruction, and site team members, unable to participate in book study groups, reported that they saw this as a lost opportunity.

Grade-Level Meetings

For Low Implementing schools, grade-level and staff meetings are the venues in which Cornerstone practices are spread. In one of the Low Implementing schools, coaches were given a portion of the monthly staff meeting to provide professional development for Cornerstone to teachers. However, two coaches from different Low Implementing schools were not able to work with teachers during grade-level meetings because of the loss of a co-teacher in one school and restrictions placed on them by the principal in the other.

Uninterrupted literacy block

Both Low Implementing schools had uninterrupted literacy blocks, but there was variation in the kinds of activities taking place. In one school, teachers were allowed a

great deal of freedom in what was taught and as a result, there was wide variation in practice and some teachers did not use centers. In the other school, the structure of the district-mandated literacy block was perceived as different enough from the Cornerstone structure that teachers felt it was a challenge to integrate the two.

Staff Perceptions of Cornerstone

Compared to staff in higher implementing schools, staff in Low Implementing schools held less positive views of Cornerstone. In one school that reported low positive views, many teachers reportedly resisted Cornerstone to “get back” at the principal. One teacher explains the difficulty of introducing a new initiative against a background of turmoil: “People came with pre-conceived notions about things and baggage that they already had in their minds, and I think to take on a new philosophy like that was almost too much for them.”

School level factors

Leadership

Low Implementing schools lacked the core foundation structures—leadership and school-based planning—needed to support the Cornerstone Initiative. Unlike Fulfilling or Implementing schools, administrators in Low Implementing schools did not view Cornerstone as a priority, were not actively involved in the professional development components of the Initiative, and did not provide instructional support to school staff. Principals in these schools were often focused on other school issues deemed more pressing.

Stability

Turnover, at all staff levels, was a serious problem in Low Implementing schools. In one district, hiring certified teachers is very difficult and there is constant turnover in the teacher population. Also, Low Implementing schools experienced turnover or staff reassignments in key grade levels. As one superintendent explained, “We’ve either had to train or retrain different folks it seems like every year of the program, and it’s hard to

be consistent... when you're changing personnel like we've had to do in this school district."

In addition, both schools experienced high student mobility, which created additional stress for school leadership and staff. Although higher implementing schools experienced turnover and relocation, in the two Low Implementing schools these factors limited the school's ability to create a professional learning environment among teachers and also provide effective classroom instruction for students. As a result, less than half the staff in both schools described their experience with the Cornerstone Initiative in fully positive terms.

As the experiences of the Low Implementing schools indicate, it is extremely difficult to build a school community in the absence of stable leadership or staff and district support. Given these conditions, very little change in classroom practice can be expected in these schools.

IMPACT

Intermediate Impacts

The Cornerstone model is complex and operates at several different levels within participating schools. In the Cornerstone model, successful implementation of the embedded professional development activities is expected to result in intermediate school-level, classroom-level, and parent-level changes, including improved school culture, more effective classroom instruction, and increased parental involvement. On-going professional development, supported by improved school culture, is expected to bring about enhanced teacher content knowledge and effective instructional strategies. More effective classroom instruction, supported by increased parental involvement in their children's education, is expected to bring about improved student knowledge and skills and enhanced student social/emotional development which will, over time, result in increased student literacy as measured by standardized tests.

This section presents the intermediate- and long-term impacts the Cornerstone Initiative has had in participating schools as described by teachers, coaches, and administrators through surveys and interviews. It also examines the relationships between a range of reported outcomes and levels of implementation of Cornerstone

activities, and presents staff perceptions regarding Cornerstone's impact on student test scores. Student achievement as measured by a variety of standardized tests is in the final portion of this section of the report.

Impact on School Culture

As presented in the logic model, Cornerstone's embedded professional development activities are designed to bring about positive changes in the overall school culture. These changes include an increasingly shared vision for teaching and learning, increased collegiality and collaboration between staff members, higher expectations for teachers and students, and the creation of a more knowledgeable and inquiring learning community. School staff members credited Cornerstone with providing schools with a shared language and helping to create a shared vision. "It's not just about the teachers," one teacher said, "but it's about all of us together." Many teachers reported getting to know their colleagues in a different way as a result of activities like the asset map and book study. Teachers indicated that their conversations had evolved from general small talk to discussions of substantive instructional issues.

In schools where Cornerstone was implemented school-wide and supported by the principal, this sense of collaboration and teamwork permeated the building. One teacher remarked, "I know that the way that we've structured the work here has opened up the doors for people to get to know one another as we've opened kindergarten to fifth grade and so on...That is something we never expected, but that is something that we've experienced and I think we are a better school because of that." Conversely, in the lower Implementing schools, there was less sense of a collaborative community. As shown in Table 2 on the following page, in most cases, larger percentages of teachers in higher Implementing schools noted the presence of indicators of positive school culture.

Table 2. Percentage of Teachers Reporting Indicators of Positive School Culture by School Implementation Level

Indicators	Teachers that Agree or Strongly Agree by Implementation Level			
	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
In this school there's a feeling that everyone is working together toward common goals	93%	91%	78%	59%
There are formal arrangements in this school that provide opportunities for teachers to discuss and critique their instruction.	90%	81%	46%	44%
Teachers in this school set high expectations for academic work	97%	97%	88%	95%
Teachers are involved in making important decisions in this school.	75%	71%	73%	44%
Most teachers in this school are continually learning and seeking new ideas from each other.	92%	94%	90%	67%

Impact on Parent Engagement

Cornerstone staff, and specifically the Community and Parent Engagement Fellow, visited schools to promote awareness of the importance of parent involvement in the education of their children, and to assist in designing activities to increase parent involvement in the school. Most principals, teachers, and coaches reported positive changes in the content of parent activities and the level of parent participation they were able to achieve as a result. For example, one teacher reported that her students read at home everyday. “Their parents are astounded. Consistently, almost 95 percent of the class is reading at home independently.”

Impact on Classroom Practice

Effective school-based professional development activities, in combination with the positive changes in school culture described above, are expected to support improved teacher content knowledge and teaching strategies that, in turn, will result in improved classroom instruction. As discussed earlier, research has shown that the quality of the classroom instruction that children receive in reading—irrespective of the specific curriculum, program or materials—has the greatest impact on reading achievement. But it takes some time after Cornerstone is introduced before many teachers make significant changes in their classroom practice. As one teacher in a third-year school noted, “In the

first year, you're just kind of trying to learn what it's all about. I think it takes a long time to learn it, to understand it, to implement it in your classroom, to implement it in your philosophy. ...It takes more than one year or two to really understand it and to feel better and more confident about doing it yourself and making it work in your classroom."

Based on survey results, over 80 percent of all teachers agreed that Cornerstone had deepened their understanding of how students learn literacy. Almost three-fourths of the teachers in Fulfilling schools (73 percent) and Implementing schools (77 percent) asserted that Cornerstone had improved their literacy teaching very much or quite a bit, as compared to teachers in the partially implementing (50 percent) and Low Implementing schools (59 percent). Many teachers described this change as permanent and asserted that they would never go back to their old way of teaching. They discussed their willingness to take on responsibility for their own learning, and at the same time how they were willing to let students assume more responsibility for themselves. By shifting into a facilitator role, and sometimes, a co-learner role with students, teachers changed the way they thought about teaching and learning. One teacher said, "Cornerstone brought a foundation for me of a positive environment for the children, the whole set up of the classroom, the groups, the individual attention, the conferencing, all of those different aspects of Cornerstone really promote literacy and mastery of the strategies."

Impact on Academic Growth

Higher percentages of teachers in Fulfilling (75 percent) and Implementing schools (70 percent) stated that participation in Cornerstone activities during the school year had improved their students' literacy skills very much or quite a bit compared to teachers in partially (42 percent) and Low Implementing schools (62 percent). Many teachers reported that their students were reading a lot more books in school and at home. "They're recognizing authors and they're looking for better quality literature." Teachers also said that students understood what they were reading at higher levels and used the Cornerstone comprehension strategies on a regular basis. Several teachers discussed the effects on student thinking. One offered, "We see much better thinking. Now they

verbalize what they're thinking. We even see those metacognitive strategies... making those connections and using the schema that they have."

Many schools focused on writing during 2004-05 as part of their literacy action plans, and teachers reported that students' writing skills had improved as a result. One teacher noted the difference in her students, "I have never once had someone come up to me and say, 'I don't know what to write [in their journal].' Where in the past, the free-writes have always been a struggle...this year they've come up with something different everyday."

Impact on Student Social/Emotional Development

During the interviews, many teachers described being pleased with the improved level of interpersonal relationships they enjoyed with their students. According to one teacher, "There's no way you can do Cornerstone without getting to know the children on a personal level, knowing how they're thinking." Another said, "We talk differently, we think differently and we act differently.... You walk in the room and you have a different feeling. We feel like a community. We're a family."

When asked about Cornerstone's impact on their students, many interviewees described great changes in students' socio-emotional growth. Teachers described increased student engagement, better classroom behavior, and more excitement about learning. According to one teacher, "During shared reading the students do a better job with their friends - team teaching...Kids want to learn...[they] move freely in and out of lessons. The movement in class is so well orchestrated." According to one teacher, there was a "whole behavior change, because they see that you care."

Students' increased motivation and passion for reading and writing were the greatest changes reported across all schools. Most teachers noted an increase in student's oral language skills and willingness to talk about their work. Teachers felt that by using the Cornerstone strategies they had given their students the tools they needed to become more thoughtful communicators. One teacher remarked, "I saw these kids come from barely reading to being verbal about anything and I've seen very, very shy quiet children just blossom...it has enabled our kids to learn in a different way because of the best

practices we're using and because it was a method that was accommodating to them that we didn't know that we had to use.”

Perceptions Regarding Cornerstone’s Impact on Test Scores

Most interviewees believed that Cornerstone had achieved a positive impact on test scores in classrooms implementing Cornerstone strategies. This was true regardless of school implementation level. When asked about Cornerstone’s impact on test scores, a principal said, “I can pinpoint specific teachers who really took up the [Cornerstone] flag, so to speak, and ran with it. I saw that their results bore that out this year.” A coach stated that, “I know that the reading and language arts scores have gone up, I guess for those kids who have actually gone through Cornerstone from kindergarten.” In a low implementing school, the principal believed that “Cornerstone has had a lot to do with our test scores because the coaches, their kids made some of the highest test scores in the school.”

In some districts, interviewees believed that what Cornerstone brought to their students was not adequately measured by high-stakes standardized tests. One teacher stated that, “We are not necessarily testing what Cornerstone has asked us to teach the children. That sounds weird when you think about comprehension strategies, but when children are accustomed to becoming so self-expressive and their words are taken away and [they have to] put down in one or two words that belong to someone else, that is really quite different than being able to express themselves, either in writing or orally, what they are thinking and doing.”

Impact on Student Outcomes

The following section presents the test score outcomes for each of the Cornerstone schools that have been involved in the Initiative for at least two years in 2004-05.¹¹ We present three categories of test results in this outcomes section: the results of the Developmental Reading Assessment (DRA), administered to K-3 students in each Cornerstone district; the grade-level state and district standardized test results; and the results of regressions carried out comparing the outcomes of Cornerstone schools with the other schools in their districts.¹² We were able to conduct regression analyses in three of the seven participating districts—Jackson, Springfield, and Horry County. The remaining four districts were not included in these analyses due to a lack of sufficient available data.

This year's analyses of test scores, like our analysis of implementation, have included a broader range of grades. The results of the assessments presented in this section include scores from tests across the 1st through 5th grades. The table below lists the schools and districts whose outcomes are presented in this section along with their implementation levels.

Table 3. Schools Included in Student Outcomes Section

District	School	Years in Cornerstone as of 2004-05
Jackson	Lake	5
	Watkins	5
Talladega	Stemley Road	5
	Sycamore	5
Bridgeport	Maplewood Annex	4
	Marin	4
Greenwood	Threadgill	4
New Haven	Bishop Woods	3
	Martin Luther King	3
Springfield	Freedman	3
	Frederick Harris	3
Horry County	South Conway	2
	Waccamaw	2

¹¹ The outcomes of the first year Cornerstone schools are included in Appendix D.

¹² The 2004-05 school year was the first year of universal DRA administration in districts that do not use the DRA as a mandatory test. Teachers in schools not already administering the DRA were provided with training from the publisher of the test to ensure accurate administration. For districts that already were administering the DRA in grades k-3 (Bridgeport and New Haven), results from the district-provided data are presented.

Regression Methodology

The use of regression analysis adds to our understanding of the relationship between Cornerstone and student performance because it allows us to compare the test scores of participants in the program with those of similar students who did not participate. Comparisons of average test scores at the school level over time may not adequately reflect the program's impact, as the composition of the student population in a given school may fluctuate. For example, if the percentage of students who have characteristics associated with lower test scores (such as limited English proficiency) increases over time at a Cornerstone school, the school-wide average might decrease even if the program is having a positive impact on these students (who otherwise would have scored lower in the absence of Cornerstone).

Regression analysis allows us to examine the relationship of the program to test scores while holding constant other factors that are thought to be related to student performance. For example, in most districts we are able to determine which students are classified as special education, limited English proficient, and low income. Thus, we can estimate a regression model that captures the differences in test scores between Cornerstone students and non-Cornerstone students who are similar in terms of these characteristics. As we also know which school a given student attended in a given year, we can add school fixed effects to the model, which are indicators for individual schools that capture each school's contribution to the outcome. The inclusion of school-level fixed effects reduces the potential for omitted-variable bias by accounting for the unobserved time-invariant characteristics of each school, which may influence student achievement. Put differently, the regression model includes a set of dummy variables indicating which school a student attended. The impact of Cornerstone, then, is measured as the change in the average adjusted performance of students in the school after implementation.

The regression model (including fixed effects for schools) that we estimated for each of the districts is as follows:

$$\text{SCORE} = \alpha + \beta X + \delta \text{CS} + \gamma \text{YR} + \eta \text{SC} + e$$

In the above, SCORE refers to a student's reading test score in a given year. X refers to a set of student characteristics generally including race, gender, and low-income status. These characteristics varied somewhat across the districts depending on the data we received. For example, some districts included information on limited English proficiency while others did not. CS is an indicator variable denoting whether or not the student participated in Cornerstone in that year. YR is an indicator variable for the year. SC is the fixed effect. The coefficients $(\beta, \delta, \gamma, \eta)$ indicate the change in the student's test score associated with each of the variables. The term α indicates the intercept, while e is an error term.

Because some districts administered different reading tests in different years, we needed to transform the test scores into a form that allows them to be compared over time. Therefore, we calculated a Z score for each student, based on the mean and standard deviation of the test scores for the group of students who took the test. The process of converting test scores to Z scores is analogous to changing value scales, such as converting yards to meters. The Z score expresses the test score in units of the standard deviation, and allows for score comparisons across different tests. The Z score for each student serves as the dependent variable in each of our models.

Jackson Outcomes

Developmental Reading Assessment (DRA) Results

DRA data are presented in Table 4 for the two Jackson foundation schools. These data are from the universal administration of the DRA across all the Cornerstone sites. The benchmarks in this analysis are from guidelines provided by the publisher of the DRA exam.¹³ The goal for all schools is 100% of their students meeting the benchmark, which would indicate all students are reading on grade level.

¹³ The guidelines provided by the publisher of the DRA indicate that for a student to reach the benchmark he or she must be reading at level 16 in spring of 1st grade, level 24 in 2nd grade, and 34 in 3rd grade.

Table 4. 2004-05 DRA results for grades 1-3 in Jackson

Jackson		Grade 1	Grade 2	Grade 3
Lake	<i>Students reading at or above spring benchmarks</i>	34%	40%	28%
	<i>Total number of students tested</i>	100	58	69
Watkins	<i>Students reading at or above spring benchmarks</i>	N/A*	50%	33%
	<i>Total number of students tested</i>		58	26*

*1st grade teachers at Watkins did not administer the DRA in spring 2005,¹⁴ and two teachers in the 3rd grade did not record their scores correctly, such that the data could not be included here.

Overall, the DRA scores of students at Lake and Watkins were low; neither school had high levels of students meeting the benchmark. The overall average for the Cornerstone schools in 2004-05 was 59% meeting the benchmark in 1st grade, 69% in 2nd grade, and 68% in 3rd grade.¹⁵ Both schools were below these averages for Cornerstone schools.

Test Score Comparisons

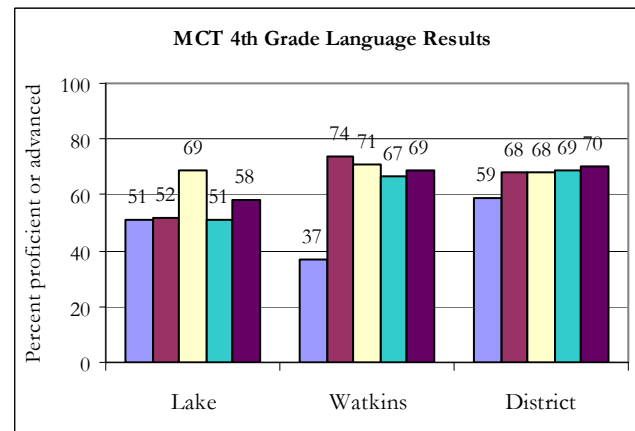
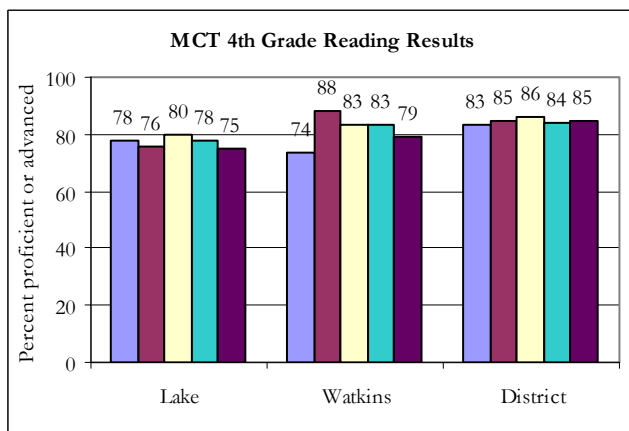
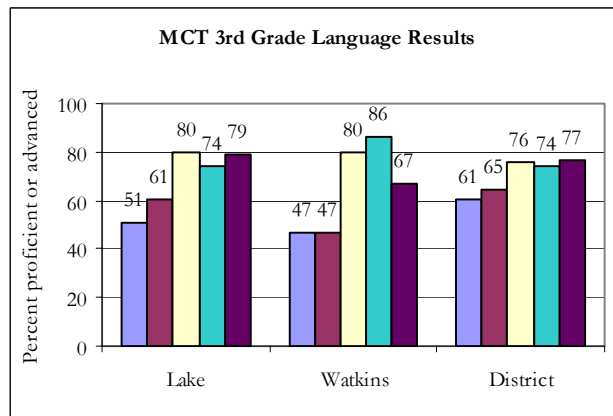
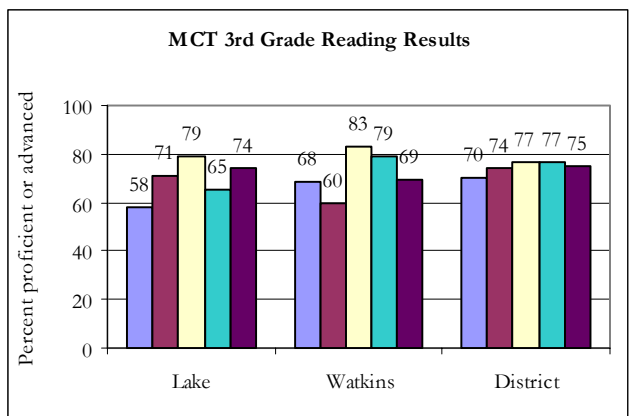
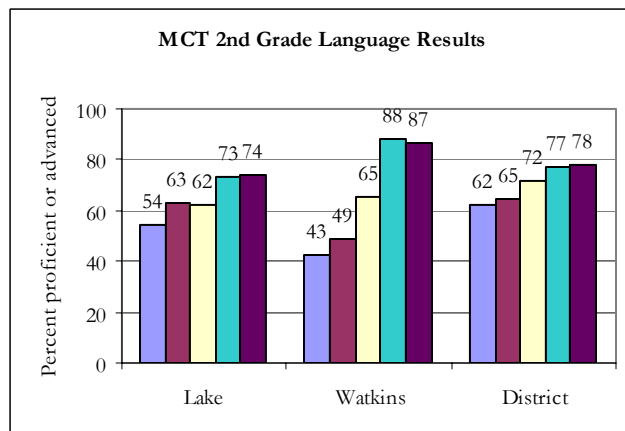
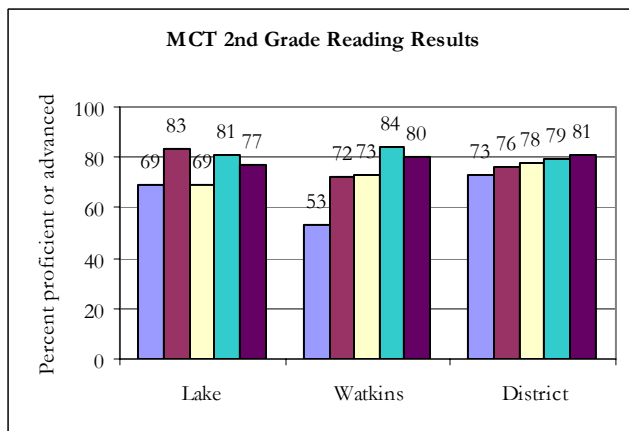
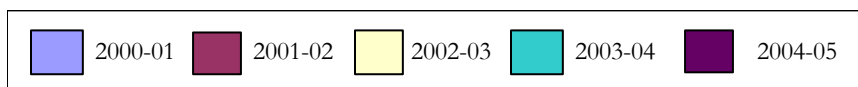
Mississippi has administered the Mississippi Curriculum Test (MCT) in both reading and language for the five years of Cornerstone's involvement with Jackson. Figure 11, on the following page, indicates the percentage of students scoring at the state defined proficiency level or above on the MCT reading and language exams.

Generally, over the five years of results, the percent proficient or above among 2nd grade students at Lake and Watkins on both the language and reading exams has increased since the early years of Cornerstone.

¹⁴ 1st grade teachers at Watkins administered the DRA in December 2004. 76 students were tested in the first grade with 62% meeting the winter DRA benchmark for 1st grade students.

¹⁵ The average for the Cornerstone schools was calculated among those schools who administered the DRA universally in K-3 for the first time. The figures exclude New Haven and Bridgeport results.

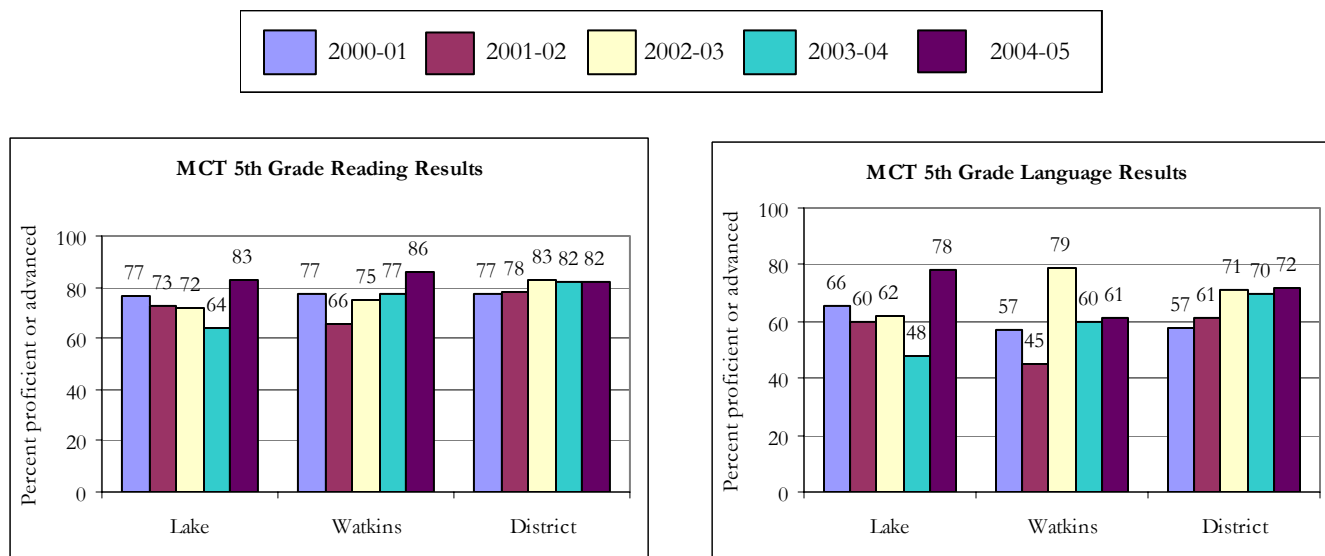
Figure 3. Jackson MCT Results



The scores of 3rd grade students at Lake have been increasing in the percent proficient or above since the school's first year of Cornerstone. On the language test,

Lake has demonstrated strong progress in the percent scoring proficient or above on the 3rd grade test. Watkins' 3rd graders are scoring proficient at higher levels than the 3rd graders in 2000-01. However the pattern of their growth has been less consistent because of a drop off in scores in 2004-05 on both the reading and language portions of the test.

Figure 3. Jackson MCT Results cont.



Lake and Watkins have not shown particularly strong growth in the 4th grade reading and language scores over time. Watkins' 2001-02 scores increased over 2000-01, but their 4th grade scores have not improved in subsequent years. Lake's 5th graders did very well on the 2004-05 reading and language sections of the MCT, outperforming the district average. Watkins' 5th grade registered good growth since 2001-02 on the reading portion, but showed more mixed results on the language portion.

Regression Adjusted Comparisons

The results of the regression analysis for Jackson suggest that the reading score gains for some grades in Lake and Watkins shown above are not simply a reflection of changing student populations within the schools. The regression model for Jackson included controls for student ethnicity, gender, low income status, and special education status. The sample included all students tested in grades two through five in all Jackson elementary schools from the 1999-2000 school year (the year prior to Cornerstone implementation) through the 2004-05 school year. A student was coded as having

participated in Cornerstone if he or she attended either Lake or Watkins during the 2000-01 school year or later. The results showed that participation in Cornerstone at Lake was associated with reading scores that were .13 standard deviations higher than for non-Cornerstone students.¹⁶ Participation in Cornerstone at Watkins was associated with reading scores that were .14 standard deviations higher.¹⁷ The regression model explained about 14% of the variation in student reading scores.

Talladega Outcomes

Developmental Reading Assessment (DRA) Results

Table 5 shows results from the universal administration of the DRA in the Talladega foundation schools. Stemley Road students are scoring well on the DRA, with the majority of students meeting the spring DRA benchmarks. Students in grades 1-3 outperformed the overall Cornerstone average of 59% meeting the benchmark in 1st grade, 69% in 2nd grade, and 68% in 3rd grade. Sycamore's students came close to the Cornerstone average in 2nd and 3rd grades, but had lower percentages of students meeting the benchmarks in 1st grade in 2004-05.

Table 5. 2004-05 DRA results for grades 1-3 in Talladega

Talladega		Grade 1	Grade 2	Grade 3
Stemley Road	<i>Students reading at or above spring benchmarks</i>	74%	78%	81%
	<i>Total number of students tested</i>	73	58	63
Sycamore	<i>Students reading at or above spring benchmarks</i>	43%	64%	67%
	<i>Total number of students tested</i>	44	47	42

¹⁶ $p < .05$.

¹⁷ $p < .10$.

Test Score Comparisons

In 2004-05, Alabama administered three standardized tests: the Stanford 10, a nationally normed test; the Alabama Reading and Mathematics Test (ARMT), a new state test in its second year of use in 2004-05; and the Alabama Direct Assessment of Writing, given in the 5th grade.

Below are the results of the Stanford 10 for the Talladega Cornerstone schools and the district average.¹⁸ The results shown below are the average percentile rank of students in the Cornerstone schools and in the district as a whole.

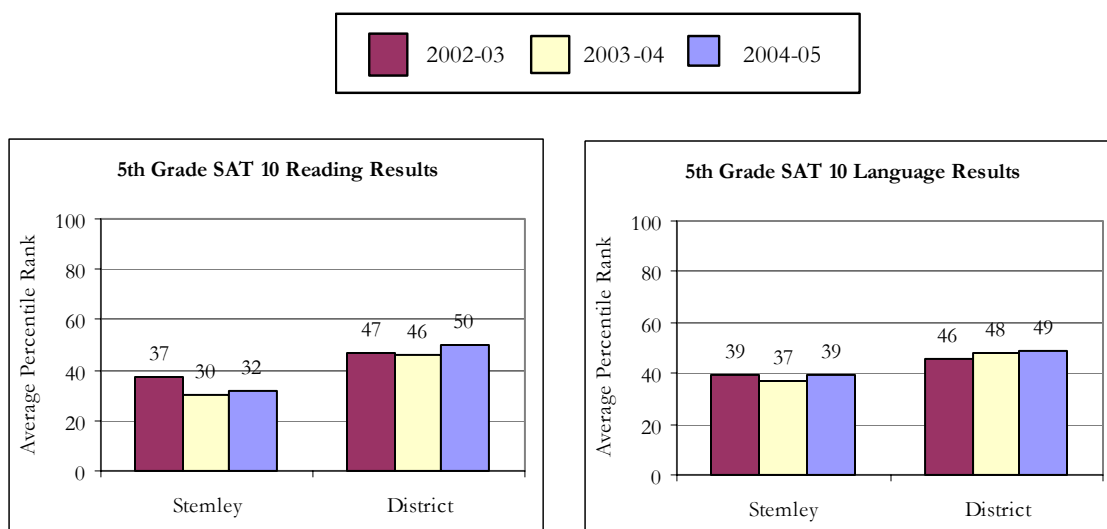
Figure 4. Talladega SAT 10 Results



¹⁸ In 2002-03, the test version changed from the Stanford 9 to the Stanford 10. The Stanford 9 is not comparable to the Stanford 10.

On the SAT 10, Stemley Road's 3rd graders in 2004-05 had a substantial decline in the average percentile rank on both the reading and language tests. Sycamore had an increase in the average percentile rank of their 3rd graders in both reading and language, scoring above the district average. The 4th graders at Stemley Road also experienced a decline in the average percentile rank, but their decrease was slight. The 5th graders at Stemley showed a very small gain on both the reading and language portions of the SAT 10 over their results for 2003-04.

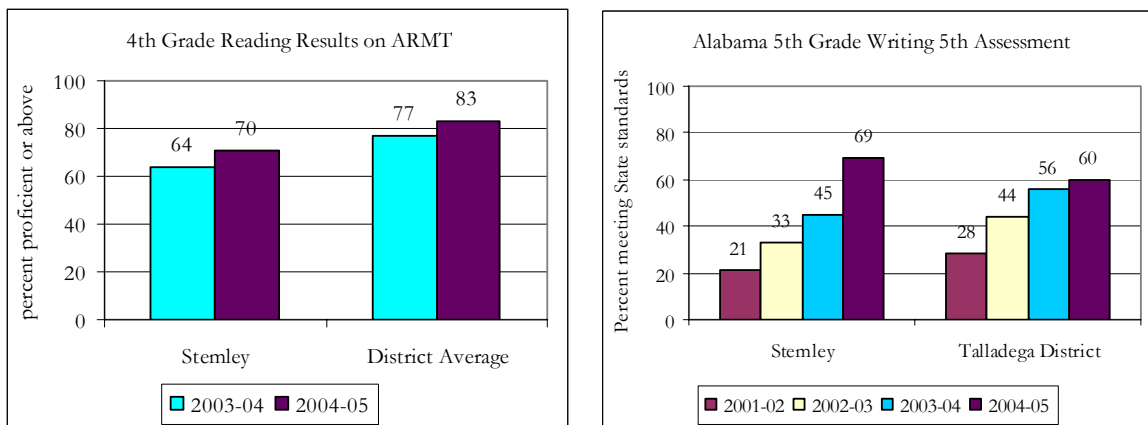
Figure 5. Talladega SAT 10 Results cont.



The Alabama Reading and Mathematics Test (ARMT) measures student proficiency levels. The chart on the left on the following page shows the percent of 4th grade students at Stemley Road who scored proficient or above on the ARMT test. 4th graders at Stemley had a higher percent proficient in 2004-05 than in 2003-04. The district average also went up during this period.

The Alabama Direct Assessment of Writing has been given to 5th graders since the start of Cornerstone.¹⁹ The chart on the right below indicates that since 2001-02, the percent of 5th graders at Stemley Road meeting the state standard has increased. While the district average has also increased, Stemley Road's results surpassed the district average on the 2004-05 administration.

Figure 6. Talladega ARMT and Direct Assessment of Writing Results



Sufficient data were not available to conduct regression analyses using Talladega data.

Bridgeport Outcomes

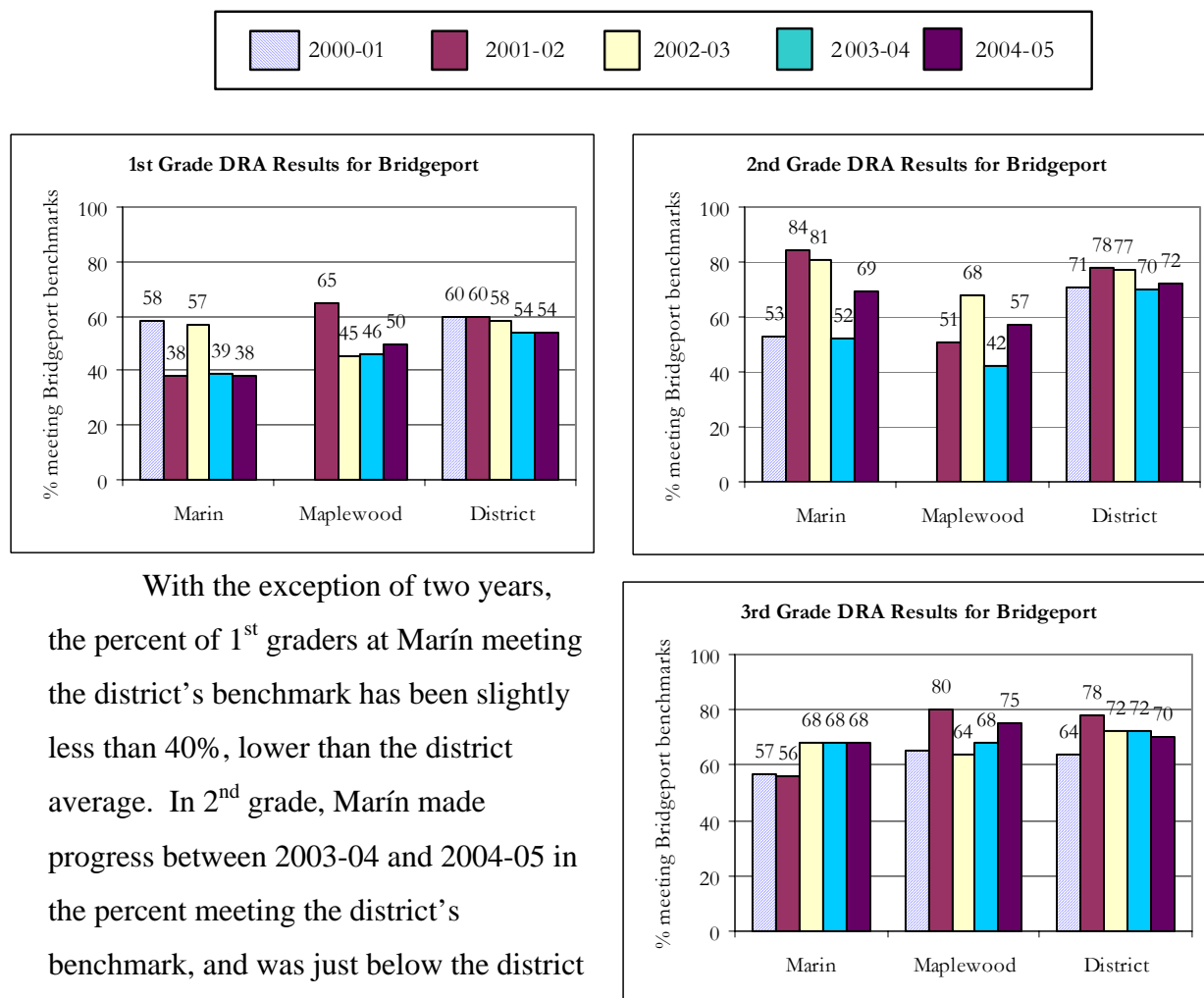
Developmental Reading Assessment (DRA) Results

The DRA is given across the Bridgeport district. Until 2004-05, the Bridgeport school district changed the benchmark level that students must meet, raising it to a higher level each year.²⁰ Thus in considering this data, note that the changes in test scores reflect both students' abilities and rising benchmarks.

¹⁹ The Alabama Direct of Assessment of Writing in 2000-01 was scored differently than later tests. For this reason these results are not presented here.

²⁰ In 2004-05, the benchmarks remained at the 2003-04 levels. The benchmarks in the last two years are higher than those used to assess the other Cornerstone schools. For 1st graders, the Bridgeport spring benchmark was level 10 on the DRA in 2001-02, in 2002-03 the benchmark was 14, and in 2003-04 it was 18. For 2nd graders in 2001-02 the benchmark was 18, in 2002-03 the benchmark was 20, and in 2003-04 it was 28. For 3rd graders the Bridgeport spring benchmark moved from level 30 in 2001-02, to level 34 in 2002-03, and to level 38 in 2003-04

Figure 7. Bridgeport DRA Results



With the exception of two years, the percent of 1st graders at Marín meeting the district’s benchmark has been slightly less than 40%, lower than the district average. In 2nd grade, Marín made progress between 2003-04 and 2004-05 in the percent meeting the district’s benchmark, and was just below the district average in 2004-05. 3rd graders’ results have remained stable between 2002-03 and 2004-05 at a little less than 70% of students meeting the benchmark, very close to the district average.

At Maplewood Annex, the percent of students meeting the benchmark in grades 1-3 has increased between 2003-04 and 2004-05, with 50% of 1st graders, 57% of 2nd graders, and 75% of 3rd graders meeting their benchmarks in 2004-05. Maplewood Annex’s 3rd grade results surpassed the district average, while their 1st and 2nd grade results were lower than the district average.

Table 6. DRA results for stable students in Bridgeport

<i>Marín</i>				
Students Who Remained in Marín for Two Years				
	Grade 1 2003-04	Grade 2 2004-05	Grade 2 2003-04	Grade 3 2004-05
Percent Meeting Spring Bridgeport Benchmark	54%	92%	60%	73%
N	26	26	15	15

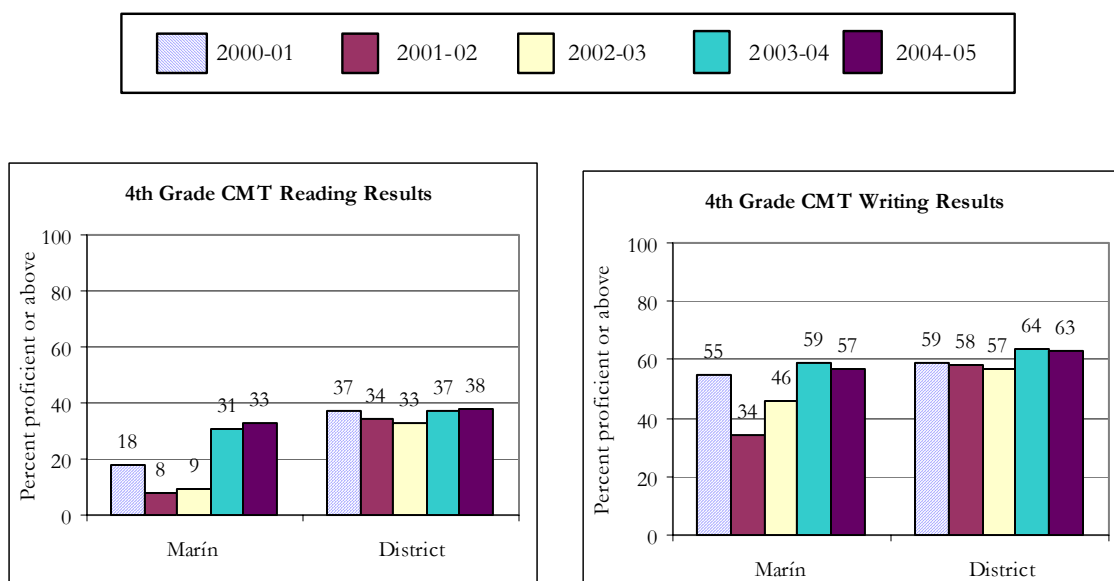
<i>Maplewood Annex</i>				
Students Who Remained in Maplewood Annex for Two Years				
	Grade 1 2003-04	Grade 2 2004-05	Grade 2 2003-04	Grade 3 2004-05
Percent Meeting Spring Bridgeport Benchmark	56%	67%	46%	64%
N	27	27	11	11

For Maplewood and Marín, we examined the data for students who remained in the Cornerstone schools for two years and were promoted. Both Marín and Maplewood Annex showed progress in moving their stable students toward meeting the district benchmarks between 2003-04 and 2004-05. The students at Marín who were promoted from 1st grade in 2003-04 to 2nd grade in 2004-05 made strong progress, with 92% of the 2nd graders meeting the district's benchmark. Students at Marín moving from 2nd grade to 3rd grade in the same years also showed improvement, although not as large an increase. At Maplewood Annex between 2003-04 and 2004-05, both groups of students who moved from 1st to 2nd grade and from 2nd to 3rd grade improved their percent, meeting the district benchmark, with approximately 65% of stable students meeting that benchmark in 2004-05 for both 2nd and 3rd graders.

Test Score Comparisons

Connecticut mandates the administration of the Connecticut Mastery Test (CMT) in reading and writing in 4th and 6th grades. The CMT 4th grade test of writing and reading is administered in the fall of each school year and assesses student proficiency levels.²¹ The figure below shows the percent of students scoring at proficient or above on the 4th grade reading and writing tests at Marín and district-wide. Maplewood Annex is a K-3 school.

Figure 8. Bridgeport CMT Results



The 2000-01 school year was the year before Cornerstone began working in Bridgeport. Marín, although experiencing a drop in the percent proficient between the first two years of Cornerstone implementation, has made steady gains in the percent of students achieving proficiency since 2001-02 on both the writing and reading portions of the CMT exam. Since 2003-04, Marín's 4th grade results have been approaching the district average.

Sufficient data were not available to conduct regression analyses using Bridgeport data.

²¹ Because the CMT is administered in the fall, students who are tested may be new to the Cornerstone school and their test results would not reflect Cornerstone treatment. The state is switching to spring administration of the CMT in the 2005-06 school year.

Greenwood Outcomes

One school in Greenwood, Threadgill Elementary, is included in our analyses in this report. The Greenwood district joined Cornerstone in 2001.

Developmental Reading Assessment (DRA) Results

Threadgill administered the DRA for the first time in 2004-05 as part of the expansion of the DRA in Cornerstone schools. Overall, their results were strongest in 3rd grade, with 62% of students reaching the benchmarks. But their scores were below the average of the Cornerstone schools, especially in 1st and 2nd grades.²²

Table 7. DRA results for grades 1-3 in Greenwood

Greenwood		Grade 1	Grade 2	Grade 3
		2004-05	2004-05	2004-05
Threadgill	<i>Students reading at or above Spring benchmarks</i>	41%	32%	62%
	<i>Total number of students tested</i>	17*	34*	60

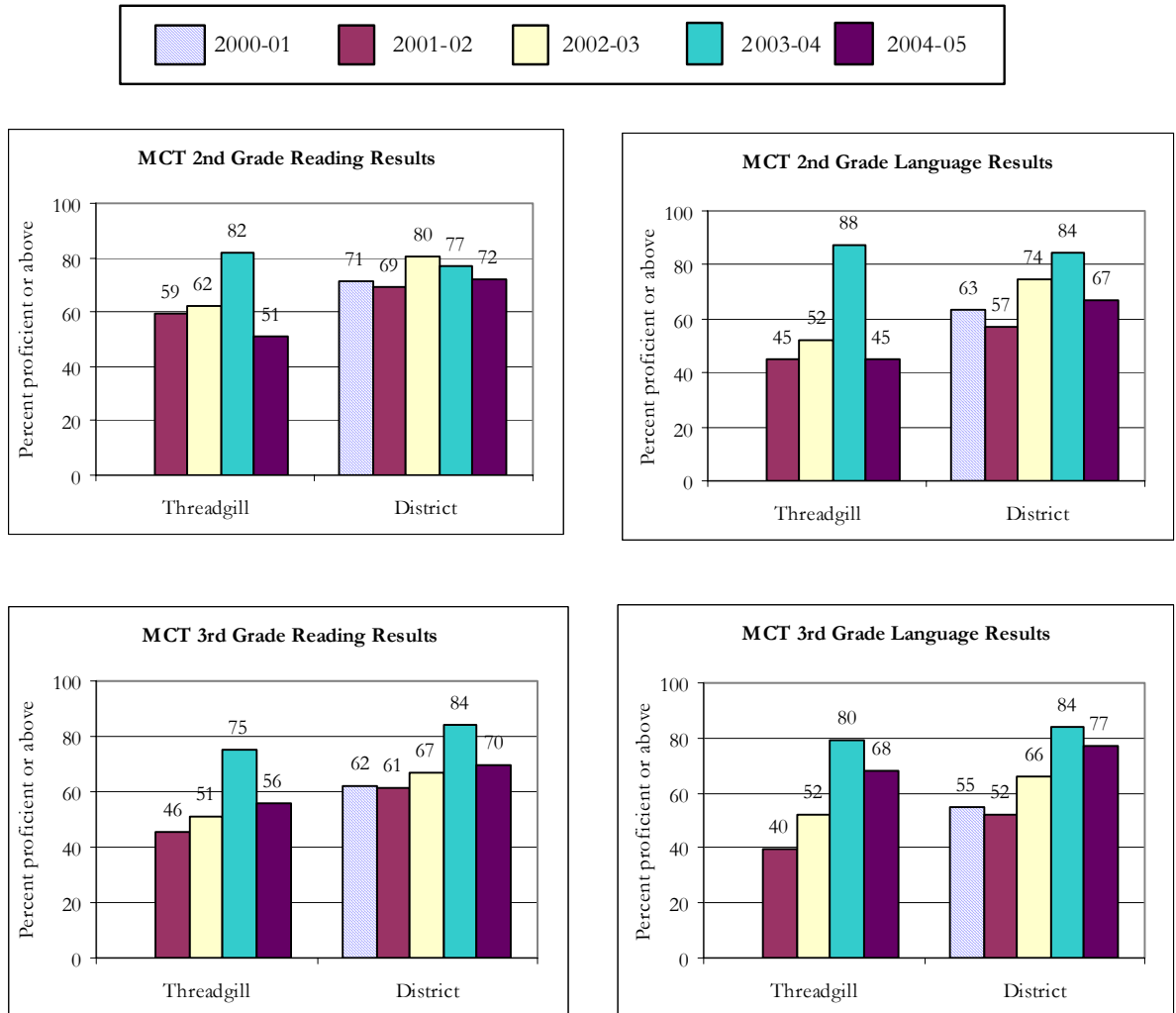
*Two 1st grade teachers and one 2nd grade teacher did not indicate students' DRA level in the data they submitted.

Test Score Comparisons

The Mississippi Curriculum Test (MCT) has been given in Greenwood since 2000-01 in reading and language. The MCT measures the proficiency level of students. The results from the 2004 – 05 MCT results are presented on the following page.

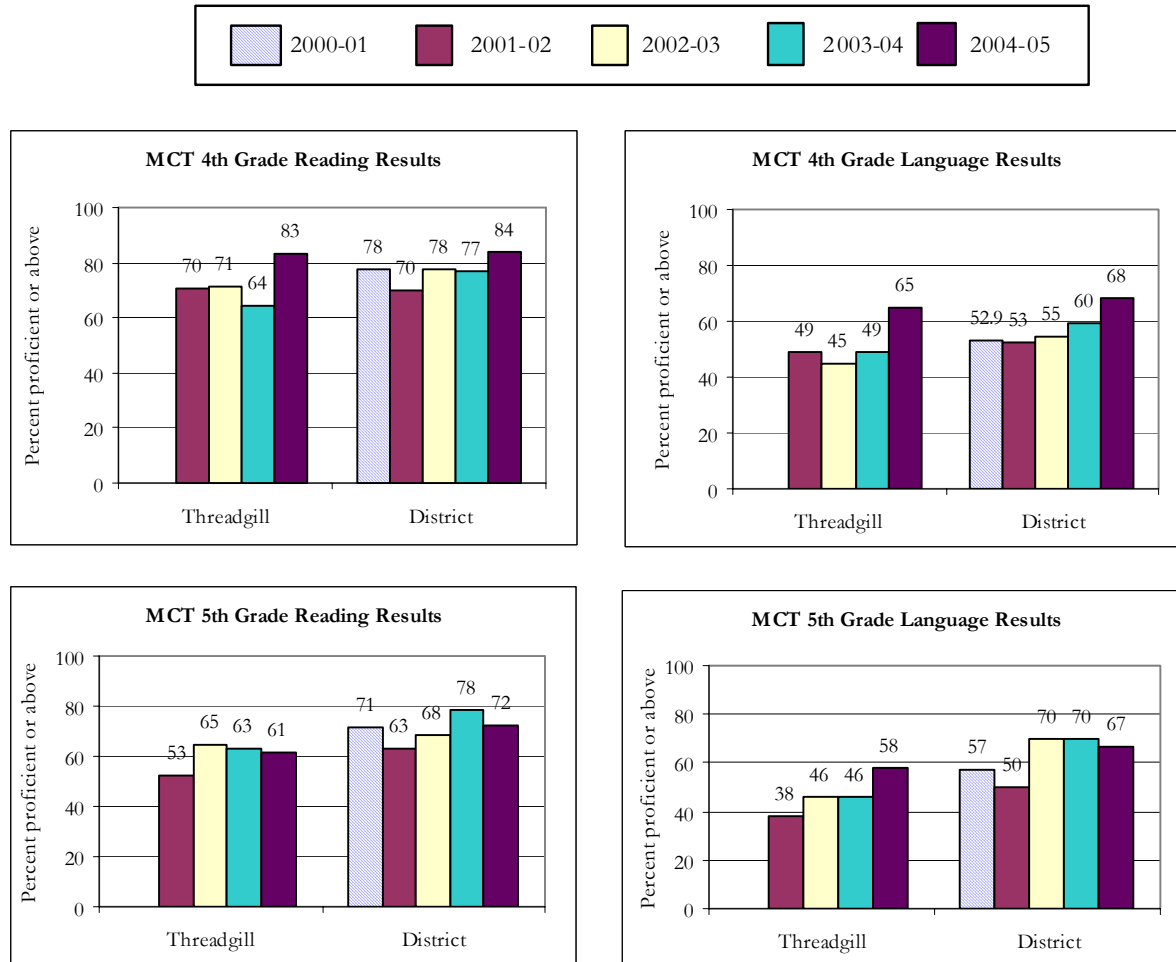
²² The average for the Cornerstone schools excludes New Haven and Bridgeport. The average for the Cornerstone schools is 59% meeting the benchmark in 1st grade, 69% in 2nd grade, and 68% in 3rd grade.

Figure 9. Greenwood MCT Results



On both the 2nd grade reading and language portions of the MCT, the percent of students at Threadgill scoring proficient or above dropped off sharply from their 2003-04 levels, and were more similar to their results registered in 2001-02. For the 3rd grade reading and language results, student test scores at Threadgill decreased in 2004-05 from the previous year. However, the 2004-05 scores were higher than their 2002-03 scores, and thus continue in an upward trajectory. Threadgill's 3rd graders remained below the district average in reading and language.

Figure 10. Greenwood MCT Results cont.



Threadgill showed substantial increases in both the 4th grade reading and language arts test scores. Threadgill was only slightly below the district average for the 4th grade reading and language test scores. The 5th grade reading results in 2004-05 for Threadgill remained at the same level as in previous years, and their 5th grade language results increased over all previous years.

Sufficient data were not available to conduct regression analyses using Greenwood data.

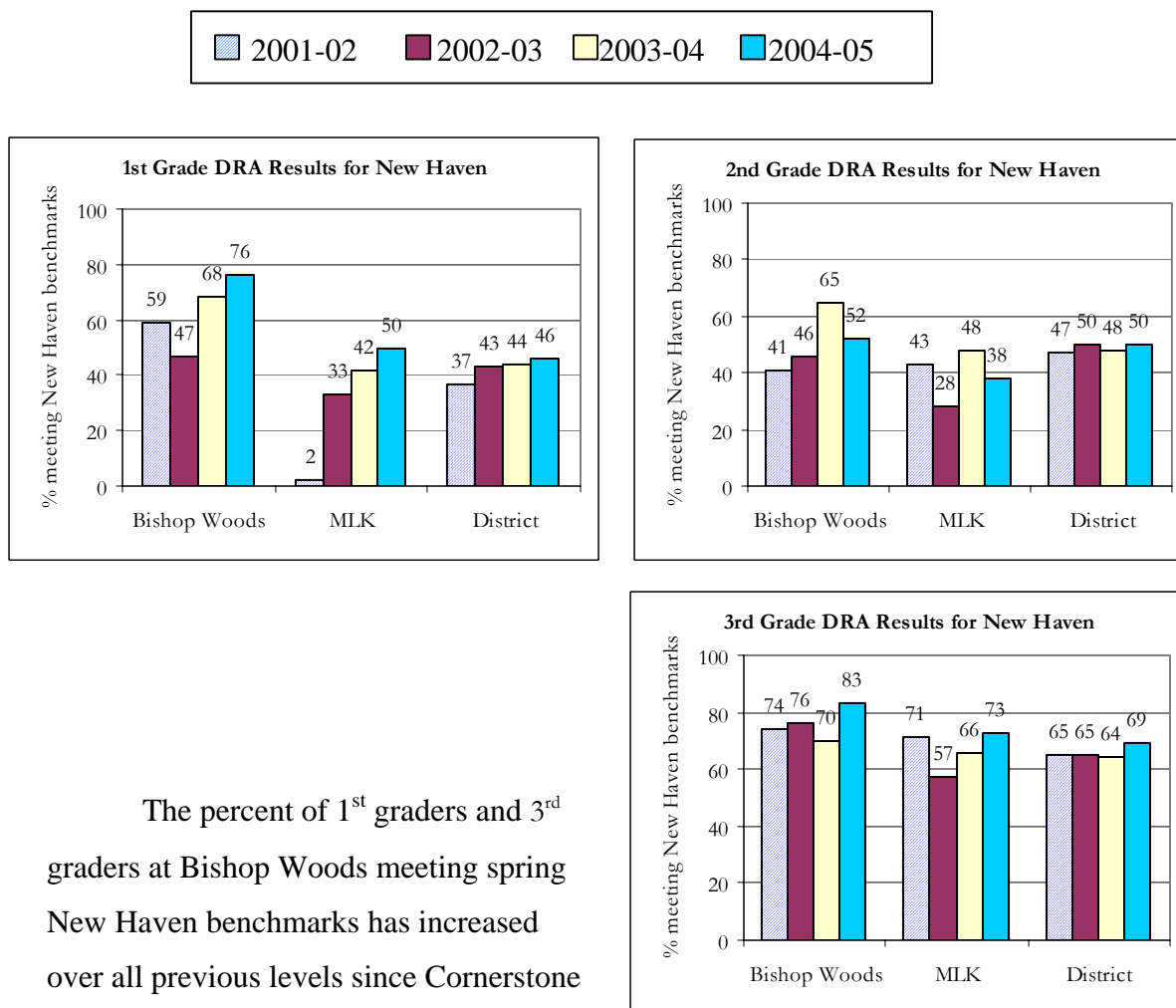
New Haven Outcomes

The cohort of New Haven Cornerstone schools whose data are presented here began in 2002-03.

Developmental Reading Assessment (DRA) Results

The charts below show the DRA results for Bishop Woods, MLK, and the district as a whole since Cornerstone began working in the district. These data are provided by the New Haven School District and reflect the New Haven benchmarks.²³

Figure 11. New Haven DRA Results



The percent of 1st graders and 3rd graders at Bishop Woods meeting spring New Haven benchmarks has increased over all previous levels since Cornerstone

²³ The spring New Haven benchmarks across these three years have not changed. To achieve the benchmark, students in 1st grade must be at DRA level 16, in 2nd grade they must be at DRA level 28, and in 3rd grade they must be at DRA level 34. These benchmarks are slightly higher for 2nd graders than what we used to assess the other Cornerstone schools.

began working in the schools. The percent of 2nd graders meeting the benchmark decreased between 2003-04 and 2004-05, but was at a higher level than in 2001-02 or 2002-03. All three grade levels at Bishop Woods in 2004-05 surpassed the district average for percent meeting the spring benchmark.

At MLK, there was an increase among 1st graders and 3rd graders reaching the benchmark as compared to previous years. The 1st and 3rd graders met the benchmark at a slightly higher percent than the district as whole. Among 2nd graders, there was a lower percent of students meeting the benchmark in 2004-05 than in the previous year, and the percent meeting the benchmark at MLK did not meet the district average.

Table 8. DRA results for stable students in New Haven

Bishop Woods				
Students who remained in Bishop Woods for two years				
	Grade 1 2003-04	Grade 2 2004-05	Grade 2 2003-04	Grade 3 2004-05
Percent Meeting Spring New Haven Benchmark	74%	62%	71%	90%
N	39	39	41	41
Martin Luther King				
Students who remained in MLK for two years				
	Grade 1 2003-04	Grade 2 2004-05	Grade 2 2003-04	Grade 3 2004-05
Percent Meeting Spring New Haven Benchmark	47%	27%	54%	73%
N	15	15	26	26

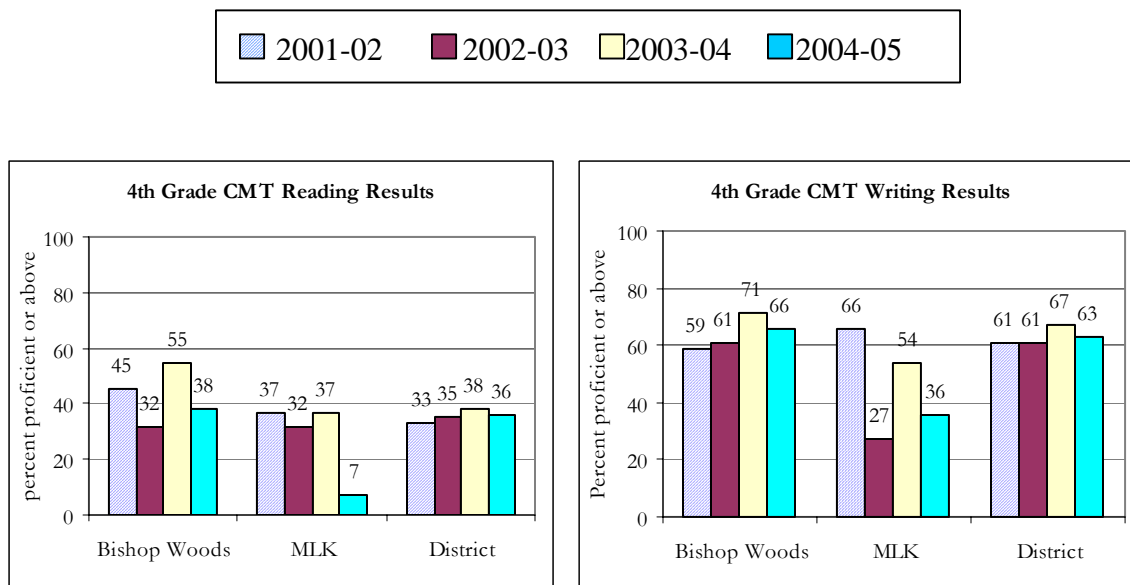
In both Bishop Woods and MLK, among the students who moved from 1st grade to 2nd grade between 2003-04 and 2004-05, the percent of students who met the New Haven spring benchmarks decreased. However, among the students moving from 2nd to 3rd grade in the same years, the percent meeting the spring benchmarks at both schools increased appreciably. Bishop Woods successfully got 90% and MLK 73% of 3rd graders who had been at the school in 2003-04 to meet the district benchmark.

Test Score Comparisons

Connecticut requires teachers to administer the Connecticut Mastery Test (CMT) in grades 4 and 6. The CMT reading and writing tests are administered in the fall of each

school year,²⁴ and measure student proficiency levels. The 2001-02 school year is the year before Cornerstone began working in New Haven.

Figure 12. New Haven CMT Results



In fall 2004, both Bishop Woods and MLK's 4th grade students had a decrease in the percent proficient on the reading and writing portions of the CMT, compared to fall 2003. Bishop Woods' results for both reading and writing still remained above the district average, but their reading results have fluctuated over the past four years. MLK's 4th grade students experienced a sharp drop, especially on the reading portion of the CMT. Their 4th grade writing results have fluctuated tremendously over the years of Cornerstone implementation in their school.

Sufficient data were not available to conduct regression analyses using New Haven data.

²⁴ Because the CMT is administered in the fall, students who are tested may be new to the Cornerstone school and their test results would not reflect Cornerstone treatment. The state of Connecticut is changing to a spring administration of the CMT in the 2005-06 school year.

Springfield Outcomes

The 2004-05 school year was Springfield's third year of Cornerstone participation.

Developmental Reading Assessment (DRA) Results

The DRA is given across schools in grades K-2 in Springfield. The Cornerstone schools were asked to administer the assessment to 3rd graders, in addition to the grades already tested by district mandate.²⁵

Table 9. DRA results for grades 1-3 in Springfield

Springfield		Grade 1 2004-05	Grade 2 2004-05	Grade 3 2004-05
Freedman	<i>Students reading at or above Spring benchmarks</i>	36%	72%	N/A *
	<i>Total number of students tested</i>	45	32	N/A *
Frederick Harris*	<i>Students reading at or above Spring benchmarks²⁶</i>	41%	51%	67%
	<i>Total number of students tested</i>	100	105	89

*Freedman only reported data for nine 3rd grade students.

Freedman's results for their 2nd grade students are slightly above the average for the Cornerstone schools, but their 1st grade students scored at a level lower than the Cornerstone average.²⁷ Harris' scores are below the Cornerstone average, but show an overall pattern of increases across the grades, with 3rd grade having the highest percent meeting the spring benchmarks, and nearly meeting the Cornerstone average.

²⁵ We received from Freedman Elementary School the DRA results for only nine 3rd grade students. The district's data also only had data for the nine students.

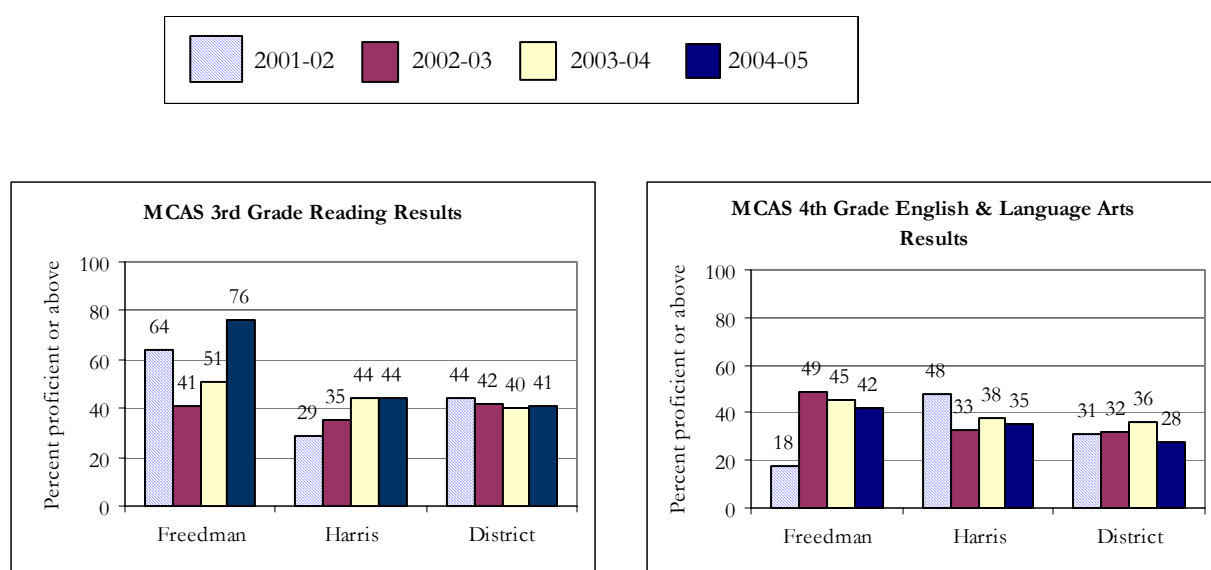
²⁶ The benchmarks used for the Springfield results are from the guidelines provided by the publisher of DRA.

²⁷ The average for the Cornerstone schools excludes New Haven and Bridgeport. The average for Cornerstone schools is 59% meeting the benchmark in 1st grade, 69% in 2nd grade, and 68% in 3rd grade.

Test Score Comparisons

The Massachusetts Comprehensive Assessment System (MCAS) has been administered to Springfield's 3rd and 4th graders for the past four years. The MCAS measures students' proficiency levels in reading at the 3rd grade and English language arts in the 4th grade. The figures below show the percent of students scoring proficient or above on the MCAS.

Figure 13. Springfield MCAS Results



On the MCAS 3rd grade reading exam, Freedman's scores increased considerably between 2003-04 and 2004-05. Harris' scores remained flat, showing no increase or decrease from 2003-04 to 2004-05. Scores for both schools on the reading MCAS were higher than the district average.

At both Freedman and Harris in 2004-05, the percent of 4th graders rated proficient on the English and Language Arts test decreased slightly from 2003-04. However, both schools' test scores were higher than the district average in 2004-05. The district's percent of students scoring proficient or above decreased to a greater degree than either Freedman or Harris.

Regression Adjusted Comparisons

The regression results for Springfield show a positive relationship between participation in Cornerstone and reading scores at Freedman. Participants at Harris showed no differences in reading scores compared to non-participants in the 3rd grade, and lower reading scores in the 4th grade.

Due to differences in testing²⁸ and in the number of years of available data in Springfield for different grades, two regression models were estimated—one for 3rd graders and another for 4th graders. The 3rd grade model included controls for race, gender, low income status, limited English proficiency, and special education status. The sample included all 3rd grade students taking the MCAS in all Springfield elementary schools in the spring of 2001 through the spring of 2005. A student was coded as having participated in Cornerstone if he or she was tested at Freedman or Harris in 2003 or later. Participation in Cornerstone at Freedman was associated with reading scores that were .24 standard deviations higher than non-participants.²⁹ At Harris, Cornerstone students showed no significant differences in reading scores from non-Cornerstone students. The 3rd grade regression model explained about 29% of the variation in student reading scores.

The 4th grade model included the same controls, with the sample consisting of 4th graders who took the MCAS in all Springfield elementary schools in spring from 2002 through 2005. For these students, participation in Cornerstone at Freedman was associated with reading scores that were .51 higher than non-Cornerstone students.³⁰ Participation in Cornerstone at Harris was associated with reading scores that were .42 standard deviations lower than non-Cornerstone students.³¹ The 4th grade model explained about 26% of the variation in student reading scores.

The statistical power of each analysis depends on a number of factors, including the size of the sample and the completeness of the information available on the characteristics of each student in the sample. Thus, data sets with many years of test scores, larger groups of students, and more extensive information about each student will

²⁸ For the 3rd grade tests, only raw scores are available, while for the 4th grade test scale scores are also available.

²⁹ $p < .10$.

³⁰ $p < .05$.

³¹ $p < .05$.

yield more precise estimates of the impact of Cornerstone. Since the Springfield regression analyses use smaller samples than those for the other districts, the impact estimates for Springfield can be expected to be somewhat less precise.

Horry County Outcomes

The test score results for the two Horry County schools that have been in Cornerstone for two years are shown below.³²

Developmental Reading Assessment (DRA) Results

The DRA results in Table 10 are from the Cornerstone test administration. Although Horry County School District has been administering the DRA for a number of years, they have not required teachers to use the comprehension portion of the test. Teachers in Cornerstone schools in Horry were asked to administer the test using the comprehension portion for our evaluation. However, because of low teacher attendance at the Pearson training, and the high stakes use of the DRA in the district, we believe these data should be interpreted cautiously. It is likely that not all teachers in these schools used the comprehension portion of the test to assess the reading level of their students. The result of this omission would inflate the DRA scores.

Table 10. 2004-05 DRA results for grades 1-3 in Horry County

Horry County		Grade 1	Grade 2	Grade 3
South Conway	<i>Students reading at or above spring benchmarks</i>	85%	92%	89%
	<i>Total number of students tested</i>	78	79	85
Waccamaw	<i>Students reading at or above spring benchmarks</i>	99%	96%	77%
	<i>Total number of students tested</i>	84	77	70

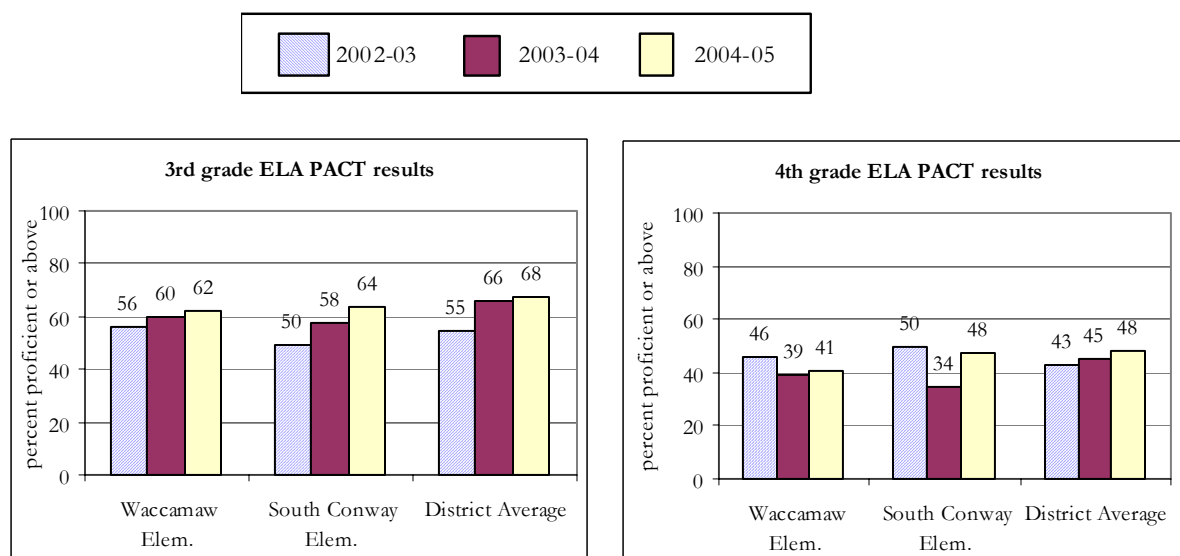
³² The results for the first year Horry schools appear in Appendix D.

Both South Conway and Waccamaw have the highest levels of students meeting the spring benchmarks of all the Cornerstone schools. 2nd graders at South Conway and 1st and 2nd graders at Waccamaw had over 90% of students meeting the benchmark.

Test Score Comparisons

Horry County administers two standardized exams, the state's Palmetto Achievement Challenge Test (PACT) and the district's Measures of Academic Progress (MAP) test. The PACT test is given annually in the spring by the state in grades 3-8. The MAP test targets grades 2-5 and is a computerized assessment given three times a year.

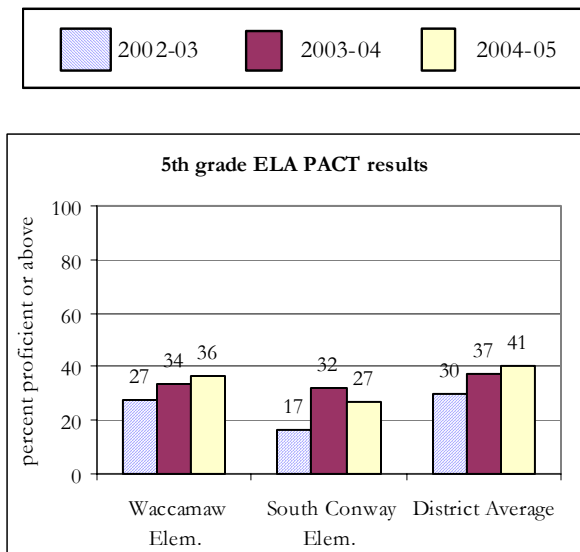
Figure 14. Horry County PACT Results



The state exam, the PACT assessment focuses on English language arts. 3rd graders at Waccamaw and South Conway have shown a small and steady increase, similar to the district pattern, in the percent proficient since the year before Cornerstone was implemented (2002-03). Both schools' 2004-05 scores were slightly below the district average. 4th grade scores at Waccamaw and South Conway both declined in 2003-04 from their level in 2002-03, but South Conway's 2004-05 scores did show increases over 2003-04, meeting the district average in 2004-05. The 5th grade scores at Waccamaw have increased steadily in small increments since 2002-03. South Conway's

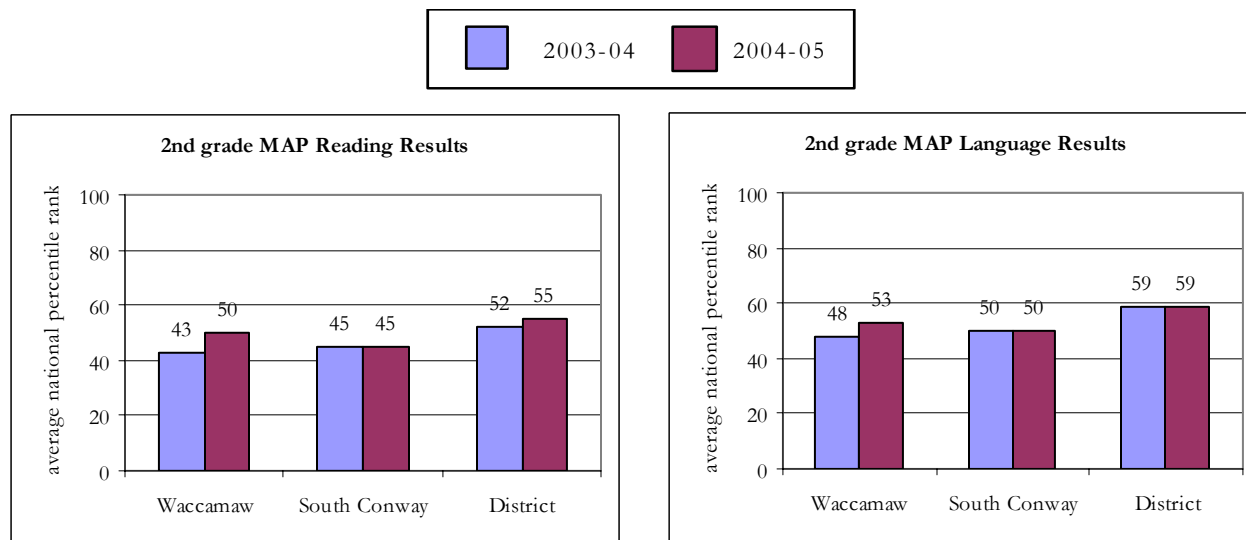
5th grade scores in 2004-05 declined from 2003-04, although their percent proficient was still greater than in 2002-03.

Figure 15. Horry County PACT Results cont.



The Horry County School District began using the MAP test in 2003-04, so we present the two years of available data in Figures 25-27. The scores are reported in average national percentile rank.

Figure 16. Horry County MAP Results



Overall the 2nd through 5th graders at Waccamaw had a small increase in average percentile ranking on the reading portion of the MAP test during their first two years of

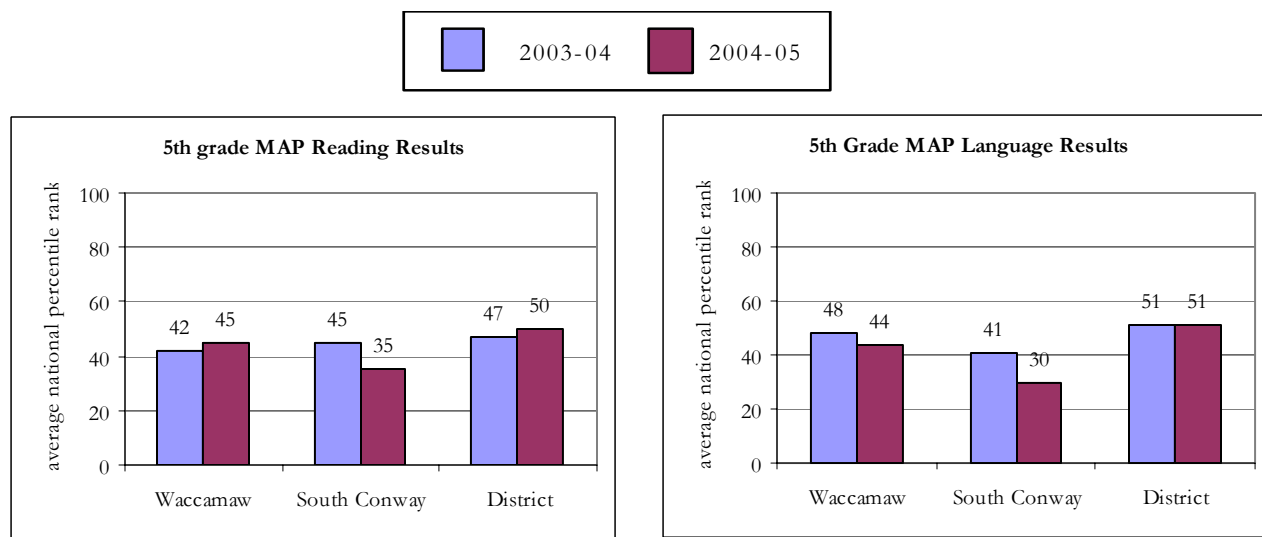
Cornerstone involvement (2003-04 and 2004-05). The 2nd and 3rd grade students also had a small increase on the Language portion of the exam. At Waccamaw, the 4th grade students' scores remained at the national percentile rank of 41%, and the 5th grade students had a small decline on the language portion.

Figure 17. Horry County MAP Results cont.



South Conway's 3rd and 4th grades had an increase in their average national percentile ranking between 2003-04 and 2004-05 on both the Reading and Language portions of the MAP test. Their 2nd grade students scored at the same level in each year, and their 5th grade students experienced a drop on both portions of the exam.

Figure 18. Horry County MAP Results cont.



Regression Adjusted Comparisons

The regression analysis using MAP results for Horry County showed no significant differences in reading scores for Cornerstone students at Waccamaw, and reading scores that were .10 standard deviations lower for participants at South Conway.³³ The regression model for Horry County included controls for race, low income status, limited English proficiency, and gender. The sample included all students in Horry County in grades two through five who took the MAP test in Fall 2003 (which served as the pre-Cornerstone implementation baseline test), spring 2004, and spring 2005. The model accounted for about 30% of the variation in student reading scores.

A separate regression analysis was conducted for Horry County using the English Language Arts (ELA) score data from the PACT test. This model included controls for race, low income status, limited English proficiency, and gender. The sample included students who took the PACT test in the spring from 1999 through 2005. Students were coded as having participated in Cornerstone if they were tested at one of the implementing schools in spring 2004 or later. In this model, students at the two Cornerstone schools showed no significant differences in ELA scores as compared to

³³ $p < .10$.

non-Cornerstone students. The model accounted for about 35% of the variation in test scores.

Summary of Student Testing Outcomes by Implementation Level

Although the results of the 2004-05 test scores continue to show mixed results, the schools that were in the implementation category of Fulfilling had the best overall outcomes. The results for the other implementation levels are more mixed. Among the Implementing and Partial clusters of schools there is some overlap in performance.

FACTORS THAT FOSTER OR CHALLENGE IMPLEMENTATION

The nature of the transformation in policy and practice necessary to implement the Cornerstone Initiative requires that practitioners in each school, as well as the school as an organization, “accept the challenge to change.”³⁴ This acceptance is influenced by institutional factors that help or challenge Cornerstone implementation at both the school and district levels. Factors at the school level include Cornerstone coach competency, principal leadership, staff stability, and teacher support or resistance. District-level factors include active superintendent and administrative support including resources to promote the work, a shared vision for literacy instruction and school reform, and prior knowledge and experience with embedded professional development and balanced literacy.

School-Level Factors & Cornerstone Supports

Coach Competency

The Cornerstone coaches who plan and carry out the school-based professional development are essential to improving literacy knowledge and teaching practice. According to Cornerstone staff, coaches must be good classroom teachers, have leadership potential, want to become leaders, and be willing to influence instruction beyond their own classrooms. Yet in some participating schools, weak teachers were selected to be coaches. In other schools, competent classroom teachers were selected who did not feel comfortable working with colleagues and were reluctant to visit other classrooms.

Cornerstone Literacy Fellows were the primary on-site representatives of the Initiative and provided the majority of the training to the coaches. They conducted demonstration lessons for coaches and classroom teachers, modeled classroom observations and teacher feedback sessions, helped coaches plan professional development activities, and assisted them in addressing any specific school-based concerns. When not on-site, Literacy Fellows provided ongoing training and support through regularly scheduled videoconferences with the coaches, and were also available

³⁴ Butcher, J., Dickinson V., Glendenning, P. Hancock, P., Hickson, F., & Trevaglia, J. *Social and Cultural Transformation through Participative Learning*. Paper presented at the Australian Association for Research in Education Annual Conference, Brisbane, December 3, 1997.

by e-mail and telephone for advice or consultation. In contrast to previous years, coaches and principals were uniformly pleased with the level of support they received from their Literacy Fellows during 2004-05. Across the majority of schools at all levels of implementation, coaches and principals reported being “very satisfied” with the support they were receiving, they met frequently with their Literacy Fellows to plan Cornerstone work and felt that their support was “very useful” in improving literacy instruction in their school. As a result of this improvement in support, the ability of Cornerstone to have an impact on coach competency and school change in general was improved in 2004-05.

Principal Leadership

Based on their experiences, the Cornerstone staff identified the school principal as a key factor to successfully implementing the initiative. Effective principals were defined as those who take an active role in the implementation of Cornerstone; support the work of the coaches in both words and actions; emphasize the importance of Cornerstone work at faculty meetings; attend book study groups; lead the asset mapping process; and monitor Cornerstone school-based activities. These principals motivate their faculties, demonstrate lifelong learning, and actively support and enhance the work of the Cornerstone coaches.

Cornerstone assigns Leadership Fellows to work with school principals in leadership development. During 2004-05, the leadership fellows held videoconferences and regular telephone calls, made regular on-site visits to some schools, and planned leadership-focused sessions at the Regional Meetings and Summer Institutes. Some principals reported that participation in Cornerstone activities had helped them become more informed about classroom learning, better understand the process of whole school change, organize faculty meetings to focus on practice rather than administrative matters, and change the ways they thought about parental involvement. In addition, principals reported appreciating the networking opportunities Cornerstone provided. However, the amount of support principals received from Cornerstone varied; some principals had regular contact with their Leadership Fellow, while others reported much less contact.

Staff Stability

It takes from three to five years for the complex changes involved in systemic school reform to move from initiation to institutionalization.³⁵ When teachers, coaches, and/or principals change during this period, it can prolong, and in some cases derail, implementation efforts. When the coaches were replaced in some schools, the Cornerstone staff had to begin again, orienting the new coaches to their new roles. Coaches in schools with high teacher turnover found themselves working intensively with new teachers each year, instead of helping the more veteran teachers refine and improve their teaching practice. Almost all of the 2004-05 schools had experienced turnover in their school principal during Cornerstone implementation. The new principals assigned to schools that were already involved with Cornerstone were expected to support an initiative they had had no role in selecting and often knew little about.

Teacher Support or Resistance

Teacher support or resistance can take place formally through professional groups and unions, and informally through the degree to which teachers participate in embedded professional development activities and what they do in their classrooms after closing their doors. In schools where book study groups were voluntary and/or held after school, sometimes significant numbers of teachers chose not to participate, although this was not always the case. In a couple of schools, some teachers were reluctant to adopt Cornerstone's focus on comprehension skills because they believed this would bring down their test scores. Other teachers reported feeling overwhelmed because they believed they were being asked to implement multiple new and competing initiatives. Additionally in some school districts, veteran teachers have experienced many short-lived reform efforts involving different reading programs, curriculum materials, and teaching methods. Some of these teachers have become extremely skeptical of new educational reforms and are content to 'wait out' new programs or initiatives.

³⁵ Fullan, M.G. (1991) *The New Meaning of Educational Change*. New York: Teachers College Press.

District-Level Factors

District factors clearly contributed to successful Cornerstone implementation. Moreover, without district support, Cornerstone has little hope of sustainability or spreading. But supportive district conditions alone cannot promote the work in schools in which there is no leadership and commitment. Several districts, for example, had schools identified as Fulfilling or Implementing, *and* also had schools in which Cornerstone implementation was defined as Partial or Low, thus district support is not a sufficient enabling condition.

Active Administrative Support

The superintendent, the district strategy manager, and literacy personnel in each Cornerstone district have become central to ensuring the success of the Cornerstone work. The district strategy manager is key to providing support to schools and acting as a liaison to Cornerstone. In two districts this person has been very active in the work and had helped maintain momentum for the Initiative despite less active superintendent support or turnover in the superintendent position.

Several Cornerstone staff members noted the enabling importance of a superintendent “who understands very personally what this kind of work in a school looks like and what this kind of learning for kids looks like, and has positioned the Cornerstone process as part of his or her district-wide plan.” These staff believed that in districts where reform was driven by individual schools rather than by the district, those schools were less likely to be successful.

Cornerstone assigned a district liaison to each district that was responsible for establishing positive working relationships with the superintendent, district strategy manager, and other district personnel. The liaison’s role was to ensure that schools receive district support, and to assist districts in developing structures and policies for scaling up and sustaining Cornerstone literacy practices. In districts with schools that ranked higher on our implementation clusters, the district liaison and the district strategy managers were in regular contact and worked as partners in supporting Cornerstone schools.

Literacy Focus and Shared Vision for Reform

According to Cornerstone, literacy plays a central role in the teaching of any subject. Students who fail to gain literacy skills early in life are at risk and often face restricted choices and opportunities. Schools in districts that had identified literacy instruction as a priority and developed long-range district-wide literacy plans philosophically aligned with Cornerstone practices were described by Cornerstone staff as being much further along in terms of implementation than districts without those characteristics. Schools in districts where there was a lack of consensus about effective pedagogy, limited knowledge of current literacy research and theories, and minimal focus on student literacy outcomes found little district support for their efforts.

Embedded Professional Development and Balanced Literacy

Some districts had developed district-wide balanced literacy approaches and supported embedded professional development activities for several years prior to the introduction of Cornerstone. These districts had already hired school-level coaches who became active members of the Cornerstone team. Teachers and principals in these districts shared the districts' vision and were already familiar with school-level coaching, book studies, and grade-level meetings. Some districts also had ongoing leadership development programs for school principals. Teachers in these districts were able to build on their prior knowledge and experiences and thus were able to implement the Cornerstone strategies much more quickly than in districts with limited or no experience of implementing similar programs.

District Selection

The original Cornerstone model defined schools as the key change agent in district literacy practice. District administrators were involved in the early work, but their prominence and role has expanded over the years. Based on the Initiative's evolving experience, Cornerstone staff has realized the primary role of the district in Cornerstone's success. A number of staff discussed ways in which the Cornerstone organization is working to address this issue and improve their process for selecting new districts. Staff members highlighted antecedent conditions that led to improved

implementation of Cornerstone, such as an existing culture of effective professional staff development. One staff member defined the difficulty of trying to work in schools “that have done reform models, but it is just something that they do. It never changes anything.” This staff member underscored the necessity of a pre-existing foundation that Cornerstone could build upon. Cornerstone staff has begun to articulate a process for selecting districts with capacity to make changes. Staff members indicate that, now “[unless] the district has some vision at the district level and some resources at the district level... we won’t take the district on.”

Other Literacy Programs and Perception of Cornerstone

Clearly Cornerstone implementation does not occur in an instructional vacuum. In the schools and districts in which it operates, Cornerstone is often one of several strands of work focusing on school and literacy improvement. In previous evaluation reports, we have discussed how participants and staff view Cornerstone in terms of its compatibility with both pre-existing programs and programs introduced during Cornerstone implementation. A frequently praised aspect of Cornerstone has been and continues to be the flexibility and adaptability of the Initiative to individual school needs and other instructional mandates and literacy programs. But because of the adaptability of the model, participants define Cornerstone in different ways.

Interviewees articulated four primary and often intersecting working definitions of Cornerstone. Cornerstone was viewed as: a whole school change model driven by literacy practice, a professional development model, a literacy program focused on deep comprehension strategies, and an initiative advocating best literacy practices through a variety of activities.

Cornerstone staff members were largely the only group who articulated a vision of Cornerstone as a whole-school change model driven by literacy practice. Staff members described how Cornerstone is designed to change school-wide practices through professional development and individual classroom instruction. They emphasized the idea that Cornerstone is “about school change and change at all levels: the teacher, the children, the administrator, and the parent.”

However, people who defined Cornerstone primarily as a professional development model also understood the influence on school-level as well as classroom-level practices. These principals, coaches, and teachers made a distinction between Cornerstone as a philosophy rather than as a packaged program. Interviewees reported that Cornerstone supplements, rather than supplants, their ongoing literacy efforts. This definition of Cornerstone came most often from districts in which a district-wide approach to literacy instruction was in place, and teachers were receiving ongoing professional development focused on literacy. Interviewees remarked that Cornerstone was helping to change school-wide practices in areas not limited to literacy teaching, such as teacher collaboration and parent involvement. In general, the schools implementing Cornerstone at higher levels adapt Cornerstone to fit their individual needs and have practitioners who define Cornerstone as a professional development model.

In other schools and districts, Cornerstone is viewed primarily as a literacy program focused on deep comprehension strategies, limited to classroom activities such as crafting, composing meaning, and reflection. Teachers in these sites mention other aspects of Cornerstone, such as working with other teachers and student-centered instruction, but the primary definition of Cornerstone centers on the deep comprehension strategies and the structure of the literacy block. Schools in the lower implementing groups did not have clear, pre-existing literacy practices, and aside from textbooks, were often using Cornerstone as the main literacy model. Practitioners in these schools rarely refer to the professional development or whole school change aspects of Cornerstone and whole school change activities, such as book study and asset mapping, were less prevalent in these schools.

Cornerstone schools that did not have preexisting literacy programs in place that emphasized surface skills and were using Cornerstone as their only literacy model worried that their students needed more help with phonemic awareness and phonics. Many of these schools had added, or were in the process of adding, additional literacy programs and practices to provide greater emphasis on surface skills instruction. Interviewees reported these decisions were based on low test scores and the perceived needs of their student population. In response to these needs, Cornerstone has been

addressing the perceived lack of surface skill coverage and has hired additional staff to develop these emphases for the Initiative.

In many sites, regardless of implementation level, participants defined Cornerstone as essentially best practices and argued that the Initiative contained nothing new except for different terminology. This view was often mentioned in the context of introducing Cornerstone to school faculty to reassure teachers that Cornerstone would only reinforce and enhance what they were already doing in their classrooms. While this strategy may be an effective means of enlisting the support and involvement of more teachers, it has the potential to overshadow the school change aspect promoted by Cornerstone.

In many districts, especially among those in the higher implementing categories, the schools' existing literacy plans and Cornerstone practices are similar, since both draw on the confluence of broadly accepted balanced literacy practices. In those districts, school and district staff were able to communicate an integrated plan to teachers that incorporated both the district and Cornerstone practices. In other districts that had adopted more prescriptive literacy programs, integrating the two was more difficult, though not impossible. Schools that successfully implemented Cornerstone despite more prescriptive mandates were comfortable with Cornerstone practices and philosophy, and viewed teachers as professionals. As one principal stated, "Cornerstone is the tools, the teacher is the decision-maker." Such a proactive stance helped teachers understand how to integrate district programs with their existing Cornerstone work.

SUMMARY OF FINDINGS

In the preceding pages we have sought to answer three questions about Cornerstone's work during its fifth year: to what extent has Cornerstone been implemented in participating schools; to what extent has implementation had an impact on schools, teachers, and students; and to what extent have student outcomes on standardized tests and the DRA changed. Below is a summary of our *Fourth Year Evaluation Report*.

Implementation

The evaluation team ranked the Cornerstone schools in one of four implementation levels (Fulfilling, Implementing, Partial, or Low Implementing), based on their Cornerstone activities during the 2004-05 school year. The two highest implementation clusters contained 12 of the 17 Cornerstone schools. The six schools in the Fulfilling cluster were fully implementing the model and moving toward institutionalization of Cornerstone practices. The schools in the Implementing cluster were close to full implementation of all the Cornerstone components. Being in the Fulfilling and Implementing clusters meant that structural elements such as coach release time, common planning time for teachers, and regular grade-level meetings were in place to facilitate Cornerstone professional development; administrators and teachers were engaged in continuous planning and assessment; Cornerstone work was given high priority; and the majority of teachers held positive views of the Initiative and reported that they had changed their classroom practice.

Among schools ranked in the lower implementation clusters, several school-level factors made implementation at these sites more difficult. First, although the majority were in districts that also contained schools ranked in higher implementation categories, and teachers and administrators in all five schools viewed Cornerstone as competing with, or at cross-purposes with other district or school initiatives. In contrast, school leaders in their higher implementing counterparts were able to successfully integrate Cornerstone with other literacy efforts. Second, the long-term Cornerstone schools had experienced turnover in teachers, coaches, and principals. Changes in principal and coach leadership, combined with teacher turnover, all hindered the creation of

professional learning environments and positive cultures of collegiality and collaboration necessary to support Cornerstone implementation. A third issue for these schools was persistent pockets of teacher resistance. Despite these challenges, some Cornerstone elements were in place in the lower implementing schools and there was evidence that some staff were committed to and hopeful about increased implementation in the coming years.

Impact

The report examined two levels of Cornerstone impact: intermediate- and long-term. In the surveys and interviews, teachers, coaches, and administrators in the higher implementing schools all described a number of intermediate outcomes they attributed to Cornerstone. These included positive changes in the overall school culture, increased staff collegiality and collaboration, and higher expectations for teachers and students. Practitioners in these schools also reported that Cornerstone had deepened their understanding of how students learn literacy and helped them make permanent changes in their teaching practice. They felt they had learned more about their students as individuals and had better interpersonal relationships with them. As a result, teachers said their students were more highly motivated to read and write, had better classroom behavior, and were more excited about learning. According to the teachers, students exhibited improved oral language skills, read more books, and had better reading comprehension and writing skills.

With regard to long-term goals, teachers, coaches, and principals all believed that the Initiative has had a positive impact on students' test scores in those classrooms where Cornerstone strategies were being implemented. This belief is supported by our analyses of student test scores that showed that the Fulfilling schools, the six schools with the highest implementation levels, had the best overall test scores. These schools showed improvements over the previous years' scores. Moreover, the results of the regression analyses showed Cornerstone had a positive impact on those outcomes. Results for other implementation levels were more mixed.

Factors That Foster or Challenge Implementation

Implementation is influenced by institutional factors at both the school and district levels. Because Cornerstone was conceived as a school-based, bottom-up reform model, most of the organization's efforts have been at the school level. Principal leadership was identified as the single most important factor in successful school-level implementation. This effective leadership was defined as understanding the Cornerstone Initiative, making Cornerstone implementation a priority within the school, leading planning activities such as asset mapping, actively supporting the work of the Cornerstone coaches, participating in book study groups and grade-level meetings, and monitoring Cornerstone school-based activities. Principals in higher implementing schools found ways to engage teachers and lessen their resistance over time and were able to integrate Cornerstone with district and state mandates. Cornerstone leadership fellows offer leadership and organizational development support to school principals, but in some schools this support was insufficient to help principals overcome obstacles to the work.

The stability of school personnel, particularly the principal, coaches, and teachers, is another factor that has affected Cornerstone implementation. While schools at all levels of implementation experienced changes in leadership, coaches, and teachers, schools in the two lower implementation clusters all experienced key personnel instability more acutely. Schools at higher implementation levels were able to strategically manage turnover and their districts offered support to perpetuate Cornerstone activities. Lower levels of teacher support were found in lower implementing schools, and these schools were less able to maintain momentum for the Initiative.

Over the years, Cornerstone staff members have increasingly focused on the important role of school districts in Cornerstone's implementation. Staff has refined the criteria by which new districts should be selected, based on past experiences. The original Cornerstone model considered schools the initial change agents, and change was conceived as proceeding from the bottom up, starting first in the coaches' classrooms and spreading throughout the target schools and then to other schools throughout the district,

facilitated by the coaches and their schools. Cornerstone staff now acknowledge that school implementation proceeds much more quickly and smoothly with active district support. They also recognize that the Foundation schools will ultimately be more successful in spreading Cornerstone practices to other schools when the district, rather than individual Foundation schools, drives the reform effort. Thus Cornerstone is becoming an integrated bottom-up and top-down model with schools, districts, and the Cornerstone organization working in partnership to enact change.

In 2004-05, two Cornerstone school districts added two new schools each to the Initiative at their own expense and had plans developed to add more schools in subsequent years. This reflects a different model for extending the Initiative's reach earlier in Cornerstone's tenure in the district. Three of these first-year schools were considered part of the Implementing cluster, because they were able to put in place most of the Cornerstone components within their first year. Successful early implementation at these sites further demonstrates the positive role that district support can play in helping schools implement and spread Cornerstone practices.

An important shift seen this year has been the support offered by Cornerstone Literacy Fellows. Across the majority of schools at all levels of implementation, coaches and principals reported being very satisfied with the literacy support they were receiving, met frequently with their Literacy Fellows, and felt that their support was "very useful" in improving their school's literacy instruction. In this fifth year, we saw a more even and consistent distribution of Cornerstone support for schools.

CONCLUSION

In 2004-05, Cornerstone completed its fifth year of helping school's improve their literacy instruction. Our primary finding establishes a relationship between implementation level and outcomes. In schools that are implementing Cornerstone at the highest levels (Fulfilling schools), teachers indicated positive changes in school culture and classroom instruction and growth in students' academic achievement and social/emotional development. These Fulfilling schools also demonstrated improved student outcomes on the DRA assessment and on standardized assessments.

The clearest incentive to continue Cornerstone work is achieving positive results. For several years, participants have described positive developments in teaching and learning within their schools, but have been frustrated by limited growth or even setbacks in test scores. In the analysis of outcomes presented here, some Cornerstone schools have posted encouraging results. These gains, however, are not uniform; for schools that are not in the Fulfilling cluster, there is no clear relationship between their test scores and their implementation level, and some schools' results continue to have no clear pattern. The task for Cornerstone is to determine how to continue to support the current successful work among the highest implementing groups and how to foster the expansion and institutionalization of Cornerstone within the schools and districts. But a critical challenge is how best to assist Partial and Low Implementing schools. Our analysis makes clear that Cornerstone needs to provide greater support to those schools to help them integrate Cornerstone with district literacy plans and to ensure that their principals receive additional support and training.

The positive impact of Cornerstone on participating schools' intermediate outcomes-- school culture, student's socio/emotional development--is congruent with our findings in previous reports. What distinguishes our findings this year is the correspondence between schools that have the highest levels of implementation of Cornerstone and schools that have high test scores. This correspondence suggests that the changes Cornerstone has made to its provision and support structure, to its professional development, and the selection process for new districts may be contributing to this positive outcome. We are encouraged by these findings. Future evaluation will clarify their significance.

APPENDICES

TABLE OF CONTENTS

A. FOUNDATION & PARTNER SCHOOLS REPORT...	75
B. FOURTH YEAR REPORT METHODOLOGIES.....	82
INTERVIEW DATA	82
ONLINE SURVEY ADMINISTRATION & RESPONSE RATES.....	83
IMPLEMENTATION RANKING	84
FIXED EFFECTS REGRESSION METHODOLOGY & TABLES.....	90
UNIVERSAL DRA ADMINISTRATION.....	96
C. SURVEY TABLES FROM ONLINE TEACHER SURVEY.....	98
D. FIRST YEAR AND PARTNER SCHOOL TEST SCORE OUTCOMES	103
E. CORNERSTONE SCHOOL CONTEXT AND OTHER LITERACY	109
F. SUMMARY OF PREVIOUS FINDINGS.....	116

A: FOUNDATION & PARTNER SCHOOLS

This report, an addendum to the *Fourth Year Evaluation Report*, focuses specifically on the first year of the foundation-partner school model. We delimit two areas of Cornerstone activities in foundation schools: the continuation of Cornerstone work carried out within the school for the benefit of foundation school staff, and activities conducted by foundation school staff to promote Cornerstone within the partner schools. The first set of activities is addressed in the main evaluation report; foundation schools' activities were considered alongside other Cornerstone schools and categorized by implementation cluster. This addendum specifically considers the work of the foundation schools with their partner schools, documents the work that took place in 2004-05,³⁶ and examines the successes and challenges experienced by both foundation and partner schools as they worked to spread the Initiative.

Introduction

The long-term goal of The Cornerstone Literacy Initiative is to create successful Cornerstone schools that can serve as springboards to spread Cornerstone practices across each participating district. After providing support to individual schools over the course of four years, Cornerstone invites schools to apply for Foundation Status, an extended period of support in which Cornerstone schools serve as teaching schools for selected partner schools within their district. According to the Cornerstone website, to reach Foundation Status schools are expected to successfully implement Cornerstone reform in K-3 and/or more grades, show evidence of literacy achievement in grades one through four, and develop a plan that describes how the Foundation Schools, partner schools, and the district will work together to ensure both the continued success of the Foundation School and the introduction of the Initiative at the partner school.

During the 2003-04 school year, schools in their fourth year of the Cornerstone Literacy Initiative were invited to apply for Foundation Status. Seven schools applied for, and were awarded, this status. Four of the seven schools awarded Foundation Status conducted activities as a Foundation School during the 2004-05 school year.³⁷

³⁶ Refer to the Appendix C for detailed information on the collection of qualitative data for the *Fourth Year Evaluation Report*.

³⁷ Foundation status was awarded to all the Cornerstone schools in three of the original Cornerstone districts: Cleveland, Jackson and Talladega. However, due to budgetary constraints, Cleveland chose not to continue the work into the foundation year. A third school in Jackson was unable to pursue foundation activities because they had low standardized test scores in 2003-04; the district decided not to allow them to work with a partner school.

Participation in Foundation-Partner school activities varied both by school and district. However, several common themes emerged from interviews at foundation schools, partner schools, and districts. In general, participants felt a sense of pride and satisfaction associated with being awarded Foundation Status, because the award not only acknowledged their accomplishments, but also signaled a belief in their capacity to promote change. In many cases, foundation school activities generated renewed reform energy, and coaches often felt that their work with the partner schools provided an opportunity to improve their own practice.

Each Foundation School was responsible for developing a plan for how to work with their partner schools. In some cases, this responsibility led to a sense of ownership and collaboration among the staff of both schools. In other cases, this independence led to a level of uncertainty about how to proceed with the work. In one school, school staff expressed their need for more guidance from Cornerstone and more support from their district.

Foundation School Districts

The 2004-05 cohort of Foundation Schools consists of four schools in two districts. The districts are quite different in many ways -- demographics, size, approach to literacy instruction, philosophy of professional development, the level of involvement of district administrators, and the overall historical context. The contrast between the two districts illuminates factors that can help or hinder the spread of the Cornerstone Literacy Initiative.

One district, relatively small with only eight elementary schools, with a predominantly rural student population, is characterized by a progressive approach to professional development and a history, at least at the administrator level, with components of the Cornerstone model such as book study groups. The philosophy of lifelong learning is pervasive in the district and influences activities from the central office down to the classroom, and district's monthly meetings with principals were seen as an opportunity to model good instruction.

All but one of the elementary schools in the district have engaged in a state literacy program concurrent with Cornerstone. As part of the state program, these schools have received extensive training in how to improve classroom reading instruction based on the five essential components of literacy, as defined by the National Reading Panel. Most interviewees thought that this background complemented their work with the Cornerstone Literacy Initiative and one teacher remarked, "[Cornerstone] is going to fit right in because [the state literacy program] has

very good points but there isn't the depth in comprehension and Cornerstone's going to fix that up and add to that part." This perception is based on the efforts of the school and district administrators, who explicitly state they have worked hard to help teachers see the connections among the different literacy approaches the district employs. Teachers are encouraged to use their knowledge of their students and make professional decisions about what will help their students succeed. One teacher summarized her approach by saying, "...there is not one certain program, we don't have an adopted program that we are using, we have textbooks but we integrate everything."

The other district sponsoring foundation and partner schools is large, with 38 elementary schools in an urban setting. Historically, the district has had a fragmented approach to instruction and professional development. Starting in 1995-96 low performing schools in the district were asked to implement a program selected from a range of whole school reform models such as Success for All and Modern Red Schoolhouse. These models guided instruction in the schools, rather than a district-wide plan for instruction and improvement. Beginning in 2003-04, however, the district changed course and moved to develop a cohesive approach to literacy instruction. The district contracted with a national organization to provide support for a new literacy model and to lead teacher-training sessions for selected grades throughout the school year. Though district personnel define Cornerstone as complementary to the new literacy model, they were also explicit that the district's current focus is on implementing this new effort in all 38 schools. They have not helped teachers understand the relationship between the two approaches. While the two Foundation schools in this district had aligned their Cornerstone activities with the new model, the uncertain relationship between the two programs has left some teachers confused about which is their school's primary literacy program. As one teacher explained, "you need to know how to balance Cornerstone with what the district expects you to do also because you have to do what the district outlines for you to do as well. So I am afraid I'm leaving something out."

Foundation-Partner School Activities

Foundation Schools are charged with the task of spreading Cornerstone work to other schools in the district, and it is the responsibility of the Cornerstone schools and the district to develop and implement a plan for replication. This approach individualizes the process of

developing additional Cornerstone schools, and the process differed in many aspects in the two Foundation school districts. The central office administration in the small rural district played an active role in every aspect of the Foundation School work, while administrators in the larger urban district took a more passive approach that essentially conferred responsibility for implementation to the Foundation Schools themselves.

Partner School Selection

Like the selection of the original Cornerstone schools, the selection of the partner schools and the teachers who act as coaches in these schools are crucial decisions that impact the work of the Cornerstone Foundation School and how the work grows in the Foundation districts. The administration in the small, rural district chose partner schools strategically, focusing on principals who were supportive and a faculty that was receptive to new approaches. The two schools selected to be partner schools in this district were approached towards the end of the school year prior to the Cornerstone Summer Institute, and subsequently attended the Summer Institute with faculty from their Cornerstone mentor school. In contrast, the partner schools in the large, urban district were selected based on low-test scores, and the principals and faculty did not participate in the Summer Institute. Of the two partner schools selected in the large, urban district, one principal was new to the building, and the principal of the other school resigned in fall 2004 and was replaced by two interim principals in spring 2005.

Approach

The ways in which Cornerstone schools introduced the Cornerstone philosophy and strategies to the partner schools affected the spread of the work and illustrate two different models of Foundation School implementation. In the small rural district, coaches at the Cornerstone Foundation schools spent two days a week at the partner schools over the course of the school year, engaging the faculty in activities related to Cornerstone. In addition, each Cornerstone Foundation School hosted two two-day professional development sessions called Lab School, and invited faculty from the two partner schools. Each Lab School session included time for visitors to observe a classroom and then a debriefing session with the teacher about the observed lesson and the choices he/she made. The Lab School sessions were highly regarded by both the faculty of the host school and the visitors as effective professional development. Lab

school sessions also helped to reinforce topics discussed at book study groups in the partner schools. As a result of the combination of these activities, our interviews with faculty at the partner schools indicated considerable familiarity with Cornerstone and praise for the work of the staff at the Cornerstone Foundation Schools.

Foundation-partner school activities in the larger urban district were not nearly as developed. Because the district specifically chose partner schools that were struggling with multiple challenges (low test scores, new leadership, and high teacher turnover), the Foundation School principals and coaches had a harder time scheduling meetings and visits with colleagues at the partner schools. In one partner school, the mid-year departure of the principal “put everything on hold,” which made Cornerstone start-up activities particularly difficult. Only one coach had been appointed halfway through the year, and the interim principals who replaced the principal who left understood that their jobs would last only through the remainder of the school year.

The other Foundation School in this district was more successful at launching activities with its partner school, largely due to a more stable staff environment in the corresponding partner school. As of the interviews in early spring of 2005, the Foundation and partner school coaches were reportedly meeting twice a month, and teachers from the partner school had visited the Foundation School to observe classes on a few occasions. However, even in this case, the principal had only appointed one literacy coach thus far and faculty was not introduced to Cornerstone until after the start of the school year. These challenges resulted in a slow start to the Foundation-partner school year.

Perhaps due to the lack of school stability, familiarity and enthusiasm for Cornerstone were reported to be at a much lower level in these partner schools. Foundation and partner school coaches met less frequently, and partner schools had not had the chance to create a consistent mechanism for providing professional development to their staff (such as book studies or lab schools) to spread Cornerstone practices. Under these circumstances and without clear expectations from the district, Cornerstone was developing very slowly in these schools.

Key Implementation Factors

Based on our analysis, three main factors influenced the different levels of Cornerstone Foundation School activities: 1) district literacy policy, 2) support from top leaders, and 3)

resource availability. The small rural district had an established literacy policy and had been involved with a state-run initiative during the period in which they were working with Cornerstone. School faculty was knowledgeable about literacy instruction, comfortable with their approach, and viewed Cornerstone as a professional development model with an emphasis on reading comprehension. In contrast, administrators in the larger urban district never explicitly articulated to the schools that Cornerstone was aligned with the new district literacy model. As a result, responsibility devolved to Foundation School principals and coaches to demonstrate to faculty at both schools how the two literacy programs were aligned.

Another key difference between the two districts was in the amount and type of support from the superintendent and other central office personnel. The superintendent in the small rural district was extremely involved in activities at the schools and made sure that the necessary release time was created for the Lab School activities. She also attended some of the Lab School sessions to explicitly demonstrate her support, and was regarded by school staff as extremely supportive. In comparison, the approach of the district administrators in the large urban district was largely passive. District personnel did not visit the partner or Foundation schools to show their support or to observe the professional development activities. Nor did they give guidance or feedback to Foundation School coaches and principals as they began to design programs for their partner schools. A district administrator explained how she expected the Foundation Schools to state their needs: “Whatever support they need, they will let us know.” This hands-off approach left the principal of one Foundation School uncertain of how best to utilize district support. Finally, the district administrators had not indicated clearly to Foundation School principals and staff what they had planned for the future of the Cornerstone Initiative in the district. While staff in the small district was able to discuss their plans for the future expansion of the Cornerstone Initiative, including expansion to middle and high schools, the large district had developed no plans to expand Cornerstone to any additional schools.

Conclusion

Spreading Cornerstone through the linking of Foundation and partner schools is a complex process. District support, including an articulated literacy plan that complements the Initiative, stable leadership and school staff, and funding are key items needed to sustain Cornerstone. In light of the inability of some districts to provide this level of support,

Cornerstone may need to better articulate the process and offer additional assistance to facilitate the shift in responsibilities to districts and schools. One principal recommended that there be a continuum outlining the activities that are expected of the Foundation Schools over time.

At the end of 2004-05, Foundation-partner efforts had proved successful in one of the two Cornerstone districts. An additional school, in a third school district, was also granted Foundation status to begin working with a partner school in 2005-06.

Based on the experience of the first Foundation Schools, it seems clear that to successfully implement Cornerstone district-wide, districts must commit to integrating the Initiative's literacy practices into the district's literacy curriculum, and to allocate or realign the necessary fiscal and human support resources. The degree to which districts adjust their existing systems and structures to do this indicates how sustainable the Initiative will be after Cornerstone support diminishes, and the district takes on the primary responsibility of sustaining the Initiative.

B: FOURTH YEAR REPORT METHODOLOGIES

The analyses presented in our *Fourth Year Evaluation Report* draw on data from four primary sources: interviews, surveys, student level test scores from each Cornerstone district, and outcomes on the Developmental Reading Assessment (DRA) which was universally administered in Cornerstone schools this year. The five sections below provide more detailed information about these data sources and their analyses as presented in the report.

Interview Data

During the 2004-05 school year, IESP staff conducted a total of 190 interviews. 161 interviews were conducted with school and district-level personnel across the Cornerstone districts. At the school level, we interviewed coaches (46), principals (22), assistant principals (1) school-based literacy specialists (12), K-3 teachers (41), and upper grade teachers when possible (20)³⁸. At the district level, we interviewed district strategy managers (6), superintendents (6), assistant superintendents (2), and district literacy supervisors (5). These numbers include interviews with school-level personnel at partner schools. As in previous years, interview questions explored specific elements of Cornerstone implementation and more general perceptions of the Initiative's impact on student literacy.

We also interviewed 12 principals and teachers at 7 comparison schools³⁹ in the Cornerstone districts. These interviews focused on the school reform programs and literacy practices being implemented in the comparison schools, and also focused on the nature of literacy professional development and extent of awareness of the Cornerstone initiative.

In summer 2005, the evaluation team interviewed 17 Cornerstone program staff members (including Literacy Fellows and District Liaisons) who work directly with the Cornerstone schools and districts. The interviews elicited information about the interactions between program staff and school-based personnel, the continuing development of the Cornerstone Initiative, challenges related to implementation, and the impacts and outcomes within Cornerstone schools.

All interviews were transcribed and added to our existing database. Each interview was coded by two research team members to assure consistency, using a coding scheme that has evolved over the course of the four years of the evaluation. Interview material was analyzed

³⁸ 11 (50%) Cornerstone schools in the 2004-05 school year contained upper grades.

³⁹ In all but two of the comparison schools we were able to interview both the principal and a teacher.

using QSR NUD*IST, a software program designed to assist in the management and analysis of qualitative data. Teams of researchers developed school and district memos examining the implementation of Cornerstone at each site and the operating context of the reform.

Online Survey Administration and Response Rates

The survey data contains the responses from 439 teachers from 17 Cornerstone schools in nine districts (Table A1). Response rates are high in most cases. The overall response rate for our survey in 2004-05 was 76% for the Cornerstone schools and Foundation schools combined.⁴⁰

Description of Respondents

Almost all the teachers who took our survey are full-time teachers (95%) and teach literacy in their classroom (93%). Most are regular classroom teachers (83%). Almost two-thirds of the teachers who took our survey teach K-3 grades only, 18% teach grades 4 and above only and 15% teach low and high grades. Of the 439, teachers who took the survey, 34 identified themselves as Cornerstone coaches.

In terms of educational attainment, 40% of the teachers' highest degree is a Bachelor's degree, 28% have a Master's degree and 28% have credits above and beyond a Master's degree. Three teachers indicated that they have Ph.D.s, and eleven teachers' highest degree is a high school diploma. Ninety-six percent of the teachers have a regular certificate (or standard form of

Table A1. Distribution of respondents across schools and districts

District & school	School Response rate
Bridgeport	
Maplewood Annex	75.00
Marin	75.51
Greenwood	
Threadgill	41.00
Horry	
Aynor	72.73
N. Myrtle Beach	78.79
S Conway	90.24
Waccamaw	92.50
Jackson	
Lake	87.10
Watkins	91.67
New Haven	
Bishop Woods	89.47
Martin Luther King	71.43
Ross/Woodward	53.57
Timothy Dwight	63.64
Springfield	
Frederick Harris	86.84
Freedman	81.82
Talladega	
Stemley Road	70.00
Sycamore	82.35

⁴⁰ Partner schools were also asked to take a shortened version of the teacher online survey. The overall response rate at partner schools was 62%.

licensure), and another dozen teachers have alternative kinds of certificates.

Our survey respondents are fairly experienced teachers, although there is variation. On average, they have 13 years of experience, including seven in the current school. Only 4% of the teachers have more than 20 years of experience in their current school, including one teacher who has been in her current school for 42 years. But overall over a quarter of the teachers have been teaching for 20 years or more.

Implementation Ranking

This section describes the ranking methodologies used in the three types of rankings presented in our report: implementation components, school environment, and district supports.

Implementation Components

For the analysis of Cornerstone implementation level in the *Fourth Year Evaluation Report*, we examined eight implementation components at each Cornerstone school. The components were measured across interview and/or survey data as outlined below. Survey responses included data from teachers in all elementary grades within each school. IESP staff evaluated each component along a three point scale (high, medium, and low) and these assessments were discussed at length among the research team to ensure consistency in ranking and consensus.

Schools were ranked among the four implementation clusters (Fulfilling, Implementing, Partial and Low) based on their level of implementation across these components.⁴¹

⁴¹We are indebted to the implementation ranking system used in Bodilly, S. (1998). *Facing the Challenges of Whole School Reform*. Santa Monica, CA: RAND.

Table A2. Measurement of Implementation Components

	Teacher Survey item(s)	Coach (C) & Principal (P) Survey item(s)	Coach (C), Principal (P) & Teacher (T) Interview Protocol item(s)
PLANNING			
Asset Mapping	<ul style="list-style-type: none"> Have you participated in the Cornerstone asset mapping process in your school? The goals from the asset map created by our staff are prominently displayed? The asset mapping process was useful for creating common goals for my school? How useful do you find the school-wide goals established by Cornerstone asset mapping process? 	<ul style="list-style-type: none"> How often, this school year, did you discuss goals established by the asset map with the school staff? (C, P) The asset mapping process was useful for creating common goals for my school? (C, P) How useful do you find the school-wide goals established by Cornerstone asset mapping process? (C,P) How useful do you think asset mapping is in improving literacy practice in your school? (C,P) 	<ul style="list-style-type: none"> Did you do an asset map this year in your school? <ol style="list-style-type: none"> Who was involved? How useful do you find the asset mapping? How were the results or goals used? (P, C, T)
Leadership Team		<ul style="list-style-type: none"> How often, this school year, did you attend Cornerstone leadership team meetings? How useful you think Cornerstone. leadership team meetings are in improving literacy practice in your school? 	<ul style="list-style-type: none"> Who attends the leadership team meetings? <ol style="list-style-type: none"> How often do you meet? Are these meetings exclusively about Cornerstone business? (P, C)
COACHING			
Coaches Released			<ul style="list-style-type: none"> This year, have you been released half time from your classroom responsibilities? <ol style="list-style-type: none"> Do you have a co-teacher this year? What has the co-teacher process been like? (C) Have you changed the academic schedule to support Cornerstone's work? [literacy block, grade-level

Cornerstone Fourth Year Evaluation Report

			meetings, more coach release time] (P) •
Coach Contact/ Quality	<ul style="list-style-type: none"> • Combined measure of: 1) You have observed a Cornerstone coaches' classroom? 2) A Cornerstone coach has come to your classroom to do a demonstration lesson? and 3) A Cornerstone coach has visited your classroom while you were teaching literacy? • To what extent have the Cornerstone coaches helped your literacy teaching this year? • I have had consistent communication with one or both coaches this year focused on teaching literacy/ • At least one of the Cornerstone coaches gives me valuable advice/feedback on my literacy instruction. • My work with the Cornerstone coaches has led me to change my teaching practice. 	<ul style="list-style-type: none"> • How often, this school year, you provided demonstrations or modeled lessons for other teachers at your school? (C) • How useful do you think coaches providing demonstrations or modeling for other teachers are in improving literacy practice in your school? (C & P) 	<ul style="list-style-type: none"> • Have you been organizing demonstration classrooms or modeling for other K-3 teachers? <ol style="list-style-type: none"> a) Have you been doing this for upper grade teachers? b) What types of feedback have you received? c) Are you focusing your work this year on particular teachers (C) • Have you observed Cornerstone coach [names here] doing a modeling session or a demonstration? (T)
PROFESSIONAL LEARNING			
Book Study	<ul style="list-style-type: none"> • Please indicate how often you participate in a Cornerstone book study/literacy study group in your school? • The Cornerstone book study groups are useful for learning about best practices in literacy instruction? • The book study groups led me to make changes in my teaching practice. • How useful do you think the Cornerstone book study/and or literacy study groups are? 	<ul style="list-style-type: none"> • How often, this school year, did you attend book study groups for teachers at your school? (C&P) • How useful you think book study groups is in improving literacy practice in your school? (C&P) 	<ul style="list-style-type: none"> • This year are you organizing a book study group for the teaching staff? <ol style="list-style-type: none"> a) What is the focus of the group? b) Are they mandatory? c) Are they different from the book study group you had last year? d) Has attendance changed since last year? e) What type of feedback have you received about the study groups? (C, P) • Have you attended a book study? How often? What did you think? (T)

Cornerstone Fourth Year Evaluation Report

Grade Level Meetings			<ul style="list-style-type: none"> Do you have regular grade level meetings? (C) Have you changed the academic schedule to support Cornerstone's work? [literacy block, grade-level meetings, more coach release time] (P)
Un-interrupted K-3 Literacy Block		<ul style="list-style-type: none"> Does your school have a daily literacy block this year in grades K-3? (P) How long is your school literacy block in grades K-3? (P) 	<ul style="list-style-type: none"> Have you changed the academic schedule to support Cornerstone's work? [literacy block, grade-level meetings, more coach release time] (P) Does your school have a literacy block? Do you teach during a literacy block? <ul style="list-style-type: none"> a) How long is it? How frequent is it" b) How long has it been implemented? c) What is the structure of the literacy block? What activities do you typically do during a literacy block? (T)
Positive Views of Cornerstone			<p>Information was drawn from several interview questions including:</p> <ul style="list-style-type: none"> What do you think of the literacy practices of Cornerstone? Are there specific challenges that you see in terms of Cornerstone spreading to all grades in your school? How much would you say Cornerstone has had an impact on teacher practice in this school? <p>(P,C, T)</p>

Staff Perceptions of School Environment

Within each component, we examined four school-level factors that contribute to or hamper implementation such as school leadership and principal support for the Initiative as well as any staff turnover. The measurement of school level factors that influenced implementation is described below.

Principal as instructional leader: Was measured using the responses of teachers from the online teacher survey to the question: the principal in this school is an instructional leader. A rating of high was 75% and above agreed or strongly agreed, medium was 65-75% and low was below 65%.

Principal & Coach Stability: Were measured by examining the number of times the principal or coaches had changed since the introduction of Cornerstone to the school. Low Stability indicated that a principal or coach had changed in 2004-05, Medium indicated that there had been coach or principal turnover in a previous year (since implementing Cornerstone), and high stability indicated that the principal had not changed since beginning the Cornerstone work. New schools were not ranked on coach and principal stability unless there was turnover mid-year in 2004-05.

Teacher Stability: Was measured using data provided by principals and coaches about the number of new teachers on staff in each grade in 2004-05. High stability indicated limited turnover (0-10% of teaching staff), medium 15-25% of teaching staff, and low stability indicated more than 25% turnover of staff. New schools were not ranked on teacher stability.

Perceptions of District Supports

For the analysis of District supports for Cornerstone Implementation, we examined four support components at each Cornerstone district. The components were measured across interview and/or survey data as outlined below. Survey responses included data from principals and Cornerstone coaches. IESP staff evaluated each component along a three-point scale (high infrastructure, medium infrastructure and limited infrastructure) based on their level of support across these components. These assessments were discussed at length among the research team to ensure consensus and consistency in ranking the districts.

Table A3. Measurement of District Supports for Cornerstone Implementation

	Coach (C) & Principal (P) Survey items	Interview Protocol item(s) Coach (C), Principal (P), Teacher (T), District Strategy Manager (D), & Superintendent (S)
Administrative Support	<ul style="list-style-type: none"> • How satisfied are you with the level of support you receive from your superintendent? (P) • How satisfied are you with the level of support you receive from your district strategy manager? (C & P) • How often this school year did you discuss Cornerstone with your district strategy manager? (P) 	<ul style="list-style-type: none"> • What level of support do you get from the district in implementing the Cornerstone initiative? In what ways do they support your work? (P) • Have you visited the Cornerstone schools this year? How often? (D & S) • How often have you met with the superintendent to discuss what's going on in the Cornerstone schools this year? (D) • Have you been on Cornerstone school review team this year? What did you learn?(D) • Given that Cornerstone has been in the district for x years, are there discussions about making Cornerstone self-sustaining? (D & S) • How aware of the Cornerstone Literacy Initiative are district administrators and decision-makers? (S) • Have you met with the Cornerstone district liaison and literacy fellow? (D & S) • Is there currently a timeline for spreading Cornerstone to other schools in the district? (S)
Resources	<ul style="list-style-type: none"> • The district provides sufficient resources (including release time and staff) to support Cornerstone work. (C & P) • The district provides structural support (scheduling, cross-school visits) to make Cornerstone work possible (C & P) 	<ul style="list-style-type: none"> • Does your school receive additional funding through grants or other means? What are those sources and how is the money spent? (P) • Cornerstone requires the district to pay for a portion of the costs. What percentage has the district contributed and how was the money used? Who decided how it would be spent?(D)
Existing Literacy Plan	<ul style="list-style-type: none"> • Indicate how useful your district's literacy plan is in improving literacy practice in your school. (C & P) • How much influence does the district's literacy standards have on the focus of literacy professional development activities in this school? (C & P) • How much influence does the district's literacy standards have on your understanding of literacy teaching 	<ul style="list-style-type: none"> • What types of literacy programs or materials are used in the school? <ul style="list-style-type: none"> a) Are any of these program or materials mandated by the district or state? b) How do you incorporate these programs or materials with the Cornerstone philosophy in the classroom? (C, P & T) • How do you see Cornerstone fitting in

	practice? (C &P)	with your district's or state's current approach to literacy teaching? (C, P, T, D, S)
Embedded Professional Development	<ul style="list-style-type: none"> To what degree do you agree that the district provides sufficient professional development opportunities (C & P) 	<ul style="list-style-type: none"> What types of professional development have you received this year focusing on literacy? <ol style="list-style-type: none"> Who provided you professional development? Could you describe the professional development activities/components? How effective would you say the professional development activities are? (C & T) <ol style="list-style-type: none"> Does each school have a staff person dedicated to literacy development? <ol style="list-style-type: none"> What is their role in the schools? How are they trained? Are they part of a particular program or policy? How long has this program or policy been in place in the district? (D)

Fixed Effects Regression Methodology and Tables

The regression model (including fixed effects for schools) that we estimated for each of the districts is as follows:

$$SCORE_{ijt} = \alpha_j + \beta X_{ijt} + \delta CS_{ijt} + \gamma GRDYR_t + e_{ijt}$$

In the above, SCORE refers to a student's reading test score in a given year. X refers to a set of student characteristics generally including race, gender, and low-income status. These characteristics varied somewhat across the districts depending on the data we received. For example, some districts included information on limited English proficiency while others did not. CS is an indicator variable denoting whether or not the student participated in Cornerstone in that year. GRDYR is an indicator variable for the student's grade and year in which the test was

given (for example, grade two in year 2001).⁴² The coefficients (β , δ , γ) indicate the change in the student's test score associated with each of the variables. The term α indicates the fixed effect, while e is an error term.

Because some districts administered different reading tests in different years, we needed comparable test scores for each year to determine program impacts. Therefore, we calculated a Z score for each student, based on the mean and standard deviation of the test scores for the group of students who took the test. The Z score expresses the test score in units of the standard deviation, and allows for score comparisons across different tests. The Z score for each student serves as the dependent variable in each of our models.

The logic of the approach used in these analyses is to isolate the differences in test scores for Cornerstone schools after the adoption of the program relative to the other schools in the district, controlling for student characteristics and other changes in the district that were occurring during the time period studied. The statistical power of each analysis depends on a number of factors, including the size of the sample and the completeness of the information available on the characteristics of each student in the sample. Thus, data sets with many years of test scores, larger groups of students, and more extensive information about each student will yield more precise estimates of the impact of Cornerstone. For example, the data available for Horry County and for Jackson includes multiple years of test scores for large numbers of students in many grades, while the limitations of the Springfield data resulted in the use of two separate models for third and fourth grades. As a result, these analyses use smaller samples, and thus the impact estimates for Springfield (as shown by the coefficients on these variables) can be expected to be less precise than those for Horry County or Jackson.

⁴² The two models estimated for Springfield include indicators for the year instead of grade/year because the sample for each model consists of only one grade.

Table A4. Horry County Grades 2-5, MAP Test
Dependent Variable: Reading Scores, expressed as Z scores

Independent Variable	Coefficient	Standard Error
Cornerstone/S. Conway	-0.099*	0.051
Cornerstone/Waccamaw	-0.078	0.052
Cornerstone/Aynor	-0.021	0.057
Cornerstone/NMBE	-0.050	0.048
Low Income	-0.398***	0.012
Special Education	-0.937***	0.014
LEP	-1.171***	0.045
Female	0.133***	0.010
Asian	0.227***	0.054
Black	-0.390***	0.014
Hispanic	-0.108***	0.038
Native American	-0.255***	0.099
Multi-racial	-0.116**	0.046
Grade 3, Fall 03	0.018	0.025
Grade 4, Fall 03	0.057**	0.025
Grade 5, Fall 03	0.040	0.025
Grade 2, Spring 04	0.008	0.025
Grade 3, Spring 04	0.026	0.025
Grade 4, Spring 04	0.069***	0.026
Grade 5, Spring 04	0.046*	0.026
Grade 2, Spring 05	0.037	0.027
Grade 3, Spring 05	0.024	0.026
Grade 4, Spring 05	0.030	0.026
Grade 5, Spring 05	0.048*	0.026

R-squared = 0.303

N=26,971

* $p < .10$

** $p < .05$

*** $p < .01$

Table A5. Horry County Grades 3-5, PACT Test
Dependent Variable: ELA Scores, expressed as Z scores

Independent Variable	Coefficient	Standard Error
Cornerstone/S. Conway	0.012	0.040
Cornerstone/Waccamaw	0.017	0.040
LEP	-0.349***	0.039
Female	0.124***	0.008
Low Income	-0.220***	0.009
Special Education	-1.303***	0.010
Asian	0.076*	0.043
Black	-0.333***	0.010
Hispanic	-0.095***	0.031
Other Race	-0.184***	0.051
Grade 4, 1999	-0.025	0.025
Grade 5, 1999	-0.025	0.026
Grade 3, 2000	0.009	0.025
Grade 4, 2000	-0.001	0.026
Grade 5, 2000	-0.040	0.025
Grade 3, 2001	0.001	0.025
Grade 4, 2001	-0.003	0.025
Grade 5, 2001	0.019	0.026
Grade 3, 2002	-0.002	0.025
Grade 4, 2002	0.001	0.025
Grade 5, 2002	-0.022	0.025
Grade 3, 2003	0.019	0.025
Grade 4, 2003	0.015	0.025
Grade 5, 2003	0.011	0.025
Grade 3, 2004	0.011	0.025
Grade 4, 2004	0.020	0.025
Grade 5, 2004	0.003	0.025
Grade 3, 2005	-0.008	0.025
Grade 4, 2005	-0.009	0.025
Grade 5, 2005	0.006	0.025

R-squared = 0.346

N=46,137

* $p < .10$

** $p < .05$

*** $p < .01$

Table A6. Jackson Grades 2-5

Dependent Variable: Reading Scores, expressed as Z scores

Independent Variable	Coefficient	Standard Error
Cornerstone/Lake	0.126**	0.062
Cornerstone/Watkins	0.137*	0.071
Non-Black	0.445***	0.022
Low Income	-0.163***	0.013
Special Education	-1.071***	0.021
Female	0.195***	0.008
Have Low Income Status	0.526***	0.083
Have Gender	0.119	0.117
Grade 4, 2000	-0.041	0.026
Grade 5, 2000	-0.057**	0.026
Grade 2, 2001	0.033	0.027
Grade 3, 2001	0.015	0.026
Grade 4, 2001	-0.048*	0.026
Grade 5, 2001	-0.063**	0.027
Grade 2, 2002	-0.022	0.026
Grade 3, 2002	-0.028	0.026
Grade 4, 2002	-0.075***	0.027
Grade 5, 2002	-0.084***	0.027
Grade 2, 2003	-0.308***	0.086
Grade 3, 2003	-0.323***	0.086
Grade 4, 2003	-0.445***	0.086
Grade 5, 2003	-0.494***	0.086
Grade 2, 2004	-0.239***	0.086
Grade 3, 2004	-0.286***	0.086
Grade 4, 2004	-0.370***	0.086
Grade 5, 2004	-0.387***	0.086
Grade 2, 2005	-0.314***	0.085
Grade 3, 2005	-0.321***	0.085
Grade 4, 2005	-0.376***	0.085
Grade 5, 2005	-0.350***	0.085

R-squared = 0.14

N= 55,781

* $p < .10$

** $p < .05$

*** $p < .01$

Table A7. Springfield Grade 3 Only

Dependent Variable: Reading Scores, expressed as Z scores

Independent Variable	Coefficient	Standard Error
Cornerstone/Freedman	0.238*	0.122
Cornerstone/Harris	0.077	0.090
Low Income	-0.256***	0.025
Female	0.038**	0.017
LEP	-0.676***	0.029
Special Education	-0.723***	0.023
Asian	-0.029	0.060
Black	-0.246***	0.026
Hispanic	-0.353***	0.025
2002	0.035	0.027
2003	0.038	0.027
2004	0.063**	0.028
2005	0.051*	0.028

R-squared = 0.295

N= 9,783

* $p < .10$

** $p < .05$

*** $p < .01$

Table A8. Springfield Grade 4 Only

Dependent Variable: Reading Scores, expressed as Z scores

Independent Variable	Coefficient	Standard Error
Cornerstone/Freedman	0.517***	0.171
Cornerstone/Harris	-0.403***	0.144
Low Income	-0.196***	0.028
Female	0.096***	0.020
LEP	-0.356***	0.032
Special Education	-0.546***	0.025
Asian	-0.001	0.068
Black	-0.229***	0.031
Hispanic	-0.321***	0.030
2003	-0.676***	0.172
2004	-0.018	0.028
2005	0.009	0.028

R-squared = 0.263

N= 7,742

* $p < .10$

** $p < .05$

*** $p < .01$

Universal DRA Administration

In 2004-05, Cornerstone schools were asked to administer the Developmental Reading Assessment (DRA) to all students in grades K-3. This was a change asked for by the evaluation team to provide greater consistency and accuracy in the data collected at each Cornerstone school. In previous years, the DRA was given to a small sample of students in those Cornerstone schools where the DRA was not required by the district or state. The sample was extremely small and in schools with high student mobility, the results of few students could be tracked over time. Moreover coaches were administering the assessment to each sample of students, which took time away from their work with other teachers. This also meant that classroom teachers were not receiving the benefits of an assessment designed to provide the classroom teacher with information about their students' reading abilities.

In fall and winter during the 2004-2005 school year, the evaluation team set up DRA training sessions, provided by Pearson, the publisher of the DRA, in Cornerstone schools in all the districts except New Haven and Bridgeport. No additional training was offered in Bridgeport or New Haven because the district provides training in the administration of the DRA. DRA kits, providing all the necessary components of the assessment, were purchased for each K-3 teacher in these schools. Additionally training was organized for teachers in Horry County Cornerstone schools after it was discovered that teachers there were unfamiliar with the comprehension portion of the exam, because the district did not require that portion of the assessment to be administered. Springfield requires the DRA to be given in grades K-2, but 3rd grade teachers, as mandated by the district, use the assessment for only those students who are falling behind. We provided training to those Cornerstone schools in Springfield, and purchased DRA kits for all the 3rd grade teachers so they could also complete universal administration in spring 2005.

In late spring and early summer 2005, Cornerstone coaches sent the completed spreadsheets from the universal DRA to the evaluation team at NYU. Data from the spreadsheets that teachers filled out on the results for each of their students were entered and the data were cleaned of missing cases and cases where teachers did not accurately score their students.⁴³

⁴³ An accurate DRA reading level of a student is measured when the student's reading accuracy is 94% or higher and the comprehension level is at least "adequate". This year, a small number of teachers still did not use this guideline and instead scored students based on a lower accuracy percentage. There were 47 cases out of 1612 in which the accuracy rate of the student was not at the 94% level; these cases were removed from the analysis.

An important consideration that affects the DRA results is the time of administration. The DRA is a sensitive assessment designed to measure growth within a school year. In years past, the timing of the DRA administration often varied greatly across the Cornerstone schools with some schools starting and finishing the administration in an appropriate window and others administering the assessment throughout an entire semester. In contrast to previous years, the timing of the DRA administration in 2004-05 was much more consistent within each Cornerstone school and across the schools. By and large, teachers in Cornerstone schools administered the assessment within a four-week period, generally in mid-April to mid-May. Teachers in Horry County Schools, where the school year ends later, administered the assessment in mid-May to mid-June. Because teachers were asked to record the date of administration for each child, we were able to remove those cases where students had not been tested within an appropriate window⁴⁴.

DRA data from the universal administration in Jackson,⁴⁵ Talladega, Greenwood, Springfield, and Horry are presented in this report.⁴⁶ The criteria we used in the analyses of the DRA results for these Cornerstone schools were the spring benchmarks suggested in the *DRA K-3 Teacher Resource Guide* published by Pearson and provided to each teacher with their DRA kit. These are the May/June expected reading levels for students to be considered on grade level.⁴⁷

The universal administration of the DRA will continue in schools participating in Cornerstone and in the foundation schools and partner schools. Teachers are being asked to assess their students in 2005-06 in both fall and spring for the purposes of the evaluation.

⁴⁴ In most cases this was not a problem except in some classrooms at Threadgill in Greenwood and Watkins in Jackson.

⁴⁵ Partner schools in Jackson did not complete the administration of the DRA.

⁴⁶ The Bridgeport and New Haven DRA results presented in the report were provided directly by the districts.

⁴⁷ The districts of Bridgeport and New Haven use different benchmarks. New Haven's 2nd grade benchmark is one level higher than the one we used for the other Cornerstone schools, but is the same for 1st and 3rd grades. Bridgeport's benchmarks are higher for each grade level than the ones used for the Cornerstone schools.

C: SURVEY TABLES FROM ONLINE TEACHER SURVEY

Below is a portion of the survey results from the online teacher survey. These survey items were selected because of their use in the implementation ranking and impact section of our report.

Table A9. Asset Mapping

Respondents: All teachers					
	Response to question	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
The asset mapping process was useful for creating common goals for my school.	Agree or Strongly agree	80.8	87.4	81.7	61.5
	Disagree or Strongly disagree	4.1	6.3	11.7	17.9
	Do not know	15.1	6.3	6.7	20.5
The goals from the asset map created by our staff are prominently displayed	Agree or Strongly agree	77.4	83.9	73.3	59.0
	Disagree or Strongly disagree	7.5	8.6	16.7	23.1
	Do not know	15.1	7.5	7.5	17.9
How useful do you find the school wide goals established by the Cornerstone asset mapping process?	Very useful or somewhat useful	75.4	73.5	56.9	55.9
	Neutral	16.9	18.1	32.8	23.5
	Somewhat not useful or not useful at all	7.7	7.4	10.3	20.6

Table A10. Book Study Groups

Respondents: All teachers					
	Response to question	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
How useful do you find the Cornerstone book study or literacy study groups?	Very useful or somewhat useful	85.4	82.0	66.7	76.7
	Neutral	11.7	12.6	22.9	20.0
	Somewhat not useful or not useful at all	3.0	5.4	10.5	3.3
How often did you participate in a Cornerstone book study group in your school?	Once or twice a month or more	78.1	86.4	44.9	32.4
	Once or twice a semester or year	19.0	10.1	30.6	35.4
	Not at all	2.9	3.6	24.5	32.4
Cornerstone book study groups are useful for learning about best practices in literacy instruction.	Agree or Strongly agree	87.0	91.4	67.8	64.1
	Disagree or Strongly disagree	4.1	4.0	5.1	0
	Do not know	8.9	4.6	27.1	35.9
The Cornerstone book study groups led me to make changes in my teaching practice.	Agree or Strongly agree	86.3	88.0	51.7	64.1
	Disagree or Strongly disagree	4.1	7.5	15.5	2.6
	Do not know	9.6	4.6	32.8	33.3

Table A11. Frequency of Coach Contact

Combined responses to the following three questions:

How often have you observed a Cornerstone coach's classroom?

How often has a coach come to your classroom to do a demonstration lesson?

How often has a coach visited your classroom while you were teaching literacy?

Responses	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
Once or twice a month or more	36.3	31.3	26.7	23.1
Not at all across the school year	6.2	11.9	21.7	12.8

Table A12. Coaching

Respondents: All teachers					
	Response to question	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
At least one of the Cornerstone coaches gives me valuable advice/feedback on my literacy instruction.	Agree or Strongly agree	90.0	88.5	78.0	93.5
	Disagree or Strongly disagree	8.5	10.8	18.0	6.5
	Do not know	1.5	.7	4.0	0
I have had consistent communication with one or both Cornerstone coaches this year focused on teaching literacy.	Agree or Strongly agree	81.1	78.9	64.8	75.8
	Disagree or Strongly disagree	17.3	21.1	33.3	24.2
	Do not know	1.6	0	1.9	0
My work with the Cornerstone coaches has led me to change my teaching practice.	Agree or Strongly agree	83.3	79.9	74.0	75.8
	Disagree or Strongly disagree	15.9	18.8	14.0	24.2
	Do not know	.8	1.3	12.0	3.0
To what extent have the Cornerstone coaches helped your literacy teaching this year?	Very much or quite a bit	51.2	47.3	37.3	37.1
	Some or a little bit	39.7	42.7	51.0	62.8
	Not at all	9.1	10.0	11.8	0

Table A13. Parent Involvement

Respondents: All teachers					
	Response to question	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
Parents have an influence on school decisions.	Agree or Strongly agree	65.8	68.6	70	38.5
	Disagree or Strongly disagree	26.8	26.9	26.7	56.4
	Do not know	7.5	4.6	3.3	5.1
Parents regularly attend literacy events.	Agree or Strongly agree	35.2	57.7	66.7	23.1
	Disagree or Strongly disagree	57.3	40	28.3	64.1
	Do not know	7.6	2.3	5	12.8
Teachers and parents are partners in educating students.	Agree or Strongly agree	63.4	66.3	61.7	46.2
	Disagree or Strongly disagree	33.1	30.9	28.4	46.1
	Do not know	3.4	2.9	10	7.7
Staff at this school work hard to build trusting relationships with parents.	Agree or Strongly agree	91.1	95.4	88.3	74.4
	Disagree or Strongly disagree	6.2	4.0	6.7	23.0
	Do not know	2.7	.6	5.0	2.6

Table A14. Responses to survey questions about principal leadership

Respondents: All teachers					
	Response to question	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
The principal in this school is an instructional leader.	Agree or Strongly agree	88.4	94.9	83.3	53.8
	Disagree or Strongly disagree	11.6	5.1	15.0	46.1
	Do not know	0	0	1.7	0
The principal in my school supports and promotes Cornerstone.	Agree or Strongly agree	98.6	100	96.7	76.9
	Disagree or Strongly disagree	.7	0	0	18.0
	Do not know	.7	0	3.3	5.1
The principal has a clear vision for this school that she/he has communicated to the staff.	Agree or Strongly agree	94.5	97.1	85.0	56.4
	Disagree or Strongly disagree	4.8	2.8	11.7	38.4
	Do not know	.7	0	3.3	5.1
The principal has confidence in the expertise of teachers.	Agree or Strongly agree	91.1	89.7	90.0	55.3
	Disagree or Strongly disagree	7.5	9.7	8.4	39.5
	Do not know	1.4	.6	1.7	5.3
The principal lets teachers know what is expected of them.	Agree or Strongly agree	94.4	95.5	93.2	76.9
	Disagree or Strongly disagree	5.6	4.5	5.1	23.1
	Do not Know	0	0	1.7	0

Table A15. School Culture

Respondents: All teachers					
	Response to question	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
Teachers respect colleagues who are expert teachers.	Agree or Strongly agree	88.4	93.1	83.3	84.6
	Disagree or Strongly disagree	6.2	5.1	11.6	15.4
	Do not know	5.5	1.7	5.0	0
Most teachers are continually learning and seeking new ideas from each other at this school.	Agree or Strongly agree	91.8	94.3	90.0	66.7
	Disagree or Strongly disagree	5.5	5.1	5.0	30.7
	Do not know	2.7	.6	5.0	2.6
Experimentation and occasional mistakes are seen as a normal aspect of teaching at this school.	Agree or Strongly agree	70.8	75.0	76.7	64.1
	Disagree or Strongly disagree	23.6	21.0	15.0	33.3
	Do not know	5.6	4.0	8.3	2.6
Teachers set high expectations for students' academic work at this school.	Agree or Strongly agree	97.2	96.6	88.3	94.9
	Disagree or Strongly disagree	1.4	3.4	10.0	5.2
	Do not know	1.4	0	1.7	0
Teachers are involved in making important decisions at this school.	Agree or Strongly agree	74.5	70.9	73.3	43.6
	Disagree or Strongly disagree	19.3	28	23.3	56.4
	Do not Know	6.2	1.1	3.3	0
There are formal arrangements that provide opportunities for teachers to discuss and critique their instruction with each other.	Agree or Strongly agree	89.7	80.6	45.8	43.6
	Disagree or Strongly disagree	8.9	17.7	42.4	46.2
	Do not Know	1.4	1.7	11.9	10.3
In this school there is a feeling that everyone is working together toward common goals.	Agree or Strongly agree	93.1	90.8	78.3	59
	Disagree or Strongly disagree	4.8	8.6	15.0	38.4
	Do not Know	2.1	.6	6.7	2.6

Table A16. Cornerstone Impact

Respondents: All teachers					
	Response to question	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
Cornerstone has deepened my understanding of how students learn literacy.	Agree or Strongly agree	91.1	85.7	85.0	82.1
	Disagree or Strongly disagree	5.5	12.6	13.3	10.3
	Do not know	3.4	1.7	1.7	7.7
Cornerstone included opportunities to work productively with my colleagues.	Agree or Strongly agree	91.7	91.4	76.7	84.6
	Disagree or Strongly disagree	4.8	6.9	15.0	15.4
	Do not know	3.4	1.7	8.3	0
How much influence does Cornerstone have on professional development in school?	A great deal	80	79	62.1	44.7
	Some or a little bit	20	18.7	38.0	52.6
	None	0	2.3	0	2.6
How much influence does Cornerstone have on your teaching practice?	A great deal	74.8	65.7	45	43.6
	Some or a little bit	23.8	30.3	51.6	48.7
	None	1.4	4.0	3.3	7.7
How much has your participation in Cornerstone activities made your work as a teacher more or less enjoyable?	Much more or somewhat more	77.1	63.1	60.0	64.7
	The same	18.3	22.3	34.0	23.5
	Somewhat less or much less	4.6	14.7	10.0	11.8

Table A17. Cornerstone Impact

Respondents: All teachers					
	Response to question	Fulfilling N=146	Implementing N=176	Partial N=60	Low N=39
Cornerstone has improved your literacy teaching practice.	Very much or quite a bit	72.6	76.5	50	58.8
	Some or a little bit	27.4	21.6	41	38.3
	Not at all	0	1.2	5.4	2.9
Cornerstone has improved your understanding of student literacy learning.	Very much or quite a bit	76.8	76.3	50	65.7
	Some or a little bit	23.2	22.5	43.1	28.6
	Not at all	0	1.2	3.4	5.7
Cornerstone has improved your classroom environment.	Very much or quite a bit	69.6	63.3	50.9	61.8
	Some or a little bit	27.4	31.3	37.7	35.3
	Not at all	3.0	5.4	7.5	2.9
Cornerstone has improved your students' literacy skills.	Very much or quite a bit	75.4	69.5	41.8	61.8
	Some or a little bit	23.1	28.7	47.3	32.3
	Not at all	0	1.2	5.5	5.9

D: FIRST YEAR AND PARTNER SCHOOL TEST SCORE OUTCOMES

Below are the test score outcomes from the first year Cornerstone schools and the partner schools in Talladega and Jackson.

Horry County

The DRA results below are from the Cornerstone test administration. Although Horry County has been administering the DRA for a number of years, they have not required teachers to use the comprehension portion of the test. Teachers in Cornerstone schools in Horry were asked to administer the test using the comprehension portion for our evaluation. However, because of low teacher attendance at the Pearson training, and the high stakes use of the DRA in the district, we believe these data should be interpreted cautiously. It is likely that not all teachers in these schools used the comprehension portion of the test to assess the reading level of their students. The result of this omission would inflate the DRA scores.

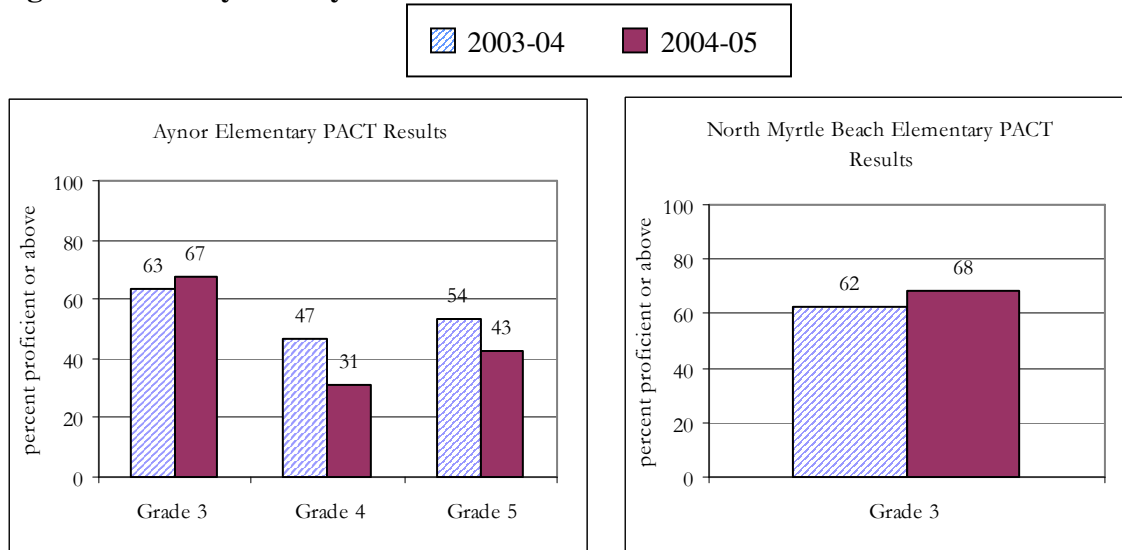
Table A18. 2004-05 DRA results for grades 1-3 in Horry

Horry		Grade 1	Grade 2	Grade 3
Aynor	<i>Students reading at or above spring benchmarks</i>	87%	100%	94%
	<i>Total number of students tested</i>	85	70	84
North Myrtle Beach	<i>Students reading at or above spring benchmarks</i>	N/A*	96%	75%
	<i>Total number of students tested</i>		162	165

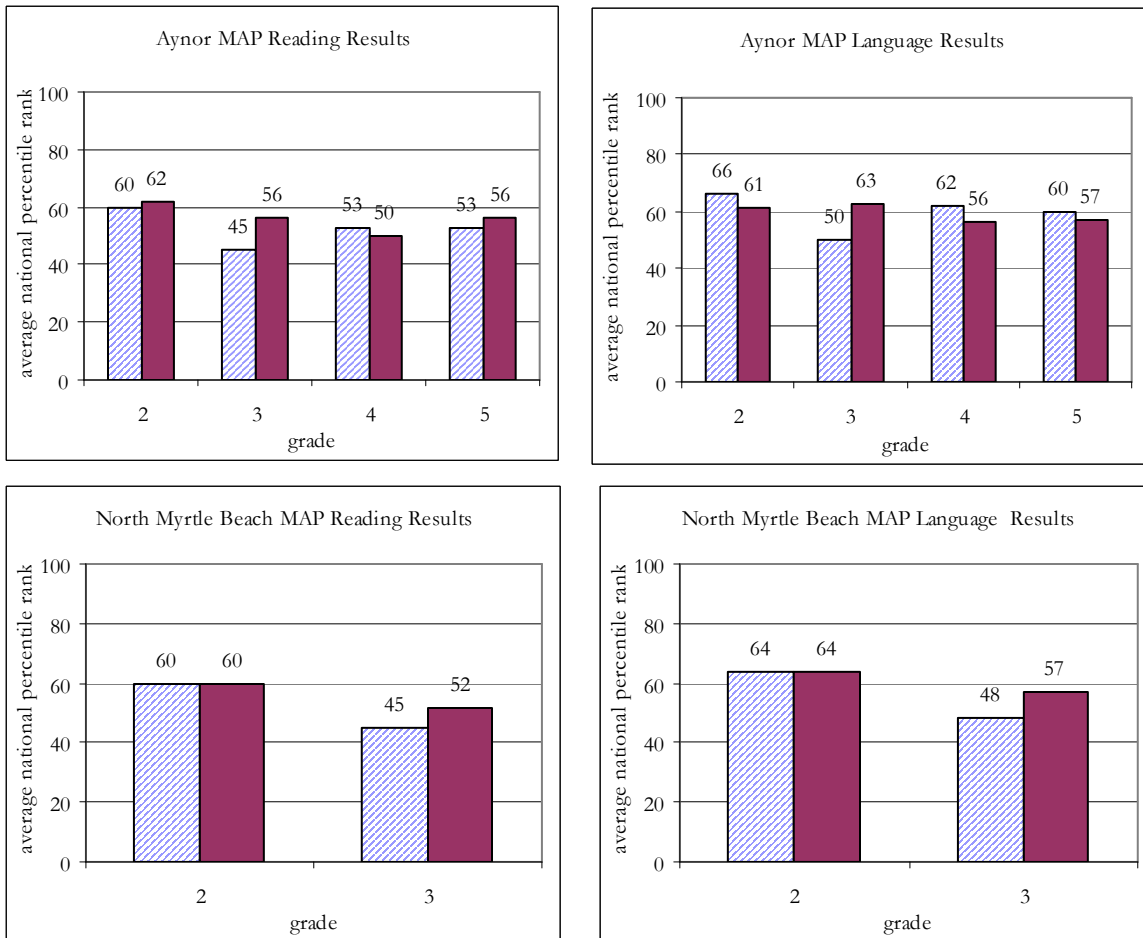
* North Myrtle Beach Elementary has only grades 2 and 3.

Horry County administers two standardized exams, the district's Measures of Academic Progress (MAP) test and the state's Palmetto Achievement Challenge Test (PACT). The PACT test is given annually in the spring by the state in grades 3-8. 2003-04 was the year before Cornerstone began working with Aynor and North Myrtle Beach Elementary Schools. The grade configuration of North Myrtle Beach Elementary is grades 2-3.

Figure A1. Horry County PACT & MAP Results



The MAP test targets grades 2-5 and is a computerized assessment given three times a year.



New Haven

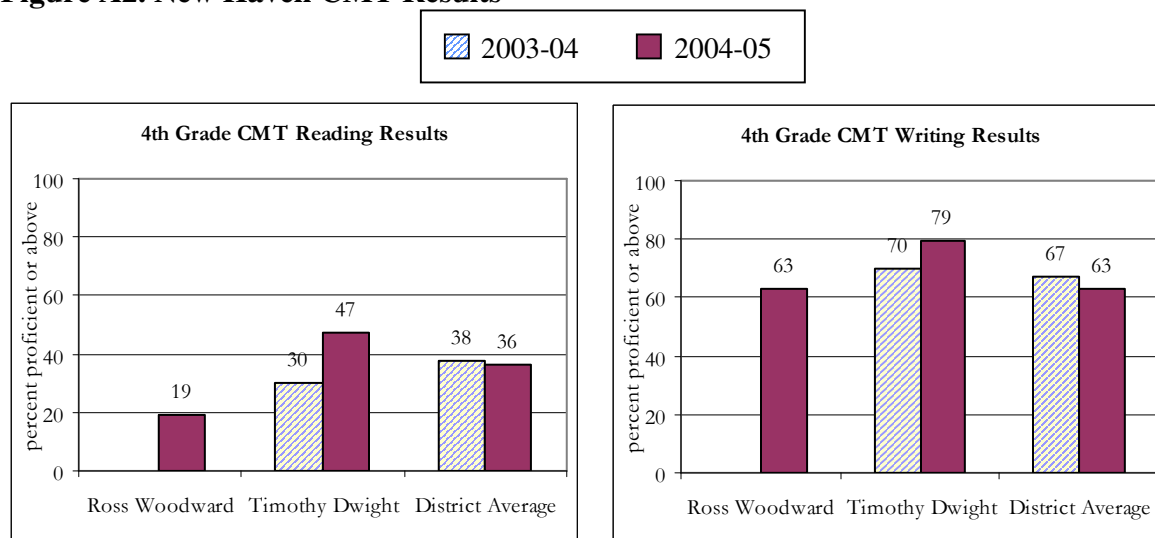
The tables below show the DRA results for Ross-Woodward and Timothy Dwight for 2004-05. These data are provided by the New Haven School District and reflect the New Haven benchmarks.⁴⁸

Table A19. 2004-05 DRA results for grades 1-3 in New Haven

New Haven		Grade 1	Grade 2	Grade 3
Ross-Woodward	<i>Students reading at or above spring New Haven benchmarks</i>	21%	38%	54%
	<i>Total number of students tested</i>	77	79	72
Timothy Dwight	<i>Students reading at or above spring New Haven benchmarks</i>	41%	57%	69%
	<i>Total number of students tested</i>	100	97	83

Connecticut requires teachers to administer the Connecticut Mastery Test (CMT) in grades 4 and 6. The CMT reading and writing tests are administered in the fall of each school year,⁴⁹ and measure student proficiency levels. The 2003-04 school year is the year before Cornerstone began working with the new cohort of schools in New Haven. Ross Woodward has

Figure A2. New Haven CMT Results



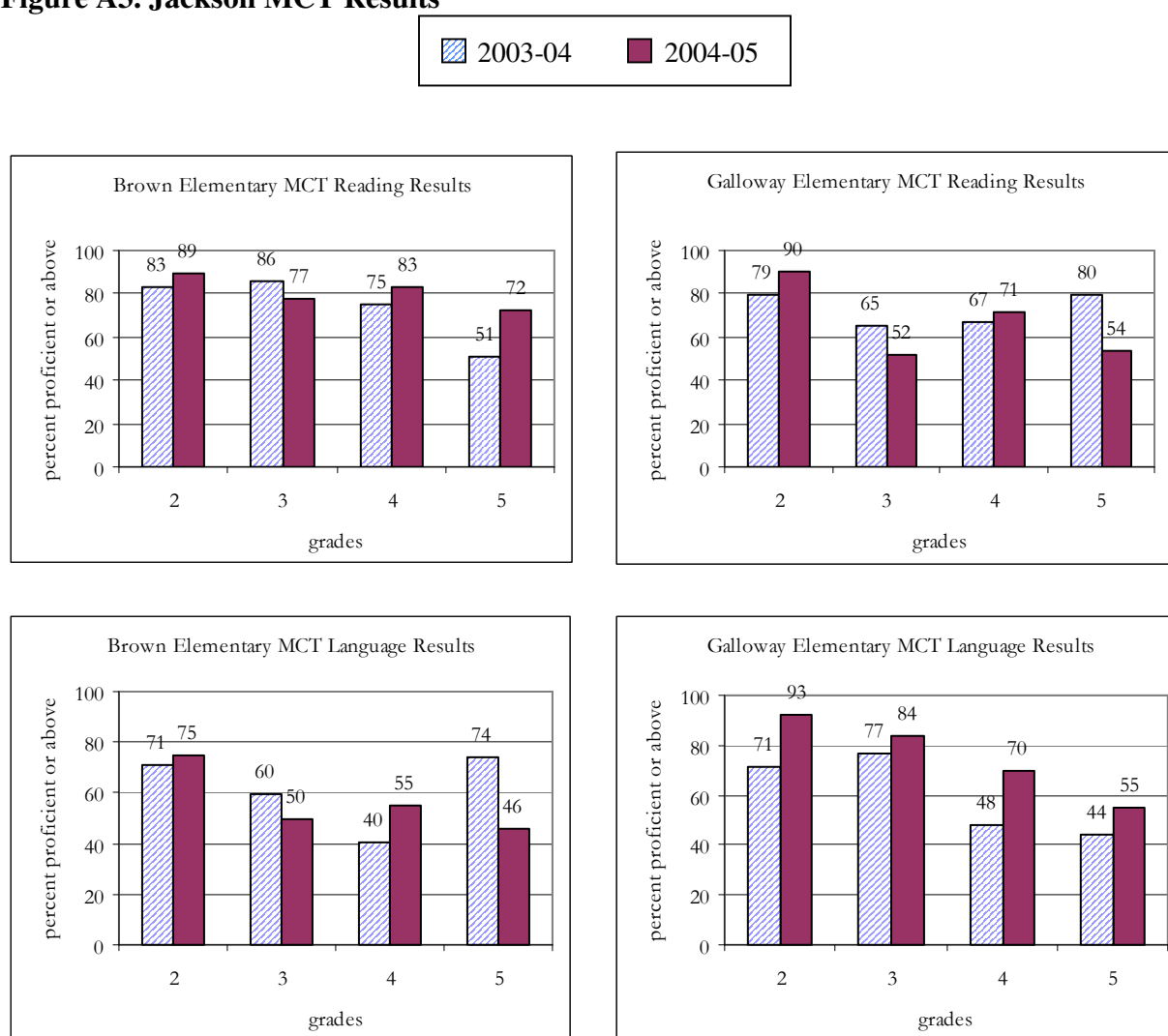
⁴⁸ The spring New Haven benchmarks across these three years have not changed. To achieve the benchmark, students in 1st grade must be at DRA level 16, in 2nd grade they must be at DRA level 28, and in 3rd grade they must be at DRA level 34. These benchmarks are slightly higher for 2nd graders than what we used to assess the other Cornerstone schools.

no test score results from 2003-04, because it was a new school in 2004-05.

Jackson Partner Schools

The Jackson partner schools did not administer the DRA, although they received training. Below are the Mississippi Curriculum Test (MCT) results for the two partner schools. The MCT measures the proficiency level of students. The results from the 2004-05 MCT results are presented below. 2003-04 was the year before Brown and Galloway were partnered with Cornerstone

Figure A3. Jackson MCT Results



⁴⁹ Because the CMT is administered in the fall, students who are tested may be new to the Cornerstone school and their test results would not reflect Cornerstone treatment. The state of Connecticut is changing to a spring administration of the CMT in the 2005-06 school year.

Talladega Partner Schools

The tables below show the DRA results for B.B. Comer and Munford Elementary for 2004-05. These schools administered the DRA as part of the universal administration in Cornerstone schools.

Table A20. 2004-05 DRA results for grades 1-3 in Talladega

Talladega		Grade 1	Grade 2	Grade 3
B.B. Comer	<i>Students reading at or above spring benchmarks</i>	45%	82%	62%
	<i>Total number of students tested</i>	95	73	73
Munford Elementary	<i>Students reading at or above spring benchmarks</i>	76%	63%	88%
	<i>Total number of students tested</i>	88	98	90

Below are the results of the Stanford 10, a nationally normed test and the Alabama Reading and Mathematics Test (ARMT), a new state test in its second year of use in 2004-05.

Figure A4. Talladega SAT 10 Results

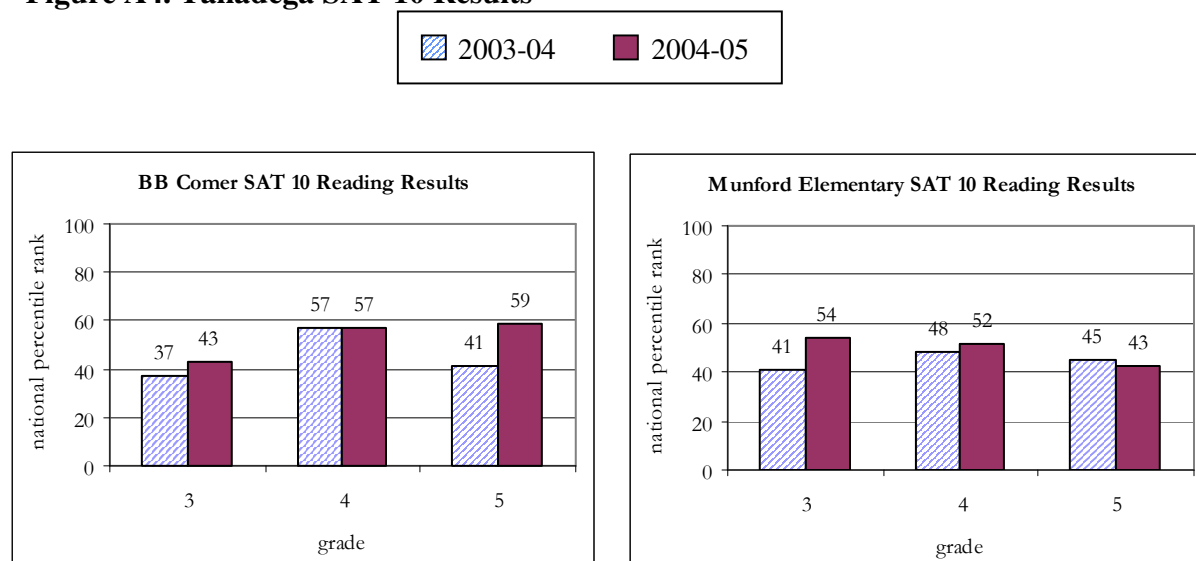


Figure A5. Talladega SAT 10 Results cont.

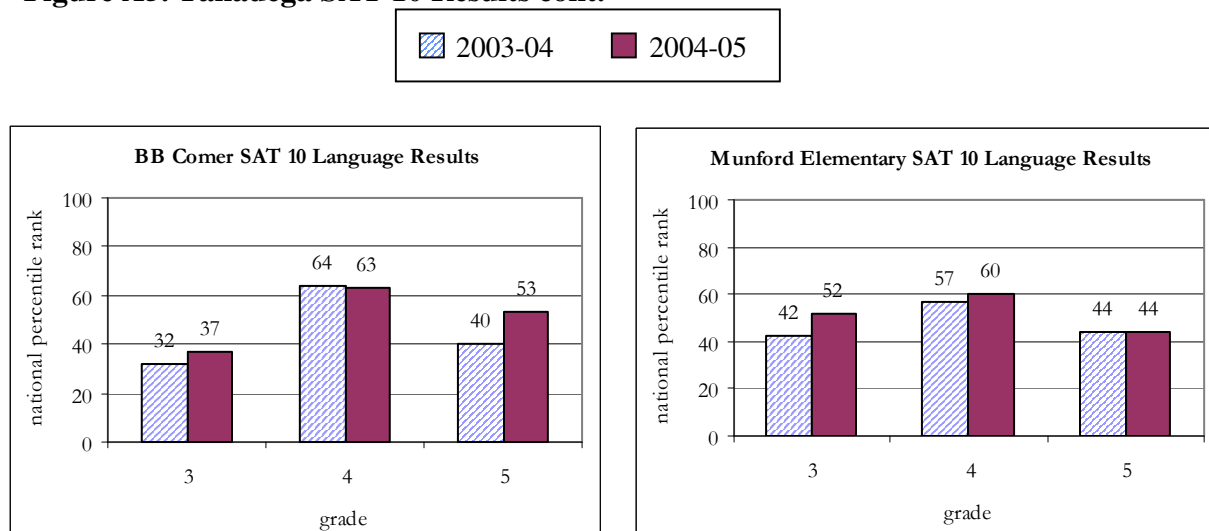
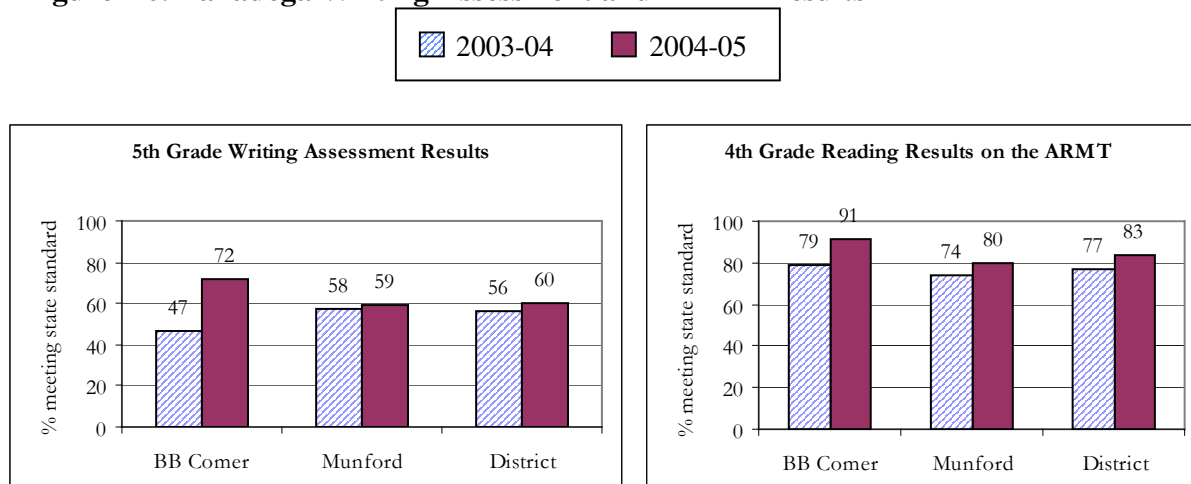


Figure A6. Talladega Writing Assessment and ARMT Results



E: CORNERSTONE SCHOOL CONTEXT AND OTHER LITERACY PROGRAMS

Jackson

In 2004-05, the Jackson Public School District overhauled their literacy plan. The district reading series, Scott Foresman, was supplemented with district-wide training from the Consortium on Reading Excellence (CORE). In 2005-06, CORE will be implemented as the overarching literacy program for the district. Jackson also provided each school with an off-site curriculum developer. This person is responsible for a number of elementary schools and therefore is not available to any one school on a daily basis. The district also continues to use the STAR model, a new method for professional development focused on literacy unveiled mid year in 2003-04, the same year that district's professional development office was reinstated after a five-year hiatus due to budget cuts. The STAR model, CORE training and the reinstitution of the professional development plan are connected to the district's partnership with the Stupski Foundation.

District-wide, Jackson is also implementing Working on the Work (WOW) and High Schools that Work, which focus on student engagement in the classroom. Jackson also has the International Baccalaureate program in three high schools, two middle schools, and one elementary school. Several schools in the district have in the past taken on and/or are still implementing comprehensive school models such as Success for All, Modern Red Schoolhouse, America's Choice, and Co-nect but over the past three years the district has gradually not renewed the contracts for these models.

School staff at Lake use thinking maps. At Watkins, teachers use the Scott Foresman Celebrate Reading Series as their basal text for all grades and WOW. Both Lake and Watkins have Open Doors, a program for gifted students.

The Jackson Public School District has an enrollment of over 31,000 students enrolled in its schools (38 of which are elementary schools). Ninety-seven percent of students are African American, 2 % White, 0.35 % Hispanic, 0.17 % Asian and 0.03 % Native American. Eighty-five percent of students qualify for free or reduced price meals and the average student attendance is 93 percent.

Lake Elementary School enrolls 597 students in grades Pre-K through 5. The percentage of students attending this school who are African American is 100%.

Watkins Elementary School enrolls 483 students in grades Pre-K through 5. 100% of the students are African American.

Brown Elementary School, Watkins' partner school, enrolls 349 students in grades pre-K through 5. 100% of the students are African-American. 2% of the students are in special education programs.

Galloway Elementary School, Lake's partner school, enrolls 402 students in grades Pre-K through 5. 99% of the students at Galloway are African American and 1% is White. 3% of the students are in special education programs.

Talladega

In 2000-01, Talladega began implementing the Alabama Reading Initiative (ARI). To date, all elementary schools in the district have adopted ARI except Sycamore (which is adopting it in the 2005-06 school year). ARI is a multi-year initiative that provides schools with literacy professional development in the form of an initial 2-week training session focused on the five components of balanced literacy. A school-based reading coach who works with small groups of at-risk children is assigned to the school and walk-throughs of the school and classrooms are also a part of ARI. Re-certification of the training takes place every three years.

For the past two years, Talladega has also been involved in Curriculum Mapping with the intent of creating a K-12 curriculum for the district. In 2004 –05, Talladega adopted Passport Voyager (Voyager), an intervention program (a component of Reading First) targeting at-risk students. Voyager was adopted during the 2004-05 school year and has not yet been used universally. Training has been provided to school staff district-wide on both Voyager and Curriculum Mapping. In the past, the district has also provided training to teachers for other programs such as Talents Unlimited, Working on the Work, and the 6-Traits writing system.

Both Stemley Road and Sycamore are using the Rigby reading series for early grades and McMillan McGraw -Hill text for grades 3-6. Stemley has also adopted Right Skills (a phonic based instruction program that is being used occasionally), Write Skills (their intervention program for students needing additional help), and Lucy Calkins.

The Talladega Public School District enrolls 7,700 students in its schools, 8 of which are elementary schools. Fifty-nine percent of students are white, 40% percent of students are African-American, and less than 1% are Latino. The percentage of students who qualify for free or reduced lunch in the elementary schools is 74%.

Stemley Road Elementary School enrolls 491 students in grades K-6. Eighty-nine percent of students qualify for free or reduced-price meals. Sixty-nine percent of students are African-American and 29% are white.

Sycamore Elementary School enrolls 199 students in grades K-3. One hundred percent of students qualified for free or reduced-price meals in 2004-05. Fifty-seven percent of students are African-American and 42% are white.

BB Comer, the partner school of Sycamore Elementary, enrolls 623 students in grades K-6. Seventy-seven percent of the students qualified for free or reduced-price meals in 2004-05. Twenty-six percent of the students are African-American and 73% are white.

Munford Elementary, the partner school of Stemley Road, enrolls 644 in grades K-5. Eighty-eight percent of students qualify for free or reduced-price meals. Twenty-seven percent of the students are African-American and 71% are white.

Bridgeport

In 2004 – 05, the district of Bridgeport adopted the Harcourt Brace Trophies basal series to support the district’s 2003-04 literacy plan which replaced their Houghton Mifflin series. The district also has full-time reading coaches at each school, who provide training to teachers through modeling and coaching. At both Maplewood Annex and Marin, this role is filled by one of the Cornerstone coaches. The district literacy coaches lead workshops at their schools three times a year. The district is also involved with the Institute for Learning (IFL).

Bridgeport has received a state grant to fund “Priority Schools.” These schools receive funds for drop out prevention, parent centers, full day Kindergarten programs, professional development, and Tops, a home school program supporting literacy in the home for children up to age 7. The district also has plans to adopt Essentials of Literacy in the upcoming year (2005-06).

In addition to the Houghton Mifflin series, schools also use Fountas and Pinnell’s *Firsthand*

Phonics. Other programs in the district include Direct Instruction, Reading First, Consortium on Reading Excellence (CORE), and Early Reading Success, which is being implemented district-wide. At Maplewood Annex, teachers are using Lucy Calkins’ work, decodable books, and anthologies.

The Bridgeport Public School District has a total enrollment of 22,264 students (42.9 % African American, 43.9 % Hispanic, 9.9 % White, 3.1 % Asian and 0.1 Native American) in 34 schools (31 elementary schools) in the 2004-2005 school year. More than ninety-five percent of students in the district qualify for free or reduced-price meals and 10.8% of the student population attend ESL or bilingual education classes.

Maplewood Annex Elementary School enrolls 232 students in grades K-3. Almost fifty percent (49.6) of the student population is African American, thirty-eight percent Hispanic and 3 percent Asian. Over ninety-five percent of students qualify for free or reduced-price meals with 2.5 % of students using ESL or bilingual services.

Luis Munoz Marin School enrolls 870 students across grades Pre-K to 8. Twenty-four percent of students are African American, 3 % White, 70.5 % Hispanic and 2.5 % Asian. More than 95 % of students qualify for free or reduced-price meals. Twenty-nine percent of students are enrolled in Bilingual Education and ESL classes.

Greenwood

As of the 2004–05 school year, the district has yet to develop a clearly articulated literacy plan. Instead, several reading programs being implemented in schools guide the district’s literacy focus. The district has adopted the McMillan McGraw-Hill reading series in grades K-2 and Scott-Foresman in grades 3-6. Write from the Beginning from Thinking Maps, Inc. is also used district-wide. In addition, the district in late fall of 2004 began implementing My Reading Coach, a computerized program that covers the five components of effective reading aimed at helping struggling readers in grades K-6. The Greenwood district provides limited professional development opportunities for teachers. Most of the professional development activities are school-based and include training from publishers and external programs that schools are implementing.

The Greenwood Public School District enrolls about 3,211 students (90% African American, 9% white) in six schools (4 elementary, 1 junior high and 1 high). Overall, about 82% of the students qualify for free or reduced lunch and less than 1% are classified as English language learners.

Threadgill Elementary School is a prek-5 school with 653 students. Ninety-nine percent of the students are African American and qualify for free or reduced lunch. The stability rate for students is 40.8%.

New Haven

The district has a comprehensive literacy model based upon the National Reading Panel’s report. New Haven is also implementing several programs focused on reading and/or writing. They are: Cast a Spell, Empowering Writers, Fountas and Pinnell’s Firsthand Phonics, Breakthrough to Literacy, and the Rebecca Sitten Spelling Program. Since 2003-04, New Haven has partnered with the Stupski Foundation on district-level capacity building efforts. The foundation was instrumental in school staff district-wide receiving training from the Consortium on Reading Excellence (CORE), instituting data teams focused on data driven decisions in each school, and literacy calibrations, which are school-level walk-throughs focused on reading instruction, writing, planning, and differentiated instruction.

New Haven was also the recipient of a Comprehensive School Reform grant resulting in four schools choosing the following programs: Reading First, Haskins, and the Columbia Writing Project. Also, the district provides each school with a literacy coach who models lessons, coaches teachers, leads grade-level meetings, and provides professional development to teachers once a month for 90 minutes. In addition, all New Haven schools have a site-based management team based on the James Comer model.

Bishop Woods uses Rebecca Sitten Spelling and is involved with the Haskins Laboratories program. They also have Early Reading Success, which provides a specialist to the school on a weekly basis. The specialist works with special education and classroom teachers who have struggling students to improve the students' phonological awareness and phonics skills. In addition, Bishop Woods received a \$30,000 grant in 2004–05 for classroom libraries. Both Dwight and Ross Woodward are implementing the STAR review program, a comprehensive writing and math portfolio system for students. At Dwight, 3rd grade students below grade level in reading use Essentials of Literacy, an intervention program, during guided reading. In Ross Woodward, teachers also use Rigby and Reading Advantage in the 6th grade. In MLK, teachers also use Rigby and Mondo literacy materials.

The New Haven School District enrolls 20,499 students in 47 schools (29 elementary schools) where 54.6 % are African American, 11.1 % White, 32.8 % Hispanic, 1.4 % Asian, and 0.1 % Native American. Almost seventy-two (71.7) percent of the total student population are eligible for free or reduced-price lunch and 15.5 % of students are enrolled in Bilingual Education and ESL classes.

Martin Luther King Elementary School enrolls 245 students in grades K-5. Over ninety percent (92.2) of the student body is African American, 2.4 % White and 5.3 % Hispanic. Over eighty percent of students qualify for free or reduced-price meals and zero percent of students are enrolled in ESL or Bilingual Education.

Bishop Woods Elementary School enrolls 314 students in grades K-4. Forty-five percent of students are African American, 14 % White, 35 % Hispanic and 6 % Asian. Sixty-five percent of students qualify for free or reduced-price meals and 9 percent of students participate in ESL and Bilingual services.

Timothy Dwight Elementary School enrolls 379 students in grades K through 4. The students are 53% African American, 45% Hispanic, 1.3% White, and 1.1% Asian American. 79% of the students qualify for free or reduced-price meals, 28% of the students are enrolled in ESL or Bilingual Education.

Ross Woodward Elementary School enrolls 561 students in grades K through 6. The students are 44.4% African American, 35.8% Hispanic, 17.8% White, and 2% Asian American. 82% are eligible for free or reduced-price meals, 26.6% of the students are enrolled in ESL or Bilingual Education.

Springfield

The district has stressed guided reading and balanced literacy since 1997. A district Reading Plan has been in place since 2002 and Harcourt Trophies is the district wide reading series. There is also a basal reading

series that schools can voluntarily choose to supplement other materials.

In the 2003-04 school year, the district provided Collaborative Professional Development (CPD) teachers to each school. Their role is to provide embedded professional development to teachers for part of the day and to work with small groups of students for the remainder of the

day. The CPD teachers meet every two weeks at the district and work on topics such as school improvement planning and MCAS tips.

In 2004-05, the district introduced Step Up Springfield, an initiative that engages the community in setting proficiency targets, in both academics and character development with quarterly benchmarks. The district is also implementing The First Steps Writing Continuum Program, a mandated student portfolio system that moves with the student to each grade, Read 180 in middle and high schools, Responsive Classroom, a classroom management/school community-building tool, and Read First.

At Freedman, teachers report using no additional programs but do use trade books and other literature to supplement the reading programs. At Harris, teachers are implementing Read First as well as Lucy Calkins' work focusing on writing in the primary grades. Additionally, Harris teachers are implementing Responsive Classrooms.

The Springfield Public School District enrolls 25,975 students (50% Hispanic, 28% African American, 20% white, and 3% Asian) in 32 elementary schools. Seventy-six percent of the students are designated low income and 14% are classified as limited English proficient.

Freedman Elementary School is K-5 with 222 students. More than half (54%) of the students are Hispanic, 34% African American, 10% white, and less than 2% Asian. Most of the students (89%) are designated low income and 27% are classified as limited English proficient.

Frederick Harris Elementary School is preK-5 with 627 students. Fifty-four percent of the students are Hispanic, 31% white, 12% African American, and 2% Asian. More than two thirds of the students (66%) are designated low income and 26% are classified as limited English proficient.

Horry County

The district's literacy model (Five Block Model) is based on a modified version that the district developed from the four-block model created by Pat Cunningham. For over the past 10 years the district has worked to develop a balanced literacy approach with a literature-based program. Teams of teachers are still working to refine the district's literacy model, develop lesson plan formats, and a scope and sequence. The district provides each school with a curriculum coach who is supported by two district literacy specialists. The district literacy coaches visit schools, model lessons, observe teachers, and provide feedback. Corrective Reading and Reading Mastery are used with special education students.

The Horry County School District enrolls 15,900 students (24% African American, 5% Hispanic, 68% white, and 1% Asian) in 24 elementary schools. Sixty-one percent of the students qualify for free or reduced lunch and 4% of students at elementary schools are classified as receiving English language or bilingual services.

South Conway Elementary School enrolls 644 students in grades preK-5. Forty-two percent of the students are African American, 3% Hispanic, 53% white, and 2% are categorized as other. Seventy-six percent of the students qualify for free or reduced lunch and 1% are classified as receiving English as a second language or bilingual services.

Waccamaw Elementary School enrolls 626 students in grades PreK -5. Twenty-six percent of the students are African American, 6% Hispanic, and 66% White. Seventy-four percent of the students qualify for free or reduced lunch.

Aynor Elementary School enrolls 528 students in grades PreK -5. Ten percent of the students are African American, 3% Hispanic, and 86% White. Sixty-two percent of the students qualify for free or reduced lunch.

North Myrtle Beach Elementary School enrolls 581 students in grades 2-3. Twenty-five percent of the students are African American, 11% Hispanic, and 57% White. Sixty-four percent of the students qualify for free or reduced lunch.

All of the schools in Horry use basal readers and Rigby books, but the district expect these to be used as a resource and not as the primary texts. Aynor uses Reading Recovery and many computer programs including STAR reading and Head Sprout, an early reading program for K-2 students and struggling readers. At North Myrtle Beach Elementary, struggling students benefit from additional instruction in an extended day program on Thursdays. At Waccamaw, teachers use Lucy Calkins' books, Working with Words and 6-Traits Writing.

F: SUMMARY OF PREVIOUS FINDINGS

To date, we have produced three annual evaluation reports covering four years of Cornerstone work. Table A21 indicates which schools and districts were considered in the previous evaluation reports.

Table A21. Cornerstone Sites and IESP Evaluation Reports

<i>IESP Evaluation Report</i>	<i>1st Yr Report SP 03</i>	<i>2nd Yr Report SP 04</i>	<i>3rd Yr Report SP 05</i>	
Cornerstone District	00-01 Schools (Cohort A)	01-02 Schools (Cohort B)	02-03 Schools (Cohort C)	03-04 Schools
Cleveland, OH	2	2	2	2
Philadelphia, PA	2			
Jackson, MS*	3	3	3	3
Talladega, AL	2	2	2	2
Trenton, NJ	2	2	2	2
Bridgeport, CT		2	2	2
Greenwood, MS		2	2	2
Dalton, GA			2	
New Haven, CT			2	2
Springfield, MA			2	2
Horry County, SC **				2
Shannon County, SD**				4
Total Cornerstone Schools	11	13	19	23
Total schools in evaluation	--	12	18	16

* Jackson has 3 Cornerstone schools, but only 2 were part of IESP evaluation for yrs 1-3.

** Schools that began in 03-04 and remained in Cornerstone were added to the evaluation in 2004-05.

Our *First Year Evaluation Report* (January 2003) focused on the first two Cornerstone cohorts in their first and second years of implementation, and indicated that the implementation of Cornerstone was proceeding on target. The report highlighted Cornerstone's strengths, including the quality and depth of Cornerstone professional development opportunities, the commitment and capacity of Cornerstone staff in recognizing and addressing problems as they arose, and the attention paid to forming a network of Cornerstone colleagues across the country. Cornerstone's impact on participating schools was indicated by reported changes in school and classroom environment, and by the extent of faculty participation in professional learning opportunities, such as book study groups.

A key challenge highlighted in the report was the issue of sustainability. Site team members were concerned that staff and site team turnover would impede the spread of

Cornerstone practices, and were apprehensive about maintaining program momentum beyond the initial period of Cornerstone support. Changes in student achievement were not yet evident in terms of standardized test score results, but the report provided baseline data on student achievement in the Cohort A and B districts where such data were available.

Our *Second Year Evaluation Report* (January 2004) included a third cohort of schools that were brought on in the 2002-03 school year. Analyses of district- and state-administered standardized tests in the Cornerstone schools in the report showed mixed results—varying progress on tests, with many schools showing strong gains in certain grades in certain years, but no strong gains reflected across entire schools, and no clear continuation of gains across multiple years. In contrast to the district- and state-administered standardized tests, DRA results showed growth in reading levels among the Cornerstone students included in the small testing sample.

Our analysis of interview and survey data indicated three patterns: First, although implementation was not consistent within cohorts, Cohort A schools reported a higher level of implementation than their counterparts at schools in Cohorts B and C. Second, Cohort A and B schools reported an increased level of implementation over the previous year's effort in almost all areas. Third, Cornerstone practices were increasingly spreading through the K-3 grades and in some cases the upper grades (especially at Cohort A schools), and site team members were enthusiastic about the impact Cornerstone practices on students.

Our *Third Year Evaluation Report* (January 2005) continued to track schools from all three cohorts through 2003-2004. The results of the standardized test score analyses continued to be mixed, but was encouraging in some schools. Two Cornerstone schools in Jackson had significant positive results on their test results, others schools' results were not significant, and in one district negative and significant. The results of the DRA analyses for the Cornerstone sample suggested some positive changes in the number of students reading at grade level.

For the third year report we created an implementation index based on survey data to test the relationship of implementation to outcomes. Findings from the implementation index suggested was that there was no direct relationship between level of implementation and test score outcomes in 2003-04. The implementation index did provide further evidence of the significant effect of participation in Cornerstone over time. Schools that participated in Cornerstone the longest generally were implementing at higher levels relative to other schools newer to the Initiative.