As discussed in a previous chapter, the district introduced NAS designs as an overarching initiative for improving student achievement. Weary of the piecemeal practice of reform that had dominated the previous administration’s efforts at school improvement, the superintendent partnered with New American Schools to push schools to comprehensively examine change from within. The central office also introduced NAS designs to its schools with hopes that each would sustain the reform effort. Simultaneously, the district began to critically examine the curriculum and instructional strategies its schools employed.

As late as the 1998–1999 school year, three years since most of our sample NAS schools had adopted designs, no campus had yet implemented its chosen design completely or purely—that is, as each is described in the design literature (http://www.newamericanschools.org/teams; Bodilly, 2001). In part this had to do with the fact that most schools still were fairly new to their selected designs. In this chapter, we describe the classroom conditions in high-poverty, urban NAS and non-NAS classrooms to gain a better understanding of the progress of design implementation early on in the process. Specifically, we examine the overall curriculum changes that were occurring throughout the district during the course of this study and then describe the changes in classroom organization and instructional practices.
DISTRICT RESTRUCTURING OF THE CURRICULUM

Because students within the San Antonio school district were low performers on TAAS, district administrators wanted the district to do what it could to ensure its students’ success. Believing that teachers had neither the expertise nor the time to learn and develop a sequential, standards-aligned curriculum across grade levels, the district took on this role full force. To meet the academic needs of its students, the district not only adopted particular research-based initiatives, over the years it also introduced its schools to specific instructional strategies.

By the 1998–1999 school year, not only were elementary schools, district wide, expected to schedule two 90-minute blocks of uninterrupted instructional time for reading and math, respectively, teachers were required to manage time within these blocks in prescribed ways. Though not to the same degree, the district structured language arts activities (spelling, grammar, and writing) as well, totaling approximately 70 minutes of instruction time per day. Thus, roughly four hours of instructional activities were mapped out for all the district’s elementary school teachers to follow (SFA/RW teachers were exempt from the district reading program).

Mathematics

The district provided the most detailed guidance with respect to math. Teachers were given a pacing guide—that is, a highly prescriptive schedule that specified which lessons were to be covered during a given week. It was to be followed conscientiously. In fact district staff or school administrators periodically looked through math workbooks to ensure accountability.

There’s more of a lock and step way they [the district] want you to be. . . . We did Everyday Math last year, but now you have to have a date in which you play a game, and you have to have charts on the [walls]. It involves a lot of clerical tasks . . . that have been added, mandated. . . . We played the games last year, but now I have to go back there, and I have to put a date when I played the games. A lot of clerical things like that. . . . They’ll come in and say, “Well, where’s your math message.” It’s these little bitty things that when
you start to think of all the things, they add up. Any they make you feel as if you’re being restricted. (Co-NCT)

for math we have people that come by. They would come in to check up in our math books to make sure we were on a certain page. . . . So we feel like if we miss one lesson in math and they come in to check and we haven’t done it, then we’ll be in trouble. So that kind of rushes us with the math. We don’t get to teach to master it.

With the approach of TAAS, teachers reportedly put Everyday Math aside to focus on solving TAAS-formatted math problems. Because the district required that Everyday Math journals be periodically checked for completion, teachers found themselves planning “math-a-thons” to catch up after TAAS.

we have TAAS practice, which is three whole days we lose from teaching because we’re doing the test. Then they [the district] mandate that you can’t get behind, so we spend the rest of the next week trying to double up on our math. They [district personnel] come in . . . and check our journals.

Another source of difficulty for teachers was that Everyday Math assumed a certain level of background math knowledge which many students performing below grade level did not have. The teachers expressed that the program failed to remedy their students’ lack of basic skills or understanding in that its spiraling approach to instruction did not immediately teach to mastery. Concepts were introduced repeatedly, in greater depth each time, with the understanding that eventually students would comprehend the material. According to one teacher:

I have nine students who are learning disabled. And I’m supposed to teach them . . . a math program that they may not be ready for because they don’t have the foundation. . . .

Given that at many schools older students were introduced to Everyday Math not ever having been exposed to its terminology and strategies in earlier grades, teachers initially experienced difficulty with the program. After it had been in place for three years, they finally became comfortable enough with Everyday Math, making
instruction easier. Ironically, it was then that all teachers in the district were given the opportunity to officially adopt this math program. In the spring of 1999, teachers voted against the Everyday Math in favor of Advantage Math, a math program more traditional in nature.

Finally, because math instruction tended to be very structured and time-consuming, teachers treated it as an activity in and of itself. That is, they rarely found ways to mesh math instruction with their design projects and/or activities.

Whenever we write these units, we try to write a component for reading, language, science, social studies, everything. . . . And math is considered separate. In fact, we don’t even have to write a math component into the unit. (MRSH)

Math has nothing to do with Modern Red.

I’ve been told in the math, I have to spend 90 minutes or more with Everyday Math. . . . so having to do that, a lot of times I just haven’t always put the math component in [the expeditions], because I’m going to have to teach a math lesson anyhow.

The Everyday Math we had, we were on a time schedule to finish so many lessons and it didn’t matter whether that lesson went along with something we were doing in expeditions or not.

Reading and Language Arts

Though less prescriptive in nature than the math pacing guide, teaching plans for reading and language arts (called “Instructional Expectations and Learner Outcomes”) were issued each grading period during the 1998–1999 school year. The district required that students read silently in class for 20 minutes every day. Students were expected to maintain a book log detailing their readings and thoughts about what they read. The teachers also were required to engage their students in daily “focus lessons” during which time they were to introduce reading strategies or skills (e.g., vocabulary, comprehension, text analysis, and reading strategies). Finally, teachers were expected to divide their students into three different level
groups and hold reading circles for 20 minutes each. The district not only structured the time involved, it also suggested which activities be made available to students left on their own: listening centers, seatwork targeting specific reading skills, and/or silent reading.

During the 1998–1999 school year, having brought forth its instructional plans for math and reading, the Office of Curriculum and Instruction introduced its teachers to a detailed language arts guide. Students were required to write in their “read and respond journals” for several minutes every day after listening to their teachers read aloud. Their teachers were to provide them with 15 minutes of daily spelling instruction. Every week, students were expected to memorize lists of spelling words found in their district-issued textbook. They also were required to work on grammar for ten minutes each day in the form of “Daily Oral Language.” Toward the end of the 1998–1999 school year, the district strongly encouraged classroom teachers at all grade school levels to incorporate learning centers into a portion of their language arts block.

They [the district] want a certain way that we teach reading . . . . We now have a framework that says do 10 minutes of this, 15 minutes of this, 15 minutes of that, 30 minutes of this.

The district gave us a very strict time line this year [1998–1999]. Up to the second almost. Ten minutes here, five minutes there, and you’re out of there . . . . You have to do just 15 minutes silently, ten minutes in the journals . . . . And that’s really affected a lot of the teaching.

Writing activities, too, were structured by the district. All fourth grade teachers in our sample found writing an especially taxing responsibility in light of the fact that their students faced the TAAS writing exam for the first time. Although students at all grade levels were expected to engage in some aspect of writing, most fourth grade teachers felt that they had no choice but to teach writing from scratch, given that these skills tended to be underdeveloped. In addition to introducing and practicing the process of writing (from brainstorming to drafting to editing), it was the responsibility of fourth grade teachers to ensure that their students be able to produce works written in different styles. Fourth grade students were expected to know how to write classificatory, narrative, how-to, and
persuasive papers not only for their own good, but also for TAAS. Most of the NAS teachers we observed tried to incorporate writing as much as possible into their project work.

The district dictated the types of mini lessons to be incorporated into daily writing instruction as well as the amount of time to be spent. As the writing TAAS neared (February), however, several fourth grade teachers found the daily 35 minutes of practice and instruction to be too little. Consequently, during the winter months, more than half the fourth grade teachers we spoke with reported (or were observed) devoting significantly more time to writing.

The district’s promotion of a varied assortment of instructional practices reflected both the back-to-basics movement as well as more progressive approaches to teaching. Some of these activities actually resembled aspects of NAS designs. For example, the structured reading time, ability-grouped reading circles, and read and response journal writings reflected elements of SFA. The provision of computers and printers in all classrooms, as well as the district’s request that all teachers receive computer training and incorporate their newly acquired skills into lesson plans, reminded one of CoNECT. The district’s emphasis on standards, both the state’s and their own, resembled MRSH. Center-work reflected aspects of ELOB. The NAS schools faced competing demands between the district initiatives and the implementation of NAS designs. As one teacher stated:

You’re told what to do and how to do it for reading. You’re told that the spelling has to be done every day according to a spelling list that has nothing to do with whatever projects your students are working on. You’re told what page and lesson to be on in math and math takes an hour and a half. . . . So everything’s becoming very prescriptive. And everything has to tie into the process and the objectives on the process.

In the words of another teacher: “We’re just here following. . . . That’s what really hurt this year. It felt like we didn’t have the ability to make instructional decisions. Everything is in its place. Do this. Do that.”
Given the district's focus on promoting a variety of instructional approaches, what were the instructional conditions in NAS classrooms? Did these differ from those in non-NAS classrooms within a reform-minded district? In the sections that follow, we draw on our different sources of data to describe the early implementation of NAS designs in classrooms within high-poverty schools.

CLASSROOM ORGANIZATION

Many key items on the teacher survey focused on activities at the classroom level. Teachers were asked about skills they emphasized, instructional strategies they used, grouping practices within classrooms, assessments and grading criteria, instructional materials and technology. Before describing other instructional strategies, we begin with a view of average class size and grouping practices and then go on to examine differences found between NAS and non-NAS classrooms across a variety of classroom conditions and instructional practices. We highlight differences across 1998 and 1999 for our longitudinal sample of 40 teachers and bring information from our observations and interviews where appropriate.

Class Size

An important educational issue has been the class size in which students receive instruction (Bohrnstedt and Stecher, 1999; Stecher and Bohrnstedt, 2000; Grissmer, 1999). In general, teacher survey responses did not indicate clear distinctions between classrooms in NAS and non-NAS schools in terms of class size. Teachers were asked to indicate the number of students in their classrooms at the time they responded to the survey (late spring of 1998 and 1999). Overall, teachers in NAS and non-NAS elementary school classrooms had about 18 students, which is within the range for which class size reduction efforts have found positive effects on student achievement in the elementary grades (Grissmer, 1999). NAS teachers reported slightly smaller class sizes by about one or two students (Figure 5.1). This overall similarity between NAS and non-NAS classrooms is likely due to state policy on reducing class sizes (Texas Educational Agency, 1999).
Grouping Practices

With respect to student grouping, each design articulates its own approach. The MRSH design endorses multiage, multiyear classroom groupings with few pullouts. Within this environment, students can be observed working individually as well as in a variety of groups, depending on project. In Co-NECT schools, one also expects to see multiage, multiyear arrangements. However, this design allows for other grouping strategies as well—tracking being the one exception. The ELOB design also does not endorse tracking. In addition to mainstreaming special education students, it espouses looping. Teachers are to stay with the same students for two to three years to nurture relationships. One expects to see ELOB students working in small groups. The SFA/RW design, unlike the other designs, openly endorses the homogenous grouping of students by reading level. However, students are to be assessed every eight weeks and reassigned as appropriate, providing a flexible use of grouping for instructional purposes. This way, students can receive the individual attention they need.
Teachers in NAS classrooms tended to report using non-traditional grouping practices, although for the entire sample such practices were not widespread throughout any of the schools. Mean responses on survey items that addressed this issue (using a 6-point scale varying from does not describe my school to clearly describes my school) are provided in Table 5.1. By 1999, when considering whether grouping was flexible or was organized into block scheduling, NAS teachers tended to report in the middle of the 6-point scale (2.7 and 2.9, respectively). Compared with NAS teachers’ reports on these indicators, non-NAS teachers scored somewhat lower. In addition, NAS teachers reported an increase between 1998 and 1999 when asked about whether their schools used more traditional ability grouping on a regular basis.

Our observations in NAS and non-NAS schools revealed that not all of the San Antonio NAS schools implemented the design team approaches to student grouping. And in fact, variation was observed within design by school as well. The SFA/RW schools strictly followed the guidelines laid out for them. They really had no choice, since the implementation of Success for All involved very specific actions. There was no room to deviate given the scripted curriculum and accompanying materials. At the two SFA/RW schools we followed, reading assessments, administered approximately every eight

### Table 5.1

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<tr>
<td>Student grouping is fluid, multiage, or multyear</td>
<td>3.1</td>
<td>2.2</td>
<td>2.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Students are organized into instructional groups using block scheduling for specific curricular purposes</td>
<td>3.5</td>
<td>2.4</td>
<td>2.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Students in this school are grouped by achievement levels into high, middle, and/or remedial instructional groups on a regular basis</td>
<td>2.8</td>
<td>2.3</td>
<td>3.5</td>
<td>2.7</td>
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NOTE: Means are based on teacher reports in a total sample size of 40 teachers—26 NAS and 14 Non-NAS. Responses range from 1 "does not describe my school" to 6 "clearly describes my school."
weeks, determined how students should be grouped. In most cases, students tended to be similar in age. Teachers employed all the instructional strategies called for in their SFA lesson plans. Grouping strategies varied by activity. Not only did students learn as a class, they also worked individually and in small groups.

Only one of the ELOB schools in our sample practiced looping (teachers staying with the same group of students across school years). Both ELOB schools we visited, however, tended to place gifted and talented students together. The ELOB students we observed were given opportunities to work both independently and cooperatively. When asked to work together, students were given the option to work alone, which some took advantage of. However, when asked to work independently, students had no say. Relative to students exposed to SFA/RW, the ELOB students appeared to be less familiar with cooperative learning. When given the chance to work collaboratively, the students rarely solved problems together. They tended to work independently. Often, these students were put in small groups to assist or inspire one another as they worked on individual projects.

The grouping practices of the two Co-NECT schools we observed differed from one another. One engaged in looping; one did not. In the school that practiced looping, the fourth and fifth grade teachers collaborated quite extensively. However, they did not instruct each other’s students. Desk arrangements varied by classroom. Students were observed working both individually and in small groups.

As for the MRSH schools we followed in San Antonio, no evidence of performance grouping, multiage classrooms, or multigrade teaching teams was observed. Looping, however, was practiced at one school. Students were not tracked by ability, but teachers did report that the gifted and talented students tended to be the responsibility of one teacher. The teachers at both MRSH schools periodically regrouped their students and rearranged desks as appropriate, but such changes tended to be socially based. Students were grouped differently as necessary throughout the day, but the groupings did not vary that dramatically. Students worked either independently or in small groups. They also learned as a whole class.
About six weeks prior to the TAAS, teachers at two of the NAS schools reported working with a variety of students. That is, grade-level teachers pooled their class lists and then divided all students by areas of weakness as determined by performance on the most recently administered TAAS simulation. Each grade-level teacher worked with one ability group for a set amount of time.

Overall, teachers in the NAS classrooms did tend to use more varieties of grouping practices than teachers in the non-NAS classrooms. Grouping practices were not consistent, however, among designs and schools.

INSTRUCTIONAL PRACTICES

We examined a variety of survey questions about both the skills students are expected to demonstrate and the particular instructional strategies teachers use in their classrooms. Since NAS designs tend to emphasize higher-order, analytic thinking skills over more basic skills, we might expect teachers in NAS classrooms to report lower levels of memorization and higher levels of other types of critical thinking skills (Bodilly, 2001). We sorted teacher responses about student tasks and teacher practices according to more conventional or reform-like categories of instruction. While some of the reports are based on teacher surveys, which may be subject to problems of response biases due to exposure to reform jargon (Mayer, 1999; Burstein et al., 1995), we believe the following comparisons are informative. Moreover, we also draw on our observational data, interviews with teachers, and examination of student work to further our understanding about what instructional practices occurred across elementary classrooms in the district.

CONVENTIONAL INSTRUCTIONAL PRACTICES

Figure 5.2 shows mean responses on a 4-point scale (from almost never to every lesson) in which teachers were asked, “How often do you have students memorize facts or problems?” Memorization tended to be emphasized more by non-NAS teachers, but only in 1998. The slight increase in NAS responses in 1999 may be due to the increased pressures schools were experiencing to switch to more basic skills instruction to prepare for the TAAS.
We also asked teachers to indicate how often they used particular instructional strategies in their classes, using a 5-point scale, ranging from never to almost every day. Responses from teachers in NAS and non-NAS schools varied only slightly in both years when it came to reporting on conventional instructional strategies such as:

- Work individually on written assignments/worksheets in class;
- Practice or drill on computational skills;
- Read textbooks or supplementary materials; and
- Work on next day’s homework in class.

With the exception of the last item, well over 90 percent of all 40 teachers reported using these strategies at least once or twice a week.
Between 21 and 29 percent of teachers indicated having students work on their next day’s homework in classes that often.

In general, teachers in the NAS schools indicated less reliance on more conventional instructional strategies than teachers in non-NAS schools. Teachers in non-NAS schools were much more likely to use conventional instructional strategies such as lecturing, administering a test over a full class period, and administering quizzes.

**Reform-Like Instructional Practices**

Teachers responded to several survey items asking about how often students were requested to demonstrate analytical and higher-order thinking skills, using a 4-point scale (from almost never to every lesson). We found few differences in NAS teachers’ responses compared with non-NAS teachers when asked how often students use library sources, brainstorm ideas for written work, debate ideas, apply concepts or skills from earlier lessons, judge and critique their own and each others’ work, reflect, relate the material to their life or their community, draft and redraft work, and work in teams toward a common goal.

Non-NAS teachers, on average, reported a higher degree of emphasis only on the item that asked about how often students “independently conduct and design their own research project.” In both 1998 and 1999, 70 percent of non-NAS teachers reported having students conduct such projects in at least some lessons, compared with 60 percent in 1998 and 31 percent in 1999 for teachers in NAS classrooms. When we examined responses to this item in more detail, we found that in 1998, teachers in ELOB, Co-NECT, and to some extent MRSH (73 percent) indicated having students conduct such projects in at least some lessons. Fewer teachers in RW classrooms (36 percent) reported use in at least some lessons, which likely reflects RW not emphasizing project-based learning within its design. By 1999, when emphasis on NAS designs was generally decreasing, most teachers in all the NAS classrooms indicated that this instructional strategy was “almost never” used.

Another set of survey items measuring instructional strategies was used to construct a composite for reform-like instructional practices.
Responses from two scales were standardized—to indicate (1) how often teachers used the instructional strategies with this class (a 5-point scale ranging from never to almost every day) and (2) how often teachers had students demonstrate skills (a 4-point scale ranging from almost never to every lesson). The following items were included in the reform composite:¹

- Have students listen to an outside speaker/expert;
- Have students perform research projects;
- Use manipulatives to demonstrate a concept;
- Have students work with manipulatives;
- Have small groups work on problems to find a joint solution;
- Have the whole class discuss solutions developed in small groups;
- Have students work on problems for which there is no obvious method or solution;
- Have students represent and analyze relationships using tables and graphs;
- Have students respond to questions or assignments that require writing at least a paragraph;
- Have students keep a journal;
- Summarize main points of today’s lesson;
- Have students work on projects in class;
- Have students explain their reasoning; and
- Have students represent and analyze relationships using tables, graphs, or charts.

Teachers’ responses for this reform-like instructional composite are provided in Figure 5.3. While the average use of reform-like instructional practices increased for NAS and non-NAS teachers between

¹The alpha reliability for this composite was 0.77 for both 1998 and 1999. The range of correlations for the individual items was 0.17 to 0.20 in both years.
1998 and 1999, teachers in NAS schools reported higher levels than their counterparts in non-NAS schools. For example, in 1999, 54 percent of NAS teachers reported using practices in the reform-like composite at least once or twice a week compared with 36 percent of non-NAS teachers.

Given the unique features of designs and their respective emphases on student work products, one would reasonably expect to see differences in classroom appearance, setup, and student work displays across design schools. While such displays are a simple way that teachers can give the impression of superficial compliance to implementing a reform, we found even these displays were less apparent in the second year than the first year of our study. In the first year, design elements were often clearly identifiable. In MRSH classrooms, standards were posted next to student work. Word walls and team score sheets were posted in SFA/RW classrooms. Rich classroom libraries were found in Co-NECT classrooms and student work linked to themes and a multidisciplinary perspective was posted in

![Figure 5.3—Percentage of Teachers Who Reported Using Reform-Like Instructional Practices at Least Once or Twice a Week in NAS and Non-NAS Schools, Spring 1998 and 1999](image)

**NOTE:** Percentages are based on a total sample size of 40 teachers—26 NAS and 14 Non-NAS.
hallways and classrooms. Displayed throughout ELOB classrooms were expedition themes, student-developed rubrics, and drafts and re-drafts of student writing.

In year two of our study, the growing influence of the central office on classroom affairs was reflected in the other types of postings found on classroom walls. Across our sample schools, identical posters outlining the writing and reading processes, math definitions, and district-developed rubrics were commonly found taped to classroom walls. In every classroom, word walls were found as well as postings of student work on bulletin boards. Classrooms across our sample looked alike in other ways as well. The district provided all classrooms with six computers and at least one printer. All computers were loaded with the same programs. The same trade books were found in every room. In most classrooms, desks were commonly arranged in clusters of four to six. Teachers across schools reportedly rearranged students quite regularly to enable classmates to get to know one another.

One could tell that classrooms were part of given designs only because teachers advertised this fact through posters. In MRSH classrooms various standards tended to be posted on bulletin boards next to displays of student work. In ELOB classrooms design principles were often found taped to walls. Co-NECT classrooms tended to be less distinctively marked. The selection of student work on display as well as reading-related posters clearly distinguished SFA/RW classrooms from the rest. The appearance of classrooms as well as the work displayed revealed teachers’ efforts to comply with both the district’s demands and those of their selected designs.

Classroom observations revealed a schism with respect to design implementation. The designs per se were not the source of teachers’ problems. The difficulties arose out of the struggle to merge district demands with design practices while maintaining the integrity of designs. All teachers indicated in their talks with us that they perceived passing TAAS scores to be the bottom line. With this in mind, the teachers were left on their own to figure out how to incorporate district initiatives into their lesson plans in the spirit of their designs. To determine whether NAS teachers and students actually interacted with each other and subject materials in ways reflective of design
teams’ curricular and instructional theories, classroom activities were examined with care.

Use of Assessments

NAS’s ultimate goal is to help schools realize improved student performance. In San Antonio, the TAAS is the preeminent measure of student performance. Clearly, it was very important to the district and its schools that students perform respectably on this standardized test. As in many urban school districts, San Antonio schools functioned in a high-stakes testing environment. Given this climate, the district assumed much of the responsibility for assuring the accountability of its schools and teachers by imposing a set of instructional standards and practices across the board—regardless of the existence of NAS designs at its schools. Moreover, teachers focused on reinforcing basic math and reading skills in their efforts to prepare students for TAAS.

Teachers from different design schools consistently remarked that with the approach of TAAS, instruction narrowed to honing tested skills. They questioned whether the instructional approaches espoused by their respective designs (e.g., project-based and interdisciplinary) alone could bring about test score increases. In the words of one teacher whose school dropped the design at the start of what would have been its third year, “There are some faculty members who bemoan the loss of their love [the design]. But I think all of us saw that it wasn’t getting us where we needed to be when the requirement here is having a certain level of performance on the TAAS test.”

As described in the previous chapter, teachers reported that TAAS preparation was a matter of practice and familiarizing students with test format. Given the district’s numbers of students performing below grade level, it was important to them that they directly address tested skills. Teaching students how to take the TAAS was just as important to teachers as reviewing the skills to be tested. Such an assessment system within a high-stakes accountability environment does not fit well with most of the design teams’ approaches (except SFA/RW), even though each team expresses a desire to work with whatever local assessment is in place (Bodilly, 2001).
No design was developed solely to produce high standardized test scores. Each design in fact promotes its own methods of assessment. The ELOB design calls for authentic assessment, including performance-based exhibitions, student portfolios, and student self-assessments. Student work products are to be shared with the community to ensure a certain quality of work and to encourage support. The Co-NECT design relies on a mix of assessments and portfolios to judge student achievement. Teachers use exemplar products that provide models and rubrics that explicitly describe the characteristics of varying levels of quality to encourage students to set goals and measure progress. The MRSH design, like Co-NECT, also relies on various assessments. Schools are required to use MRSH-developed tests to measure student performance and individual student contracts to measure progress toward standards. The SFA/RW design team uses a formal assessment at least every eight weeks to reassign students to reading groups. In addition, it endorses informal assessments to monitor individual progress.

Teachers across the various NAS schools reported using a variety of assessment measures. These ranged from observations to student work assessments to objective paper and pencil tests. All teachers made some use of rubrics. The district encouraged this and even provided teachers with several rubrics to use. In compliance with district policy, teachers also regularly administered spelling, math, and reading tests, as well as year-end reading and math tests.

The teachers at the MRSH schools we observed used rubrics to assess their students’ projects. One teacher developed multiple-choice tests to assess her students’ knowledge. At both schools, methods of assessment varied by subject. At neither school was there mention of watershed assessments or individual education compacts.

The Co-NECT teachers we spoke with also used district-established rubrics to some extent. None felt entirely comfortable with the process, however. With respect to Co-NECT projects, teachers seemed to apply different criteria depending on assignment type. There appeared to be no obvious measures of assessment in place. The Co-NECT teachers we observed did not put as much time into developing assessment tools as they did into planning units. Students were rarely shown exemplary work. Nor were the grading criteria explained to them up front.
At the ELOB schools we observed, the practice of assessment appeared to change greatly from the spring of 1998 to the spring of 1999. In the first year, students developed and applied their own rubrics and re-drafted their work. But, in the second year, teachers and students were not seen reexamining graded assignments or discussing ways to improve upon them. Nor did there appear to be any evidence of reflection on the quality of student work. Rubrics were used at times to grade student work, but it is not clear how consistently. The rubrics used by ELOB teachers tended to be those developed by other outside experts. The teachers at both ELOB schools we followed mentioned that they really were unclear as to how their design defined good quality work.

Show us what a good product is. Is this a good product? Give us an [example of] authentic product. Is a book an authentic product? . . . What is an authentic product? What does that look like?

Most MRSH and Co-NECT teachers we talked with also expressed the need to see examples of quality products and/or teacher-developed units:

If I can see it, see a product . . . then I get an idea. But just hearing it, I can’t picture that. (Co-NECT)

I would like to see how does it look whenever a good unit is being taught. (MRSH)

The SFA/RW teachers we spoke with were only familiar with SFA. Given its scripted approach to reading, the practice of assessment was not an issue for SFA/RW teachers. At both SFA/RW schools, reading assessments were administered about every eight weeks to determine students’ reading levels. Based on their results, students were regrouped as necessary. Reading teachers used team score sheets to record their students’ grades on SFA assignments. The score sheet enabled them to chart their students’ progress over time.

On the teacher survey, respondents were asked to indicate the importance of varying types of assessment instruments using a 4-point scale (from not very important to very important). The only assessment that teachers in NAS schools rated as being important was the use of student portfolios. In general, non-NAS teachers tended to
indicate higher levels of importance on most assessments used, including multiple-choice and essay tests (whether developed by the teacher, an outside source, or found within a unit or book), completion of homework, student work, open-ended problems, individual projects/reports, performance tasks or events, and standardized test results. Teachers in both NAS and non-NAS schools responded similarly with respect to the importance of assessing student participation in class and group projects/reports.

**Use of Instructional Materials**

Little variation was found between NAS and non-NAS teachers in the use of instructional materials. Both groups of teachers tended to use a variety of materials fairly frequently in their classrooms, including textbooks, literature books, workbooks, computers, calculators, manipulatives, audio-visual equipment, games, lab equipment, and library materials.

NAS teachers were more likely than non-NAS teachers to report that inadequate instructional materials hindered student achievement (see Figure 5.4). For example, in 1998, 35 percent of NAS teachers reported that instructional materials hindered students' academic success either moderately or greatly compared with 21 percent of non-NAS teachers. For these same teachers, 16 percent of NAS teachers and 7 percent of non-NAS teachers reported that inadequate instructional materials posed a barrier to students' academic success in 1999. It is likely that this overall decline was due to the extensive curricular programs (mathematics, reading, language arts) being implemented district wide.

In the first year of our study, our classroom observations revealed that the use of instructional materials varied greatly among the NAS designs. While non-NAS and MRSH students were seen using textbooks, traditional literature, and pencil and paper, students in Co-NECT and ELOB schools were observed accessing various other materials during project time, including reference books, the Internet, and sometimes multimedia software. They also left the room to gather resources from the library or other classrooms. During the SFA block, SFA/RW students used the SFA workbooks and trade books supplied by the design.
By the second year, materials used for instructional purposes tended to be more similar across schools, regardless of design presence. The technology available in classrooms was similar, for example. Students across the district read many of the same books and engaged in tasks that required little more than pencil and paper. Even the SFA classrooms contained the same reading materials as the other district schools, although they were not used during the reading block. Given that the district required all schools to adopt the same math curriculum and employ specific instructional strategies in the areas of reading and language arts, it is not all that surprising that the materials found in classrooms tended to be more alike than different. However, although the materials were similar, they were not always utilized in the same way by all campuses. For example, one of our Co-NECT schools employed the available technology more readily than most other campuses.
EXAMPLES OF STUDENT WORK

The work students produced also tended to look alike across schools. However, a close examination of the work collected revealed that some teachers more so than others espoused an interdisciplinary, reform-minded instructional approach.

So that RAND could better understand the nature of student work assigned over the course of one year, teachers were asked to submit examples of student work every three months or so. No criteria were established with regard to work submissions. The teachers simply were asked to provide examples of typical work assignments produced by several of their randomly selected students.²

Quite possibly the submitted work was not entirely representative of all student assignments made by a given teacher; nonetheless, an analysis of the student pieces revealed the types of activities assigned by each of the teachers in our sample. Each piece of work was coded according to several variables, such as content area, nature of assignment (e.g., journal entry, essay, etc.), as well as whether the piece provided evidence of use of standards, technology, cooperative learning, connection to an overall theme, drafts, rubrics, or other individual design elements. In addition, the degree with which students had to apply skills to culminating projects or themes was noted. Overall, the student work revealed the use of a uniform fourth grade curriculum across schools within San Antonio. For example, in social studies, students across NAS and non-NAS schools studied Texas history, including such topics as regions, Indians, exploration, missions, settlements, and tall tales.

Although the submissions were similar in content and skills emphasized, they revealed that teachers did not present the curriculum in the same ways. For example, some teachers made efforts to cover multiple objectives simultaneously by having students write biographies about famous people from Texas history. Other teachers allowed students to write biographies on any famous person, past or present.

²RAND randomly selected one-quarter of the students in each class every three months. Once a student was selected, his or her name was removed from the class roster.
One pattern that emerged was a tendency of NAS teachers to incorporate the practice of reading and writing skills whenever they could. Thus, when covering a social studies topic, or on rare occasions a science lesson, for example, they had their students activate the reading process and write how-to, classificatory, persuasive, and/or narrative papers. By contrast, non-NAS teachers tended to use more traditional and compartmentalized strategies to teach social studies and science, such as fill-in-the-blank questions at the end of a social studies chapter (see Tables 5.2 and 5.3 for examples of lesson plans).

Although design teachers made efforts to integrate district- or state-required content material into their units of study, they did not consistently engage their students in interdisciplinary work. Many tended to endorse a more traditional instructional style some of the time, teaching subjects as discrete disciplines and relying on worksheets and textbook assignments. In some ways, they were encouraged to do so. For example, teachers were required to calculate report card grades for each subject; moreover, they were

<table>
<thead>
<tr>
<th>Language Arts</th>
<th>Math</th>
<th>Social Studies</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAAS Master p. 38</td>
<td>Students will locate places on an atlas map, solve problems in math box 51, and record information about latitude and longitude. <em>Everyday Math Workbooks</em> pp. 236–238</td>
<td><em>A Paradise Called Texas</em>—Use Reading Process to gather information about the German culture in Texas for a report to be presented in class</td>
<td>Students will make and use a book about magnetism—AIMS Lesson. After creating the book, reading and discussing info on magnets, students will experiment with magnets.</td>
</tr>
<tr>
<td>Write a story about the day the Snowman came to life, listing ideas</td>
<td>Test Ready pp. 33 &amp; 34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give Spelling pre-test on unit 15</td>
<td>Independent Reading, pp. 227–247 using the reading process &amp; do Sum It Up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary focus, <em>Beat the Story Drum</em>, p. 227</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Test Ready</em> pp. 33 &amp; 34</td>
<td>Student journal pp. 145 &amp; 146</td>
<td>Study Links 50 &amp; 51 <em>World Tour Guide Book</em> and record sheets 1, 5–7</td>
<td></td>
</tr>
</tbody>
</table>
Table 5.3

Example of a Lesson Plan Consistent with Reform-Like Orientation of a NAS Design

<table>
<thead>
<tr>
<th>Title: Europe in the Middle Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract: This unit focuses on the development of civilization during the European Middle Ages from 400 A.D. to 1500 A.D. The social studies component is research-based and includes geography, feudalism, chivalry, timelines, and the study of important people. The language arts focus is on writing and dialect. Math includes measurement and construction of castles. Reading incorporates myths, legends, and an understanding of real and fictional characters. Science is included with the study of hygiene and diseases. Art and drama are fully executed throughout the entire unit with the production of a play and the creation of artifacts.</td>
</tr>
<tr>
<td>MRSH Core Knowledge Sequence: World Civilization for the fourth grade.</td>
</tr>
<tr>
<td>Note: the teacher goes on to outline 12 lessons in the unit</td>
</tr>
</tbody>
</table>

expected to follow state and district-mandated curricular and instructional guidelines by subject. Teachers had the latitude to tie subjects together, but the constraints within which they operated tended to limit their vision.

As revealed earlier, teachers across design schools reported that they found it difficult to integrate Everyday Math lessons with other subjects. Thus, they taught it as a subject in and of itself and our analysis of student work was consistent with the teacher challenges expressed during interviews and observations.

In general, the SFA/RW and non-NAS schools modeled a traditional approach to instruction, focusing on compartmentalized skill exercises. They utilized worksheets and textbook assignments as prescribed by SFA. The student work submitted by ELOB and Co-NECT teachers reflected a more interdisciplinary unit-based approach to instruction and showed more evidence of contemporary teaching practices (e.g., the use of rubrics, cooperative grouping, and integrated technology). One of our Co-NECT schools, more so than the other, however, reflected a more traditional approach to teaching. The MRSH schools employed a mix of strategies including project-oriented work that incorporated a variety of skills in the process.
Use of Technology for Instructional Purposes

Since NAS designs such as Co-NECT and MRSHT tend to emphasize the use of technology in the classroom, two survey items addressed this issue. As shown in Figure 5.5, compared with NAS teachers, those in non-NAS schools indicated slightly higher levels of technology being used as an integrated classroom resource. In both sets of schools teachers reported that technology use declined from 1998 to 1999, despite a district-wide effort to support the use of computers in all elementary schools.

The second item focused more on technology use in schools than in classrooms. As shown in Figure 5.6, teachers in NAS and non-NAS schools reported a decline in technology being used to manage curriculum, instruction, and student progress. By 1999, 12 percent of NAS teachers agreed that such use of technology described their school, while 21 percent of non-NAS teachers agreed.

NOTE: Percentages are based on a total sample size of 40 teachers—26 NAS and 14 Non-NAS.

Figure 5.5—Percentage of Teachers Who Reported That Technology Was Clearly an Integrated Classroom Resource in NAS and Non-NAS Schools, Spring 1998 and 1999
The decrease in teacher-reported use of technology in both schools and classrooms could in part be explained by the increased demands on teacher time to comply with the district’s math, reading, and language arts initiatives. The structure mandated by the district for teaching these subjects was time-consuming and fairly rigid and may have decreased the opportunities for teachers to incorporate technology into instruction.

Few indications of the use of technology were seen during our classroom observations. Computers were primarily used by students to type essays and reports. Occasionally, we saw students take reading tests on the computers. Once in a while students were observed playing educational games or researching topics on the Internet. Most of the time, however, the computers were not in use during classroom observations.

Comments made by several NAS teachers during interviews also indicate that technology use was decreasing due to several factors. All the teachers we spoke with reported that there are lots of problems
with computers and printers in the classrooms. Many of the computers were outdated and did not have the capacity to run the latest educational software available. Many were not connected to the Internet. Obtaining supplies, such as ink for the printers, and getting repairs done were often slow processes.

Some of the teachers mentioned training problems. Not all teachers were comfortable with computers. Most of the training available for teachers was offered after school and it was left up to the teachers to take it upon themselves to sign up for the courses. Teachers expressed that many did not have the time or the means to practice what they had learned in their training sessions.

One teacher pointed out that many of her fourth grade students were reading at a second grade level. Many students in the classrooms we visited were struggling readers. For such students, it is not always easy to work independently on computers.

**TEACHER-REPORTED EFFECTS OF REFORM**

On our surveys we asked NAS and non-NAS teachers whether the implementation of their schools’ respective NAS design had positive effects on their professional work lives and on their students.

**Teacher Reports of NAS Design Effects on Teaching and Learning**

The school improvement composite was comprised of several items asking about the extent to which the NAS design had positive or negative effects on individual teachers\(^3\).

- Teaching;
- Professional growth;

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\(^3\)The teacher-reported effects composite was comprised of items on a 7-point scale (from great deal of negative effect to great deal of positive effect). The alpha reliability for this composite was 0.93 in 1998 and 0.96 in 1999. The range of correlations for the individual items was 0.46 to 0.85 in 1998 and 0.58 to 0.86 in 1999.
• Job satisfaction;
• Students’ achievement;
• Students’ enthusiasm for learning;
• Classroom curriculum; and
• Students’ engagement in learning.

In both survey years, a substantial proportion of teachers in the NAS schools (83 percent in 1998 and 88 percent in 1999) attributed positive effects of the designs on these aspects of their work lives and on their students.

Few teachers felt that their style of teaching had dramatically shifted as a result of design training. Differences in the way teachers approached curriculum, however, were cited as a positive consequence of design implementation. Several teachers reported that they now engaged in much more research to prepare lessons and plan activities. The designs forced them to study topics and gain new content knowledge and a reliance on worksheets and textbooks.

At one of our Co-NECT schools, a teacher reported that because of the design, she became more aware that she needed to involve the community in her students’ education and thus made a greater effort to get parents or “some kind of outside influence” into her classroom. Another teacher at a different Co-NECT school stated that the design led him to think more deeply about subject matter:

When we plan, when we look at things, you look at them . . . much broader, more in-depth. And you’re just not dealing with surface things because you really want to get involved in the product in what you’re doing. Also, you find yourself pulling and researching more as a teacher, trying to find out more . . . about information, using the Internet to get a website and things like books and things like that. . . . And I think it’s expanded what we teach.

At this school, teachers also cited increased technology use as a positive consequence of design implementation and training. Teachers were taught how to work computers and use them in their classrooms. According to those we spoke with, before Co-NECT, computers just sat there all day, “not being used.”
Teachers at our MRSH schools remarked:

I like the standards because they focus me. They show me exactly what I’m doing. . . . We used to just come in and teach a unit and hope for the best, you know. . . . And now it’s much more focused. . . . Teaching is more focused. The principal knows what we’re doing. Everybody knows what we’re doing, if we have all the same focus.

The greatest advantage to the school the design brings is that a lot of teachers who sit back and give worksheets can no longer do that, and I think that worksheets are taboo around here now. So I think it’s made a lot of lazy teachers less lazy.

According to a teacher at an ELOB school, much of the training she received “raised a consciousness or awareness in (her) to better allow (her) to teach to the whole child, instead of just to academic flaws.” Teachers at our other ELOB school reported that as a result of having the design in place, they noticed some improvement in their students’ oral skills. Additionally, the design led them to engage their students in more group work and research.

Teachers at both SFA/RW schools we visited reported that they found it really advantageous to work with children at the same reading level. SFA enabled teachers to “focus on where the kids were actually reading and take them from there and fill in some of the gaps.” At one of our SFA/RW schools, teachers stated that their students were reading more on their own as a result of the reading program. A teacher at the other SFA/RW school in our sample reported that several of her colleagues utilized the SFA reading strategies when teaching subjects that involved reading.

Over half of the NAS teachers reported their school had generally improved over the last three years, but by 1999 about half of the non-NAS teachers also reported such general improvements. When considering effects of NAS designs on teachers’ professional life (teaching and professional growth) and student learning and engagement, NAS teachers tended to be quite positive. The mixed picture may be due to NAS teachers teaching in challenged schools with low-achieving students and having high expectations for student progress in the skill areas.
Analysis of responses to the survey revealed few differences in teacher perceptions of instructional environments between NAS and non-NAS schools. Some differences were evident. For example, teachers in NAS schools reported instructional strategies and classroom practices that could be categorized as reform-like, rather than conventional. In other areas, fewer differences were found. Teachers in non-NAS schools indicated more frequent use of traditional assessment instruments with their students. Both groups reported similar use of instructional materials, though more teachers in NAS than non-NAS schools perceived inadequate materials to be a problem. Use of technology in the classroom was more prevalent in non-NAS schools, but schoolwide use of technology was more prevalent in NAS schools.

The more substantial differences shown here, however, were not between NAS and non-NAS schools, but between 1998 and 1999, which is likely a reflection of the dramatic level of change within the district itself.

As shown in the last chapter, by the end of 1999, NAS teachers reported a substantial shift in their perceptions indicating little support and stronger opposition to NAS design team programs when compared with their perceptions a year earlier. Yet, this same group of teachers expressed relatively more positive views about the impact of NAS in both general and design-specific terms. These contradictory results could be attributed to changes in district administration and the emphasis on accountability and TAAS. Data collected in teacher focus groups, interviews, and classroom observation give more detail on the process of change in the district and teacher attitudes toward NAS and provide explanation and a context for the survey results described here. Perhaps the most influential factor that posed a barrier to sustained, meaningful NAS design implementation was the high-stakes assessment to which schools were held accountable. How the designs fit this accountability system was open to question. Yet, district personnel and teachers seemed to have little time to let this question be resolved. The result was more district initiatives aimed at changing teaching and learning that would be reflected by TAAS scores. The NAS designs were but a part of this mix of educational reforms.
District initiatives compromised the essence of designs by forcing the reduction of each to blocks of time. Teachers reported “doing Co-NECT” and “getting to ELOB and MRSH” upon completing such activities as daily oral language drill, journal writing, reading, and math. To be able to meet the demands of both district and design, teachers had little alternative but to turn their respective designs “on and off,” depending on task. Often, this meant that teachers taught the design almost as a separate subject after completing reading, writing, and math lessons. In practice, the designs came to mean project time to students. The emphases on standards made this less the case at MRSH schools. In the second year of the study, when the district prescribed more instructional strategies, the new strategies took time away from engaging in design-related interdisciplinary projects.

The teachers did not feel that their designs necessarily competed with district initiatives, rather ideas regarding which to prioritize were what clashed. They found it difficult to actually integrate the ideas coming from both sources. This struggle was made manifest as one sat in classrooms and observed instruction. Not only was it clear that teachers turned designs on and off, most striking was that, by the second year of our study, regardless of whether schools were non-NAS or had in place Co-NECT, ELOB, MRSH, or SFA/RW, one saw similar instruction taking place.

Almost every teacher began his/her day with a daily oral language drill. All teachers taught the reading process and had students write in their “read and respond journals.” All teachers employed Everyday Math. All students were taught spelling out of the same district-issued spelling books. All teachers reviewed specific TAAS skills and referred by name to key TAAS objectives. All fourth graders were taught four types of writing via the writing process.

Because teachers referred to state standards when developing design units, one saw students across design schools engage in similar activities and study identical topics. In Co-NECT, ELOB, and MRSH schools, various instructional activities centered on Texan Native Americans, for example, were observed during the 1998–1999 school year.
Interestingly, though introduced as design-inspired projects, several identical activities were performed across different design schools. In Co-NECT and ELOB schools, for example, the students wrote stories, using pictographs, on wrinkled brown paper shaped to resemble animal skins. In ELOB and MRSH schools, students constructed a variety of three-dimensional dwellings inhabited by native Texans.

In MRSH schools, teachers got together to develop instructional plans guided by the state, drawing from design and state standards as well as Core Knowledge. In ELOB schools, too, teachers developed expeditions around district mandates and Texas’s education standards. Additionally, they derived inspiration from their ten design team principles, incorporating as many as they could into their lessons. Expeditions were planned to promote active student involvement and to nurture oral language skills. Co-NECT teachers, like the others, also developed curriculum based on state standards. The outcome differed only in that their lessons tended to make more use of technology. However, this observation, too, varied by school. One Co-NECT school more so than another in San Antonio tended to utilize computers to engage in research, produce hyper-studio reports, and type up written work. Students scanned photographs into their computers and tried to utilize the technological equipment they had available (e.g., digital camera and camcorder). However, even at this school, plans often derailed due to equipment failure.

The implementation of SFA/RW in San Antonio differed from the other three designs in that SFA/RW schools opted to implement only one aspect of the design: Success for All. This decision tended to ease the pressure that teachers at other design schools felt to “fit” design elements into their days. Given that SFA is a highly structured, prescribed reading program, an academic area of critical importance to the district, teachers in SFA/RW schools expressed greater confidence in their progress and degree of implementation than their colleagues at other design schools. By electing to adopt only SFA, implementation was made less challenging given its limited nature.

Clearly, district-issued curricular and instructional strategies regarding reading, language arts, and math limited the ability of teachers to develop units, expeditions, and lessons as described in their respective design literature. Moreover, because the schools were obligated
to use the same math curriculum and engage in 90 minutes of uninterrupted math and reading instruction and 70 or so minutes of language arts activity, teachers tended to develop design units around social studies/science topics. Design activities were frequently scheduled for the afternoon.

Due to time constraints during the school day, teachers across the various design schools also revealed that they tended not to complete their units or expeditions as planned. So many unaccounted factors interrupted the flow of their “units” that time was lost. Because time was of the essence, teachers tended to move on to different units without producing final culminating products.

Instead of NAS designs guiding curriculum and instruction, it appears that the district and state initiatives directed the educational mission of all schools. TAAS success was obviously the major driving force behind all this. The district’s influence was clearly revealed in the conversations we had with teachers, which explain many of our survey results showing few differences between NAS and non-NAS teachers. Regardless of design adoptions, teachers across the various San Antonio schools tended to voice the same frustrations. As previously stated, limited school hours and demands on teacher time were repeatedly discussed at all schools. Teachers frequently mentioned their difficulty trying to “fit” all district and design activities into any one school day. Teachers remarked that the emphasis on TAAS tended to stifle their creativity. They were given little opportunity to devise their own ways to meet the needs of their students.

All teachers expressed their annoyance at having to devote energy and time to seemingly petty activities, for example, checking students’ math and writing journals for dates and times. They expressed that full-blown design implementation was difficult to accomplish given the variety and frequency of interruptions experienced throughout the year. At the beginning of the 1998–1999 school year, for example, teachers across schools were asked to attend district-sponsored workshops and/or training during the school day at least once a week. This was a source of much trouble. Being away tended to mean that students fell behind. Other interruptions reported by teachers included: TAAS simulations; preparation for TAAS; meetings called after school (often unexpectedly) to discuss district initiatives, taking time away from teachers to organize their
classrooms and plan lessons; the introduction of district initiatives during teacher planning periods; the strict math pacing guide; the required administration of periodic math tests; and the paperwork required to document classroom activities.

the district’s programs come before design. That’s the way it is.

We’ve got to get the kids prepared for [TAAS]. So we’re taking the time out to do that, to get the kids ready for it and we’re operating in two different mindsets. . . .

I don’t know where our direction is at. I know that the district is becoming more and more a top-down situation where we’re told this is what the reading is going to look like. When district staff walk in, they want to see the reading done in a certain way.

Our interviews revealed that though the district was supportive both financially and philosophically of NAS designs in its schools, it unwittingly hindered design implementation at all schools (except SFA/RW schools) by establishing an ever-growing presence in the daily classroom affairs of its teachers. The paucity of communication between the district and design teams failed to create the kind of supportive operating environment called for by NAS. Moreover, the limited communication between teachers and their respective design representatives served to weaken implementation as well. Not knowing how to integrate central office initiatives with design aspects, teachers tended to compromise designs by selecting and modifying only those elements that could coexist with district actions.

I just think that [the district] is trying to do too many things. Maybe they feel that our schools are very low so they are doing all these other things without really giving us a chance to test it. . . . They are doing all these things without realizing that it’s overkill. It’s way too much.

Understanding the relationships between instructional practices and student achievement is important for understanding schooling processes and school improvement strategies (Klein et al., 2000; Gamoran et al., 1995; Oakes et al., 1992). Despite the similarities across the district in instructional conditions and the press of district
reading and mathematics initiatives and the marginalization of NAS designs, it is worth exploring the relationships between instructional conditions and student achievement on the TAAS reading and mathematics tests as well as an independent open-ended reading assessment (Stanford-9). It is to this that we turn in the next chapter, first examining relationships in all the fourth grade classrooms and students, and second in the sample of classrooms and students for which RAND gathered additional survey information on classroom conditions and supplemental achievement scores.