
**IMPLEMENTATION OF NAS DESIGNS IN A
HIGH-POVERTY DISTRICT**

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While the last chapter examined the relationship of district, design, school, and teacher factors to implementation in a longitudinal sample of schools across all NAS sites, this chapter focuses on implementation of NAS designs within a high-poverty district. Here we focus on the conditions in the district, schools, and classrooms that promote or inhibit design implementation and changes in teaching and learning within a particular district (see Berends et al., 2002).

In this chapter, we first describe the research questions and methodology of this classroom study and then the rationale behind conducting the study in the San Antonio district. Next, we provide contextual information on the district at the start of the initiative and reasons for implementing the designs. We then discuss the implementation of the designs according to the factors related to the adoption of the designs; district assistance; professional development offered; teacher support; and changes in classroom practice. We discuss student achievement in the next chapter.

RESEARCH QUESTIONS

In our research on San Antonio schools adopting NAS designs, we focused on the challenging educational environments that these schools faced, the high-stakes accountability system in which they operated, the process for adopting NAS designs, support for implementation including training and professional development, teacher support of the NAS designs, and changes in instructional practices.

Specifically, we were interested in the following research questions:

- Do the NAS designs extend beyond changes in school organization and governance and permeate classrooms? Do NAS teachers and students interact with each other and subject materials in ways that reflect the innovative curricular and instructional approaches of the design teams?
- What factors at the district, school, and classroom level are related to implementation of designs and changes in classroom instruction?

Of course, we were also interested in the relationships between these various factors and student achievement, which we summarize in the next chapter.

METHODOLOGY

The schools analyzed in this chapter were those involved in the early stages of the district's partnership with NAS; non-NAS classrooms and schools were also part of the study. The NAS designs being implemented in this district at the time of this study included CON, EL, MRSH, and RW. While RW is intended to address core subject areas, the RW design begins by implementing the reading program, Success for All. None of these schools in San Antonio planned on implementing the nonreading subject areas of the RW design.

We gathered a variety of data in the San Antonio classroom study, including: principal and teacher surveys conducted at the end of the 1997–1998 and 1998–1999 school years; interviews with district staff, design team leaders, local facilitators, principals, and teachers; classroom observations; illustrative examples of student work; data provided by the district on test scores and student and teacher demographic characteristics; and achievement data from a supplementary test administered to students (Stanford-9 reading). RAND collected these data on a sample of 4th-grade teachers and their students during two school years.

For analyzing changes in teacher practice between the 1997–1998 and 1998–1999 school years, we relied on a longitudinal sample of 40 teachers. In 1997–1998, we were also able to observe and gather classroom artifacts from 12 teachers in NAS and non-NAS schools,

and in the following year, we were able to gather such data from about 19 teachers.

The analysis sample relating classroom conditions to student achievement consisted of over 60 teachers and roughly 850 students, but we also compared our results with all elementary schools ($n = 64$) and 4th-grade teachers ($n = 279$) and 4th graders ($n = 3,820$) within the district. In addition, this study relied on other RAND research on NAS that included site visits to schools and school districts to gather information about district and school administrators' and teachers' reports of the progress of the NAS initiative (Berends and Kirby et al., 2001; Kirby, Berends, and Naftel, 2001; Bodilly, 1998, 2001). A brief description of these data collection efforts appears in Table 5.1 (for a more detailed description of the methodology for this study see the Appendix and Berends et al., 2002).

LIMITATIONS

As with the implementation studies described in the previous chapter, the schools in the San Antonio classroom study were also some of the first schools to which design teams were providing assistance on a fee-for-service basis. The design teams were also evolving (Bodilly, 2001), and NAS and the design teams continued to alter their strategies over the time period examined during this particular study.

For the San Antonio classroom study, district staff assisted RAND in selecting teachers academically and demographically representative of its elementary schools. In light of this sample selection, our findings must be interpreted with care. The small number of schools inspires caution as does the even smaller percentage of teachers observed and interviewed. Confidence in the generalizations, however, lies in the fact that we were able to compare some of our results with the teachers and students in all district schools. Because we were able to draw on a variety of qualitative and quantitative data, we were able to compare findings from these data sources to check the robustness of the findings reported.

Table 5.1
Types of Data in RAND's Classroom Study of San Antonio

Type of Data	Information Provided
Teacher survey	Design team program characteristics Instructional strategies Professional development activities Teacher background Classroom climate and other characteristics
Teacher logs of classroom activities	Design team program characteristics Instructional strategies
Observations of classroom instruction	Design team program characteristics Instructional strategies
Teacher interviews and focus groups	Design team program characteristics Instructional strategies Design team implementation benchmarks Professional development activities Common planning time Resources for implementation
Principal and instructional guide interviews	NAS design implementation School climate and other characteristics Professional development activities Resources for implementation
Design team interviews	Design team program characteristics Instructional strategies Design team implementation benchmarks NAS design implementation Professional development activities Resources for implementation
District interviews	NAS design implementation Professional development activities District policies Resources for implementation
Student characteristics and performance	Individual students' TAAS mathematics and reading scores longitudinally linked across grades 3, 4, and 5 (also linked to teachers and schools) Stanford-9 administered to 4th graders in spring 1998 and spring 1999 (linked to teachers and schools) Students' demographic and individual characteristics

In addition to the teacher surveys, test scores, and other quantitative data, our multiple classroom observations, conversations with teachers and school administrators, examination of lesson plans, and analysis of student work revealed that design implementation is greatly affected by the environments of the district and the schools. As will be revealed in detail, the designs themselves were only one means brought in by the district to reform its academically troubled school system.

CHOICE OF DISTRICT

We undertook this study during the early years of NAS's scale-up phase. We could not predict ahead of time which districts would be more successful in implementing design-based assistance reforms than others. But, early indications showed that understanding district context would prove important. In addition, by concentrating on one cooperative district, we might be able to more directly track changes in teacher-student interactions and eventual student performance associated with design adoption.

At the time this study was undertaken, NAS had entered into partnerships with selected districts. NAS already knew that the districts did not provide quite the environments originally envisioned as supportive of whole-school reform. Nevertheless, two districts were judged by NAS as being especially supportive in terms of commitments by the district superintendents: Memphis and San Antonio. Rather than trying to understand what happened in an unsupportive district and measure outcomes there, we attempted to choose a more supportive one. Thus, we chose San Antonio because of its level of support at the time and its willingness to participate in the study. Due to previous agreements among Memphis City Schools, the University of Memphis, and RAND, we were unable to extend the design and methods of our San Antonio classroom study to Memphis.

Events soon revealed that San Antonio's district policies were much less supportive than initially anticipated—the substance of this chapter. The changes we document in San Antonio provide lessons for all reforms in high-poverty, high-stakes accountability settings. Thus, they deserve special attention. Furthermore, as can now be

seen, NAS has not been successful in implementing its designs and maintaining a supportive environment in any of the districts it partnered with originally. The larger issue is whether a supportive environment for design-based assistance is possible anywhere under current district policy environments.

SAN ANTONIO CONTEXT

While NAS was busy starting up in July 1991, the San Antonio school district struggled to raise its students' achievement levels and meet the challenges it faced. At the time, productive communication proved problematic, as did the effective utilization of district staff. Much energy was expended on the management of day-to-day organizational affairs. According to several central office administrators, instructional practice was too often addressed last. In the words of one, "The school district was perceived as backwater, low-performing, not doing anything, in decay."

Prior to the new superintendent's arrival there was no sense of a unified curricular vision across the district, let alone among the various feeder schools. Individual schools had in place a wide variety of curricular and instructional programs, with little coherence among them. When school staff was asked what instructional strategies were in place, a typical response tended to include 12 to 14 different programs. Classrooms basically functioned in isolation. Though people at the district level were responsible for the various programs, there was no expectation for entire schools or even a majority of classrooms to adopt them.

This diversity and range of programs across school campuses made it difficult to know what students were being taught and how learning was being assessed within classrooms across the district. Moreover, without a unified curricular trajectory, the same topics were at times observed being taught at a variety of grade levels. As one district staff member stated:

We had a lot of redundancy in the curriculum and we had a total lack of direction, in part because each school in this district very much did its own thing. . . . I walked [through] a 3rd-, a 5th-, a 7th-, and a 9th-grade classroom. Within the same ten-day period they were all doing the solar system . . . everybody was doing exactly the

same thing. The mobiles were hanging in every room. . . . The test was the same.

When the new superintendent came on board, significant changes occurred in the district. The superintendent proceeded to focus on five district goals: increasing student achievement, fostering collaboration and communication, strengthening parent and community involvement, building an infrastructure for professional development, and providing appropriate school facilities to all students.

To facilitate the realization of the district's five new goals, the superintendent set out to build an infrastructure to support instruction. Upon learning that teachers and principals could use more central office support and that the efforts of the district office were not optimally coordinated, the new superintendent set out to reorganize. She began by eliminating certain central office positions, creating new ones, and reallocating resources to better serve schools. Her vision was to create a blend of site-based and central operations management.

You know, we have to come to terms with what really makes sense to be consistent districtwide and what really the schools should be able to decide.

She felt that there should be consistency across the district with respect to operations such as uniform policy, transportation, and discipline. The superintendent believed all schools should focus on instructional matters as much as possible.

Pressures to Improve State Test Scores

The press to increase student achievement and improve test scores in San Antonio schools was clearly evident during the time of our study. To this end, the district, under the superintendent's leadership, established an Office of Curriculum and Instruction responsible for developing a sequential, standards-aligned curriculum across grade levels in all schools throughout the district. The subjects covered on the Texas Assessment of Academic Skills (TAAS), namely mathematics and reading, were given primary attention. Additionally, the district partnered with New American Schools to help tighten its focus and to encourage school improvement.

Suddenly, schools were not only exposed to, but required to, implement many ideas at once, naturally resulting in some confusion and resistance on the part of school staff.

The emphasis on increased student achievement not only called for greater student learning, it heightened the district's focus on improved TAAS performance as well. Tied to the Texas system of school accountability, TAAS scores provided measures of achievement readily reported to and understood by administrators and teachers alike. The act of addressing targeted skills enabled educators to work toward specific academic goals during a time of great change in the district. Successful TAAS performance not only became the goal easiest to visualize but in fact the *single* goal to attain. Schools paid a price for this, however. According to teachers, the focus on TAAS tended to mute creativity and channel all activities toward preparation as the test approached. Some teachers reported preparing their students for TAAS from day one of the school year by incorporating test-taking strategies and TAAS vocabulary into their lessons.

We are very TAAS-focused at the beginning of the year. A lot of us would think in that direction from the beginning when you start learning how to highlight in the book and pick out what is important. There are a lot of strategies that we teach that start off from the very beginning in all the lessons. (RW school.)

I think TAAS takes up pretty much the day, and I think as teachers we get bogged down with those worksheets and don't come up with other creative ways to implement the objectives that they test on in TAAS. So I think we're very worksheet-oriented because I think when the children do get that test booklet, it won't be in the form of a game, it won't be in the form of a project. But it would be in paper/pencil test. (EL school.)

In addition, lack of time during the school day—a chronic issue—became even more problematic in light of teachers' needs to balance TAAS preparation with other instruction. Many teachers reportedly coped with the multiple demands on their time by putting aside other activities to focus almost exclusively on TAAS as the test dates grew closer.

Come January, MRSH is over here, on the side. . . . From January through the end of February, which is when we have our writing TAAS, we write compositions . . . we write all day, every day in the month of February. So then MRSH is out the window. . . . Maybe once a week we could do that, but you can't teach a unit once a week. And so it just doesn't happen. Okay, as soon as that's over (TAAS writing), like March 1st, then we're cramming for the TAAS formatted math and reading. . . . And we do that for two months solid.

During the 1998–1999 school year, schools administered as many as four district-directed TAAS simulations, after which teachers were required to analyze the results and pinpoint their students' weaknesses.

[Y]ou . . . have assessments schoolwide that you have to do and figure out the percentage of students passing and write out a pass plan on how you can get those students who did not pass up to passing mode. You have to turn it in, a sheet with every student's name as to what objectives they have passed and what objectives they've failed.

We give a TAAS simulation and if your class is extremely weak in a certain area, it is your [the teacher's] responsibility to boost that one target area.

In many classrooms, bar graphs were posted, revealing individual students' scores on each subtest. Interestingly, two low-performing TAAS schools were "encouraged" by the district to suspend all activity that did not directly stress TAAS skills. For one school, this meant neglecting its NAS design altogether. Another school suspended all design activity after spring break to prepare intensively for TAAS. According to teachers, they were told to do so by the school administration, who received this "suggestion" from the district.

At several schools, teachers remarked that 1998–1999 was the first school year they were explicitly asked to "teach to TAAS." The administration disliked having to make such a request, but felt that their schools had no substantial say in the matter. Schools feared being placed on lists that threatened their existence. Moreover, a district policy enacted at the start of the 1998–1999 school year based

teachers' evaluations in part on their students' TAAS scores. According to one teacher:

[The district] has just about threatened to disown schools that were doing EL because we weren't concentrating on TAAS. And TAAS is the be-all, end-all. . . . But we're seeing scores that are not acceptable.

Whether or not schools were directly told to focus on TAAS preparation, teachers at all schools in our sample reported feeling pressure to "teach to TAAS" given the high-stakes nature of the test.

To help students perform better on TAAS, teachers not only spent time on reviewing the skills that would be tested, but also the art of test-taking. This included teaching test-taking strategies and exposing students to vocabulary, wording, and format.

And then we practice with bubbles, transferring back and forth. And they've got to have a, b, c, d, e, and f. . . . And they really have to practice and practice and practice with that. And I don't know why it is so hard. . . . I would like to know why it is so difficult for them to make the transfer. (MRSH school.)

It's *how* to read and understand what it's asking because if you understand what the TAAS is looking for, you can figure out how to answer it. . . . As we teach skills we teach strategies with it and figure out exactly which strategy is appropriate for this question. (RW school.)

It is within this context of high-stakes accountability, challenged schools, and high expectations for school improvement that the NAS designs were introduced to and implemented in schools.

NAS'S ESSENTIAL ROLE IN THE DISTRICT'S REFORM STRATEGY

While restructuring instructional leadership, rethinking the delivery and content of professional development, introducing instructional strategies to teachers, pushing state standards, and refocusing the district's attention on instruction and student achievement, San Antonio district administrators simultaneously reviewed national

reform efforts and programs. Central office administrators seriously examined and eventually decided to implement the reform ideas of NAS—particularly NAS’s approach to comprehensive school reform. Convinced that the designs could play an important role in the district’s efforts to bring about increased student achievement, the NAS designs became an important piece of the reform package in the district. Viewing NAS designs as the framework and glue to tie the multiple district initiatives together, the central office expected to monitor the progress of design implementation and support the schools in their efforts.

The superintendent viewed designs as the needed catalyst to force schools to examine change from within. She did not want the piecemeal practice of reform to continue within the district’s schools, where only certain classrooms or subject teachers engaged in new practices. Not only did she view the NAS designs as the outside galvanizing force for change, she also had hopes that the designs would help sustain the district’s efforts to engage in comprehensive school reform. Others in the central office thought, too, that the NAS designs could “provide a wholeness and integration and stimulate teachers to think or rethink what they were doing.” The designs also were seen as one way to help shift teachers’ thinking as isolated agents of instruction to members of a community of learners: “When you’ve got a whole-school design, everybody plays, everybody’s part of the planning process.”

As time passed, it became clear to central staff members and design team representatives alike that greater communication was needed between them. The district took the initiative by arranging quarterly meetings to be attended by all design representatives and several central office administrators and staff members. These meetings began in the 1998–1999 academic year. Central office staff were hired or reassigned to provide schools with instructional leadership. At the district level, four people were hired to serve as *Instructional Stewards*, or area superintendents. The Instructional Stewards were required to report directly to the superintendent. Each was held accountable for his or her own Learning Community, a specified group of elementary, middle, and high schools. The primary responsibility of the Instructional Stewards was to support schools and provide instructional guidance. The Instructional Stewards were expected to provide support by assisting the analysis of school data such as TAAS

results and supervising the development of campus improvement plans. They were to study the campus plans of every school in their respective Learning Communities to assess their viability as well as commitment to San Antonio district goals.

In the words of one Instructional Steward, “Curriculum, instruction, assessment, is what we’re all about.” Another reported that Instructional Stewards were “responsible for supporting the principals, of evaluating them, of helping them to determine the priority needs within their schools and supporting them in accomplishing whatever it is they needed to accomplish.”

It was important to all involved to determine how best to align the designs with the district’s plan for professional development and emphasis on state-developed academic standards. There had been confusion regarding this because in some cases the district initiatives directly conflicted with the principles of various designs. Moreover, when there was overlap between district and design ideas regarding instructional practice, the teachers often did not know which to follow.

The district context described so far is important when understanding the results of our San Antonio classroom study. In what follows, we discuss some of our results as they relate to the adoption of designs, the assistance provided by the district for implementation, professional development, teacher support, and instructional practices in NAS and non-NAS classrooms.

FINDINGS

Adoption of Designs

Upon talking with teachers, principals, and district staff, it became clear that the process by which teachers learned about NAS designs varied from school to school. Teachers at some schools reported being exposed to all the designs supported by the district—CON, EL, MRSH, and RW. Others heard about only a select few. A number of schools in our sample sent a select group of teachers to design presentations. These teachers then came back to their schools to share what they learned with their colleagues so that all could vote on their design of choice. Some schools had teachers visit actual design

schools and report back to their colleagues. In some cases, teachers listened to the presentations of design representatives at their own schools. In the MRSB schools, the principals introduced the design to their teachers after each visited a demonstration site. Though teachers at these schools were told about at least one other design, MRSB seemed to be the one favored as it was introduced.

Regardless of the number of designs to which each school was introduced, all teachers across our sample were given the opportunity to vote. At many of the schools exposed to multiple designs, teachers first discussed the suitability of each to their respective campuses and then approved the design most favored through a vote. In some cases, all presented designs were listed as choices. Early on, in accordance with the district, initially at least 60 percent of all teachers and school staff had to vote in favor of a given design for it to be implemented.

Across our sample, teachers reported feeling pressure to choose a design. Given that in time all district schools would have to take on a design, teachers never had the choice to reject design adoption altogether. Not only was there pressure to take on a design—several teachers stated that they were given little time to learn about and decide upon a design. According to one of our MRSB teachers: “I remember that it was a rush, rush thing . . . and I know that at the time we voted on it, we had no idea what it was. . . . All we were told was the teacher would have a lot of input.” As one of the teachers at an EL school stated, “Truthfully, I felt that we could have and should have looked at other designs. But because of the time constraints, we had to immediately decide, and we did not get an opportunity to look at as many designs as there are out there.”

Teachers reported choosing designs that seemed to match their schools’ visions and instructional approaches. For many this meant going with the design that required the least change. Teachers at one CON school, for example, stated that this design suited them best given that they already had reworked their curriculum and were unwilling to rewrite it.

As a staff, what we were looking for was something that would fit what we already have. . . . We weren’t willing to chuck all the work

that we had already done. . . . Co-NECT allowed us to keep the curriculum that we had and perhaps enhance it with technology.

At one of our RW schools, teachers stated that having to write thematic-based units turned them off to their other choices. In the case of our EL schools, the design principles and project-based approach to instruction appealed to teachers and school staff.

Thus, while teachers were attracted to certain aspects of NAS designs and were given the opportunity to vote to adopt a particular design, the time constraints to make a decision inhibited a greater understanding of what teachers could accomplish with a NAS design in place.

District Assistance for Design Implementation

All schools in the district, regardless of being NAS or non-NAS, received increased support for teachers in the form of *Instructional Guides*. The Guides assumed responsibility for handling all curricular issues on campus and for keeping abreast of the latest instructional strategies and techniques. When needed, they assisted teachers in classrooms by modeling skills, for example. Instructional Guides also helped to identify and locate resources. Not only did they tutor and test students, they provided training to school staff as well. Furthermore, they worked closely with their respective principals, serving to facilitate communication between teachers and administrators. Given their many roles, Instructional Guides tended not to spend as much time in classrooms as they would have liked. Many reported that a good chunk of their time was spent away at training sessions. Instructional Guides at NAS schools attended both district in-services and design training.

Instructional Guides received a great deal of credit for enabling the district office to push forward and implement ideas very rapidly. Quarterly meetings attended by Instructional Guides and central office staff served to further the budding lines of communication. During these meetings, Guides reportedly discussed what was working at their schools, what upset teachers, what needed to be improved upon, and what additional support systems were necessary.

When asked whether the district supported their schools' design implementation efforts, most teachers indicated that it did so passively. The central office allowed schools to choose from a selection of designs, for example. Additionally, it did not dictate how to proceed with design implementation. Most importantly, the district provided the funds to enable comprehensive school reform. Clear to teachers, however, was that the central office's emphasis was on test results. Thus, teachers in design schools were required to implement the district's mathematics and reading initiatives in addition to their reform models of choice. In this way, support from the central office for design implementation was conditional.

It's left up to the campus and the grade levels on how . . . to integrate all of this information. So I don't want to say that the district doesn't support the design. They do, but they support just as much the things that the district is implementing onto the campuses as well.

Professional Development

Professional development is a crucial element for school improvement (Bodilly, 2001; Garet et al., 1999). One of the challenges facing NAS schools has been that districts, not schools, control the resources for professional development. Districts also differ in the amount of funding they have to focus on specific professional development efforts for NAS design implementation. Moreover, some designs stress the importance of specific design team training for implementing the designs (e.g., MRS and RW). Others (e.g., CON and EL) emphasize the importance of long-term development of teachers' capabilities and professionalization, which in turn should contribute to ongoing school improvement. Whatever the approach, the availability of resources for design team training, district training, and overall professional development efforts for design implementation remains a challenge within districts that have competing goals, objectives, and incentives for teacher professional development.

Design Team Assistance. Besides the district and the Instructional Guides, design teams provide another important source of support for implementation. Design teams assist implementation by provid-

ing schools and teachers with support such as training, professional development, and materials (Bodilly, 1998; Glennan, 1998). Teachers' responses to our surveys provided a broad picture of how all design schools were progressing in implementation, and changes that occurred from one year to the next. Some of these responses between the spring of 1998 and 1999 for a small number of teachers surveyed across two school years appear in Table 5.2.

For instance, in 1998 a relatively high proportion of teachers in the NAS schools (58 percent) agreed that their respective design team had clearly communicated "its program to school staff so that it could be well-implemented." By 1999, the percentage of teachers reporting clear communication by design teams was markedly higher—88 percent.

Training by Design Teams. As for the actual design training, however, there was little regular, consistent assistance provided, according to teacher interviews across design schools. Over time, there was even less contact between teachers and their respective design representatives.

In large part, this had to do with the fact that these representatives serviced numerous schools, making it difficult for them to be attentive to any one. It also appears that from the start, strong relationships rarely were established, making it unlikely that teachers would rely on their respective design representatives for external technical support and assistance. In some schools, design representatives turned over, disrupting what rapport had been established. Several teachers in our sample saw their design representatives so infrequently that they didn't even know their names. The RW schools should have received the most regular design assistance given that each had one facilitator on campus to meet its needs. Additionally, the program included a series of implementation visits conducted by RW consultants. At one of our RW schools, however, the Instructional Guide took on the RW facilitator role as well, making it very difficult for her to efficiently address issues pertaining to the design team reading program.

Few design representatives entered classrooms on a regular basis. Teachers reported that visitors to classrooms tended to be district staff. The teachers were given little, if any, outside "expert" support

that enabled them to objectively assess their progress and growth as design teachers. Teachers reported that when in need of help, they tended to turn to their colleagues or Instructional Guides first. Across design schools, teachers did not have enough interaction with their respective design representatives to feel their absence.

In addition, teachers reported on our surveys that their participation in design-related professional development meetings/conferences declined from one year to the next. In 1998, 62 percent of teachers reported participating in these types of activities more than twice during the past 12 months; 50 percent of teachers reported doing so in 1999. The percentage of teachers who reported attending workshops or courses related to their NAS design also decreased from 50 percent in 1998 to 39 percent in 1999 (see Table 5.2).

In part, these decreases may be due to design teams emphasizing teacher training more during the initial stages of implementation. However, the decline may also be a signal that the level of implementation itself was declining in these schools because the district was shifting its focus away from NAS efforts.

Consistent with the survey results, interviews and observations revealed that teachers at EL, CON, and MRSH design schools saw their respective design representatives with little regularity—an impediment to design implementation. Regardless of their schools' adopted designs, teachers reported the need for more concrete, hands-on training that would enable them to better understand design processes.

District Training and Professional Development. In addition to training by design teams, teachers at NAS schools also received the district's professional development, as did their colleagues from non-NAS schools. Much of the in-service professional development revolved around the district's reading and math initiatives. Teachers at RW schools attended reading in-services provided by the design rather than the district. More workshops having to do with language arts were offered during the 1998–1999 school year. Teachers attended technology training and workshops concerning state standards and curriculum alignment as well. Relatively speaking, few social studies or science workshops were provided.

Table 5.2
Percentage of Longitudinal Sample of NAS Teachers Who Reported
Design Team Communication, Professional Development,
and Support in Spring 1998 and Spring 1999

	Spring 1998	Spring 1999
NAS design team clearly communicated its program	58	88
Attended design-related professional development meetings/conferences in past 12 months	62	50
Attended workshops or courses related to NAS design in past 12 months	50	39
Strongly support the NAS design team program	54	25
Strongly or somewhat oppose the NAS design team program	15	43

NOTE: Percentages are based on teacher reports in a longitudinal sample of 40 teachers—26 NAS teachers responded to the survey items in this table; 14 non-NAS teachers did not respond to these NAS-specific questions.

Because NAS teachers were obligated to attend as many of these various in-services as their colleagues in non-NAS schools, the amount of training activities served only to heighten frustrations. All of the designs except RW required teachers to develop units and write curriculum. While encouraging schools to implement NAS designs, the district simultaneously constrained their ability to do so by telling teachers what to teach and how.

The district and design teams did not tend to coordinate their efforts with respect to professional development, so teachers were left on their own to merge the information they received from each. This was not easily done without modifying the essence of each design. Not only did this effort burden teachers' workload, but it also led to confusion as to what to prioritize.

Teacher Support for the NAS Designs in San Antonio

Over the two school years we conducted research, one indication of changes in NAS implementation came from an item that asked teachers how strongly they supported or opposed the NAS design team program in their school. In 1998, 54 percent of teachers indi-

cated that they “strongly support a NAS design team program” in their school, but this fell to 25 percent in 1999. The proportion of teachers indicating that they strongly opposed or somewhat opposed NAS designs in their school increased from 15 percent in 1998 to 43 percent in 1999 (see Table 5.2).

Clearly, the central office played an active role in initiating change across the district as did design teams in their select schools. The actions of the central office made it difficult for NAS teachers to view design implementation as a district priority. Consequently, these teachers were not able to fully commit to the ideas described in their respective design literature. Some feared that the NAS initiative, too, like many others that had been introduced over the years, would fade away in time. Furthermore, aspects of designs such as EL, MRSH, and CON overwhelmed many teachers. The task of writing curriculum was not an activity readily undertaken or easily accomplished by many, given their lack of time and experience.

During interviews, teachers reported variation with respect to levels of design implementation within their schools. Implementation in individual classrooms depended in large part on teachers’ feelings about the designs, their willingness to invest time and energy, and their particular strengths and weaknesses. One teacher in the sample stated that within her school, differing levels of competency existed among teachers. The task of having to write curriculum “exacerbated the unevenness.”

Another teacher reported that within her school, some of her colleagues were more engaged in design implementation than others. Another teacher stated:

You have to have your commitment factor. Some people are very committed to it and other people are not, so that affects how you’re going to implement it.

A number of teachers believed that NAS designs alone did little to help children who lacked solid academic foundations. Due in large part to other district activities that were pushed, some came to view designs as hands-on, project oriented approaches to education that built *on*, not *up*, basic skills. One teacher at an EL school indicated that her students needed more structure. She stated that many came

from unstructured home environments and thus needed more orderly classroom experiences.

[I]t would work probably better with a group of kids that are on grade level, that have a lot of self-control. . . . If they come from a home where there is no structure, [and] they come into a classroom where there is no structure . . . that's the problem. But I really feel, and I might be wrong, that this works with a different population much better than what it has worked with our students.

Teachers at a CON school stated that their design units had to be “modified” to address their students’ basic skills needs. At RW and MRSH schools, teachers expressed less doubt about the potential of NAS designs to bring about desired change in school achievement. This may have to do with the fact that their respective designs either gave them a curriculum to follow (RW) or topics to develop and standards to incorporate (MRSH).

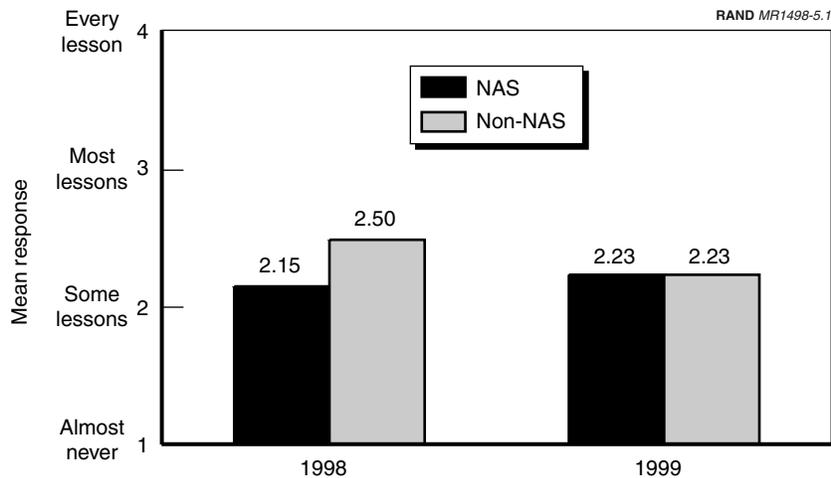
INSTRUCTIONAL PRACTICES

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, to check the robustness of our findings we also relied 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 5.1 shows mean responses on a four-point scale (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 five-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:



NOTE: Means are based on teacher reports in a total sample size of 40 teachers—26 NAS and 14 non-NAS.

Figure 5.1—Average Teacher Response for Having Students Memorize Facts or Problems in the Typical Lesson in NAS and Non-NAS Schools, Spring 1998 and Spring 1999

- 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 four-point scale (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.

We used a number of survey items measuring instructional strategies 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 index: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 of 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 5.2. While the average use of reform-like instructional practices increased for NAS and non-NAS teachers between 1998 and 1999, teachers in NAS schools reported higher levels than their counterparts in non-NAS schools. For example, in 1999, 54 per-

¹The alpha reliability for this index 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.

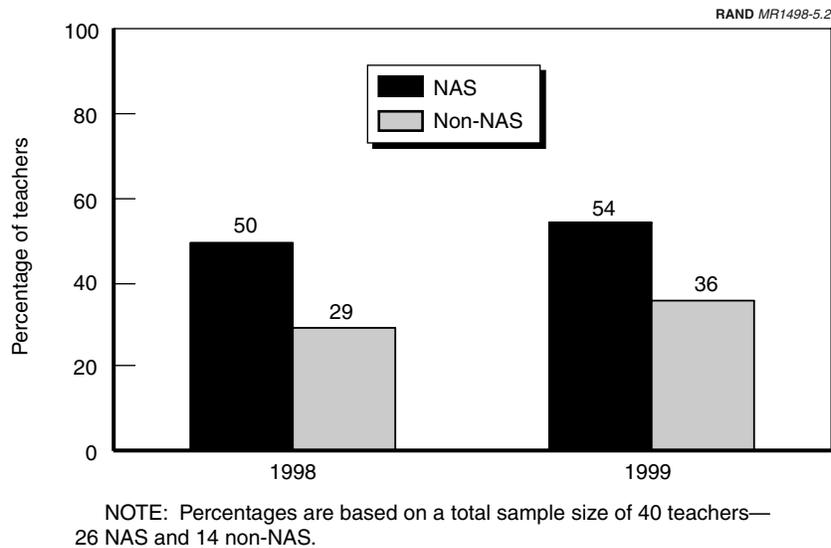


Figure 5.2—Percentage of Teachers Who Reported Using Reform-Like Instructional Practices at Least Once or Twice a Week in NAS and Non-NAS Schools, Spring 1998 and Spring 1999

cent 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.

While NAS teachers tended to report more reform-like instructional practices, one might expect that the enactment of such practices might differ due to the unique features of each NAS design. Given the unique aspects 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 MRSB classrooms, standards were posted next to student work. Word walls and team score sheets were posted in RW classrooms. Rich classroom libraries were

found in CON classrooms and student work linked to themes and a multidisciplinary perspective was posted in hallways and classrooms. Displayed throughout EL classrooms were expedition themes, student-developed rubrics, and drafts and redrafts 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 EL classrooms, design principles were often found taped to walls. CON classrooms tended to be less-distinctively marked. The selection of student work on display as well as reading-related posters clearly distinguished 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 the 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.

As mentioned earlier, to address the demands of the TAAS, the district implemented specific mathematics, reading, and language arts programs in addition to the NAS designs. In the spring of 1996, all schools were implementing *Everyday Mathematics*—developed by the University of Chicago School Mathematics Project. The district expectations were that all schools throughout the district would follow a similar pace, and the district developed pacing guides to ensure that this would happen. In addition, San Antonio elementary schools implemented a reading program that involved a 90-minute reading block. By the 1998–1999 school year, elementary schools districtwide were not only expected to schedule two 90-minute blocks of uninterrupted instructional time for reading and math, respectively, but teachers were also 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 (RW teachers were exempt from the district reading program).

Not surprisingly, then, our analyses revealed few differences in teacher perceptions of instructional environments between NAS and non-NAS schools. Some changes were evident. For example, teachers in NAS schools reported instructional strategies and classroom practices that could be categorized as reform-like (e.g., discussion in small groups to find a joint solution to a problem, project-based learning, use of manipulatives), rather than conventional (e.g., drill and skill and individual worksheets). In other areas, fewer differences were found. For instance, both NAS and non-NAS teachers reported similar use of instructional materials, though more teachers in NAS than non-NAS schools perceived inadequate materials to be a problem. The more substantial differences we found 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. That is, while the implementation of NAS designs was not high relative to other schools and jurisdictions (see Berends and Kirby et

al., 2001; Kirby, Berends, and Naftel, 2001), implementation of NAS designs was higher in 1998 than it was in 1999.

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 RW 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.

SUMMARY AND POLICY IMPLICATIONS

Many schools across the country are now attempting NAS-like reforms using federal funding provided by such programs as Title I and the CSR program. Schools adopting comprehensive school reforms confront many of obstacles during implementation and thereby face continuing challenges in improving student achievement. This is important to remember when setting expectations for school improvement under new federal, state, and local programs—particularly when implementing strategies and interventions in high-poverty, low-performing settings.

Our findings are consistent with Porter and Clune's scheme for better educational policy (see Porter et al., 1988; Porter, 1994; Clune, 1998). They posit that educational policies such as comprehensive school reform are likely to influence teachers and students to the extent to which they are specific, powerful, authoritative, consistent, and stable. *Specificity*, or depth, is the extent to which the comprehensive school reform provides detailed guidance or materials to

help schools and teachers understand what they are supposed to do (e.g., materials that describe the stages of implementing the design and ongoing, clear assistance strategies to further promote implementation). *Power* refers to the rewards or sanctions attached to the whole-school reform, such as teachers receiving bonuses or greater autonomy if they comply with implementing the design. *Authority* refers to the degree to which the reform policy is seen as *legitimate* and as having the *support* of those who are responsible for implementation. If respected groups or policymakers have strong positive views toward whole-school reform and if teachers support its implementation, the design is likely to have greater influence in changing teaching and learning. *Consistency* or *alignment* refers to the extent to which the set of whole-school interventions and strategies are aligned with a common mission and vision, both within the school and the district. *Stability* refers to the reform being sustained over time in a coherent, consistent manner. Policymakers and educators might use these dimensions as a means for thinking critically about the comprehensive school reform being considered and whether the conditions exist for it to succeed.

Thinking carefully about the factors necessary to promote high-quality implementation and coherence with other educational policies and reforms and ensuring that these factors are present and aligned in schools is the only way in which comprehensive school reform can succeed in improving the learning opportunities of all students, especially those in high-poverty settings.