
SUMMARY

A decade ago, New American Schools (NAS) launched an ambitious effort for whole-school reform to address the perceived lagging achievement of American students and the lackluster school reform attempts that produced so little meaningful change. As a private non-profit organization, NAS set out to help schools and districts significantly raise the achievement of large numbers of students by offering whole-school designs and design-based assistance during the implementation process. NAS is currently in the scale-up phase of its effort and its designs are being widely diffused to schools across the nation.

The purpose of this study is to examine the conditions of NAS classrooms compared with non-NAS classrooms and to study the relationships between classroom conditions and student achievement in a high-poverty district in San Antonio, Texas. The focus is on the conditions in the district, schools, and classrooms that promote or inhibit design implementation and changes in teaching and learning.

Specifically, this study addresses the following 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, changes in classroom instruction, and student achievement?

In this report, we are not attempting a “summative” evaluation, thereby claiming that the NAS designs have been thoroughly developed and implemented so that program effects can be clearly detected. Such an evaluation seems premature, given the variation in implementation among designs between different sites, the support and leadership provided by districts, and the different stages of design implementation and development (see Berends and Kirby et al., 2001; Bodilly, 2001; Kirby, Berends, and Naftel, 2001). Rather, our intent is more “formative” in order to provide empirical results and insights to educators and policymakers who are interested in whole-school or comprehensive school reform, particularly in high-poverty schools within high-stakes accountability environments.

THE ANALYSIS SAMPLE

The schools included in this study were those involved in the early stages of the San Antonio district’s partnership with NAS. The NAS designs being implemented in this district at the time of this study included Co-NECT, Expeditionary Learning/Outward Bound (ELOB), Modern Red Schoolhouse (MRSH), and Success for All/Roots & Wings (SFA/RW).¹

We gathered a variety of data, 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). In addition, this study relies on other RAND research on NAS that included site visits to schools and school districts to gather information about district and school administrators’ and

¹While SFA has been around for the past couple of decades, NAS provided funding to the Success for All Foundation to develop and implement Roots & Wings, which not only includes the reading program of SFA, but also builds in other curricular programs such as MathWings and WorldLab. San Antonio schools were only implementing the SFA component of SFA/RW during the time of this study. Because the Success for All Foundation considers all SFA schools as potential RW schools and because NAS provided funding for RW, we refer to this design as SFA/RW.

teachers' reports of the progress of the NAS initiative (Berends and Kirby et al., 2001; Bodilly, 1998, 2001).

RAND collected these data on a sample of fourth 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 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 and fourth grade teachers and students within the district.

IMPORTANT LIMITATIONS

There are several important limitations of this research that need to be kept in mind. First, for most design teams, the schools analyzed in this study were the first buildings to which they provided implementation assistance on a fee-for-service basis. Many changes have been made to both the designs and the assistance provided as the teams and the schools have gained experience (see Bodilly, 2001). Thus, when interpreting the findings in this report, it is important to note the unique features of the population of schools we studied.

Second, the fact that designs are evolving over time as design teams gain experience and adapt to local contexts may make future implementations more successful. However, this is still an open question, and some of our research calls this into question (Kirby, Berends, and Naftel, 2001). Certainly, additional empirical work would be helpful to address this issue.

Third, the district context in which these schools were implementing has changed dramatically since the time the data for this report were collected. Similar to many urban contexts, the superintendent and key staff have moved on to other positions, and some new district policies have been put in place. Whether these are more or less conducive to NAS design implementation is beyond the scope of the current analysis.

NAS WITHIN A REFORM-MINDED URBAN SCHOOL DISTRICT

As is evident in our description of these schools and classrooms within an urban school district, NAS partnered with schools and jurisdictions that are predominantly low-performing, urban, high poverty, and high minority (Berends and Kirby et al., 2001; Berends, 1999).

While NAS was busy starting up in July of 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 last addressed.

When the new superintendent came on board in 1994, there were significant changes in the district that occurred. The superintendent proceeded to draw up five district goals: (1) increase student achievement; (2) foster collaboration and communication; (3) strengthen parent and community involvement; (4) build an infrastructure for professional development; and (5) provide appropriate school facilities to all students.

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 district considered the NAS designs an important piece of the reform package. Viewing NAS designs as the framework and glue to hold the multiple district initiatives together, the central office expected to monitor the progress of design implementation and support the schools in their efforts.

NAS IMPLEMENTATION IN SCHOOLS FACING HIGH-STAKES ACCOUNTABILITY

The district introduced the NAS initiative to schools with hopes that the marketed “break the mold” designs would provoke teachers and administrators to engage enthusiastically in comprehensive school reform. The thought was that an external model provider would be more successful at pushing and sustaining change than the central office could ever be alone. The district had every intention of fully supporting its NAS schools in all ways—including professional development, site-based facilitators (called Instructional Guides), and other resources for the schools to implement the designs.

Given this support, when NAS designs were first introduced in 1996, one might have expected that in time, design schools would look, feel, and in some ways function differently from one another as well as from schools that had elected not to take on a whole-school design.

Yet, this expectation was not met because of the many challenges faced by the district, schools, design teams, and teachers. A closer examination of both whole-school and individual classroom activities revealed a more complicated story. In our research 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, principal leadership, and teacher collaboration and support of the NAS designs.

The press to improve test scores on the state tests (Texas Assessment of Academic Skills [TAAS]) was clearly evident during the time of our study. For instance, in addition to the NAS designs, the district 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 TAAS, namely mathematics and reading, were given primary attention. Thus, schools were not only exposed to many ideas at the same time, but they were also required to implement them all at once, naturally resulting in some confusion and resistance on the part of school staff.

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 began implementing a reading initiative that involved a 90-minute block of time. 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 implementing the district’s reading initiative).

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 stated in their interviews with us that they 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.

Within this context, the district provided a substantial amount of professional development to teachers. Much of the in-service training revolved around the district’s reading and mathematics initiatives. 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 SFA/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, it also led to confusion as to what to prioritize.

Amid the professional development from the district, design teams were also assisting schools that adopted designs. Each NAS design team aims to provide schools and teachers with resources to assist in implementation, especially in terms of communication between design team members and school staff, and design-related professional development. For instance, by 1999 a relatively high proportion of teachers in the NAS schools (88 percent) agreed that their respective design teams had clearly communicated "its program to school staff so that it could be well-implemented."

Part of this communication involves teacher training by design teams. However, according to teachers across design schools, there was little regular, consistent assistance provided. 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.

CLASSROOM CONDITIONS IN NAS AND NON-NAS SCHOOLS

Our analyses revealed few differences in teacher perceptions of instructional environments between NAS and non-NAS schools. Some changes were evident. For example, about half of the teachers in NAS schools reported that they used reform-like practices (e.g., discussion in small groups to find a joint solution to a problem, project-based learning, use of manipulatives) at least once or twice a week compared with roughly one-third of non-NAS teachers. 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 inad-

equate 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 et al., 2001), implementation of NAS designs was higher in 1998 than it was in 1999.

STUDENT ACHIEVEMENT IN NAS AND NON-NAS CLASSROOMS

Because instructional conditions varied more between NAS and non-NAS schools during the 1997–1998 school year, we analyzed data for that school year to examine whether such variation in instructional conditions was related to student achievement, controlling for other student, teacher, classroom, and school characteristics. We first examined relationships in all the fourth grade classrooms in the district and then in the sample of classrooms for which RAND gathered additional survey data on classroom instruction and a supplemental reading test (Stanford-9).

As expected because of the early stages of implementation, NAS designs had no significant effects on student achievement. More important, we did not find that instructional conditions promoted by reforms such as NAS—including teacher-reported collaboration, quality of professional development, and reform-like instructional practices—were related to student achievement net of other student and classroom conditions.

However, we did find significant effects of principal leadership on the TAAS reading and mathematics scores. Principal leadership in our analysis was measured by teacher reports about principals who clearly communicated what was expected of teachers, were supportive and encouraging of staff, obtained resources for the school, enforced rules for student conduct, talked with teachers regarding instructional practices, had confidence in the expertise of the teachers, and took a personal interest in the professional development of teachers. Our previous analyses have shown the importance of principal leadership in implementing the designs (Berends and Kirby et al., 2001; Kirby et al., 2001). Here we found a positive link between

principal leadership and student performance in both NAS and non-NAS schools, indicating that leadership is important to achievement in general, and to implementation in particular.

POLICY IMPLICATIONS

Currently, many schools across the country are attempting NAS-like reforms using funding provided by such federal programs as Title I and the Comprehensive School Reform Demonstration (CSR D) program. Our study in conjunction with the other RAND studies on NAS has clear implications. Schools attempting comprehensive school reforms face many obstacles during implementation, and because of this, whole-school designs face continuing challenges in significantly raising the achievement of all students. This is particularly 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.

Because the target of the federal Title I and CSR D funds is primarily high-poverty schools, the schools most likely to be affected by the CSR D program are the same schools that are most likely to face a multitude of other difficulties. High-poverty schools often present very fragmented and conflicting environments with difficult and changing political currents and entrenched unions. Teachers in high-poverty schools often face new accountability systems as well as a fluctuating reform agenda, and generally lack sufficient time for implementing reform efforts, often becoming demoralized, losing their enthusiasm for the difficult task of improving student performance under difficult conditions (for a description of CSR D schools see Kirby et al., in review).

Federal and state policymakers need to think critically about their current stance of simultaneously promoting: high-stakes testing; the implementation of comprehensive school reforms that promote innovative curriculum and instructional strategies; and the implementation of multiple other concurrent reforms. The implementation of high-stakes testing regimes—the apparent outcome of many standards-based reforms—might preclude the adoption of rich and varied curricula that challenge students and motivate them toward more in-depth learning experiences. It certainly prevents such

adoption when other more basic skills instructional reforms are mandated on top of the design-based curriculum. The current study shows that high-stakes tests may be a two-edged sword in this environment. On the one hand, high-stakes tests may motivate schools to increase performance and often to seek out new curricula and instructional strategies associated with comprehensive school reforms. On the other hand, those very same tests may provide disincentives to adopt richer, more in-depth curricula.

Our findings are consistent with Porter and Clune's scheme for better educational policy (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, within both 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, particularly those in high-poverty settings.