The goal of NAS is to improve student learning. To make this goal a reality, NAS organized its work into several phases: a call for "break the mold" proposals for school designs, development and pilot implementation of those proposals, and a diffusing of the developed designs to a large number of schools within partnering school districts (NAS's scale-up phase). (For more information about the evolution of NAS, see Bodilly et al., 1995; Bodilly, 1998; Glennan, 1998.)

While private sponsorship of school innovation is not new historically (Tyack and Cuban, 1995), the NAS initiative is significant because of its focus on establishing partnerships among school designs, districts, and schools. NAS views such partnerships as key to helping a large number of schools change their organization and practices so as to improve student achievement.

**KEY ELEMENTS OF THE DESIGNS**

In September 1995, NAS and its partners began to bring the designs to scale—that is, to implement designs more widely within partnering districts. As NAS entered the scale-up phase, there were seven design teams:1

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1Another design, Urban Learning Centers (ULC), was implementing in the Los Angeles area. This design team was not included in the NAS portfolio when scale-up began because it had not shown the capacity to go to scale. It since has shown this capacity and is now being marketed by NAS as one of its designs.
Assessing the Progress of New American Schools

• Audrey Cohen College (AC) (recently renamed Purpose-Centered Education);
• Authentic Teaching, Learning, and Assessment for All Students (ATLAS);
• Co-NECT Schools (CON);
• Expeditionary Learning Outward Bound (ELOB);
• Modern Red Schoolhouse (MR);
• National Alliance for Restructuring Education (NARE) (recently renamed America’s Choice Design Network); and
• Roots and Wings (RW).

Each design has unique features, yet all tend to emphasize school change in the following areas:

• Organization and governance;
• Professional life of teachers;
• Content and performance expectations;
• Curriculum and instructional strategies; and
• Parent and community involvement.

The area of organization and governance refers to the authority relations among the various parties in the school. An example of a change in a governance arrangement is a reorganization of the decisionmaking processes for budgets and staffing to include teachers and other school employees and parents. Giving authority to the school site has received a great deal of attention in the education community. According to Murphy (1991), the central focus on governance restructuring stems from a belief that change must reside with those who are closest to the learners (see also Bryk et al., 1998). NAS and many of the designs strongly share this belief.

The professional life of teachers refers to the roles that teachers play and the relationships in which they participate during the school

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2Currently, RAND is documenting the continued development and adaptation of the designs over time—from the initial development of the designs’ educational ideas during NAS’s RFP phase, through the phases in which these ideas met the economic, sociological, and political realities of implementation in schools.
day. In effect, when referring to restructuring schools, particularly those in poor, urban areas, what is involved here is overhauling the conditions under which teachers work by changing their responsibilities and tasks and by developing a more professional culture in schools (Newmann and Associates, 1996; Murphy, 1991; Sykes, 1990; Wise, 1989). In contrast to an environment in which teachers work in isolation without contact with their colleagues (Lortie, 1970), design teams aim to build a collaborative environment for teachers. Thus, it is important to understand the extent to which teachers collaborate, engaging together in activities such as professional development, common planning time, and critiquing each other’s instruction. Moreover, it is important to understand the professional development activities of teachers and how these relate to changes in classroom activities.

Each of the designs aims to bring all students to high standards, even though each may use different means to attain this goal. To monitor whether designs are making progress toward this end, critical indicators might include the degree to which student assessments are explicitly linked to academic standards, teachers make performance expectations explicit to students, and the curriculum and performance standards are consistent and coherent across grade levels.

Most of the designs are concerned with shaping student experiences within classrooms to further academic achievement growth. NAS designs embrace alternative instructional strategies that involve different relationships between teachers and students and between students and subject matter. Yet, again, each design differs somewhat in the specific nature of these activities. Conventional classrooms are often characterized as “teachers talk at students and fill their heads with knowledge,” and “students respond with the correct answers at appropriate times” (see Gamoran et al., 1995; Sizer, 1984; Powell, Farrar, and Cohen, 1985). In contrast, design teams tend to emphasize alternative instructional practices, such as students working in small groups, using manipulatives, engaging in student-led discussions, and working on group and/or individual projects that span a long period of time (e.g., a marking period or semester).

Closely related to instructional strategies are school decisions about how students are grouped for instruction. The effects of ability grouping and “tracking” on student achievement are strongly de-
bated among educators and researchers (see Slavin, 1987, 1990; Gamoran and Berends, 1987; Oakes, Gamoran, and Page, 1992; Hallinan, 1994; Oakes, 1994). Yet most agree that alternatives to inflexible grouping arrangements are worth further exploration. Thus, the NAS designs have experimented with such alternative student groupings. For example, students within an ELOB or CON design may have the same teacher for several years. RW emphasizes flexibility by grouping students by achievement level in reading for part of the day and mixing students of various achievement levels for other subjects. Students are assessed every eight weeks or so to see if they would be better served by being placed in a different group. In short, each of the designs is sensitive to the issue of ability grouping and is working with schools to group students in more-effective ways.

Conventional wisdom suggests that the parent-child relationship and parent involvement in the child’s education are critical components of school success. The NAS designs have embraced this issue as well. Several of them (e.g., ATLAS and RW) aim to have individuals or teams within the schools that serve as resources to students and families to help integrate the provision of social services. Others (e.g., AC, ELOB, and NARE) emphasize the need for students to apply their learning in ways that directly benefit the community. Each design desires that parents and community members be involved in positive ways in the educational program.

NEW AMERICAN SCHOOLS APPROACH

Design-Based Assistance

Because NAS believes that most schools have benefited from focused, strategic assistance in their efforts to implement a design, it now considers the support and development of design-based assistance organizations to be its most important accomplishment.3

3To a certain extent, this approach to supporting the diffusion of designs and design-based assistance can be characterized as NAS’s “theory of action” (Weiss, 1972, 1995, 1997). Weiss’s conceptualization grounds educational research and evaluation in program theories of change to articulate the explicit or implicit theories about how and why programs will work. Weiss (1995, p. 69) states four major reasons why it is useful to ground educational research and evaluation of educational programs on the theories of change underlying educational programs: (1) such research concentrates
NAS's approach to schoolwide reform relies on such design-based assistance “as its cornerstone” (Glennan, 1998, p. 14). In fact, NAS’s current mission is to improve student achievement for large numbers of students through design-based assistance (New American Schools Development Corporation, 1999).

A critical aspect of design-based assistance is the designs’ commitment to providing ongoing assistance to support services aimed at furthering implementation and school transformation—organization, curriculum, instruction, and professional development of staff. That is, when guided by a design and assisted by an external agent (the design team), schoolwide reform will promote greater program cohesiveness and coherence within the school, as well as collaboration among the school’s staff. Such an approach will lead to school-based programs that better serve the needs of students and result in improved academic outcomes.

Toward this end, teachers and other staff in schools need to have a significant amount of choice when adopting design-based assistance. This is consistent with NAS’s conviction that educational change cannot be mandated “from above.” Because of this belief, the designs require a significant majority buy-in on the part of school staff (e.g., 75 to 80 percent) before implementation can begin.

**Engaging District Support**

Initially, the NAS strategy focused primarily on schools. NAS believed that a national reform effort would be established if schools were transformed with the help of designs—one at a time. But this NAS strategy has evolved:

> Over the past four years, we have recognized that the power of school-by-school improvement is limited. The major evolution in the New American Schools strategy has been the growing convic-

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...evaluation attention and resources on key aspects of the program; (2) it facilitates aggregation of evaluation results into a broader base of theoretical and program knowledge; (3) it asks program practitioners to make their assumptions explicit and to reach consensus with their colleagues about what they are attempting to do and why; and (4) research and evaluation that address the theoretical assumptions embedded in programs may have more influence on both policy and popular opinion than do those that fail to address them.
tion that, without changes in the structure, policies, and practices of school systems, good schools will remain the exception (New American Schools Development Corporation, 1997, p. 5).

Thus, rather than breaking the molds of existing schools—one at a time—with fundamentally different models of organization, NAS aimed toward a “bottom-up, top-down” perspective that attempts to assist (1) districts to establish a conducive operating environment for the designs, and (2) schools to change their organization, professional development, standards, curriculum, and instruction to improve student learning.

NAS believes that the designs and the assistance they provide are likely to be widely successful only if they operate in jurisdictions that provide supportive environments. In such environments, school districts support design implementation in a number of ways (see Bodilly and Berends, 1999). For instance, before implementation, districts can encourage schools to assess their needs so that they can ask probing questions of the design teams about how those needs can best be met within the context of a schoolwide design. Such a process, among others, can further the appropriate match of the designs to schools based on district accountability demands, design capabilities, and school needs. Moreover, in supportive operating environments, there is a reasonably intense focus on design implementation for a limited number of years (e.g., three years). There are also adequate resources for accomplishing that implementation—a critical aspect that requires district leadership and stability (see Bodilly, 1998; Keltner, 1998). Such an approach assumes that this district focus on schoolwide transformation will lead to district policies that conform to and reinforce consistent and coherent strategies for school change. These include not only resource allocation, but policies related to hiring, curriculum, instruction, standards, and assessments as well.

In 1995, at the beginning of the scale-up phase, NAS partnered with ten jurisdictions: Cincinnati, Dade County, Kentucky, Maryland, Memphis, Philadelphia, Pittsburgh, San Antonio, San Diego, and Washington State. The goal in each jurisdiction was to transform 30
percent of the schools within a five-year period using NAS or other schoolwide designs. While chosen arbitrarily, the 30 percent goal reflected the desire to ensure that design-based schools would form a critical mass within each jurisdiction.

**RAND'S ASSESSMENT**

The NAS approach relies on school designs and design-based assistance and requires the alignment of numerous institutional, social, political, and economic factors for successful implementation, consistency and coherence, and ultimate success. It is both ambitious and complex. As a result, any assessment of the NAS initiative has to be multidimensional and multifaceted and must rely on a variety of data and a wide array of indicators. Such an assessment is a difficult and analytically complex undertaking. Yet it is critical to understanding the progress of schools implementing schoolwide reform, especially since so little research has been conducted in this relatively new educational policy area (see Herman, 1999; Fashola and Slavin, 1998; Pogrow, 1998).

To monitor the progress of the NAS initiative, RAND is addressing the five key questions outlined in Chapter One. These focus on issues related to the types of schools NAS design teams are assisting, the development of the design teams over time, changes in classroom environments in design-based schools and their effects on student achievement, and the implementation and performance trends in the NAS schools.

**Data Collection Efforts**

To address the issues of concern, RAND has used district-provided data and has undertaken a variety of data collection efforts: interviews, focus groups, case studies, surveys, observations, gathering of school and classroom artifacts, and document analysis. In a supplementary study of changes in classroom practice in an urban school district, we are administering a commercial test to a sample of fourth graders in NAS and non-NAS schools. All of these data inform

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5For further discussions of this complexity, see Bodilly, 1998; Glennan, 1998; and Fuhrman and Ritter, 1998.
our understanding of the reform that NAS is attempting to accomplish in districts, schools, classrooms, and the academic lives of students across the United States.

**Monitoring a Longitudinal Sample of NAS Schools.** For a longitudinal sample of schools, RAND is gathering data from districts, schools, principals, and teachers. We began collecting data at the beginning of NAS’s scale-up phase, and we currently plan to continue these efforts through the 1999–2000 school year. A variety of data will help us to monitor the trends in implementation and performance at the NAS sites:

- **Teacher surveys administered to all teachers in NAS schools.** These surveys cover such topics as a teacher’s understanding of the design; human, material, strategic, and other support available for design implementation; levels of implementation of key design elements; classroom activities in a target class; attitudes and perceptions toward teaching; professional development experiences; teacher background information; teacher’s overall support for the design; satisfaction with student progress; and perceived effects of the design on the teacher’s professional life and on student achievement and engagement.

- **Principal phone interviews.** These interviews, which take about an hour to complete, ask principals a series of closed and open-ended questions similar to those on the teacher survey. In addition, we ask principals about the aids and impediments to reform, the alignment between jurisdiction-sponsored tests and teaching and learning, teachers’ professional development experiences, and school organizational characteristics.

- **District data on school performance indicators.** These include mandated test scores, attendance rates, promotion and dropout rates, and school demographic characteristics.

- **Site visits to schools and school districts.** The purpose of these site visits is to obtain district, school administrator, and teacher reports of the progress of the NAS initiative. One set of site visits is aimed particularly at schools and school districts no longer implementing NAS designs, the objective being to understand what led to the decision to stop. Another set focuses on particularly successful schools in order to understand what factors lead to success.
Monitoring Changes in Classroom Practices in San Antonio. In the spring of 1997, RAND began collecting data in selected NAS and non-NAS schools in San Antonio, Texas. This effort was to span two school years, ending in the spring of 1999.

For about 60 elementary classrooms, our task was to gather a wide variety of data over two school years:

- **Survey data from teachers.** These data include information on instructional practices, implementation of the designs, professional development, parental involvement, judgments about the effects of the design and support, and background characteristics.

- **Student-level data.** These data, gathered for all students in the elementary classrooms, include
  - Student background (gender, race-ethnicity, age, at-risk status, poverty, English proficiency, and prior test scores).
  - Test data from the Texas Assessment of Academic Skills (TAAS), which provides significant indicators for the state and district accountability systems.
  - Test data from the Stanford Achievement Open Ended Reading Test, Version 9 (SAT-9), which is a supplementary commercial test that asks students not only to read a passage and answer questions, but to explain their answers as well.

- **Principal phone interviews.** These interviews gather the same information gathered from the larger longitudinal sample of schools (see above).

- **More-specific data from classrooms.** For a subsample of about 15 teachers from the 60 classrooms, we are to collect additional data on instructional practices, such as
  - Observations of each teacher several times over the course of the school year.
  - Illustrative samples of students’ work.
  - Teacher interviews and logs about assignments, homework, projects, quizzes and tests, and papers or reports over the course of the year.
In summary, we are gathering a wide array of data from districts, schools, design teams, principals, teachers, and students. We believe such a comprehensive data collection effort is needed to monitor and assess the progress of a reform effort as complex and varied as the NAS initiative.

**Analytic Approach to Key Questions**

We now return to the key questions of the RAND assessment of NAS and highlight our analytic approach to each of them. Table 2.1 summarizes the questions and our data collection activities. (Instruments and protocols for these studies are available from RAND upon request.)

**What Were the NAS Schools Like Before They Implemented the Designs?** This question is the focus of this report, which is the first in a series of reports based on analyses of the longitudinal sample RAND is using to monitor trends in implementation and performance. Most of the information in this report is based on data gathered before the NAS designs were implemented. As such, the report is a “baseline.” With data provided by districts, we describe what the NAS schools were like (e.g., in terms of school performance, poverty, and racial-ethnic composition) before the designs began implementing and assisting. Moreover, we have retrospective survey data from principals to describe what their school climates were like early on in the scale-up phase.

**How Have the Designs and the Assistance They Provide Evolved over Time?** Since 1992, the designs and their teams have changed for many different reasons. We are examining the evolution of the designs based on document review and interviews over several years. This analysis addresses the question: What changes have been made to the designs and why? It will provide crucial information on the designs, the variation in foci among them, and the changes they made over time as they encountered implementation realities in schools facing significant challenges in terms of accountability systems, low test scores, poverty, diverse student populations, and difficult school climates.
Table 2.1

Key Questions of RAND Assessment and Data Collection Activities

<table>
<thead>
<tr>
<th>Question</th>
<th>Teacher Surveys</th>
<th>Principal Phone Interviews</th>
<th>District Data on Schools</th>
<th>Site Visits</th>
<th>Focus Groups</th>
<th>Classroom Observations</th>
<th>Student Work Samples</th>
<th>Student Interviews</th>
<th>Document Review</th>
<th>Student Test Data and Background Information</th>
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</thead>
<tbody>
<tr>
<td>What were the NAS schools like before they implemented the designs?</td>
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<tr>
<td>How have the designs and the assistance they provide evolved over time?</td>
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<tr>
<td>Are the critical components of the NAS designs being implemented across a wide array of schools? Why or why not?</td>
<td>√</td>
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<tr>
<td>Do the NAS designs extend beyond changes in school organization and governance and permeate classrooms to change curriculum and instruction?</td>
<td>√</td>
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<tr>
<td>Over time, what is the progress of the schools being assisted by NAS design teams in improving student and school performance?</td>
<td>√</td>
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</table>
Are the Critical Components of the NAS Designs Being Implemented Across a Wide Array of Schools? Why or Why Not? As noted, we have collected two years’ worth of data on teacher-reported design implementation levels and on principals’ and teachers’ views of this effort. These quantitative data will be complemented by interviews with district personnel to better understand how changes in district policies are related to and affect design implementation in schools.

To address this question, we will analyze

- Changes in implementation indicators, support for the designs, and teachers’ judgments about the effects of the designs in their schools. We will use our teacher and principal survey data from the 1996–1997 and 1997–1998 school years and information provided through interviews of key decisionmakers in the different jurisdictions. Our indicators measure implementation in various areas: organization and governance, teacher professional life, instructional strategies and performance expectations, and involvement of parents and community.

- Insights from the jurisdiction interviews. Our objective is to understand the decision in some jurisdictions to stop implementing the designs and the importance to this decision of factors such as level and type of district support, new mandates, and teacher support.

- Differences among teachers, both within and among schools, related to variations in design implementation. The goal is to know more about how the implementation of a NAS design becomes a schoolwide reform effort. As designs continue to provide assistance and as teachers continue to become more familiar with the design team activities in their schools, we expect increases in implementation levels and agreement among teachers within schools.

Do the NAS Designs Extend Beyond Changes in School Organization and Governance and Permeate Classrooms to Change Curriculum and Instruction? A principal hypothesis of the NAS initiative is that schoolwide reform will be successful when design teams provide assistance to schools to fully implement the key design components.
A critical aim of this schoolwide reform is to improve classroom instruction and thereby improve student achievement and engagement.

This question focuses on changes in classroom practices. To answer it, RAND is conducting a supplementary study of classrooms in San Antonio to better understand the differences in instructional practices between NAS and non-NAS classrooms.

As part of this study, we are gathering a rich array of classroom-level data through observations, teacher interviews and focus groups, classroom artifacts, and teacher surveys. Such information will help provide answers to the question, Do NAS teachers and students interact with each other and with subject materials in ways that reflect the design teams’ curricular and instructional theories of change? Our analyses and reporting of these data will include descriptive results about whether instructional practices promoted by the designs are occurring in NAS classrooms and will compare these practices to those in non-NAS classrooms.

Whether design-promoted instructional practices are related to student learning is clearly an important issue, and the data we collect in this effort will help us to address it. We describe the analyses related to the relationships among design implementation, instructional practices, and student achievement below.

**Over Time, What Is the Progress of the Schools Being Assisted by NAS Design Teams in Improving Student and School Performance?**

Because the main goal of NAS and the design teams is to improve student learning, this is a crucial question in our assessment of the NAS initiative. However, as stated earlier, a variety of institutional, social, political, and economic factors must be aligned if implementation is to be successful and school performance improved. To address this question, our assessment draws on a variety of data, indicators, and analyses. Melding these together is a difficult and analytically complex undertaking. Even so, understanding the progress of schools implementing schoolwide reform is important, particularly in today’s educational policy environment.

Our analyses informing this question include the following:
• For eight jurisdictions, we will analyze changes in performance outcomes between 1994–1995 (base year) and 1997–1998. That is, we will examine the progress of NAS schools in our sample over three years of implementation during the scale-up phase.

• We will use a wide array of data to help explain these implementation and performance trends. For example, we will link implementation measures to school performance indicators. In addition, interview and focus group information from case studies will provide a rich description of what has happened in these schools. That is, not only will we monitor the performance trends in a large sample of NAS schools, we will also provide explanations for why those trends occurred.

• We will use the San Antonio classroom data to examine the relationships among implementation, classroom instruction, and student achievement. We will examine the relationships between student achievement and a variety of individual and social factors, including (1) student characteristics (gender, race-ethnicity, at-risk status, age, English proficiency); (2) students’ prior achievement (i.e., third-grade mathematics and reading scores); (3) classroom instruction; (4) design team activities; and (5) teacher background characteristics (education level, experience, age, gender, and race-ethnicity). To more accurately capture changes in student performance, we will have to assess the changes in student composition problems, as well as the mobility of teachers in our sample.

• As part of the San Antonio study, we will track the test scores of a fourth-grade cohort. We will be able to obtain scores for the fourth graders in our spring 1998 sample, as well as their third-grade (1997) and fifth-grade (1999) scores. So, over the course of this study, we will be able track scores for this year’s cohort from grade 3 through grade 5. We will compare the trends of these NAS students to the trends of their non-NAS counterparts.

• Because our previous work indicates that school-level differences contribute significantly to the observed variation in implementation (Bodilly, 1998), we intend in the spring of 2000 to explore this issue further by visiting schools that claim to be implementing the designs. On the basis of previous analyses of the longitudinal school sample described above, we will classify
implementing schools as having produced low or high performance outcomes. Differences among these two groups will be explored to provide additional information about why performance differs in schools implementing NAS designs.

Our analyses of student performance would benefit greatly from the inclusion of individual-level test score data directly comparable across all implementing sites. However, participating districts were unwilling to consider additional testing because of the burden on schools, teachers, and students. Moreover, the cost of such testing could not be accommodated within the available funding. Thus, only in the study of classroom instruction is it feasible to administer a supplemental commercial test. While specialized tests, better matched to the design objectives, might have provided relevant information on the effects of the designs, the public expects performance to be measured against local accountability measures, which are what our analyses are based on.

We fully realize the problems inherent in attempting to identify a “design team” effect independent of the efforts of other curricular and instructional programs being implemented in NAS schools. Nonetheless, the combined analyses will provide important insights into levels of implementation, extent of assistance as reported by teachers, professional development, and the usefulness of the designs and design-based assistance for creating positive classroom and school environments that improve student learning.

**SIGNIFICANT FEATURES OF RAND RESEARCH**

The RAND assessment outlined above has a number of significant qualities designed to capture the complex nature of the NAS reform:

- It keeps a constant focus on implementation, using various methods to determine whether designs can be implemented in real schools facing significant challenges and whether the process for helping schools to choose among designs is effective.

- It recognizes that school transformation and performance are the joint products of a number of important factors: the design itself, the assistance provided by the design team, the environment for implementation provided by the school district, and the readiness of the school. While it cannot possibly isolate these
factors completely from each other, the evaluation tries to provide some understanding of the contribution of each.

- Its design emphasizes school improvement over time. Rarely have data been gathered on a similar set of schools over time to monitor the progress of implementation and other crucial organizational and performance factors. Within RAND’s longitudinal sample of NAS sites, schools serve as their own “controls.” Over time, we examine whether each school’s test scores improve, and we compare changes in school test scores to changes in district test scores. The reason we have not chosen to try more-complex quasi-experimental evaluation designs is that they most likely could not be effectively implemented, because of NAS’s overall scale-up strategy.

- Its design reflects an understanding that school-centered reform requires substantial time. Our assessment spans a five-year period.

In summary, RAND’s research on NAS strives to be a comprehensive assessment that will not only inform NAS, the design teams, and the partnering jurisdictions, but will also provide important lessons for those interested in comprehensive school reform.