As a response to the school reforms that had produced little change in the nation’s test scores, New American Schools (NAS) launched its efforts for whole-school reform in 1991. As a private nonprofit organization, NAS’s mission is to help schools and districts significantly raise the achievement of large numbers of students with whole-school designs and the assistance design teams provide during the implementation process. NAS is currently in the scale-up phase of its effort in which the designs are being widely diffused in partnering jurisdictions across the nation.

An earlier report, Berends, Kirby, et al. (2001), provided an overview of the progress in implementation and performance in a longitudinal sample of schools three years into the scale-up phase. This current report provides an update on the progress in implementation one year later in a longitudinal sample of schools adopting one of seven designs:

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

The report is based on a variety of data gathered from the schools: principal and teacher surveys conducted during the 1996–1997, 1997–1998, and 1998–1999 school years, and data provided by districts on school demographic characteristics. In addition, the report relies on other RAND studies 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 (Bodilly, 1998).

LIMITATIONS OF THE STUDY

There are some important limitations of this research that need to be kept in mind. The sample of schools analyzed here consisted of, for most design teams, the first schools to which they had provided assistance with implementing their designs on a fee-for-service basis. There were many changes in both the designs and the assistance provided as the teams and the schools 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 have studied.

THE ANALYSIS SAMPLE

The target population of schools for this study was all schools beginning implementation of a NAS design during school year 1995–1996 or 1996–1997 in seven jurisdictions that chose to partner with NAS at the beginning of the scale-up phase: Cincinnati, Dade, Kentucky, Memphis, Philadelphia, San Antonio, and Washington state.

The schools in the sample were located in largely urban, high-poverty and high-minority districts.

The analysis sample for the earlier study consisted of 104 schools that were implementing in both 1997 and 1998 and which had com-
plete data from both principals and teachers in both years. These schools were followed up a year later; only 71 of the 104 schools responded. A few of the schools had dropped the design but the majority of the attrition in the sample was due to nonresponse. This is not unusual in panel data. Thus, the analysis sample for the current study consists of 71 schools in which principals reported that they were implementing designs in all three years (1997, 1998, and 1999) and which had complete data (i.e., from teachers and principals) in all three years. Despite the smaller sample size, our findings are remarkably robust and mirror those found in our earlier study (Berends, Kirby, et al., 2001). The teacher sample consisted of approximately 1,500 teachers.

TRENDS IN IMPLEMENTATION

As measured by teacher reports on our indicators in our longitudinal sample of NAS schools, implementation increased and deepened over the first four years after schools adopted designs, although at a decreasing rate. Between the fourth and fifth years, however, we found a significant downturn in implementation, although a few schools with more years of implementation continued to show progress in implementation.

Implementation increased modestly from 1997 to 1999 across all schools by about 3/10ths of a standard deviation. The between-school variance declined slightly over this time period, as measured by the standard deviation, although the within-school variance increased slightly.

FACTORS AFFECTING IMPLEMENTATION

We decomposed the variance in implementation into its variance components: within-school variance and between-school variance. The variance in implementation within schools was much larger than the variance between schools. In fact, only 18 percent of the total variance in reported teacher implementation was between schools; the remaining 82 percent was within schools. The between-school variance component declined from 27 percent in 1998 to 18 percent in 1999, with a corresponding increase in the within-school variance component.
Our multilevel models explained almost all of the between-school variance and about 31 percent of the within-school variance.

The findings are largely consistent with those of our earlier study (Berends, Kirby, et al., 2000).

**Principal Leadership**

Principal leadership was the single most important predictor in the models, both at the teacher level and the school level. Schools in which teachers reported strong principal leadership also reported much higher levels of implementation, by over half a standard deviation. Teachers who rated their principals higher than others in the same school also reported significantly higher levels of implementation (again by over half a standard deviation). We find that this variable was strongly correlated with teacher reports of the level of resources—in terms of materials, funds, and time—available to them to implement designs.

**Prior Levels of Implementation**

We find that schools with higher levels of prior implementation in 1997 tended to make steady progress over time. This finding, while not surprising, highlights the importance of making sure that schools are off to a good start. Without this, schools are likely to fall further behind as time passes.

**Teacher Perceptions**

Not surprisingly, teacher perceptions of students and their readiness to learn were all significantly related to level of implementation. Teachers reporting that lack of basic skills was not a hindrance to
their students’ academic success, that lack of student discipline and parent support was not a problem, or that students can learn with the resources available also reported higher implementation than those who felt otherwise. African American teachers also reported higher levels of implementation than non–African American teachers.

**School Characteristics**

Implementation was higher in high-poverty schools as well as schools serving high numbers of minority students. However, in schools that served significant numbers of both poor and minority students, implementation levels were significantly lower.

**Designs and Design Team Assistance**

Our results emphasize the importance of design-related factors and design team assistance. High reported levels of implementation were related to reportedly clear communication by design teams and higher levels of teacher support for the designs. In addition, we do find that the types of designs themselves were important, with some such as CON, NARE, and RW clearly reporting higher implementation, and others such as MRSH reporting significantly lower levels of implementation. Controlling for other factors including prior implementation levels, AC schools showed marked progress over this time period.

**District Support**

There were large differences in implementation between jurisdictions. In general, implementation was higher in those districts that were more supportive of the NAS designs and characterized by stability of district leadership (e.g., Memphis). Controlling for other factors, including prior implementation levels, we found that there were no significant differences among jurisdictions by 1999, with two exceptions. San Antonio schools were about 6/10ths of a standard deviation and Washington schools about half a standard deviation lower on the implementation index relative to Memphis schools.
Both of these jurisdictions ranked low with respect to district support.

Based on all of RAND’s work, it is fair to infer that district and institutional factors are extremely important in ensuring the success of comprehensive school reform, particularly in the early stages of implementing the designs.

**Funding**

Our exit interviews with 30 principals of schools that had dropped the NAS designs as well as other related RAND research highlight the importance of adequate resources in funding. Lack of funding was the single most important reason cited by close to three-quarters of the schools in the decision to drop the design.

**CONCLUSIONS AND POLICY IMPLICATIONS**

NAS and the design teams partnered with schools and districts that are characterized by a host of problems related to poverty, achievement, and climate characteristics. To scale-up the designs or replicate implementation in these sites is extremely difficult. Implementation varied both within and across schools, sites, and designs.

It is clear that several factors need to be aligned for designs to be well-implemented in schools. Without strong principal leadership, without teachers who support the designs and have a strong sense of teacher efficacy, without district leadership and support, without clear communication and provision of materials and staff support on the part of design teams, implementation is likely to lag far behind. These are sobering and important lessons for federal, state, and local efforts aimed at comprehensive school reform.

Our findings also suggest that comprehensive school reform faces many obstacles during implementation, and because of this, whole-school designs face continuing challenges in ultimately achieving their main purpose: significantly raising the achievement of all students.