This study was designed to analyze the implementation of state and district mandated academic standards, assessment processes, accountability, and intervention strategies at the middle-school level. Its goal is to identify and describe intervention strategies that are effective in increasing the ability of middle school students in at-risk situations to achieve state or district academic standards. Seventeen states identified by Achieve, a bipartisan, nonprofit organization created by governors and business leaders to support efforts to raise academic standards and improve student performance, participated in the study. The survey asked a number of questions related to standards-based reform, such as whether states provided funding for intervention programs to help students who are failing or are in danger of failing; and whether dropout rates have increased as a result of the implementation of higher standards. The results of survey questions are presented in table form throughout the report. In sum, the report argues that states should use their newly established and more rigorous standards to develop interventions that provide teachers with the skills and knowledge required to teach to the highest standards, along with providing students with additional opportunities to achieve the highest standards. It urges that interventions be in place before accountability measures are enforced.

(Contains 5 tables and 32 references.) (JDM)
Introduction

During the 1999 National Education Summit, governors, educators, and business leaders identified three key challenges facing U.S. schools: (1) improving educator quality, (2) helping all students achieve to high standards, and (3) strengthening accountability. There is no doubt that progress is being made in at least one of these areas.

In regard to strengthening accountability, in 1996 only 14 states had content standards in four core curriculum areas; by 1999, 44 states had established such standards. All but one state has established standards in at least two core subjects, and all but two states measure student and/or school performance at least annually. States hold schools responsible in a variety of ways: 40 release school report cards, 21 rate schools, 20 offer assistance, 13 offer rewards, and 18 impose schoolwide sanctions. Eight states now require students to master tenth-grade standards in order to graduate (Quality Counts 2000).

There appears to be considerably less progress being made, however, on the first two challenges. In fact, teacher quality and the lack of implementation of interventions to help all students achieve high standards are major concerns of those who question the wisdom of the way standards-based reform is being implemented.

The National Urban League insists that “politicians and school administrators are going about the business of improving schools completely backwards.” In support of this contention, Price (1999) quotes the head of the Virginia School Boards Association: “The state insisted on testing first, training teachers second, and purchasing new books and materials third, which is the exact opposite of what we need to do.”

In reality, the implementation of standards-based reform across the country is uneven, sometimes careless, and has led some of its main proponents to worry (Olson, 2000). Diane Ravitch, a senior research scholar at New York University and a former assistant
U.S. Secretary of Education, was quoted as saying (Olson, 2000), "At this point, it would be hard to say I can identify a place that's got it right, because there are so many ways to do it wrong."

Response to Problems

In reading the comments, research, and organizational efforts surrounding standards-based reform, the work of Achieve, Inc. surfaced. Achieve, Inc. is a bipartisan, nonprofit organization created by the governors of the states and business leaders to support state efforts to raise academic standards and improve student performance. In a report issued in 1998, Achieve, Inc. presented a snapshot of state school accountability systems in 1998. One of the categories they reported on was, "Does the state require and fund interventions for low-achieving students?"

This was an intriguing idea and one we wanted to explore further. Did all the districts in a state perceive that the state required and funded interventions? What other interventions besides tutoring and summer school did the districts offer? How many of the states had requirements for student promotion and/or graduation? Was the dropout rate increasing because of the new accountability? And was professional development being offered in a manner consistent with what research for the past three decades has indicated works?

As part of the NDPC project with the Edna McConnell Clark Foundation, we surveyed the districts in the 17 states identified by Achieve, Inc. as ones that required and funded interventions for low-achieving students. Surveys were sent to approximately 5,200 schools districts in 17 states; 907 districts in 16 states responded (Hawaii did not respond). To find out how the districts in individual states responded, check the NCPC web site (www.dropoutprevention.org) and click on the Clark Study button.

Social Promotion or Retention

Question 2 raised the question, "Is a student's promotion tied to passing the assessments of those standards?" While 46% of the districts responded "no" and 14% indicated this policy was in the planning stages, 40% of the districts responded "yes." The overall 40% response from districts in the 16 states is a reflection of the reaction to social promotion—passing students on to the next grade when they are unprepared. For many students, the price of failure is retention in grade. Policymakers, school administrators, and teachers see retention as a desirable alternative to social promotion. When asked why they retain students in grade, teachers respond that it gives students another year to master the academic content and to improve their social behavior. Yet, this reasoning flies in the face of an overwhelming amount of research.
Table 1
Survey on Standards, Interventions, and Professional Development
Aggregated Data From 905 School Districts in 16 States

1. Has your district established its own standards for student learning in grades 6-8 in addition to state-mandated standards?  
2. Is a student's promotion tied to passing the assessments of those standards?  
3. Are schools in the district responsible for initiating and implementing intervention programs to help students who fail or are in danger of failing to pass the assessments?  
4. Does your state provide state funding for intervention programs to help students who fail or are in danger of failing to pass the state assessments?  
5. Does your district provide additional local funds to the schools to support intervention programs designed to help students pass the assessments?  
6. Do the schools in your district use student assessment data to improve the intervention programs?  
7. Do the schools in your district provide professional development to specifically train teachers to teach curriculum based on state and/or district standards?  
8. Are the schools in your district required to develop and implement a plan to use student standards-based assessment data to improve teachers' classroom instruction?  
9. Have dropout rates increased in your district as a result of implementing higher standards?  
10. How many of the schools in your district use the following kinds of intervention programs to help students who fail or are in danger of failing to pass the assessments of the standards?

1 = none use this kind of program  
2 = a few use this kind  
3 = about half use this kind  
4 = most use this kind

<table>
<thead>
<tr>
<th>Intervention Program</th>
<th>No</th>
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<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer school</td>
<td>29%</td>
<td>14%</td>
<td>57%</td>
</tr>
<tr>
<td>Alternative schools</td>
<td>46%</td>
<td>14%</td>
<td>40%</td>
</tr>
<tr>
<td>Before- and/or after-school sessions</td>
<td>02%</td>
<td>07%</td>
<td>91%</td>
</tr>
<tr>
<td>Saturday sessions</td>
<td>30%</td>
<td>04%</td>
<td>66%</td>
</tr>
<tr>
<td>Mentoring</td>
<td>20%</td>
<td>05%</td>
<td>75%</td>
</tr>
<tr>
<td>Tutoring</td>
<td>03%</td>
<td>11%</td>
<td>87%</td>
</tr>
<tr>
<td>Accelerated learning classes</td>
<td>05%</td>
<td>09%</td>
<td>86%</td>
</tr>
<tr>
<td>Transition classes</td>
<td>21%</td>
<td>20%</td>
<td>59%</td>
</tr>
<tr>
<td>Other</td>
<td>81%</td>
<td>19%</td>
<td></td>
</tr>
</tbody>
</table>

11. In the past school year, how many schools in your district offered the following kinds of professional development to teachers so they could help students pass the assessments of the standards?

1 = none offered this kind of program  
2 = a few offered this kind  
3 = about half offered this kind  
4 = most offered this kind

<table>
<thead>
<tr>
<th>Professional Development</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>After-school workshops                  11%</td>
<td>20%</td>
<td>09%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Eight-hour or longer workshops            20%</td>
<td>23%</td>
<td>11%</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Curriculum/instruction specific workshops  04%</td>
<td>14%</td>
<td>18%</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>Conferences/Institutes                   07%</td>
<td>21%</td>
<td>16%</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Summer workshops of a week or longer     31%</td>
<td>34%</td>
<td>12%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Content/instruction specific university courses 47%</td>
<td>29%</td>
<td>10%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Multiple days throughout the school year related to the same topic 17%</td>
<td>27%</td>
<td>19%</td>
<td>37%</td>
<td></td>
</tr>
<tr>
<td>Coaching and feedback throughout the school year 13%</td>
<td>30%</td>
<td>17%</td>
<td>40%</td>
<td></td>
</tr>
</tbody>
</table>

Page 3
For example, in December of 1999, the Consortium on Chicago School Research released its study of Chicago’s policy on ending social promotion (Duffrin, 2000a). Their report is generally positive but somewhat mixed on Chicago’s policy requiring that 3rd-, 6th-, and 8th-grade students earn at least a minimum score on the Iowa Test of Basic Skills (ITBS) before they can move to the next grade. On the positive side, the percentage of 6th- and 8th-graders being promoted after the regular school year continues to increase. Unfortunately, students who were held back because they still couldn’t pass the test after attending summer school were doing no better two years later than similarly unsuccessful students who had been automatically promoted in previous years (Viadero, 2000).

Table 2 lists the responses for the districts in each of the 16 states. Over 50% of the districts in Florida, Louisiana, North Carolina, and South Carolina indicated that a student’s promotion tied to passing the assessment of those standards was the case.

<table>
<thead>
<tr>
<th>District</th>
<th>No</th>
<th>Planning</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>71%</td>
<td>00%</td>
<td>29%</td>
</tr>
<tr>
<td>AR</td>
<td>63%</td>
<td>04%</td>
<td>33%</td>
</tr>
<tr>
<td>CO</td>
<td>51%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>FL</td>
<td>15%</td>
<td>05%</td>
<td>80%</td>
</tr>
<tr>
<td>GA</td>
<td>53%</td>
<td>21%</td>
<td>26%</td>
</tr>
<tr>
<td>IN</td>
<td>48%</td>
<td>12%</td>
<td>40%</td>
</tr>
<tr>
<td>KS</td>
<td>62%</td>
<td>14%</td>
<td>24%</td>
</tr>
<tr>
<td>KY</td>
<td>48%</td>
<td>13%</td>
<td>40%</td>
</tr>
<tr>
<td>LA</td>
<td>04%</td>
<td>09%</td>
<td>87%</td>
</tr>
<tr>
<td>MN</td>
<td>57%</td>
<td>10%</td>
<td>33%</td>
</tr>
<tr>
<td>NC</td>
<td>05%</td>
<td>23%</td>
<td>72%</td>
</tr>
<tr>
<td>NY</td>
<td>52%</td>
<td>13%</td>
<td>35%</td>
</tr>
<tr>
<td>SC</td>
<td>36%</td>
<td>07%</td>
<td>57%</td>
</tr>
<tr>
<td>TX</td>
<td>38%</td>
<td>16%</td>
<td>47%</td>
</tr>
<tr>
<td>VA</td>
<td>39%</td>
<td>28%</td>
<td>33%</td>
</tr>
<tr>
<td>WA</td>
<td>62%</td>
<td>18%</td>
<td>21%</td>
</tr>
</tbody>
</table>

\( \bar{X} \) 16 states 46% 14% 40%

Studies have found that retention increases the probability of a student’s dropping out of school. Male, black, Southern, and poor students are more likely to be the ones retained according to a report from the National Center for Education Statistics (1997). Of those students who had been retained, nearly twice as many reported having dropped out of school as those who had never been retained. This places minority, poor, and/or urban students in a kind of double jeopardy: systems that failed to educate them adequately are now punishing them for not being educated.

Minnesota, for example, has had one of the highest graduation rates in the country. The success of the predominantly white student body, however, has concealed the disturbingly low success rates for virtually all minority groups according to an article in the Minneapolis Star Tribune ("Concerns are raised," 2000). The article discussed a University of Minnesota Office of Educational Accountability report that revealed in 1998, while 82% of the white students graduated in four years and only 8% dropped out, the numbers for black students were considerably worse—38% dropped out over four years and only 36% graduated. The report expressed concern that, "As requirements for high school graduation increase in the next few years, it will be difficult to maintain our current four-year completion rate...let alone improve on it."

Table 3 contains the responses to Question 9, "Have dropout rates increased in your district as a result of implementing higher standards?" In hindsight, the question probably should have been, "What has happened to the dropout rates in your district as a result of implementing higher standards?" The response choices could have been "increased," "stayed the same," or "decreased." Nevertheless, the responses still provide some insight into the districts’ perceptions. In four of the states, more than one-third of the districts indicated their dropout rates had increased.

Although it makes no sense to ignore the research that points to the futility of retaining students in grade, neither should the negative effects of retention be used to support whole-scale promotion. Students should not be pushed through a system that does not
Table 3. State responses to Question 9, “Have dropout rates increased in your district as a result of implementing higher standards?”

<table>
<thead>
<tr>
<th>State</th>
<th>NO (%)</th>
<th>YES (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>AR</td>
<td>94%</td>
<td>06%</td>
</tr>
<tr>
<td>CO</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>FL</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>GA</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>IN</td>
<td>76%</td>
<td>23%</td>
</tr>
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<td>KS</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>KY</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>LA</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>MN</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>NC</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>NY</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>SC</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>TX</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>VA</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>WA</td>
<td>90%</td>
<td>10%</td>
</tr>
</tbody>
</table>

X 16 states 81% 19%

ensure they acquire the skills and knowledge they need. As pointed out in Taking Responsibility for Ending Social Promotion (U.S. Department of Education, 1999), decades of research have shown that both retention and social promotion fail to provide long-term benefits for low-performing students unless accompanied by effective programmatic interventions. If students are to be held accountable for meeting academic standards, schools must provide adequate opportunities for students to meet expectations.

It should be clear to policymakers and educators alike that students with behavioral or academic problems should be identified early and provided the support and interventions needed to help them. Linda Darling-Hammond (1998) suggests four complementary strategies:

1. Enhancing professional development for teachers to ensure they have the knowledge and skills they need to teach a wider range of students to meet the standards,
2. Redesigning schools to support more intensive learning,
3. Ensuring that targeted supports and services are available for students when they are needed, and
4. Employing classroom assessments that better inform teaching.

Interventions

In Question 10—“How many of the schools in your district use the following kinds of intervention programs to help students who fail or are in danger of failing to pass the assessments of the standards?”—we tried to identify the most common types of interventions and some that were less common. As can be seen in Table 1, summer school appears to be the most popular intervention strategy for helping students who fail or are in danger of failing to pass tests of standards. Seventy-eight percent of the districts responding to our survey indicated that half or most of their schools used summer school as an intervention. This raises the question, “Do summer school programs help students pass a test and be promoted to the next grade?”

It appears that summer school is a good news/bad news situation. The good news from the New York City School System is that 64.2% of the students who attended summer school in 1999 passed the end-of-summer tests and were promoted to the next grade. The bad news is that more than 14,000 (40.3%) of the 35,000 students assigned to attend summer school never showed up. Those that did not attend summer school and pass the test, were retained (“Most assigned to summer school,” 1999).

Melissa Roderick at the University of Chicago is the principal researcher for the Consortium on Chicago Schools Research’s study. She notes that the Chicago policy (requiring passing grades on the ITBS for promotion to the next grade for 3rd, 5th, and 8th grade students) has shrunk the pool of hard-core low-achievers by siphoning off students who could succeed with added pressure to work hard and those who...
needed additional help through summer school, smaller class size, or tutoring. The students who are left, however, have serious problems that may require a "technical team" approach. More importantly, Roderick believes the system needs to identify the most at-risk students before they reach third grade (Duffrin, 2000a).

The Chicago School Board is acting on Roderick's message, "For the kids who are left, you have to do something really different to solve their problems." The Board is in the process of adopting measures to help students before they have to repeat a grade. They are instituting mandatory summer school for below level 1st- and 2nd-graders, a computer phonics program targeting a specific learning disability, early childhood programs, after-school and extended-day activities, and vision screening and free eyeglasses. The Board is also providing training for tutors and extra teachers who will work with retained students using alternative strategies for teaching reading (Viadero, 2000).

Maryland developed a criterion-referenced test to measure school performance and progress toward meeting state standards. Students in grades 3, 5, and 8 take the Maryland School Performance Assessment Program (MSPAP) in six core subject areas. The test is designed to improve instruction and measure school improvement, not individual student performance. Each elementary and middle school was to have 70% of its students scoring at the satisfactory level by 1999. The results for 1999 showed that statewide, 43.8% of the students were scoring at the satisfactory level when scores were averaged across the various tests. In only 77 of 1,357 schools were 70% of the students scoring at the satisfactory level (Fulton, 2000).

The failure of schools to meet the 70% passing goal on the MSPAP and the addition of a high school test have led members of the State Board of Education to the conclusion that many Maryland students lack the necessary preparation to pass the assessments. In October 1999, the board approved the "Every Child Achieving: A Plan for Meeting the Needs of Individual Learners" initiative. The initiative focuses on academic intervention, educator and administrator capacity, and student readiness. If fully funded, the initiative will provide the following (Fulton, 2000):

- extended learning experiences for K-8 students with deficiencies in reading and math,
- summer programs for students not reaching proficiency levels in reading and/or mathematics by the end of 8th grade,
- individualized learning plans for students who fail one or more high school assessments,
- newly hired elementary teachers who have strong content knowledge in core subject areas, and
- newly hired secondary teachers who have a major content area they will teach.

In reviewing the responses to Question 10 on the NDPC survey, we found that before- and after-school programs and tutoring are prevalent interventions. On the survey, 67% of the districts responded that half or most of their schools have before- and/or after-school programs and 73% responded that half or most of their schools have tutoring programs in place. The next most frequently used interventions are accelerated classes (49%) and alternative schools (43%), with the districts indicating half or most of their schools offered these. The least popular interventions were Saturday sessions (66% responded "did not use") and transition classes (49% responded "did not use").

The U.S. Department of Education (1999, p. 10) recommended strategies for developing comprehensive approaches to helping students achieve higher standards. They include the following:

- Set clear objectives for students to meet performance standards at key grades.
- Identify student needs early in order to apply appropriate instructional strategies.
- Emphasize early childhood literacy.
- Focus on providing high-quality curriculum and instruction.
- Provide professional development that deepens teachers' content knowledge and
improves instructional strategies to engage all children in learning.

- Set out explicit expectations for all stakeholders, including families and communities, in efforts to end social promotion.
- Provide summer school for students who are not meeting high academic standards.
- Extend learning time through before- and after-school programs, tutoring, homework centers, and year-round schooling.
- Reduce class sizes in the primary grades.
- Keep students and teachers together for more than one year and use other effective student grouping practices.
- Develop transitional and dropout prevention programs.
- Hold schools accountable for performance by publicly reporting school performance, rewarding school improvement, and intervening in low-performing schools.

Using Data

Ensuring that standards are met requires assessment. All too often, however, assessment is used only for accountability purposes. Linking student promotion or graduation, teachers’ and administrators’ pay raises, and schools’ rankings to student performance are examples of prevalent forms of accountability. Hayes Mizell, the director of the program for student achievement at the Edna McConnell Clark Foundation, said (quoted in Olson, 2000), “To date, it appears that policymakers and politicians are more interested in using standards as a club for compliance than as a light toward better teaching and learning.” Others have observed that the accountability aspects of the standards movement have outpaced efforts to provide schools, teachers, and students with the capacity to reach the standards (Olson, 2000).

Accountability assigns consequences for what has already been done, however, and assessment is much more powerful when used for continuous improvement. For example, Table 4 contains the state responses to Question 6, “Do the schools in your district use student assessment data to improve the intervention programs?” In 14 of the 16 states, 80% or more of the districts indicated they did use assessment to improve the intervention programs.

Perhaps a better question would have been, “Do you assess the progress of students often enough to adjust the intervention programs to help students learn better?” Typically, schools wait to measure student performance until it is too late—until students have failed an end-of-the-year test. This prevents both teachers and schools from providing the kind of timely interventions that help students pass those tests. A more effective strategy is to use assessment on a regular basis to determine what students are learning, to identify where the gaps are, and to adjust what is being done to achieve the desired outcomes. Schools must develop a comprehensive approach by using data effectively to (1) identify at-risk students early, before they fall too far behind; (2) determine if the kinds of interventions be-

<table>
<thead>
<tr>
<th>State</th>
<th>No</th>
<th>Planning</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>09%</td>
<td>10%</td>
<td>81%</td>
</tr>
<tr>
<td>AR</td>
<td>06%</td>
<td>14%</td>
<td>80%</td>
</tr>
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<td>CO</td>
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<td>11%</td>
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<td>LA</td>
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</tr>
<tr>
<td>WA</td>
<td>07%</td>
<td>29%</td>
<td>64%</td>
</tr>
</tbody>
</table>

\[16 states \] 05% 09% 86%
ing provided are effective; and (3) identifying gaps in curriculum and instruction.

The regular analysis of student achievement data is critical to understanding how to overcome the barriers of low achievement and eliminate the gap between disadvantaged and advantaged students. Data can be used in a variety of ways: to confirm what some schools already believe—that children from poor families tend to have lower scores on standardized tests—or it can be used to improve instruction for all students. Data can be used to justify poor results or to take a critical look at teaching and school practices that are barriers to student learning ("Data-driven school reform," 2000).

States have large databases on school and student performance which are too often used only to identify low- and high-performing districts. Districts too often use data only to rank and sort students rather than to help schools and teachers improve. The Southern Regional Education Board (SREB) (1999) recommends, however, that states report the percentages of students who meet performance levels in a way that informs districts and schools about which teaching practices improve academic performance. Districts should emphasize the need for continuous assessment of teachers’ instructional strategies and support schools in gathering, analyzing, and interpreting evidence of student performance. Districts should use both state and local assessment data to identify how to improve schools and teaching to better meet students’ needs.

**Professional Development**

The single largest factor affecting the academic growth of students is the differences in the effectiveness of individual classroom teachers. The Tennessee Value-Added Assessment System (TVAAS) aggregated student test data and provided a measure of the effects on the academic progress of student populations of the system, the school, and the individual teachers (Sanders, 1998). The effects of third-grade teachers on students’ fifth-grade mathematics scores were measurable. The effects were cumulative—a sequence of highly effective teachers for three years resulted in more than a 50% higher score in students’ fifth-grade mathematics achievement compared with three years of low-effectiveness teachers. As the level of teacher effectiveness increased, students of lower-achievement were the first to benefit.

Question 7 asks, "Do the schools in your district provide professional development to specifically train teachers to teach curriculum based on state and/or district standards?" Table 5 shows that, not surprisingly, more than 75% of the districts in all but two states responded they did this. Most states and districts recognize the importance of supporting professional development for teachers already in the classroom and providing them with the knowledge and skills they need to teach to higher standards. Nevertheless, efforts in this area are often inadequate and under-funded (Allen, 2000). The typical school district currently allocates about one percent of its budget for professional development. Less than half (47%) of the teachers on

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\(\bar{x}\) 16 states 05% 09% 86%
a national survey reported that they received release
time to attend professional development, and 23% said
they were given no support, time, or credit for
professional development (National Center for
Educational Statistics, 1998). As Sparks and Hirsh
(1999, p. 14) have pointed out, “We cannot expect
teachers to teach what they do not know....We certainly
cannot expect our teachers to share and learn from each
other’s knowledge and skills unless we provide them
with the research, structures, time, and money with
which to do it.”

How states tackle the task of ensuring the
nation’s teaching force has the capacity to teach to
higher standards will be the true test of standards-based
reform (“Achieve to post summit responses on web
site,” 2000). Two decades of research on professional
development indicate that to improve teaching, each
classroom must become a laboratory. Teachers, with
the support of coaches and mentors, must apply what
they are learning, refine it, and incorporate it in their
professional practice. Good professional development
should include the following (“Design qualities for pro-
fessional development,” 2000, p. 6):

- **Data Driven:** Student achievement data
  point out professional development needs
  for individual schools and across schools.
- **Long Term and Sustained:** It takes time
  for teachers, principals, and support staff
to learn new skills and behaviors. People
need to focus over time until new behav-
iors become internalized.
- **Results Oriented:** The focus of profes-
sional development should be increasing
student learning. Precious time and re-
sources should be directed toward impro-
ving student performance.
- **Job Embedded:** Studies show that people
learn best on the job supported by training
and coaching. People apply what they learn
directly to what they do. For teachers, the
classroom should become a learning labo-
ratory for building professional practice.
- **Collegial:** Teamwork is important. Whole
school professional development holds the

promise of raising the achievement levels
of all students.

Keeping the above characteristics in mind, take
a look back at Table 1, Question 11. Less than half the
districts reported that most of their schools offered eight
hour or longer workshops. Only slightly more than a
third said most of their schools offered professional
development that consisted of multiple days through-
out the year related to the same topic, and about one-
quarter of the districts indicated that most of their
schools offered summer workshops of a week or longer.

The most effective way to improve the achieve-
ment of students is to improve the quality of teaching.
No effort to improve the academic performance of all
students, especially the most disadvantaged, can suc-
cceed unless it changes the way teachers teach and stu-
dents learn. Improving professional development re-
quires empowering educators to develop new models
for integrating learning into all aspects of the school.
Effective professional development makes the connec-
tion between subject matter and instructional strate-
gies. It creates regular opportunities for serious colla-
borative planning, developing classroom assessment skills,
and connecting teachers to other professionals within
and outside their schools (Sparks & Hirsh, 1999).

**Equity and Excellence**

Few states have decreased the achievement gap
between minority and white students, poor and more
affluent students. For example, on the first NAEP writing
test, 44% of Connecticut’s 8th graders scored pro-
ficient or better—well ahead of the next-highest state,
Maine, at 32%. Yet, Connecticut has only 15% of its
black students scoring at that level (Quality Counts
2000). The Tennessee Value-Added Assessment Sys-
tem (Sanders, 1998) research found that black students
were over represented in the least effective teachers’
classroom by about 10% and were under represented
in the most effective teachers’ classrooms by a simi-
lar amount.

Texas is the only state that holds schools ac-
countable for helping poor and minority students meet
the same achievement benchmarks as their peers. In Texas, 20% of Hispanic 8th graders scored at the proficient level on the NAEP writing test compared with 10% nationwide. Among the state’s African American 8th graders, 20% scored proficient or higher compared with only 7% nationwide (Quality Counts 2000).

In Chicago, the policy of retaining students who do not pass the Iowa Tests of Basic Skills at 3rd, 6th, and 8th grade is affecting a disproportionate number of students who attend schools in the city’s poorest neighborhoods. Some high-poverty elementary schools retain nearly 40% of their 3rd-graders—twice the city average (Duffrin, 2000). The Chicago policy may also be disproportionately affecting minority students. For example, Hispanic students’ chances of being retained in their current grade were three times that of non-Hispanic White students, and African American students were 4.5 times more likely to be retained (Viadero, 2000).

Even in the poorest neighborhoods, however, some schools retain very few students. Carnegie Elementary is one of these schools. With 98% of its students coming from low-income families, the school has retained only 5% of its 3rd-graders in the past two years and has never retained a 6th- or 8th-grader. In the past nine years, under the leadership of Principal Thomas Avery, the percentages of students scoring at or above national norms on the Iowa Tests of Basic Skills in reading have doubled (from 20% to 40%) and increased in math from 12% to 55% (Duffrin, 2000).

The reasons for Carnegie’s success are not immediately apparent. There are no dramatic new programs, no special textbooks, and the same mix of veteran and novice teachers found elsewhere. What becomes evident, however, is the dedicated leadership of the principal and the extraordinarily high morale of the teachers. One teacher explained the staff’s willingness to work so hard was due to support from the principal. “He gives us 100%...and as a result, we’re able to give 100% to the students.” Since Avery’s arrival nine years ago, the school has devoted a full hour and a half to reading each morning. Textbooks show up before school starts, teachers get the supplies they request, and professional development is provided.

At the same time, Avery checks to see that teachers use what they request, that equipment is utilized, and information from conferences is shared with the rest of the staff (Duffrin, 2000).

### Powerful Forces

Unfortunately, few school districts subscribe to the belief that the achievement gap between disadvantaged and advantaged students can be virtually eliminated. The Clark Foundation began working with the Jefferson County Public Schools (JCPS) in 1989. Over a six-year period, the Foundation made a series of grants to implement reforms at the three lowest performing middle schools. When the district adopted standards-based reform in 1995, the Foundation made larger grants to the district as a whole. A wide variety of intervention efforts were supported with disappointing results. After a decade and millions of dollars, the three middle schools still remain at or near the bottom in achievement among the district’s 24 middle schools (“Goodbye, yellow brick road,” 2000). The question is, “Why?”

The answer is complicated and, unfortunately, much too familiar. There were not enough accomplished teachers, not enough principals who were leaders, not enough inspired support people and central office administrators who believed that greater gains were possible and knew how to achieve them. Observations by an independent research organization suggest there was a lack of vision, that too many JCPS leaders believed economically disadvantaged students could not excel. The researchers found a core group of educators who emerged in the district after years of trial and experimentation who knew what it would take to make all schools successful. Those educators, however, were too often stymied by powerful systemic forces resistant to the dramatic changes necessary to achieve the desired results (“Goodbye, yellow brick road,” 2000).

We have known for decades that tweaking the system here and there, adding additional programs, or offering lip service to school improvement without a real commitment from all the stakeholders is a recipe for more failure, especially for those students who have
traditionally been underserved by the schools. With educational systems across the nation that have increased the high school completion rate a mere 2% in the last 25 years, it seems more productive to begin reform by addressing the causes of the problem rather than the symptoms.

Systemic Change

The powerful forces that mitigate against authentic change or improvement in the schools combine to form a pervasive ethos that is systemic. True reform that results in real change and improvement requires changing the organizational structure, the established procedures, the way decisions are made and resources allocated, and the relationships between central office personnel and school staff. We have known this for years. An early study of the implementation of federally sponsored innovations revealed that the critical variables related to improvement, change, and effectiveness are organizational and systemic rather than individual or programmatic in nature (Berman & McLaughlin, 1978).

The principles of Total Quality Management espoused by W. Edwards Deming affirm that the central problem in traditional organizations is that they tend to blame what goes wrong on individual people (Bonstingl, 1992). According to Deming’s theory, however, 85% of the problems in an organization can be attributed to systemic causes—practices, rules, expectations, working conditions, and traditions. Frymier (1987) concluded from a study of 183 professional educators from nine urban schools that events and mandates required the educators to engage in activities that would not help their students perform well in school. By both circumstance and by law, the educators were forced to deal with factors over which they had almost no control.

Mandating standards and accountability is not going to have any greater chance of success than have any of our other reforms if the traditional educational structure and operating procedures are left intact. The idea that a school will improve its instructional practice, and therefore the overall performance of its students, implies an authority for collective deliberation and action that many schools are not allowed. It is unrealistic to expect that more sophisticated reform strategies introduced into a system that is not organized to engage in change will result in anything other than more failure.

A shining example of the success of systemic change can be found in the Brazosport Independent School District (BISD), Texas. The district has 18 schools with an enrollment of 13,500 and serves seven distinct communities. Nine of its campuses educate a large percentage of students living below the federal poverty line. In 1991-92, students in half of the district’s campuses had low performance on the Texas Assessment of Academic Skills (TAAS), which measures the level of student learning on Texas’ academic standards. A thorough examination of the results of the TAAS showed that economically disadvantaged children, regardless of ethnicity, were not successful, and the gap between minority and non-Hispanic White students was too great.

In the 1993-94 school year, there was a 32% gap between non-Hispanic White and African American students and a 20% gap between non-Hispanic White and Hispanic students. By the 1998-99 school year the gap had decreased to 7% between non-Hispanic White and African American students, and to 3% between non-Hispanic White and Hispanic students. Disadvantaged students raised their performance from 57% in the 1993-94 school year to 93% in the 1998-99 school year. Most importantly, however, all groups were performing above the 90% level on the TAAS (Anderson, 2000).

These amazing results were not accomplished by what Superintendent Gerald Anderson calls “drill and kill.” By identifying teachers who were successfully teaching economically disadvantaged children, the district was able to develop and pilot test a process for teaching all students successfully. The systematic process, which was replicated in all the districts’ schools, combined elements of Total Quality Management, Effective Schools Research, the Shewhart Cycle of continuous improvement, an Eight-Step Instructional Process focused on regular assessment and re-teaching to address students’ learning
problems, restructuring the school-day schedule to allow for tutoring and enrichment, and out-of-school opportunities for learning. Teachers received professional development in areas such as learning styles, ways to convey high expectations for all students, instructional focus modeling, interpretation of test data, Total Quality Management, and Effective Schools Research. The process not only raised the achievement level of the disadvantaged and minority students, but the scores of non-Hispanic White students rose from 81% passing the TASS in 1993-94 to 98% passing in 1998-99 (Anderson, 2000).

This effort changed the ethos of the entire district—from expectations for student learning to the processes used to increase that learning. From the school board to the classroom, everyone supported the idea that disadvantaged and minority students had the ability to learn at the same high levels as more advantaged, non-Hispanic White students. As a result of these high expectations, all groups of students increased their scores on the TAAS to above the 90% level. Data was used to identify gaps in student learning, all schools adopted an instructional process that used data to inform teaching, the school day was restructured to allow for enrichment and tutorial, and principals were in classes daily. The entire system was focused on improving student learning.

**In Summary**

This report is the last of a series of special reports presenting the argument that states should use their newly established, more rigorous standards to develop interventions that provide teachers with the skills and knowledge required to teach to the higher standards and provide students with additional opportunities to achieve the higher standards. These interventions should be in place for a sufficient time before accountability measures are enforced.

Recent research has shown that teacher expertise is one of the single most important determinants of student achievement. The evidence from studies conducted in Tennessee, Texas, Massachusetts, and Alabama shows a positive correlation between teacher quality and student achievement (Duttweiler & Robinson, 1999). Yet, four out of five teachers in a national survey said they were not prepared to teach in today’s classrooms (National Center for Educational Statistics, 1999).

Teacher education programs do not prepare individuals for the realities of the classroom, state certification and licensing procedures are not sufficiently rigorous, and traditional professional development practices are rarely effective in improving classroom practice. These aspects of education must be the states’ number one priority if standards-based reforms are to lead to an improvement in student achievement. In order to improve educational outcomes for students, effective instructional environments must have well-trained, reflective teachers who are adequately supported in terms of professional development. Each dollar spent on improving teachers’ qualifications nets greater gains in student learning than any other use of an education dollar (Darling-Hammond, 1997).

Teacher preparation, certification, and professional development must be redesigned to produce teachers with the skills and knowledge to effectively teach to the new standards. Funding for professional development and the time to revise the curriculum must be a part of the new standards-based reform movement. Without training and time, teachers cannot change the curriculum to match the standards, and if what is being taught does not change, students will suffer (Scanlon, 1998).

When all is said and done, standards must ultimately translate into classroom practices before they can improve student performance and achievement. Reformers want teachers to revolutionize their practice—to coach and facilitate rather than to pour knowledge into passive brains. Yet, public education in the United States contains few social and professional structures that help teachers adopt these perceptions and continue to learn about teaching and learning (Cohen, 1996). More importantly, few states have constructed a policy blueprint that addresses—in a cohesive, coherent, and sustainable manner—the conditions affecting student learning: teacher standards, professional development, or school capacity (Hirsch, Koppich, & Knapp, 1998).
It is hard to argue against the need for raising academic standards in this country. It follows logically that if we set standards, we must assess students' knowledge to see how well they are mastering the standards. The question that arises at this point is what do we do about students who fail to meet the higher standards? Many policymakers and educators believe that accountability strategies (e.g., making promotion to the next grade or receiving a high school diploma contingent on passing the assessments) will motivate students to work harder. Others, however, question the advisability of placing additional barriers in the paths of students who may already be having difficulty traversing the educational system.

Students in at-risk situations are faced with personal, health, family, and/or community problems that contribute to their low academic performance. Too often, these problems are compounded by circumstances in the schools that hinder student learning. To provide a helping hand for low-performing students, curriculum and instructional changes should be made to provide students with learning opportunities focused on their learning needs. Schools will need to engage students in a variety of active learning experiences—experiences that address students' multiple intellectual strengths, integrate service learning into the curriculum, and use technology to provide active learning environments and experiences that are relevant to life outside the classroom.

Most importantly, intervention strategies must be put in place to provide middle-grade students who are having difficulty in the classroom with the additional assistance they need to learn successfully. Alternative schools provide settings in which students who do not do well in the regular classroom receive help appropriate to their needs. Mentoring and tutoring have proven to be extremely effective with youth in at-risk situations. In addition, more school districts are implementing after-school, weekend, and summer programs to provide children structured, enriching alternatives during out-of-school hours.

The best course of action is to develop a comprehensive program that revitalizes the schools, includes ongoing teacher professional development, and provides students with a wide variety of opportunities designed to give them the helping hand they need. The crucial point is that we cannot set higher standards and hold students accountable and still continue along the same, familiar classroom path. We cannot continue business as usual in our schools unless we want to push students out the door. Higher standards and higher expectations can lead to higher academic achievement for all students if we also provide the kind of system structure, classroom instruction, technology, and interventions students in at-risk situations need to succeed.

Successful attempts to improve students' learning will require changes throughout the educational system. It seems obvious that attempts to improve students' learning will be successful only to the extent that changes throughout the educational system give school building staff the support and resources they need and sufficient latitude to adapt policies and practices to fit their unique circumstances.

**The Most Effective Strategies for Dropout Prevention**

The NDPC has identified 15 effective strategies that have a positive impact on the dropout rate. Desirable outcomes are achieved when school districts develop a program improvement plan that encompasses most or all of these strategies in ways that research and practice indicate are the most effective. The strategies are:

- Systemic renewal
- Community collaboration
- Professional development
- Family involvement
- Early childhood education
- Reading and writing programs
- Alternative schooling
- Individualized instruction
- Instructional technologies
- Mentoring/tutoring
- Service learning
- Learning styles/multiple intelligences
- Conflict resolution/violence prevention
- Career education/workforce readiness
- Out-of-school experiences
Conclusions

In pursuit of standards-based reform, educators, policymakers, parents, and community leaders must ask themselves the following question: "Can we, in good conscience, hold students accountable before we have four important pieces of standards-based reform in place?"

- competent teachers who are teaching to the higher standards using instructional strategies that motivate and involve students,
- readily available data in a form that can guide both instruction and professional development,
- intervention strategies to help students achieve the higher standards, and
- organizational structures that support and facilitate implementation of the changes required for success.

It is clear from the experiences of successful schools and districts that all students can meet higher standards if:

- School systems are structured to support classroom learning.
- Quality teachers are trained to teach to higher standards in ways that help students learn.
- Data is available and used to make decisions about practice.
- Multiple and comprehensive interventions are in place to help students in danger of failing.
- Sufficient funds are targeted to professional development and interventions.

Powerful forces can be marshalled also to support change and improvement. Leadership, resources, and community support are all required to implement comprehensive approaches that provide students with opportunities to acquire the academic knowledge and skills necessary to demonstrate they have met standards. It is imperative that we change those school practices which place students at risk of failure. As educators, it is our job to create an enriching, culturally sensitive, relevant, and active environment for all children. We must not just write vision statements that parrot the phrase "All children can learn"; we must shape our classrooms, our schools, and our districts so that it becomes a reality.

References


The Special Reports can be downloaded with Acrobat Reader from <www.dropoutprevention.org>.
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Survey results for each state can be seen on the Clark Study page of the National Dropout Prevention Center’s web site <www.dropoutprevention.org>.

### Middle School Standards, Assessment, Accountability, and Interventions

This study of middle school standards, assessment, accountability, and interventions is funded by the Edna McConnell Clark Foundation.

**Goal of the Study**

The goal of this study is to analyze the implementation of state and district mandated academic standards, assessment processes, accountability, and intervention strategies at the middle-school level in order to identify and describe those intervention strategies that are effective in increasing the ability of middle school students in at-risk situations to achieve state or district academic standards.

**About the Author**

Patricia Cloud Duttweiler, Ed.D., is Assistant Director of the National Dropout Prevention Center.

### The National Dropout Prevention Center and Network

The National Dropout Prevention Center (NDPC)—a research center within the College of Health, Education, and Human Development at Clemson University, Clemson, SC—was created to significantly reduce America’s dropout rate. It is committed to meeting the needs of youth in at-risk situations by shaping school environments which ensure that all youth receive the quality education to which they are entitled. The NDPC acts in concert with the National Dropout Prevention Network (NDPN)—a membership organization of more than 2,000 teachers, school administrators, state department of education staff, community organizations, and business leaders who are concerned with education issues. The Center/Network partnership has emerged as a highly visible national resource on at-risk and dropout issues. It publishes the refereed Journal of At-Risk Issues, a quarterly newsletter, the research-based Solutions and Strategies series, and other publications. It maintains a web page (dropoutprevention.org) and an e-mail listserver (ndpc@clemson.edu) that provide users with needed information and referrals quickly and easily through the Internet. The Center/Network partnership also provides professional development through its annual National Dropout Prevention Conference, annual America’s At-Risk Youth National FORUM, and special regional conferences.

**National Dropout Prevention Center**

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