LESSONS FROM THE CLASSROOM LEVEL

FEDERAL AND STATE ACCOUNTABILITY IN RHODE ISLAND





LESSONS FROM THE CLASSROOM LEVEL

Executive Summary

In the winter and spring of 2007-08, the Center on Education Policy (CEP) expanded its ongoing research on the impact of the No Child Left Behind Act (NCLB) by conducting case studies of six schools in Rhode Island.¹ Our purpose was to learn more about the influence of NCLB and related state accountability policies on curriculum, instruction, and student achievement. The schools studied used a variety of instructional practices and included a mix of urban, suburban, and rural schools, as well as elementary, middle, and high schools.

This study takes a more in-depth look at classroom practices than most other studies of NCLB, including CEP's previous survey- and interview-based research. In this study of Rhode Island schools, we not only interviewed school administrators, teachers, students, and parents, but we also conducted formal classroom observations that documented the time spent on various types of instructional practices and teacher-student interactions in the six schools. These case studies show how administrators and teachers in different schools have responded to federal and state accountability policies designed to raise student achievement.

Key findings from the six case study schools include the following:

• The high-performing schools in the study (those that had already met state schoolwide performance targets for 2011) and their school districts seemed to have the greatest alignment between curriculum and state standards. Since the implementation of NCLB, all the schools studied had taken steps to align curriculum with state content standards, but some appeared to have done a better job with this task. Some of the higher-performing schools and districts had administrators and teachers who were directly

involved in state-level discussions about the development of state standards and the New England Common Assessment Program (NECAP) tests, which are used for NCLB accountability in Rhode Island. The schools that were struggling to align curriculum and standards either had atypical, nontraditional curriculum or lacked sufficient direction, leadership, or funding at the district level.

- Many teachers and administrators in case study schools acknowledged the pressure to "teach to the test" by focusing curriculum on specific content or skills included on the state test. In addition, most schools have incorporated some form of test preparation, such as drilling students on skills likely to be tested, using items released by the state as practice tests, and discussing test-taking strategies with students. This trend mirrors findings from a body of research which indicates that high-stakes testing may encourage teaching to the test.
- The most common mode of instruction in the elementary and middle school classes we observed was teacher-led discussion, where the teacher primarily lectures and leads the class in discussion. Teachers also frequently asked closed questions, those with only one or a few "correct" answers. Other common modes of instruction at this level included seat work and silent reading. Teachers said they felt pushed to adopt more teacher-directed instruction and passive learning strategies to keep up with the fastpaced curriculum and cover as much content as possible. Teachers at the higher-performing schools in our study tended to emphasize teacherled discussion and closed questions, while teachers at the lower-performing schools used more individual student work.

Rhode Island, a northeastern state, is one of three states in our larger study of federal and state accountability policies. The other states include a midwestern state, Illinois, and a western state, Washington State. In addition to geographic distribution, states were chosen on other factors such as demographic differences and sizes of population.

- Study participants reported focusing more instructional time on the tested subjects of English language arts (ELA) and mathematics at the expense of other subject areas. In addition, more attention was devoted to "bubble kids," (students who scored just below the proficient level on state tests). In some of the elementary schools we studied, social studies and science received less discrete instructional time and instead was integrated into the ELA and math curriculum. Teachers at all school levels also expressed concern about a loss of depth and richness in curriculum content as a result of the fast pace of instruction necessary to cover the material likely to be tested. Parents, as well as teachers, noted that the pressure to quicken the pace of instruction restricts teachers to teaching to the standards, which generally correspond to lower levels of understanding, rather than teaching to mastery. Teachers at several schools pointed out that the time it takes to administer the tests themselves has reduced instructional time in the subject being tested. And in five of the six schools we studied, interviewees discussed how they strategically targeted resources and interventions on bubble kids in an attempt to raise their scores to the proficient level.
- Administrators and teachers in case study schools are making greater use of test data to reach decisions about curriculum, instruction, teacher professional development, and other areas. The increased focus on testing and accountability has yielded data that teachers can use to target instruction on students' weaknesses. Some schools were observed to use data more effectively than others, however.
- Some study participants expressed concern about the negative effects of what they saw as an overreliance on standardized tests to measure achievement. Teachers and administrators pointed to negative impacts of testing on teacher morale, development of the whole child, and the depth of the curriculum. This was especially true in the schools that had large numbers of English language learners (ELLs) and high rates of poverty and were under intense pressure to meet state test score targets. Furthermore, staff in schools with innovative teaching and curriculum structures reported feeling, in the words of one teacher, like "square pegs in a round hole."

 Many of the participants from the case studies reported that they lacked sufficient resources, including funding, staff, and materials, to prepare students for the NECAP tests. Participants also noted a lack of resources to meet state and federal requirements.

Background and Study Methods

The No Child Left Behind Act, like earlier versions of standards-based reform, aims to raise student achievement and close achievement gaps between students of different races, ethnicities, and income levels. CEP's studies of student achievement have concluded that in most of the states with adequate data, scores on state reading and math tests have gone up since NCLB was enacted in 2002, and that achievement gaps have narrowed more often than they have widened (Center on Education Policy, 2007a; 2008a). Other CEP studies of NCLB implementation at the local level have found that many schools have increased instructional time for English language arts and mathematics but have sometimes done so at the expense of other subjects and activities (CEP, 2007c; 2008b).

This study seeks to better understand and explain these trends by taking a closer look at practices at the school and classroom levels. In particular, the study examines the changes that districts, schools, and teachers have made in curriculum and instruction in response to NCLB and related state accountability policies.

To gather data for this study, CEP researchers conducted interviews and in-depth classroom observations in six schools in Rhode Island with diverse economic, geographic, and demographic characteristics. Research for the study was conducted from November to May during school year 2007-08.

FOCUS OF THE STUDY

We focused on changes in policies and practices that affect curriculum and instruction in reading (or English language arts at the higher grades) and mathematics, the only two subjects tested for NCLB accountability before 2008. These include the following changes, which have been commonly reported in other studies of the local effects of NCLB (Hamilton & Berends, 2006; Booher-Jennings, 2005; Center on Education Policy, 2003; 2004; 2005; 2006; and Sunderman et al., 2004):

- Increasing alignment between instruction and state standards for curriculum content
- Focusing on tested content at the expense of other subject matter
- Ignoring, reducing, or deleting aspects of the curriculum that are not tested
- Targeting (through instructional time and resource allocation) students who are closest to scoring at the proficient level on state tests in an attempt to make AYP
- Continually changing educational programs, particularly in high-poverty districts and low-performing schools, in response to calls for reform—a phenomenon sometimes known as "policy churn" (Sunderman et al., 2004, p. 4)
- Using data to drive decisions in curriculum and instruction
- Addressing achievement gaps

SELECTION OF CASE STUDY SCHOOLS

CEP researchers worked with Rhode Island Department of Education officials to identify districts and schools to participate in this study. We chose six schools in five school districts, including three elementary schools, one middle school, and two high schools.

Several factors guided this selection. Although the schools chosen do not constitute a representative sample, we did take steps to ensure they represented different characteristics to help us gain a more nuanced understanding of the effects of NCLB in different types of public schools. We chose school districts in different kinds of communities (urban, suburban, or rural) and of various sizes. We made sure our sample included both schools that received federal Title I funds for low-achieving students in low-income areas and schools that did not. We took into account school demographics and selected several schools with a relatively diverse student population. In addition, we chose schools that were in some phase of NCLB improvement. Finally, we chose schools from both the

elementary and secondary levels. It should be noted that the findings from the six case study schools are not generalizable to every school in Rhode Island.

In order to elicit straightforward responses from and avoid possible repercussions for the people we interviewed, we guaranteed anonymity to participating schools. The list below describes schools and districts participating in this study, identified by pseudonyms.² The information below about the adequate yearly progress (AYP) and NCLB improvement status of these schools represents their status during school year 2007-08, which was based on tests administered in school year 2006-07. Although Rhode Island has since published the AYP status of schools for school year 2008-09, based on 2007-08 testing, that information is not included in this report because it had not been released at the time the report was written and because our study looked at activities during school year 2007-08.

- Chace Elementary School is a rural Title I school in Catalina School District, which serves an outer suburban community. The majority of Chace's students are white. Roughly one-third of the school's students are eligible for free or reduced-price lunch (meaning that they come from low-income families). At the time of our study, the school was designated as "high-performing" under Rhode Island's state accountability system and had made adequate yearly progress under NCLB based on tests administered in both 2005-06 and 2006-07.
- Farnum High School in WindPath School District is a suburban school and does not receive Title I funds. The enrollment is mostly white and includes students from diverse economic backgrounds. When we conducted our research, the school was classified as making "insufficient progress" under the state accountability system; the school did not make AYP based on either 2005-06 or 2006-07 testing and was identified for improvement under NCLB. Over the past five years, Farnum has lowered its dropout rate and has seen an increase in test scores among students who receive free or reduced-price lunch.
- Hutchinson Elementary School is located in Beneteau School District, an urban district. Roughly half of the students are white, and half are

² School pseudonyms are based on famous women in Rhode Island history, and district pseudonyms are based on sailboat manufacturers.

minority students. About three-fourths of the students are eligible for free or reduced-price lunch. At the time of our visits, Hutchison was classified by the state as a high-performing school and had made AYP based on both 2005-06 and 2006-07 testing.

- Lewis Elementary School, a Title I school, is located in Jeanneau School District, a large urban district. Nearly all of Lewis' students qualify for free and reduced-price lunch. At the time of our study, the school was labeled as "moderately performing" under Rhode Island's accountability system and had been identified for improvement under NCLB.
- Wittman Middle School, a Title I school, is located in the outer suburban area of the Tartan School District. One-third of the student population is Latino, and more than three-fourths of the students qualify for free or reduced-price lunch. During the time of our research, Wittman had moved up in ranking on the state accountability system from "insufficient progress" (based on 2004-05 testing), to "moderately performing" (2005-06 testing), to "caution" (2006-07 testing). Wittman made AYP based on 2005-06 testing but did not meet AYP targets based on 2006-07 testing.
- Vare High School in Jeanneau School District is an urban school. One-third of the students are Latino, and about half are eligible for free or reduced-price lunch, but the school does not receive Title I funds. Vare made AYP based on 2006-07 testing, and at the time of our study, it was in year 7 of NCLB improvement. According to the state accountability system, the school was classified as making insufficient progress.

CASE STUDY INTERVIEWS

To collect information for our case studies of the six schools, CEP researchers interviewed 17 administrators, 79 teachers, 58 students, 38 parents, and 8 other school representatives (librarians, reading and math specialists, administrative interns, and Reading First coaches). Through these means, we hoped to not only gain detailed knowledge of district and school practices and policies but also probe the assumptions and beliefs underlying the implementation of NCLB and testdriven accountability in general.

At the district level, CEP researchers spoke with the superintendent, director of curriculum and instruction, assessment director, and Title I coordinator, where applicable. In each of the case study schools, we asked the principal to identify a staff member to act as study liaison. This person arranged for school-level interviews. These included individual interviews with principals, assistant principals, and reading and/or math coaches, as well as focus group interviews with teachers, students, and parents.3 Appendix A provides more information about the interview process for this study.

CLASSROOM OBSERVATIONS

The study used classroom observations to document the salient features of instructional practices and teacher-student interactions. The study liaison in each school scheduled these observations in reading/language arts (or English) and mathematics classes. CEP researchers visited each school for two to three days, depending on the school's schedule.

Through these classroom observations, we hoped to look more deeply into teachers' practices than many previous studies of school reform and NCLB implementation have done. Prior studies have been based largely on survey and interview data; although these are important research tools, they are based on selfperceptions and can be influenced by respondents' beliefs. Indeed, some analysts have challenged the accuracy of survey and interview data on issues of classroom instruction, particularly when the questions address teachers' own instructional practices (Hamilton et al., 2003; Spillane & Zeuli, 1999). The classroom observations in this Rhode Island study were intended to address some of the limitations of earlier research, including CEP's own research, and to further explore and validate the findings from our interview data. We acknowledge, however, that the inferences that can be drawn from the classroom observations are limited in scope because our sample is limited.

CEP researchers observed 57 classes in three elementary schools and one middle school, including 35 English language arts classes and 22 math classes. Observations were also conducted in 14 more classes at one of the two high schools in our study. During all of the observations, the researchers recorded teaching practices using a time-sampling technique: classroom

³ Researchers were not able to interview each of these groups at every school.

instruction was recorded at two-minute intervals for a class period of 30-60 minutes. The researchers also wrote detailed notes after each observation. These notes provided important contextual information for interpreting the time-sampling data and helped to improve reliability among different researchers.

The researchers designed a time-sampling instrument to record three aspects of classroom teaching: instructional practices, class grouping, and noninstructional issues. (See appendix B for more detail about observation categories.) The instrument used drew from current findings about changes to instructional practices and curricular choices and was adapted from prior studies (Hamilton et al., 2007; Pianta et al., 2007; University of Michigan School of Education, 2007). The researchers were trained to use the instrument to record teacher behaviors accurately during a classroom observation and to take detailed notes.

OTHER DATA SOURCES

Researchers also analyzed policy documents and other records at both the district and school levels, including curriculum and pacing guides where applicable, to understand how instructional policies have changed in response to NCLB's focus on student achievement. The analysis of documents allowed researchers to determine how district and school administrators and teachers have attempted to comply with district policies and make AYP.

LIMITATIONS OF THE STUDY

Like any study, this study has certain limitations. First are the inherent limitations of interview and self-reported data, noted above.

Second, the schools and districts studied may not represent the experiences of all Rhode Island schools, and their demographic characteristics may not reflect the student population in Rhode Island. For instance, Rhode Island as a whole has a larger white and African American population than the districts studied.

Third, our efforts to include classroom observations as a supplement to interview data have shown promise, but we are cautious about drawing inferences that may be misleading on a larger scale. Therefore, we have used a design in which the qualitative data from interviews are dominant, and the quantitative classroom observation data are used to supplement and validate the qualitative data.

Lastly, this study does not draw a causal relationship between policy and instructional changes, nor does it aim to evaluate the effectiveness of the implementation of NCLB and related accountability policies. Rather, the study gives snapshots of how schools with different profiles have responded to state and federal accountability systems in terms of curriculum and instruction. The study also illustrates how NCLB's requirements have led to changes in educational practice in a sample of diverse schools and districts and examines NCLB in the context of reform efforts that may have been underway before the federal law took effect. To explore how NCLB, state, and local policies interact and how they affect student achievement requires the extra level of in-depth analysis offered in this report.

NCLB and Rhode Island

Rhode Island is a small state that values local control over education; 37% of education funds come from the state, a lower share of state funding than the national average of 47.6%. It has pockets of diversity, with Latinos comprising the largest minority group (14% of the student population).

To comply with the provisions of the No Child Left Behind Act, the Rhode Island Department of Education (RIDE) made a number of significant changes to its public school accountability system. The most relevant changes for purposes of this study are described below (Rhode Island Department of Education, 2006a).

ASSESSMENTS

Rhode Island has completely revamped its testing system to meet NCLB requirements. Prior to NCLB, Rhode Island students in grades 4, 8, and 10 were assessed in reading, writing, and mathematics in the spring, using the New Standards Reference Exam (NSRE), which is an off-the-shelf test, and a state-developed writing assessment. During school year 2005-06, the state started administering its new statewide assessment, the New England Common Assessment Program (NECAP) at grades 3 through 8 in the fall. That same year, high

school students took the NSRE tests and a pilot high school test of the NECAP. After a brief transition period, the NSRE was replaced by the NECAP tests.

The NECAP was developed by Rhode Island, New Hampshire, and Vermont to meet NCLB testing requirements. It is the first multi-state testing collaboration in the nation. This partnership made it possible for the three states to satisfy the NCLB testing requirements with lower development costs and greater expertise. Although the NECAP was developed in collaboration with two other states, Rhode Island officials said that the test is closely tied to Rhode Island standards and classroom instruction. The results of the NECAP cannot be compared with those from the prior state assessment, so there is a break in the comparability of test data.

The reading and math NECAP tests are administered in grades 3 through 8 and 11, and the writing test in grades 5, 8 and 11. The NECAP includes multiple-choice items, short-answer questions, and writing prompts that require students to demonstrate their writing ability by responding to a stand-alone prompt or a text passage. Students were also tested on science in the spring of 2008.

In keeping with NCLB requirements, 95% of all students in a school or district, as well as 95% of the students in each subgroup, must participate in state testing. Elementary and middle schools must also have an attendance rate of 90%, while high schools must meet a graduation rate target that rises incrementally.

Following the passage of NCLB, Rhode Island established statewide targets for tracking student performance, rather than goals for individual schools and districts. School performance was classified on the basis of an Index Proficiency Score, which is based on the percentage of students performing at various achievement levels on the NECAP, as well as attendance and graduation rates.

SCHOOL CLASSIFICATIONS

Based on the indicators described above, Rhode Island schools are classified annually into three broad categories: high-performing, moderately performing, and insufficient progress. To be considered high-performing in 2007, a school had to reach the schoolwide targets for 2011 specified in RIDE guidelines. A moderately performing school is one that has met schoolwide targets for the current year, and a school with insufficient progress has missed the targets. In addition, a high or moderately performing school that has missed up to three targets, excluding the schoolwide ELA and math targets, is classified "with caution." High and moderately performing schools that have shown significant advances in ELA and math achievement as determined by RIDE, or those that have obtained exceptionally high⁴ schoolwide Index Proficiency Scores, are classified as "commended schools."

CONSEQUENCES OF NOT MAKING AYP

The Rhode Island Department of Education works with districts and schools. Additional resources are given to districts to work with schools identified for improvement. (Rhode Island Department of Education, 2006b). Additional assistance and resources are provided to schools making insufficient progress. State law mandates that RIDE must provide this type of support for three years. If sufficient progress is still not made, state law specifies progressive levels of control by RIDE, which may eventually lead to school reconstitution. Reconstitution can mean restructuring or even closing of the school, at the extreme.

NCLB dictates a series of sanctions for schools receiving Title I funding (Rhode Island Department of Education, 2006b) which is parallel in state policy. These range from offering public school choice in year 1 of improvement to restructuring school governance in year 4 of improvement and beyond.

Influence on Curriculum

Overall, attention to issues of state and federal accountability in Rhode Island has increased across the six schools studied. Only recently have studies begun to examine the impact of NCLB accountability provisions at the local level. In this section we describe the curriculum changes made by administrators and teachers in response to state and federal accountability policies.

Exceptionally high Index Proficiency Scores are 94 in reading and 92 in math at the elementary and middle school levels, and 91 in ELA and 88 in math at the high school level.

A previous CEP study (2006) found that schools are investing more time and attention into better aligning curriculum and instruction to state standards. Our findings in Rhode Island, described below, support this observation and also highlight the critical role of district-level support and local participation in state standards creation in determining the success of these efforts. Our Rhode Island research also revealed evidence of policy churn, defined earlier in this report.

Alignment to standards is a dominant theme in curriculum and instructional planning in Rhode Island. The most successful schools in terms of improvement status seem to be those that have achieved the greatest alignment between state standards and the curriculum designed to meet those standards. The schools that are struggling to align curriculum to standards either have atypical or nontraditional curriculum or lack sufficient direction or support at the district level.

All three of the elementary schools we studied reported changing curriculum to better align it to state standards. Staff at these schools also noted that alignment to the curriculum as a driving force was a noticeable change. The two high-performing elementary schools described their activities as a never-ending process. Staff at both Hutchinson and Chace Elementary Schools mentioned being involved in the development of the state's grade-level expectations (GLEs) and NECAP, which seems to have given them an advantage. This in turn has allowed Hutchinson, for example, to design instructional pacing guides, discussed later in this report, that are very specific to NECAP.

The teachers that we interviewed attributed improvements in their school's performance in part to district support for and teacher "buy-in" of state standards. Wittman Middle School in the Tartan School District improved its status from insufficient progress to moderately performing for school year 2006-07. A Tartan district official commented that "at the elementary and middle [schools], you can talk to most any teacher and they will be able to tell you how what they're teaching relates to the GLEs very specifically." School administrators also said that Wittman's math, reading, and writing curricula are aligned with the GLEs. One administrator noted that on a curriculum alignment scale of 1 to 10, "we're probably at an 8 and half."

By contrast, the Jeanneau school district's lack of a uniform, districtwide curriculum aligned to state standards was described as a problem by study participants at Lewis Elementary. As a result, interviewees described the development of curriculum aligned to standards as a "massive" task. Teachers reported that they rely on the federally funded Reading First program to provide some guidance and consistency in reading instruction at the primary grades; however, there are still problems in alignment with state standards.

Curriculum and instruction is atypical at Vare High School, which is essentially divided into two schools. Students do not receive traditional grades; rather, their progress is measured by their ability to meet standards and apply learning objectives. The curriculum at Vare is project-based and interdisciplinary. Teachers recognized the additional challenges involved in aligning their projects with grade span expectations (GSEs) and keeping pace with the rest of the district. One teacher described Vare's curriculum as "a square peg that doesn't fit in the round hole" because "we do not follow scope and sequence of other schools, which I think gives some people at the central administration level fits because they want standardization across the board and we don't fit in."

Despite these challenges, Vare has made improvement from being classified for insufficient progress in previous years to making AYP in 2006-07. Teachers reported that each year they review their "gateway" document—which stipulates the GSEs students must meet to advance—to ensure the curriculum matches up with district mandates. Teachers noted, however, that students feel accountable for meeting learning goals rather than doing well on standardized tests. "[The learning goals and the test] become separate things," said one teacher. "There's no real connection between what we're doing in our project, our debates today, and the NECAP that I can see."

Most teachers and administrators at Farnum High School said that the school's curriculum is somewhat aligned with the GSEs; however, very few participants spoke of a comprehensive strategy to ensure it was truly aligned. Their efforts seem more reflective of demonstrating alignment of the existing curriculum to standards rather than redesigning an entirely new curriculum. To accommodate changes in standards, teachers describe adapting current course content and assignments to incorporate the GLEs and the subject matter likely to be tested, rather than significantly altering or adding courses.

Influence on Instruction

In this section we discuss the impact of NCLB and related state accountability policies on instructional practices, such as narrowing the curriculum and using more teacher-directed instruction, addressing issues of instructional pace and depth, and preparing students to pass the NECAP.

CURRICULUM NARROWING AND TEACHER-DIRECTED INSTRUCTION

Hamilton et al. (2008) cite several studies that point to a narrowing of curriculum to accommodate the increased emphasis on tested subjects. Our study of Rhode Island also provides evidence of this unintended outcome of test-driven accountability systems. At Hutchinson and Chace Elementary Schools, an increase in instructional time in reading, writing, and mathematics has resulted in less time for social studies and science; these latter two subjects are now integrated into the reading and math curriculum. For example, history and science are taught through reading or writing lessons with less depth or focus on developing knowledge of history or science content.

Teachers reported that the pressure to teach to a single test has led to cuts in what they felt was a rich curriculum to accommodate the skills stressed on a single measurement of achievement. Several teachers expressed frustration that they were forced to eliminate content they considered worthwhile or explore certain topics in less depth to align their instruction to standards and accommodate the testing schedule.

Generally speaking, in the classes we observed in Rhode Island, the predominant mode of instruction was teacher-directed, meaning that the teacher is mainly lecturing and leading the entire class in discussion. The next most common mode of instruction consisted of independent learning activities, such as seat work and silent reading. Although this is not necessarily a change from previous methods of instruction, some teachers did report that they used teacher-directed methods to make sure they covered enough key content before state testing time.

TEST PREPARATION

CEP researchers asked study participants to talk about the ways in which they helped students prepare for the NECAP. Many teachers and administrators acknowledged the pressure to teach to the test by focusing their curriculum and instruction on specific content or skills that were likely to be included on the NECAP. Specific responses and strategies varied, depending on the academic level of the school and the degree of pressure to improve scores to make AYP.

Teachers at all three elementary schools discussed the need to instruct young children in test-taking skills and build children's familiarity with the test format and test vocabulary. This was motivated partly by a desire to reduce stress for children unfamiliar with these types of tests. The most commonly described practice was to use test items released by the state from a previous year's test. Hutchinson teachers and students also described the use of worksheets and the availability of after-school tutoring twice a week for a few weeks before the NECAP was administered.

Lewis Elementary, which was in improvement status at the time of our visit, described the most extensive, systematic preparation for the NECAP among the elementary schools we studied. Study participants described how they had developed test preparation units with sample questions, practiced multiple-choice responses, and engaged in other test-taking strategies. These test preparation activities began when students came back to school in September and continued until the assessment was over in October. School officials acknowledged that "there's more test preparation [at that time] and everyone worries about the test." One administrator commented that everyone in the school was involved in test preparation—an "all hands on deck" approach that included resource teachers and the school psychologist.

Test preparation was not limited to the elementary schools, however. School officials, parents, and students all described some activities designed to prepare students for the NECAP. At Wittman Middle School, parents were aware of the NECAP and said their children prepared for it and reviewed content at school. Students also talked about taking pre-tests, participating in test reviews, and doing warm-up exercises at the beginning of the school year to prepare for the exam. "[Teachers] give us . . . strategies to help us," explained

one student. Other students said they could stay after school and get help from their teachers if they wanted. Another student commented that teachers prepare the students for the NECAP throughout the school year.

The nature of Vare's curriculum and authentic assessment program does not lend itself to preparing students for testing because students do not take many classroom tests. Administrators and teachers recognized that students needed to be drilled on test-taking skills. To address this need, the school decided that for the first three weeks of the school year, a morning period that would normally be used by students to work on their yearly projects would instead be used to concentrate on the types of math and reading skills tested on the NECAP. The students we talked to had differences of opinion about whether they felt well prepared for the NECAP and noted that the preparation varied depending on their teachers and course schedules.

While teachers at Farnum High School reported resisting teaching to the test, they acknowledged that they do teach skills they know will be tested on the NECAP. A few students commented that this attention to test items was more transparent in math classes than in English classes. Students reported being given a packet of worksheets in their math classes one week before the test; they worked on these sheets during class and independently. In contrast, English teachers reported that because the NECAP administers different kinds of writing prompts to students randomly, students must practice different writing styles throughout the term to respond to various prompts or audiences.

COMMON INSTRUCTIONAL STRATEGIES AND PACE OF INSTRUCTION

Our classroom observations in Rhode Island revealed that teachers had adopted strategies to maximize the amount of curriculum content covered during the school year. Figure 1 shows the percentage of time devoted to various types of instructional activities according to our classroom observations. Under the definitions used for this study, closed questions refer to questions asked by teachers that have only one or a very limited number of "correct" answers. Open-ended questions have more than one answer or can be interpreted differently, and are used by teachers to encourage students to explore possibilities and ideas. Problem modeling refers to teachers showing students the steps

for solving a particular problem. Additional definitions of instructional activities can be found in appendix B. The percentages of observed classroom time total more than 100% because more than one instructional practice can be observed and recorded in the two-minute intervals used in classroom observations.

Different patterns of instruction were observed in the schools we studied in Rhode Island. At the elementary and middle school levels, the most frequently observed activities were directed by teachers; these teacherdirected activities are one way of maximizing the amount of content covered during the school year. For example, elementary and middle school teachers, on average, spent 30% of the observed classroom time asking closed questions and 24% in teacher-led discussion. Significant amounts of time were also spent at the elementary and middle school levels on individual seat work (19% of observed time), silent reading (17%), and hands-on activities (13%). At the high school level, teachers spent less time on teacher-led discussion (9%) but more time on modeling problems (25%), particularly in math classes. On the other hand, no significant amount of time was spent on hands-on activities or silent reading in high school classes.

Teachers in our study expressed concern that class time for teacher-student interactions has been limited by the pace of instruction. Parents, as well as teachers, noted that there is pressure to increase the pace of instruction, which they felt restricts teachers to teaching to the standards rather than teaching to mastery. Teachers at several schools pointed out that the time it takes to administer the tests also reduces instructional time in the subject being tested.

As mentioned earlier, teachers at Hutchinson reported using pacing guides developed by the district, which are very specific to the NECAP. These pacing guides dictate the topics teachers should focus on and in what order, the amount of days that should be spent on each topic, and which topics could be skipped if teachers fall behind. Teachers at Chace also followed a pacing guide designed to improve consistency across districts in meeting GLEs. Teachers at both schools noted that the pacing guides restricted their flexibility in their daily teaching schedule and reported gaps in the textbooks and curriculum materials. As a result, teachers mentioned that they fill in the gaps with supplemental materials.

Figure 1. Percentage of Classroom Observation Time Spent on Various Types of Instructional Activities, by School Level

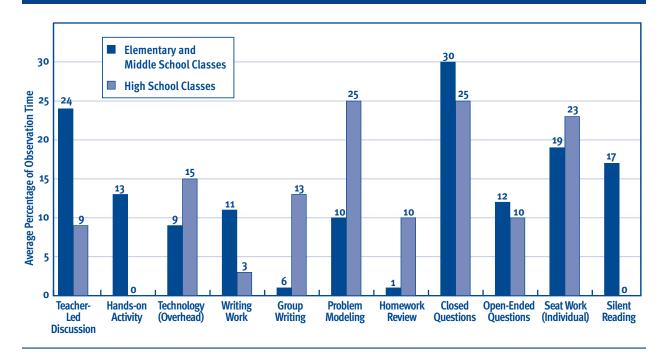


Figure reads: Elementary and middle school teachers spent an average of 24% of observed classroom time in teacher-led discussion, while high school teachers spent 9% of observed time in this type of activity.

Note: Percentages shown may total more than 100% because more than one instructional practice can be observed and recorded in the two-minute intervals used in classroom observations.

Source: Center on Education Policy, Rhode Island classroom observation data, 2008.

Similarly, teachers at Wittman Middle School reported following schoolwide curriculum and pacing guides in reading and math. Several teachers felt these pacing guides are well-aligned with and closely tied to the GLEs. Teachers said that all students, regardless of which teachers or course schedules they were assigned to, were "doing the same thing" and that all teams covered the same content. All teachers said the consistent curriculum has helped with behavior problems and student familiarity. Some teachers cautioned, however, that even though every classroom should progress evenly on the curriculum in terms of the skill level being taught, teachers were not necessarily addressing concepts simultaneously.

These responses to our interview questions support the findings noted in the research literature by Hamilton et al. (2008) and others—namely, that systematic reform efforts are having a direct impact on organizational structures and have led to changes in teacher practice. As one teacher observed, however, "everybody is more or

less left to their own to devise the materials and the structure of their class," indicating that teacher behavior in their classrooms remains somewhat autonomous and independent of school-level organizational changes.

PERCEIVED IMPACT OF TEST-BASED ACCOUNTABILITY ON INSTRUCTIONAL AND ASSESSMENT STRATEGIES

Teachers at Vare High School spoke repeatedly of changes in their instruction and assessment strategies to prepare for the NECAP. One teacher described this change as "teacher-centered, not project-based. It was different than what we normally do in a lot of ways." Several teachers described their understanding of assessment in relation to their students' abilities and to "carryover" knowledge and contended that this philosophy is in opposition to test-driven accountability. As an example of what is meant by "carrying over" knowledge, one teacher explained that "authentic assess-

ment" at Vare in 2007-08 consisted of a series of debates that students prepared for and participated in. During a debate, one student referenced the school project from the previous year. This teacher claimed that the student had demonstrated retention of knowledge because she was able to recall and apply information learned more than a year ago.

To understand whether there were differences in instructional activities and classroom grouping between higher- and lower-performing schools, we analyzed classroom observation data from the three elementary schools and one middle school participating in our study. Our observations of classes in one high school were excluded from this analysis because they differed considerably from the elementary and middle schools in instruction, curriculum, and school environment. As noted above in the discussion of study methods, the observation data represent a snapshot of instructional practices in 57 elementary and middle school classrooms during a 30-60 minute period of one school day.

As shown in **figure 2**, we found statistically significant differences across schools in the use of four instructional activities: teacher-led discussion, closed questions, open-ended questions, and seat work. Teachers in Hutchinson Elementary and Chace Elementary, two higher-performing schools, spent relatively more time on teacher-student interactions, such as discussion and questioning. For instance, teachers in Hutchinson spent an average of 38% of the observed classroom time on teacher-led discussion, more than three times as much as teachers at Wittman Middle School and Lewis Elementary, two schools that were in NCLB improvement during school year 2007-08. By contrast, students in Wittman and Lewis spent more time on seat work than those in Hutchinson and Chace. Classes at Lewis spent an average of 35% of classroom observation time on seat work, compared with 15% of observed time in Hutchinson and just 5% in Chace. This finding indicates that teachers at Wittman and Lewis emphasized individual student work, while those at Hutchinson and Chace emphasized classroom discourse.

Figure 2. Differences in Time Spent on Various Instructional Activities at Four Rhode Island Schools

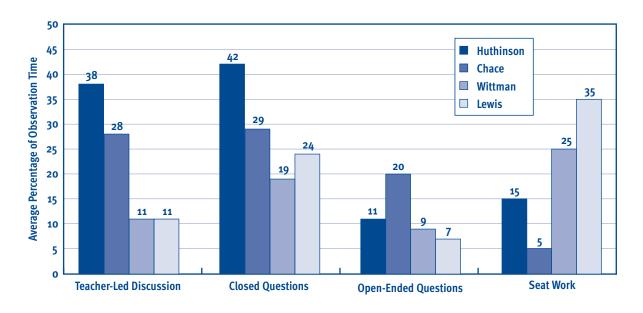


Figure reads: Teachers at Hutchinson Elementary spent an average 38% of observed classroom time on teacher-led discussion, while teachers at Chace spent 28% percent of observed time on this activity and teachers at Wittman and Lewis spent 11%.

Note: Only major activities with significant differences across schools are shown in the figure. A major activity is defined as one that used more than 10% of observed classroom time.

Note: Percentages shown may total more than 100% because more than one instructional practice can be observed and recorded in the two-minute intervals used in classroom observations.

Source: Center on Education Policy, Rhode Island classroom observation data, 2008.

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Figure 3 compared student grouping strategies at the four schools. All four schools used whole-class instruction as the predominant grouping: in three of the schools, at least 85% of the observed classroom time was spent in whole-class instruction. Teachers at Hutchinson and Chace also spent a considerable amount of time on one-to-one instruction, 31% and 45% respectively. At Hutchinson, teachers spent about a quarter of the time (26%) on individual instruction. Often multiple grouping strategies were used simultaneously; for example, some one-to-one instruction may be incorporated into whole-class instruction. For this reason, the percentages of observed time total more than 100%.

It is interesting to note how much instruction varies across schools despite the focus on state standards; this may be partly because the curriculum was different in each of the schools. The variations exist not only among schools with different AYP performance, but also between the two higher-performing schools.

Although grouping students by their abilities and learning needs is known to facilitate individualized instruction, we also found that teachers in the schools we studied were able to cover the material in the curriculum when they grouped students of mixed abilities. Farnum High School, for example, has eliminated the lowest track in English as part of a push for more rigorous instruction. This has resulted in more heterogeneous grouping, which requires teachers to focus more on individualizing instruction for students. According to one administrator, the use of collaborative classes, along with the school's literacy enhancement program, contributed to an increase in test scores in English. Farnum also eliminated self-contained classrooms for lower-performing students with disabilities and has placed these students in a math class taught by both a math teacher and a special educator.

Vare High School also uses a heterogeneous grouping strategy called "looping." Students are assigned to teams of heterogeneous ability groups, and teachers are assigned the same students for two to three years. This strategy is designed to improve continuity in instruction and develop stronger teacher-student relationships.

One-to-One

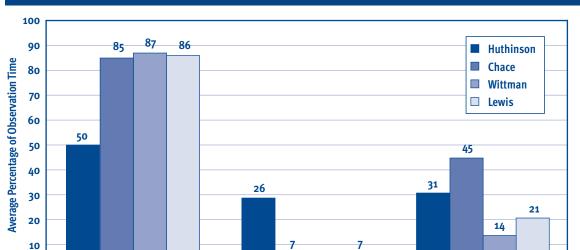


Figure 3. Comparison of Student Grouping Strategies at Four Rhode Island Schools

Figure reads: Teachers at Hutchinson Elementary spent an average of 50% of observed classroom time on whole-class instruction, compared with 85% of observed time at Chace Elementary, 87% at Wittman Middle School, and 86% at Lewis Elementary.

Individual

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Note: Percentages shown may exceed 100% because more than one instructional practice can be observed and recorded in the two-minute intervals used in classroom observations.

Source: Center on Education Policy, Rhode Island classroom observation data, 2008.

Whole Class

Because the team of teachers has the same students for two years or more, they are better able to track students' development and communicate to district and school administrators about the students' characteristics that are affecting their achievement. The makeup of these teams is reconsidered if a large number of students fail to meet expectations or if there is a need to reassign students to improve class dynamics. For example, said one teacher, "maybe we get some more talkers—like we have one class that's very quiet, so we're thinking about getting some kids that will hold a conversation a little more." Looping also allows teachers to structure classes and move students so they work better as a team. Teachers, rather than the central administration, are responsible for determining student schedules.

STRATEGICALLY TARGETING STUDENTS CLOSE TO PROFICIENCY

One widely reported response to NCLB and other highstakes accountability policies is to target resources and interventions on students who are on the verge of becoming proficient on the state assessment—students commonly referred to as "bubble kids" (Booher-Jennings, 2005; Hamilton et al., 2007). These students often receive targeted instruction or specialized curriculum in an attempt to raise their scores to the proficient level. Rhode Island's index proficiency score system also gives credit for students moving up from levels well below proficiency. According to the state, the system was developed in part to prevent strategic targeting of students. We found that our case study schools are using the strategy of targeting bubble kids, albeit in different ways and to varying degrees. In five of the six schools we studied, teachers and administrators talked about how they strategically target students who have scored close to the proficiency mark on the NECAP. One district administrator contended that targeting students close to proficiency is the status quo in Rhode Island:

Well, I think if you were going to go throughout Rhode Island, that's what you would find because that's how fragile the accountability system is . . . I remember when the Rhode Island accountability system first started, this school had six students for whom they had zero scores, and it happened that the kids just didn't participate in the assessment. So, all you have to do is target a handful of kids, and you can sway your results. And so I think that pattern of focusing on kids that are near proficiency is pretty common throughout the state.

We also found that more intensive efforts to strategically target students appeared to take place at the elementary level. In all three elementary schools we studied, this strategy was reported by both teachers and administrators. They often candidly discussed the reasons why they felt it was necessary to target students close to proficiency, including the diversity of the students they serve and, in some cases, the mounting pressures to meet the numerous achievement targets under the state's accountability system. One interviewee explained how focusing on the bubble, or "bump-up," kids could dramatically improve student achievement:

We looked at the small bump-up group . . . We had 37 targets to meet. [So we were] . . . focusing on strategies of test taking and making students aware of, "if you got a 37 and you need a 39, look how close you were. Here's the one thing you could have done."

Access to assessment data was a necessary prerequisite for targeting students. Teachers and administrators provided detailed descriptions of how assessment data were used to identify students who would receive more intensive instruction and specialized curriculum. One group of teachers explained that, based on test score data, students were grouped into three levels labeled green, yellow, and pink. For instance, the yellow group included students who were close to scoring proficient, while the pink group was composed of students with somewhat lower scores than those in the yellow group. Two teachers further elaborated on the kinds of conversations they had during this sorting process:

Teacher 1: We met with the principal. We looked at the test scores, highlighted kids and said, "Okay, this one's a green, this one's a pink, and a yellow." And then we grouped—

Teacher 2: And analyzed them: "Why do you think they're pink?"

Teacher 1: Right. Looked at the scores, saw what they needed and then we actually—kids would get pulled out of the rooms into small groups. Then I'd work with some. So there was a lot of that going on.

Another teacher described how NECAP data were used to strategically target the bump-up group for instruction and determine who would provide that instruction: We group them by their scores . . . [For] our "twos," the students that almost made it, we went deeper . . . There are some that are— only two more points and they would have passed. We took all those twos and divided them up into three groups. The ones that were almost there, we call them our "bump-up kids." The [academic] coaches took the bump-up groups because we thought it could have more impact by working with the ones who were almost there—pushing them harder, pushing them a little beyond their comfort zone, hoping that would help them.

Study participants provided unique insights into how they strategically target students close to proficiency for special instruction and curriculum. For example, teachers in one elementary school explained that they sit in committees to break down test data and "target certain populations of kids in different subject areas." Once students are identified as being close to proficient in math, reading, or both, the school sends home math or literacy "baskets" filled with materials tailored to the student's level. In reading, for example, the literacy baskets consist of "fun things like Mad Libs, a writing journal . . . fun board games, different activities," according to one administrator. "And we went to the homes of the kids nearly achieving based on NECAP."

Other Perceived Impacts of Test-Based Accountability

Study participants at each of the three elementary schools described some other consequences of the increased emphasis on curriculum alignment and test scores.

On the negative side, some participants felt that an overreliance on standardized tests to measure achievement is negatively affecting teacher morale, development of the whole child, and the depth of the curriculum.

In most of the schools we visited, teachers and administrators appeared to be working very hard, sometimes under difficult circumstances, and several expressed frustration that their hard work, as well as their students' progress, was not being adequately recognized by the accountability system. Teachers at Lewis, a high-poverty school that had been identified for improvement, described their constant worry about test scores and its negative impact on their morale. "It gets tiring after a while to work and work and work and just con-

stantly be put down," said one teacher. Other teachers at Lewis talked about what they saw as the unfairness of an accountability system that does not adequately consider differences among schools in resources or in students' needs, backgrounds, and lives outside school. One interviewee explained the situation in this way:

You feel like a punching bag... [W]e have to meet 37 targets. You know someone in the suburbs doesn't have to meet that many... [and] if I meet 36 targets today, I'm still going to be a failing school. We don't feel like a failing school.

Another teacher talked about the pressure to help students do well on the state tests:

I mean, you work as hard as you can and do as much as you can to try to help students as much as you can, and preparing them to be emotionally stable on the day of the test. And there are so many things you can't help with . . . And you're about to receive a report on your scores from people who really don't even understand at all what went into getting those scores. So I feel pressured to get a good score.

Some teachers also pointed to what they saw as negative impacts of test-based accountability on the academic and social development of children. One teacher at Hutchinson observed that the increased focus on academics as early as kindergarten allowed fewer opportunities for children to gain social skills through play. Another teacher felt the lack of time for social studies and the elimination of field trips was lessening the connection between the school and the community.

Teachers at Wittman Middle School expressed concern that state standards and tests failed to recognize the cultural diversity present in their school and district. One teacher noted that a question on the NECAP included a reading passage about a snow day, even though many of the school's ELLs had never seen snow. "They take the test in November, and they've never seen snow," the teacher said. "How can they write intelligently about what to do on a day of snow . . . Those things indicate a cultural bias." Math teachers also felt that the language used in some math questions was culturally biased, noting that many of their students did not understand the context of the math problems presented to them.

On the positive side, at the district level the increased focus on standards and accountability has motivated school officials to provide more opportunities for teachers to collaborate on curriculum and has provided data to help target instruction to specific knowledge gaps. When staff at Lewis decided to make a concerted effort to raise test scores, teachers met by grade level during the school day to analyze test scores and previously released NECAP items. These meetings included classroom teachers, specialists, and special education staff. Consistent with the state initiative to create more collaborative time, the schedule was rearranged to free classroom teachers and specialists for two half-day sessions. Teachers from different grades were paired up so that they could attend. For example, 2nd grade students would go to 3rd grade teachers while 2nd grade teachers attended the morning meeting, and vice versa in the afternoon.

A focus on standards-based accountability has also drawn more attention to low-performing subgroups of students, according to study participants, a shift that one administrator at Farnum described as an "awakening." Another administrator said that NCLB and Rhode Island's state accountability system has truly "had a positive impact in waking up people to underperforming subgroups," adding that the federal law "has created data as an impetus to focus on all kids." Many administrators explained recent efforts by themselves and teachers to learn how to use test data strategically, as explained in more detail below.

Additional Impacts of Federal and State Accountability

As we began to collect data and interview teachers, students, parents, and administrators, we found that many participants wanted to focus on how they were attempting to increase student achievement outside of formal accountability policies. Therefore, we present some findings related to the participants' perceptions about additional influences on student achievement.

USE OF DATA

All case study schools have significantly increased their use of data since the implementation of the NECAP. These schools are using data to make decisions about curriculum, instruction, professional development for

teachers, and other areas. According to study participants, some schools appeared to be more effective than others in using data, and the effectiveness of data analysis impacted the success of the school.

Teachers and administrators are using data to better understand their own teaching, identify students who need additional help, pinpoint specific areas where students need additional support and discern other factors that might be impacting students' performance. A teacher at Lewis Elementary described the kinds of discussions teachers had about data when they met in grade-level groups:

We began by poring through the data and really looked at ourselves personally and down deep. I mean we first looked at our overall scores based on our interim assessments and our NECAP scores. We then went deeper from the school level, we went to grade level, ultimately to [the] classroom. And then down into the students themselves individually.

In addition to data from the state assessment, teachers and administrators in our case study schools used data from a variety of standardized diagnostic assessments to pinpoint areas where students need specific help in learning reading skills.

Teachers in Beneteau and other school districts now have the opportunity to design formative assessments in their ATI Galileo systems (an integrative technology system that links assignments, grade-books, and online testing with district goals and state academic standards).

Many district and school administrators and teachers said that the use of data at Wittman has changed significantly over the past five years. One teacher noted that Wittman teachers hardly looked at data in the past because schools were not held as accountable for student performance as they are now. Study participants at Hutchinson also reported changing their use of data significantly. Ten years ago, detailed achievement data were nonexistent, according to one administrator, but today, the use of data is "pervasive," and district-mandated professional development is driven by data. An analysis of the district's strategic plan supports this contention; every district objective begins with the phrase, "Student data will . . ."

Many of the teachers interviewed reported that NECAP data help them to make better decisions about teaching, classroom management, and student placement in classes, and in some cases to make better schoolwide and classroom-level decisions. For instance, a Tartan district administrator noted that the current system of using data has helped in three major areas: student achievement, classroom management and organization, and teacher instruction. Since Wittman Middle School (in the Tartan district) uses a looping approach in assigning students to teachers, the data are useful in determining how students have progressed from year to year.

Farnum High School offers a good example of the use of data to improve the school and increase accountability. One Farnum administrator reported that data have helped to highlight the school's strengths and weaknesses compared with other Rhode Island schools and indicate the areas that faculty and staff need to work on. Another administrator added that data have also helped Farnum transform from a "traditional" high school focusing on college preparatory skills to one that serves all the needs of all students, especially those who are struggling. For instance, the administrator reported, "we've eliminated a lot of tracks in the school, collapsed levels of courses, added and eliminated a lot of the nonrigorous coursework in the school." Study participants at Chace also discussed how they use NECAP data to guide curriculum, instruction, and teacher professional development, as well as to target students for particular interventions and remediation.

Some teachers interviewed reported that decisions based on data have been oriented more toward test preparation and indicated that the district was primarily responsible for this decision. For instance, a teacher at Vare High School noted that "the language program is a hundred percent data driven" because the skills students learn in language classes are the skills they need to pass the state test.

In Lewis and other schools, study participants mentioned that data have been used to target individual students for interventions as well as to identify gaps in the curriculum, and these actions have contributed to an increase in students' test scores for school year 2006-07. Teachers and administrators at Lewis also stressed that this more intensive focus on data has been brought about specifically by test-driven accountability.

School administrators at Vare are also developing professional development activities to train teachers to use data more effectively. According to a district administrator, Vare is moving in the right direction by "looking at [data] systematically, and actually using the right measures on the test is something that is being embraced now." In the past, this administrator said, "we looked at the SAT 10 results, we looked at the NECAP results or previously the NSRE results, but we were missing a lot of other tools that you need such as screening measures, progress-monitoring tools, diagnostic tools, and program assessment."

Data use and interpretation was not limited to administrators or teachers. At Wittman Middle School, students and parents also reported that they are familiar with at least some of the state test data and understood its application to their achievement and progress. For instance, students said that from looking at their NECAP results, which they received with their report cards, they understood how they were doing in comparison to other students in the district.

Most study participants also mentioned, however, that the NECAP data arrive too late for effective analysis. For instance, at Hutchinson, a few teachers indicated that they received test results too late in the school year, so they cannot use them to work with their current students. A state official said, however, that for the school year 2008-09 ad future years, scores should be available by January.

In addition, many teachers reported that some data are more useful than others. Hutchinson teachers, for example, explained that assessments used in the lower elementary grades, such as the Phonemic Awareness Literacy Screening, tend to be more useful in assessing and guiding improvement among their students than those used in the upper grades. Overall, however, teachers reported that the recent focus on accountability at the state level has increased the level of monitoring of student progress. "[W]e're monitoring our kids much more closely now to see what works, what doesn't work, how do we change our approaches to [meet] their needs. And [it's] more screening than we've ever done," commented a Hutchinson teacher.

PARENTAL INVOLVEMENT

Parental involvement varied across the Rhode Island case study schools. Strong parental involvement was evident in just two of the schools, Wittman Middle and Hutchinson Elementary.

Many interviewees reported that parental involvement is high at Wittman. School administrators, for instance, noted that activities held for parents, such as school report nights, generally attracted around 50 parents, even before the activities were mandated by the state. School report nights are used to inform parents about test scores, and these scores are used to prepare their students for the NECAP.

Teachers added that their principal is primarily responsible for getting parents involved in school activities. The principal has "honor roll award ceremonies with parent breakfasts," one teacher said. "And [we] have an active parent/teacher association." Wittman also has a home/school liaison charged with making sure school information and resources reach all parents.

Strong parental involvement was also evident at Hutchinson Elementary School. Some of the parents at the school have developed a program called Friends of Hutchinson that helps to connect parents with other parents, their children, and teachers in an effort to build school-community relationships. One parent described the benefits of these efforts:

Parents have a busy schedule after they drop their children off. But we try to do a couple of things during the school year so parents can get together and meet other parents. And students can socialize. [We create an environment where it is] nice and close knit, that if you have a question, if you want to ask the teacher something . . . you get to know the teachers on a one-to-one basis.

LEADERSHIP

Interviewees spoke about how strong leadership facilitates student achievement. At Wittman, for example, most study participants pointed to strong administrative leadership at both the district and school levels as a key ingredient in the positive change in school climate. The actions of administrative leaders at Wittman and at the district indicate that these leaders are risk-takers and visionaries, and that they hold high expec-

tations for teachers and students. Furthermore, according to study participants, school and districts leaders have also provided their staffs with the necessary tools to be successful.

Most teachers agreed that the school's administrators are strong leaders, especially the principal. "I think the biggest change has been with leadership . . . from the superintendent on down to the principal," said one faculty member. Another interviewee reported that the principal "is a never-ending ball of energy, positiveness, bringing in interventions, staying on top of the teachers." Some study participants noted that the school's principal has high expectations for teachers and, in the words of one interviewee, "has this mantra . . . 'we can do it; we can do it' . . . and everyone is believing around here that we can do that."

Interviewees from Hutchinson also cited strong leadership as a factor associated with high student achievement. Interviews with district officials revealed them to be leaders with a commitment to equity and change. At the school level, many teachers said that the school's leaders, past and present, have been strong principals who were supportive of teachers. For example, one group of teachers interviewed discussed how the principal is willing to make time for teacher collaboration whenever possible. Some teachers also stressed that the school has always had strong educational leaders.

A current administrator remarked on a previous principal's strength as a leader and the impact of her tenure on current student achievement: "The woman who was principal of this school when the school opened ran a good, tight ship. And she had high expectations for her teachers, and they had high expectations for the students. She left a legacy."

Other case study participants did not discuss leadership in a positive light. For example, Lewis is undergoing considerable policy churn and administrative turnover. Some study participants at Lewis cited as problematic the high number of new curricular and instructional programs (particularly in reading) implemented at the school and within the district over the last ten years. Some teachers discussed the frequent implementation of new programs at their school:

Teacher 1: It's awfully hard, too, to keep going, to keep learning a new program.

Teacher 2: It's overwhelming, but when it's a nice program—I really like the math and social studies . . .

Teacher 3: When it's a positive move, like [when] people have researched it, they're thorough about it, and how it will affect all populations, [then] I don't think teachers mind the change. But when you're thrown something, and they're not organized about it, they don't roll it out appropriately; when there's not enough training; when it was not researched enough; then they're finding it's not working out for most students. I think that's what gets frustrating about it.

TEACHER CHARACTERISTICS

The characteristics of teachers and their responses to state standards, district and school leadership, and students are also integral to a school's success, according to most study participants. Interviewees at all six schools studied pointed to three teacher characteristics as particularly important: teachers collaborated with one another, held high standards for their students, and were highly motivated.

At Hutchinson Elementary, for example, many study participants pointed to these three teacher characteristics as key factors in the school's academic progress. Hutchinson teachers had high expectations for their students; according to one administrator, the school's teachers never believed "that students cannot learn. It's always that they can learn. And they would hold them to the highest standard." Parents also spoke about the teachers' sense of accountability at Hutchinson; teachers "hold each other accountable," said one parent.

Interviewees from Chace Elementary also highlighted the importance of these teacher characteristics in promoting student achievement. Several administrators discussed how teachers at Chace do a wonderful job collaborating with one another.

Many study participants at Lewis and Chace identified teachers they thought were highly effective and noted how teachers had contributed to their school's success. A number of administrators and teachers emphasized teachers' work ethic, pointing out that many teachers work very hard and often beyond their contracted work day.

Interviewees at Wittman Middle School and Farnum High School discussed the importance of various professional development activities for teachers. For instance, teachers were provided with training on how to better interpret data from school assessments and surveys and use it effectively in their teaching. At Farnum, administrators implemented two initiatives to improve communication and collaboration about instructional strategies: the Teacher Learning Center and common planning time. The Teacher Learning Center responds to the need for teachers to collaborate and communicate across disciplines by looking at data, defining goals, and making recommendations to the school improvement team. The current accountability system has "forced teachers to understand that there's a need . . . for them to work together," one administrator explained. Most of the Farnum teachers we interviewed said the Teacher Learning Center has been successful. As one result of the collaboration encouraged by this center, teachers have strategically integrated skills across classes, such as integrating the math skill of reading graphs (interpreting data) into social studies.

RESOURCES

Many study participants said that resource limitations—including limited funding, shortages of highly qualified staff, and inadequate materials—were hampering the success of their school.

Vare and Lewis schools use site-based management, which means that decisions about budgets, instruction, and other crucial areas are made by a team of school administrators, teachers, parents, and community members rather than by the district's central office. This type of management has contributed to the climate and structure of these two schools. Both schools experienced trouble with resources, however, because their site-based decisions interfered with district-level decisions on funding, recruitment and hiring of teachers, and other areas. Interviewees at both schools stressed their lack of resources.

At Vare, a school administrator made the following comment about the school's high rate of teacher turnover:

I think we do a pretty good job of moving [our students] forward, but the deficits are too large for us to totally overcome quite often. We've gotten better at what we do, at our teaching, and I think that we

can still get better . . . I've had to deal with 40% turnover in staff each year for the last four consecutive years.

According to this administrator, staffing problems include the use of long-term substitutes and the hiring of staff who are not highly qualified in their subject area (the district handles teacher hiring). For example, when a position remained vacant at the beginning of the school year, "we had day-to-day subs, and finally in November we ended up with another math teacher," the administrator explained. Students were directly affected by these staffing challenges, the administrator said:

I have one group that didn't get math last year; I have another group that didn't get math the year before. And so, when you talk about testing, you know I get a group of 30 kids from two years ago who will be tested next year, who essentially had a bad year of math or no real math. And this year my blue team, they have a year of bad math behind them . . . [W]hen we do the test prep, we had to have the science teacher do the math because the math teacher couldn't do the math. He just couldn't even control the kids to do the math.

At Lewis, teachers said a lack of materials, particularly the lack of coherent reading curricular materials, has affected student achievement. A district administrator admitted that a lack of funding has been an impediment to effective teaching at Lewis and other district schools:

[T]he teachers don't have a lot in the way of tools for teaching students. So we also have to find funding so that they have the proper tools for teaching. They have a balanced literacy framework, and they do have some tools and materials that were funded from Reading First. But it's so much that it's not focused. So teachers are doing a lot of everything instead of focusing on what they really need to do to move those students forward.

One teacher described how inadequate funding and materials have made it difficult to implement instructional strategies for underperforming students (those eligible for what the district calls Tier 2 and 3 interventions):

We do not have enough supports to do [the Tier 2 or Tier 3 interventions] because you're supposed to do extra on top of what they already do for reading that hour and a half that we've allotted. And they need interventions at Tier 2 or a Tier 3. They should get at least 20 or 30 minutes extra time. We do not have enough time nor enough staff to implement that type of intervention.

Some school administrators viewed teachers' unions, which are powerful players in Rhode Island education, as an obstacle to progress by constraining the material and time teachers have to deliver their lessons. The school administrators interviewed felt the teachers' unions have shaped how schools in Rhode Island should operate. For instance, administrators in the Beneteau district said that before the onset of grade-level expectations and pacing guides, when the curriculum was "very, very, very loose" in the words of one interviewee, the "powerful union [was] intertwined with politics and [allowed] teachers to do whatever they want[ed] to do." Since then, an increase in accountability has provided the district with more leverage in its negotiations with the union, according to one interviewee:

[W]e knew a lot of times things needed to change, but . . . there were so many obstacles in our way, the union being one, or just lack of funding, too. I mean just many reasons we just couldn't make the change that we knew we needed to . . . when that accountability system went into place, we could use that as leverage. We have to do this because these are the consequences if we don't.

District and school administrators from Tartan also discussed the role of unions. One administrator said the union contract hampered reform:

[O]ur contract covers everything. The name, the word, a child isn't even mentioned in the contract. It is absolutely an adult entitlement document that constricts and restricts in every way, shape, and form. And the rank and file of the teachers are with us in terms of the reform efforts . . . I can actually tell you how many hours, how many conversations, how many times that faculty has had to meet to get what they are demanding, and they're fighting their own union.

Another administrator added that union rules can be "a barrier in terms of moving forward as quickly as we would like" and that this has ultimately impacted student achievement and school progress in Rhode Island.

Over the past few years, however, the Beneteau district and union have been able to work together to design professional development opportunities to meet teachers' needs. As one district administrator explained, a reason why this cooperative work is possible is because the union is "very knowledgeable about education.

Another example of district and union cooperation in Beneteau relates to a teacher "sick bank." According to a district administrator, this was not part of the negotiated contract but was something that both district and union agreed was important. The sick bank provides teachers with an assurance that if they are seriously ill they will not have to worry about receiving their paycheck and health benefits. The result, explained district administrators, has been a surprising "positive morale" among teachers.

At Hutchinson Elementary, a lack of local funding is a major limitation, according to study participants. The state contributes significant funds to the school because the local community cannot contribute the necessary funding. Further, many changes made over recent years were possible only because the district was able to obtain additional funding. For example, the district received a federal Comprehensive School Reform grant that it used to implement the ATI Galileo technology system. District officials also pointed out that without Reading First and Title I funds, the district "would have never been able to do what we've done in the last five years."

Interviewees at Farnum High were also worried about funding. One school administrator explained how local policies limit funding and could affect the availability of resources for the school:

[B]asically now the funding mechanism for each town is that you cannot increase the amount that you tax people by more than . . . x percent. And it goes down each year . . . And it doesn't matter whether you have more tax dollars available or not. You can't. You know if you had— if it was three million dollars that people were taxed it can't be taxed by more than— I don't know what it is, 4 percent. And then the next year it goes down to 3.5 percent and then 3 percent. So funding is going to become an issue.

Wittman was the one case study school in which interviewees spoke positively about resources. In addition to its Title I funding, Wittman currently receives funding from approximately 52 grants. Wittman also has a grants coordinator to help teachers search for and write grants. The grants coordinator attributed the high volume of grants in Tartan to several factors:

[T]here is an actual position in the district [for a] grants coordinator and also because of the size of the district being very small. And the communication between [the grants coordinator] and the teachers or [the grants coordinator] and the administration is very important—informing them that there is a process, that [the grants coordinator] is here to help them.

Teachers in Wittman also receive funds through small private grants, according to the grants coordinator, including "opportunities for . . . students to engage in nonacademic programs, such as those supported by SCOPE, those supported by the Rhode Island Learn and Serve program."

Some Wittman teachers felt that funding and other resources are not adequate. For instance, teachers said they do not have appropriate programs for advanced students. One teacher noted, however, that teachers have not allowed inadequate resources to become an excuse for inaction:

Instead of focusing on what we don't have, I think we do a good job at focusing [on] what we do have and making it work. You know it's real easy to get caught up in the "oh we don't have this." And you know, [point a] finger [saying] "we don't have technology, we don't have this, we don't have that." And that distracts from the mission. That doesn't really move you forward.

Conclusion

In the Rhode Island districts and schools that we studied, test-driven, standards-based accountability has changed curriculum and instruction many ways. In some of our case study schools, these changes may have influenced student achievement. Study participants also report some negative impacts of these changes. It remains to be seen whether these sometimes dramatic changes in curriculum and instruction will lead to significant gains in achievement in most schools.

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Appendix A— Additional Information about Study Interviews

To collect qualitative data for this study, CEP researchers interviewed a variety of individuals, using the interview formats described below.

District- and school-level administrators. Researchers conducted interviews of 45 minutes to an hour in length with both district- and school-level administrators. At the district level, the researchers spoke with the superintendent, director of curriculum and instruction, assessment director, and Title I coordinator, where applicable. Researchers also interviewed principals, assistant principals, and reading and/or math coaches.

Teachers. Researchers conducted focus group interviews with 3rd- and 5th-grade teachers in the participating elementary schools, 8th-grade teachers in the middle school, and 11th-grade teachers in the high schools. Teachers from these grade levels were chosen because these levels have been tested for state and federal accountability purposes in Rhode Island for several years, unlike other grades where testing has been phased in since enactment of NCLB.

Students. CEP researchers interviewed students in focus groups of three to seven students at each school. Students were selected from grades 3, 5, 8, and 11 because these levels have been consistently tested for state and federal accountability purposes.

Parents. A study liaison at each school arranged for focus group interviews with parents. Any parent with a child enrolled at the school, no matter the grade level, was invited to participate. Most of the interviews were conducted on school grounds in the early evenings to best accommodate working parents' schedules.

Appendix B— Classroom Observation Instrument

Below are the definitions of the grouping practices, instructional strategies, noninstructional practices, and test preparation activities included in the classroom observation instrument used for this study.

GROUPING PRACTICES

Whole class—Teacher delivers instruction to the whole class. Also used when the whole class is working on the same assignment but on their own.

Large group—Teacher works with students in groups larger than five.

Small group—Teacher works with students in groups of five or fewer.

Pairs—Students work in pairs.

Individual—Students work on individual and different assignments. This shows a highly individualized curriculum.

One-to-one—Teacher works one-on-one with students providing direct instruction to that student.

INSTRUCTIONAL STRATEGIES

Assessment—Any formative or summative assessment given during our observation.

Board work—Students are asked to "go to the board" (chalk board or smart board) to solve a problem or for a related instructional activity.

Cooperative learning (roles)—Small teams of students use an assortment of learning activities to learn a subject or topic.

Demonstration—Teacher uses a demonstration as the instructional strategy. Examples include creating a shape using tangrams, conducting an experiment, or performing a piece of literature (such as a monologue or poem).

Formal problem solving—"Formal" techniques and strategies taught to help students solve problems. Some examples include "draw a picture or diagram," "solve a simpler problem," and "work backwards."

Group writing assignment (including pairs)— Students are working on some form of written assignment as a group. This does not include when students are working on "writing work" as a group (for example, creating a fictional story, screenplay).

Hands-on activity/materials/manipulatives—The activity is integral to the lesson; game pieces do not count. It does not include the use of calculators but does include protractors, rulers, etc. Group games are a hands-on activity unless it is a noninstructional game such as Candyland, Risk, or Monopoly (unless using money is the objective).

Homework—Students work on homework during instructional time.

Learning center/station—These are more often used in elementary schools; the teacher sets up several different learning centers or stations, and students may travel from one to another depending on the amount of time it takes to complete each center.

Presentation/lecture—Teacher delivers instruction primarily through lecture with very little discussion.

Presentation/lecture with discussion—A discussion follows a lecture format. This is distinguished from classroom discussion because there is a lecture component to it.

Problem modeling—This can be led by a teacher or student; teacher shows students step-by-step how to solve a particular problem. General problem solving techniques such as "solve a simpler problem" are categorized as formal problem solving.

Read aloud—Teachers and/or students take turns reading aloud from a text. Who is participating (teacher and/or students) is designated.

Review of work—Used only if the teacher states that students are reviewing a concept previously learned. For example, the teacher may state that the students need to review a concept such as the associative property in mathematics before beginning the new unit's concepts. Does not include when students are reviewing a concept that was learned earlier in the week; this is meant to designate instructional time that is spent on reviewing material learned earlier in the school year

or from a prior year. Working on "skill and drill" worksheets (often mathematical facts) is included here.

Seat work—Students are given worksheets or an assignment to do on their own. Also includes when students are asked to do some problems on their own after they have worked through some examples as a whole class.

Silent reading—Students are asked to read silently during observation.

Small group discussion (include pairs)—Students are broken into groups and discussion is the main task of the group.

Structured note taking—While students may take notes at any time during the class, this occurs when students are prompted by the teacher to "take notes," "take out their notebooks," or "copy down this information."

Student-led classroom discussion—Student(s) actively lead a whole group discussion

Student presentation—This includes formal student presentations only, such as presenting a poem, short story, or piece of art work. This can also include when students are to present group findings.

Teacher-led class discussion—Teacher invites students to discuss an idea, topic, assignment. Questions can be closed or open but discussion is an integral part of the instructional strategy.

Use of film, video, DVD, or audio—Read-along texts are included.

Writing work—Can include essays, fictional writing, or research papers. Does not include students taking "essay" exams. That is included under assessments.

THE USE OF TECHNOLOGY IN INSTRUCTION

Can be either teacher or students utilizing some form of technology directed by teacher. Calculators are included only if they are being used for instructional purposes. Specifically, look for the use of computers, overhead projectors, Elmos, smart boards, LCD projectors, calculators (if used as instruction).

TYPES OF QUESTIONS TEACHES ASK

Closed questions—Teacher asks questions that have only one answer or very limited answers; there are "correct" and "incorrect" answers.

Open-ended questions—Teacher asks questions that encourage students to explore possibilities and ideas. These questions have more than one answer or can be interpreted differently.

NONINSTRUCTIONAL PRACTICES

Administrative task—Examples include taking attendance, collecting or passing out materials, checking to make sure homework is completed. Also includes when students move into different instructional groups such as small groups or pairs if instructional time is lost.

Classroom management—When student behavior interrupts instruction.

Interruption—Could include announcements, fire drill, assemblies.

Other—For example, "game time" would be an example of an "other" practice if the game is not related to instruction (e.g., Life, Trivial Pursuit, Battleship); classroom celebrations.

TEST PREPARATION ACTIVITIES

Teaching general test-taking strategies

Teaching problems of questions found on state assessment

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