

# Perceived Effects of State-Mandated Testing Programs on Teaching and Learning:

## Findings from a National Survey of Teachers

*National Board on Educational  
Testing and Public Policy*

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## EXECUTIVE SUMMARY

Tests have consistently been viewed as a lever to change classroom practices and improve general education. The current emphasis on high-stakes testing resulting from standards-based reform efforts is largely an extension of three decades of testing, with a new emphasis on higher standards and greater academic achievement. In large part, current state tests were designed to serve two functions: to measure student achievement of the state's content standards and to indicate school effectiveness.

To that end, consequences in the form of rewards and sanctions have been attached to test results in an effort to improve teachers' and students' performance. These rewards and sanctions vary from high to low in severity. Generally, they are applied at both the institutional level (districts, schools, administrators, teachers) and the student level — sometimes with similar stakes and sometimes with different stakes. Of particular interest in this study was the relationship between the two levels of accountability (stakes for districts, schools, and/or teachers, and stakes for students) and the effect of state testing programs on classroom practices as witnessed by those who experience their impact firsthand, namely classroom teachers. Consequently, results from the national survey of teachers are reported for five types of state testing programs, those with (1) high stakes for districts, schools, and/or teachers *and* high stakes for students (H/H), (2) high stakes for districts, schools, and/or teachers *and* moderate stakes for students (H/M), (3) high stakes for districts, schools, and/or teachers *and* low stakes for students (H/L), (4) moderate stakes for districts, schools, and/or teachers *and* high stakes for students (M/H), and (5) moderate stakes for districts, schools, and teachers *and* low stakes for students (M/L).

At least two themes emerge from these survey data. First, in several areas teachers' responses differ significantly when analyzed by the severity of the stakes attached to test results. Pressure on teachers, emphasis on test preparation, time devoted to tested content, and views on accountability are such areas. The second theme is that the views of elementary, middle, and high school teachers regarding the effects of their state's test differed from each other in areas such as school climate and classroom use of test results. And then, there are instances when stakes and grade level combined show interesting patterns in teachers' responses; in others there are no differences at all.

This summary is organized like the Findings section, by major areas surveyed. These areas include (1) school climate, (2) pressure on teachers, (3) perceived value of the state test, (4) alignment of classroom practices with the state test, (5) impact on the content and mode of instruction, (6) test preparation and administration, (7) perceived unintended consequences, and (8) accountability and use of test results. Within each area, we present findings for stakes levels, grade levels, and stakes combined with grade levels.

## I. School Climate

Items related to school climate dealt with teacher expectations for students, student morale, how conducive the climate was to learning, student motivation, and testing pressure on students. Teachers from high-stakes states were more likely than were teachers from M/L states to report that students felt intense pressure to perform well and were extremely anxious about taking the state test. In states with high stakes for students, three-quarters or more of teachers reported this degree of pressure. This compares with about half of the teachers in low-stakes states. Test-related anxiety and pressure did not negatively influence teachers' expectations of student performance or perceptions of school climate. In states where stakes are high for students, large majorities of teachers (8 in 10) reported that most of their students tried their best on the state test. Although most teachers (7 in 10) indicated that student morale was high, teachers in low-stakes states were more likely to report this than were their colleagues in high-stakes states.

Elementary and middle school teachers were more positive about school climate than were their high school counterparts. Nonetheless, more elementary and middle school teachers than high school teachers reported that their students are extremely anxious and are under intense pressure because of the state test. In other words, the psychological impact was perceived to be greater at the elementary level, yet this did not seem to negatively affect the general atmosphere of the school.

## II. Pressure on Teachers

Items related to pressure on teachers dealt with pressure from administrators and parents to improve test scores, pressure to limit teaching to what is tested and to change teaching methods in ways that are not beneficial, and teachers' discontent with their profession (low morale or wanting to transfer out of tested grades). In general, teachers in high-stakes states reported feeling more pressure than those in lower-stakes states. However, regardless of the consequences attached to the state test, teachers reported similar feelings of pressure from parents to raise test scores and similar views on school morale. A large majority of teachers felt that there is so much pressure for high scores on the state-mandated test that they have little time to teach anything not covered on the test. This view was most pronounced in states where high levels of accountability are demanded of districts, schools, teachers, and students. This finding supports the contention that state testing programs have the effect of narrowing the curriculum. Also, teachers in high-stakes states were more likely than those in low-stakes states to report that they feel pressure from the district superintendent, and to a lesser degree from their building principal, to raise test scores. While most teachers reported such pressure, it was significantly lower for those in low-stakes than in high-stakes states. Between 3 in 10 and 4 in 10 teachers in high-stakes states compared with 2 in 10 of their counterparts in low-stakes states reported that teachers at their school want to transfer out of the tested grades.

Generally, elementary teachers reported feeling more pressure than high school teachers, while middle school teachers were somewhere in between. Further, elementary and middle school teachers in states with high stakes for districts, schools, teachers, and students reported the greatest feelings of test-related pressure as compared with their counterparts in other testing programs. A substantial majority of teachers at each grade level indicated that state testing programs have led them to teach in ways that contradict their ideas of sound instructional practices; this view was particularly pronounced among elementary teachers. This finding is a particularly distressing one and highlights the fact that state testing programs can have unintended negative effects.

### **III. Alignment of Classroom Practices with the State Test**

Items related to alignment of classroom practices with the state test dealt with compatibility between the test and the curriculum, instruction, texts, and teacher-made tests. Teachers in the H/H and H/L groups indicated greater alignment at the scale score level than did teachers in the other groups. At the individual item level, teachers in low-stakes states more often than teachers in high-stakes states found that teaching the state standards resulted in better test performance. Far more teachers in high-stakes states said their own tests reflected the format of the state test than did teachers in low-stakes states. A similar pattern occurred with regard to the content of teacher-made tests, although the differences were not as large.

Elementary teachers held the most positive opinion of state curricular standards but were less positive than high school teachers about the compatibility of their instructional texts and materials with the state tests. This may be due to the fact that unlike high school teachers, who generally teach one subject, elementary teachers have to deal with several tested subjects per grade. With far more texts and materials, there is more room for disparity. A majority of all teachers were positive in their opinions of their state's curricular standards, and the vast majority indicated that their district's curriculum was aligned with the state test.

### **IV. Perceived Value of the State Test**

Items related to the perceived value of the state test dealt with the accuracy of inferences that can be made from the test about quality of instruction, student learning, school effectiveness, and differences among various groups; the adequacy and appropriateness of media coverage of test results; and the cost/benefit ratio of the testing program. Teachers in high-stakes states, more so than those in low-stakes states, reported that the test brought much-needed attention to education issues. It should be noted that it was a minority of teachers across all stakes levels who agreed with this assessment of the power of the state test to call public attention to educational issues.

Elementary teachers felt to a greater degree than either middle or high school teachers that the state test measured achievement of high standards. Middle school teachers more often agreed with this item than did high school teachers. More elementary teachers thought that the test did not accurately measure what minority students know than did middle or high school teachers. Both elementary and middle school teachers felt to a greater degree than high school teachers that the test score differences from year to year reflected changes in the characteristics of students rather than changes in school effectiveness. Elementary teachers, more than middle or high school teachers, indicated that media reporting about the state test was not accurate.

About three-quarters of all teachers, regardless of stakes or grade level, found that the benefits of the testing program were not worth the time and money involved. A similar proportion felt that the media coverage of state-mandated testing issues was unfair to teachers and inaccurately portrayed the quality of education and the complexity of teaching. Across all stakes levels, 9 in 10 teachers did not regard the state test as an accurate measure of what ESL students know and can do, and 4 in 10 teachers reported that teachers in their school could raise test scores without improving learning.

## **V. Impact on the Content and Mode of Instruction**

Items regarding the impact on classroom instruction dealt with changes in the amount of time spent on a variety of activities and with the influence of the testing program on pedagogical practices and instructional emphasis. The items clustered into 3 scales: (1) impact on tested subject areas, (2) impact on non-core subject areas, and (3) impact on student and class activities.

More teachers in states with high stakes for students than in states with lesser stakes indicated that they spent more time on instruction in tested areas and less on instruction in non-core subject areas (e.g. fine arts, physical education, foreign languages, industrial/vocational education) and on other activities (e.g. field trips, enrichment activities). In general, the influence of state testing programs on teachers' instructional practices is more closely related to the stakes for students than those for schools.

More elementary and middle school teachers than high school teachers reported that they increased the amount of time spent on tested areas and decreased the time spent on non-core subject areas and on other activities. The impact of testing programs is generally stronger in elementary and middle schools than in high schools.

Across all types of testing programs, teachers reported increased time spent on subject areas that are tested and less time on areas not tested. They also reported that testing has influenced the time spent using a variety of instructional methods such as whole-group instruction, individual-seat work, cooperative learning, and using problems similar to those on the test.

## VI. Test Preparation

Teachers responded to a series of items related to preparing their students for the state-mandated test (e.g. on test preparation methods used and amount of time spent on test preparation). Teachers in states with high-stakes tests are much more apt than their counterparts in states with lower-stakes tests to engage in test preparation earlier in the school year; spend more time on such initiatives; target special groups of students for more intense preparation; use materials that closely resemble the test; use commercially or state-developed test-specific preparation materials; use released items from the state test; and try to motivate their students to do well on the state test.

Teachers in high-stakes states were more likely to report that they focused test preparation on students who were on the border either of passing or of moving to the next performance level. Elementary teachers in high-stakes states reported spending more time on test preparation than did their high school counterparts. Further, elementary teachers were more apt to report engaging in test preparation throughout the year than were middle or high school teachers.

Elementary teachers in states with high stakes for schools and students were twice as likely as teachers in the low-stakes states to report that their test preparation content was very similar to the content of the state test. When asked whether summer school should be required or recommended as a motivator roughly half of elementary and middle school teachers and a third of secondary teachers in the H/H states responded affirmatively compared with fewer than 1 in 10 teachers across all grade levels in the low-stakes states. Retention in grade as a motivator was selected by a quarter of elementary teachers, a third of middle school teachers, and 1 in 5 high school teachers in H/H states, while the frequency in the M/L states never reached 5% at any grade level.

## VII. Unintended Consequences of the State Test

Survey items in this area dealt with the effect of state testing programs on the instructional use of technology — specifically the use of computers in writing instruction and the effect of the state test on decisions related to persistence, including decisions about grade retention and dropping out of high school. One-third of teachers in H/H states compared with one-fifth of those in M/L states said their school does not use computers when teaching writing because the state test is handwritten. Roughly one-fourth of teachers in states with high stakes for both schools and students, and one-tenth in the other high-stakes states, agreed that the test has caused retention in grades, contrasted with only 3% of teachers in low-stakes states. As for dropouts, 25% of teachers in states with high stakes for students compared with 10% of all other teachers state that the testing caused many students to drop out of high school.

A majority of teachers across stakes and grade levels disagreed with all of the four unintended consequences described in this section – teachers not using computers to teach writing because the state writing test is handwritten, the district forbidding the use of computers in writing instruction, the test causing many students to drop out of high school, and the test having caused many students to be retained in grade.

## VIII. Use of State Test Results

Teachers' views on the use of the state test results fell into the following four categories: (1) district-level use, (2) classroom-level use, (3) the reporting of test results, and (4) professional development and resources. Results for each area will be presented in turn.

### A. Views on District-Level Use

Items in this area dealt with the use of state test results for three accountability purposes: school, student, and teacher/administrator accountability. Teachers in H/H states viewed the use of state tests for school, student, and teacher/administrator accountability as slightly less inappropriate than did teachers in other states. Further, student accountability was the most appropriate of the three uses (between moderately appropriate and moderately inappropriate, a neutral view), and teacher/administrator accountability the least appropriate. Although teachers in H/H states viewed the use of test results for accountability somewhat more favorably (or at least less unfavorably) than their counterparts in other states, their opinions were still at the neutral to unfavorable end of the spectrum relative to teachers in states where the stakes are not as high. This less unfavorable view could be a result of teachers' being more comfortable with test use for accountability, or simply being resigned to such uses. Many more teachers in H/H states (25%) said that their students' test results influence their teaching on a daily basis than did teachers in the states with lower stakes (10%).

Greater percentages of high school than elementary or middle school teachers, not surprisingly, reported that test results were used in their district to make decisions about graduation. Generally, awareness of how test results are used was lower at the high school level than in elementary or middle schools. This finding is reasonable for decisions about placement in groups by ability or in special education, which are generally made before high school and are simply carried forward independently of state test results. It makes less sense, however, for other uses (e.g. ranking schools publicly or holding schools accountable), where district-level use should be the same across all three school types.

Teachers, on average across all the states, were neutral regarding the use of state test results for student accountability. Their use for school accountability was seen on average as moderately inappropriate, and for teacher/administrator accountability as moderately to very inappropriate. When asked how state tests were actually used in their districts, all teachers most frequently cited use for accountability of schools and districts, ranking schools, and remediating students. Most uses of test results were cited by less than 30% of all teachers and many by less than 10%.

## B. Views on Classroom-Level Use

Items in this area dealt with the influence of school- and student-level test results on teaching. Teachers were asked how often school-level and student-level results on the state test affected their teaching. Significantly more teachers (40%) in states with high stakes for schools and students than in low-stakes states (10%) reported that their school's results influenced their teaching on a daily basis. Conversely, a greater percentage of teachers in low-stakes states (25%) indicated that the school's results influenced their teaching a few times a year than teachers in states with high stakes for schools and students (roughly 10%).

Teachers in H/H states tend to use state-mandated test results for classroom decisions to a greater extent than do teachers in low-stakes situations. Teachers in states with high stakes for schools and students used the results the most of any group to plan instruction (60%) and to select instructional materials (50%); teachers in low-stakes states used them the least (40% and 30% respectively). Teachers in states with high stakes for schools and students reported using the results significantly more frequently to give feedback to students than did their counterparts in low-stakes situations. Teachers in H/H states also reported using the results more often than other teachers to evaluate student progress; to group students within the class; and to determine student grades. It should be noted that the latter two uses were chosen by a small percentage of all teachers regardless of stakes level.

State-mandated test results influenced elementary teachers' instruction with much greater frequency than was the case for high school teachers. This may occur because the tests now focus elementary instruction on the standards tested, giving elementary teachers who must teach a variety of subjects much greater direction on what should be taught. These findings may also indicate that the state-mandated tests narrow or shape elementary curriculum to a greater degree than is the case at the high school level. Conversely, high school teachers' instruction may be least influenced by the state tests, because these teachers have always taught a specific subject area (e.g. math or history), and the test is measuring, for the most part, content they were already teaching. Middle school teachers fall somewhere between elementary and high school teachers in terms of subject matter specialization, and therefore the influence of the state test results on their instruction is somewhere between that for the other two groups, although generally closer to the elementary teachers. More elementary teachers reported using the results of the state-mandated test to aid in decisions about instruction, assess their own teaching effectiveness, provide feedback to parents, evaluate students, and group students in their class than did high school teachers. In general, high school teachers are least likely to use state-mandated test results.

Clearly, the stakes attached to the results of the state-mandated tests affect the extent to which teachers use them for various instructional and feedback activities. When the stakes are high for students and teachers, teachers use the results to the greatest extent; when they are low, they tend to use them less often. For 7 of the 8 activities listed, fewer than half of the teachers – regardless of stakes level – indicated that they use the test results to inform their practice, the lone exception being that a majority of all teachers reported using results to plan instruction. Further, very small proportions (less than 10% overall) use the results for student-specific decisions (i.e. grouping students within the class or determining student grades).

### **C. Views on the Reporting of Test Results**

Items in this section dealt with the various reports on test results that teachers receive: individual student reports, and school- and district-level reports. A majority of all teachers either agreed or strongly agreed that the individual student reports and the school and district reports are easy to interpret and provide useful information. Significantly more teachers (though still only 10%) in the states with low stakes were unfamiliar with the school and district reports than were teachers in any of the three high-stakes groups. High school teachers were the least familiar with the various reports. Between 10% and 20% reported that they have never seen these reports. Significantly fewer high school teachers than elementary or middle school teachers agreed that the reports provide useful information. Elementary teachers were the most familiar with the school reports; less than 10% reported that they had never seen them.

### **D. Professional Development and Resource Personnel**

Items in this section dealt with the adequacy of professional development related to the state testing program and the availability of someone in the school to deal with and answer questions about the program. The vast majority of all teachers (80%) indicated that they do have someone to turn to at their school to obtain accurate information about the state-mandated testing program. The sole difference occurred between teachers in states with high stakes for students and schools and those in states with low stakes (80% vs. 70%). More teachers in states where the stakes are high viewed the professional development as adequate than did teachers where the stakes are low. Conversely, greater proportions of teachers in low-stakes situations indicated that there is no professional development related to test preparation, interpretation, and use of test results. A significantly smaller percentage of high school teachers also indicated that the professional development activities focused on test preparation, interpretation, and use of test results are less adequate or nonexistent than did elementary or middle school teachers. The majority of all teachers viewed the professional development related to areas concerning implementation of the state-mandated testing program as adequate.

## Conclusions

This study shows that the severity of consequences attached to state tests affects the instruction students receive. Generally, as the stakes increase, so does the influence of the test; and in some cases, this influence varies for elementary, middle, and high school teachers within the same testing program. Further, the combination of stakes and grade levels produced significant differences, generally indicating that instruction at the lower grades in high-stakes states is most affected by the state test. However, in some areas there were no differences among stakes and grade levels; these findings were also of interest.

For the most part, the views of teachers in states with high stakes for both students and teachers (or schools and districts), i.e. H/H states, about the effect of state testing programs differed from those of teachers in states where the stakes were low (M/L states). The differences were in the expected direction: teachers in high-stakes situations, particularly in H/H states, reported feeling more pressure to have their students do well on the test, to align their instruction with the test, to engage in more test preparation, and so forth. In many instances, results from teachers in states where the stakes were low for students but high for schools (H/L) were very similar to those for teachers in H/H states.

Elementary teachers often indicated that they are most affected by the statewide testing program. For example, they reported more time spent on instruction in tested areas, less time spent on instruction in non-tested areas, more time spent on test preparation, and greater impact on their instructional practices than did secondary teachers.

The findings in this report need to be examined by policymakers and educators in their own state to determine whether the effects of the state test, as reported here by teachers, are the desired ones. To the extent that undesired effects are occurring, the testing program should be modified to minimize them. Only by listening to what teachers tell us is happening as a result of these testing programs can we be confident that these programs are having the intended effect. Teachers are on the front line every day. Their voice on this issue must be heard; their opinions must enter into the formation of sound testing policy. While some states do involve teachers in the formulation of the testing program, others do not. Even in states that do so, the number of teachers involved is small. We hope the findings presented here give voice to a broader cross-section of teachers than has heretofore been available on issues related to statewide testing programs, and that they spur more teacher input in the future.



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Created as an independent monitoring system for assessment in America, the National Board on Educational Testing and Public Policy is located in the Carolyn A. and Peter S. Lynch School of Education at Boston College. The National Board provides research-based test information for policy decision making, with special attention to groups historically underserved by the educational systems of our country. Specifically, the National Board

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