A survey, designed to take approximately 15 minutes to complete, was administered to 1,656 elementary school teachers in Michigan to obtain information on a variety of topics related to student assessment and mandated state testing. Most of the teachers were employed in small suburban or urban schools, and 88% were employed in the public schools. Teachers apparently placed very little value on the mandated tests as a way to evaluate a student's progress, and only 36% said that they used the state tests for this purpose. The assessment measures that teachers did find valuable were those that provided timely and useful information about individual children. Most teachers did recognize a role for mandated tests as diagnostic tools, but most did not agree that such tests should be used for teacher or school accountability purposes. More than one-third of the teachers felt pressure consistently during the school year to prepare their students for the mandated tests, and most thought that students had shown signs of stress over having to participate in mandated state testing programs. The results of the study raise serious concerns about any expansion of mandated testing unless dramatic changes are made in the ways in which such tests are administered. (SLD)
Impact of State Testing on Students and Teaching Practices: Much Pain, No Gain?

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Theoretical Framework and Objectives

Assessment practices in the schools should fulfill many purposes, including documenting student progress, improving instruction by enabling teachers to meet individual needs, helping teachers to build on student strengths and to address their weaknesses, and for conferring with parents and writing reports for school records. Among these practices, mandated testing programs, which currently exist in 48 states, can contribute to these goals. There is considerable debate, however, concerning the utility of mandated testing and its possible detrimental effects on school curricula and pedagogy. Yet, no large-scale systematic studies have been conducted to determine the nature of that impact.

Specifically, it would be important to determine whether, in the process of providing information on performance in specified subject areas of schools, districts, and statewide (the ostensible goal of mandated testing programs, e.g., Michigan Educational Assessment Program Handbook, 1997) and assessing student progress for purposes of diagnosis and parent reporting, teachers detrimentally revise their curricula and children suffer undue stress. In response, the Michigan Association for Early Childhood Teacher Educators (MiAECTE, 1998, 1999), especially concerned about reports of high levels of stress on both teachers and students and the impact of such stress on teaching practices, sought to provide such evidence through an extensive survey of teachers' assessment practices, including the role of mandated testing.

Survey Design and Sampling

The survey, which took approximately 15 minutes to complete, was designed to obtain information on a variety of topics related to student assessment and mandated state testing, including beliefs about testing and assessment and effects on students as well as teachers. Completed surveys were obtained from a broadly representative sample of 1,656 elementary school teachers in 51 counties with highest concentrations in the more densely populated areas in and near Detroit (Wayne Oakland, Macomb and St. Clair counties) and the Grand Rapids area. The statewide distribution of responses is shown in Figure 1. Most teachers (48%) were employed in suburban/small city schools or in urban schools (31%), and the remainder in areas classified as villages (12%) or rural (6%). Eighty-eight percent were employed in public schools, 6% in private religious and 2% in private non-religious schools, and 1% in charter schools. Twenty-nine percent taught Pre-K or K, 23% 1st, 14% 2nd 13% 3rd, 10% 4th, and 11% 5th or 6th grades. Most were Caucasian (87%) with the largest other group consisting of African Americans (3%). Their students were predominately Caucasian (71%) or African American (16%) as well.

Results

What value do teachers place on mandated tests for evaluating their students?

Apprently very little. When we asked teachers to rate the value of ways to verify an individual child's progress (on a scale from 0 = No value to 4 = High value), mandated tests were at the bottom of the list (Mean = 1.7), significantly lower than all other methods combined, F(1, 11585, MS error = .773) = 2256.00, p < .00001. In contrast, observing
children's work and maintaining portfolios were considered most valuable \((\textit{Means} = 3.6)\), followed by individual conferences with children \((\textit{Mean} = 3.2)\), conferring with parents about their child’s progress \((\textit{Mean} = 3.2)\), following their progress with checklists or rating scales \((\textit{Mean} = 2.8)\), and self-constructed tests \((\textit{Mean} = 2.4)\).

**What methods do teachers use to assess student progress?**

Consistent with the relative value placed on different methods, as shown in Figure 2, only 36% of the teachers indicated that they used mandated test scores to assess/evaluate their students’ progress. Ninety-one percent of the teachers did so by reviewing their children’s written work, 82% used observations and reflective notes, and 81% conducted individual assessments of skill areas. Somewhat less often, 76% obtained baseline performance information, 75% created their own tests or quizzes, 74% discussed progress with individual children, and 64% used checklists or rating scales to help assess their students’ academic achievement. Half of the teachers (49%) used publishers’ tests, which although relatively low, is still higher than the proportion of teachers who used school, district, or state mandated tests.

**What influences teachers’ decisions to use assessment methods?**

Importance ratings (0 = Not important to 4 = Extremely important) were obtained to determine the criteria teachers use to select assessment methods. As shown in Figure 3, the relationship to teachers’ curricular objectives \((\textit{Means} = 3.6)\) and usefulness in planning for individual children (3.5) were most important, followed by usefulness in reporting to parents (3.3), the amount of stress placed on students (3.2), ease of use (3.0), cultural fairness (2.9), and administrative approval (2.3). The assessment methods that teachers use and find valuable, therefore, are those that provide useful and timely information about individual children.

**What should mandated tests be used for?**

Although not placing much faith in mandated tests as effective for assessing individual student progress, most teachers (76%) indicated that their use for how to help the child progress (i.e., for diagnostic purposes) was legitimate. The vast majority disagreed or strongly disagreed, however, with the use of such tests: a) to determine teacher rewards (92%), b) to compare administrators/principals in the district schools (89%), c) to compare classrooms/teachers within one school (87%); d) to compare school districts (80%); e) as an evaluative device for determining whether a child passes to the next grade (77%); f) comparing schools within a district (70%); or g) to provide report card information (66%).

**To what extent did teachers feel pressure because of mandated testing?**

Whereas 20% of the teachers reported never having felt any pressure regarding how their students performed, 40% did so “occasionally during the school year” and more than one-third (35%) felt pressure “consistently throughout the school year.” As shown in Figure 4, the pressure also increased with grade level, with 94% of the 5th grade teachers feeling some pressure compared to 57% of the preschool teachers.
What effects did that pressure have?

Of those who experienced some pressure, few (13%) claimed that it had no effect on their teaching. Approximately one-third indicated that such testing improved their instructional strategies (32%) and helped them focus on what was important to teach their students (35%). Another third stated that mandated testing “interfered with” their instructional decisions. By far the most frequent response (52%), however, was that testing had “taken time away from what [they] consider to be more important content.” This supports considerable anecdotal evidence that such testing distorts the curriculum and pedagogy that teachers consider beneficial to their students.

Effects of mandated testing on students

Most (83%) of the teachers reported that “students in [their] classroom have shown signs/symptoms of stress” at least once over having to participate in mandated testing programs. The modal category (56%) was that students in their classes showed signs “occasionally,” and 21% reported that the signs/symptoms occurred “frequently and consistently.” The types of stress that were observed were: (“The symptoms of stress that my student/students has/have shown”): verbally expressed concerns/fears (71%), crying (39%), inappropriate acting out behaviors (36%), resistance to school attendance (28%), illness (27%), withdrawal at school (14%), sleep disturbances (13%), eating disturbances (7%), toileting accidents (6%), or withdrawal at home (3%). As shown in figure 4, we also found that the incidence of teachers reporting symptoms increases with grade level, beginning with 53% of preschool teachers 67% teaching Kindergarten, and increasing from 87% in first grade to 96% of those teaching 5th grade.

Additional findings

Teachers rated the importance of several factors for raising mandated test scores and the degree of influence that these factors have on year-to-year changes in mandated test scores, the temporal delay between testing and reporting of scores, and how teachers respond to their classes and to individual students once receiving those scores. Some highlights are teacher beliefs that: a) most important for raising scores are parental support and help, reducing class size, a closer match between the curriculum and test content, and more time spent on thinking skills; b) year-to-year changes in mandated test scores are primarily influenced by changes in groups of children (i.e., a cohort effect), the degree of parental encouragement, changes in test content, and changes in the way students are prepared for test taking; and c) test results are too delayed to be of much use to teachers.

Conclusions and Implications

The Improving America's Schools Act of 1994 introduced another round of design changes to expand the data that the National Assessment of Educational Progress (NAEP, 1996) gathers, most notably to allow state assessments as a regular feature. Although since 1996 the NAEP has been collecting information on special subsamples, and encourages authentic assessment that measures student knowledge and understanding with a variety of hands-on performance tasks such as science kits and mathematical tools, the move toward national testing continues.

The results of the present study raise serious concerns about any expansion of mandated testing unless dramatic changes are made in the ways in which such tests are administered...
and reported. In general, teachers paint a clear picture of high levels of stress and time spent on testing in return for very limited gains. At the very least, the data indicate that steps should be taken to alleviate the negative impact of such programs on classrooms, and that results from mandated testing programs need to reach teachers quickly enough to be of any value in diagnostic assessment or curriculum planning (Education Commission of the States, 1996).

There is little evidence that teachers view their state-wide mandated testing program as contributing to a positive learning environment, beneficial teaching practices, or quality curriculum content. Quite to the contrary, they have little faith in mandated testing for accomplishing pedagogical goals they deem important, a message that should be delivered to policy makers, parents, and administrators. Finally, in addition to determining the beliefs of those affected by assessment practices, and showing the need for reconsideration of some mandated testing policies, results of this study suggest that even greater emphasis should be placed on assessment in teacher education so that teachers are better prepared to cope with the pressures to which so many of them report being subjected.

References


Figure 1. Statewide Distribution of Teacher Sample
Assessment Type
Written Work
Reports to Parents
Observations
Individual Tests
Obtain Baseline Inform.
Own Tests/Quizzes
Discuss w/ Child
Checklists
Requests from Parents
Text/Manual Tests
Mandated Tests

Percent Using Method

Figure 2. Methods Teachers Use to Evaluate Their Students

Influence Source
Teaching objectives
Useful in planning
Useful report to parents
Amount of student stress
Ease of use
Cultural fairness
Administrative approval

Importance

Figure 3. Sources of Influence That Determine Assessment Practices
Figure 4. Percentage of Teachers Feeling Pressure and Observing Symptoms in Students as a Function of Mandated Testing
I. DOCUMENT IDENTIFICATION:

Title: IMPACT OF STATE TESTING ON STUDENTS AND TEACHING PRACTICES: MUCH PRIDE, NO GAIN?

Author(s): LEAH ADAMS & STUART A. KARABENICK

Corporate Source: EASTERN MICHIGAN UNIVERSITY

Publication Date: APRIL 2000

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