

TEACHERS AND TESTING: A SURVEY OF TEST USE

Jennie P. Yeh
Northrop Corporation

Joan L. Herman
Center for the Study of Evaluation

Lawrence M. Rudner
National Institute of Education

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Introduction

Testing in American schools is increasing in both scope and visibility. School board accountability concerns, federal and state evaluation requirements, local and regional assessment needs, mushrooming minimum competency tests, and the growth of curriculum-embedded testing, among others, have contributed to the boom, and there is little doubt that this boom accounts for significant expenditures of time and money. What return are we getting for this quite considerable investment? Little information is available. How are tests used in schools? What functions do tests serve in classrooms? Of what use are test results to teachers? Studies over a decade ago report little use (Goslin, 1965; Goslin, Epstein, & Hilloch, 1965), and more recent studies of standardized tests portray a similar picture (Boyd et al., 1975; Airasian, 1979; Salmon-Cox, 1981). Have newer forms of assessment --e.g., criterion-referenced and program-embedded tests--altered the scene?

The study reported here provides basic information about teachers and testing. Two-hundred sixty teachers participated in a survey, representing 20 California elementary schools in urban, rural, and suburban areas and in low and higher socioeconomic status communities¹. The results of these teachers' reports give some preliminary answers to:

- How much testing is going on in schools?
- To what extent are the results used by teachers?
- How much do teachers know about testing and what are their attitudes toward tests?
- What factors seem to influence the use of tests?

¹All kindergarten through sixth-grade teachers at the 20 schools were sent questionnaires. Extrapolating from the previous year's public school directory, the return rate was estimated to be 60 percent.

How Much Testing is Going on in Schools?

All schools in the study administered yearly state assessment tests in grades one, two, three, and six, and all administered annual or semi-annual standardized norm-referenced test batteries to students within their purview. A sizeable number were required, in addition, to give beginning and end of year assessments of a criterion-referenced or district continuum variety. As with all California schools, the schools in the study were also involved in required minimum competency testing. While this listing of required tests is sizeable, it is not exhaustive, and only begins to tell the story of how much testing goes on in schools. Other kinds of tests, teachers reported, constituted a much greater proportion of assessment activities in schools.

What of the tests--teacher made and curriculum embedded--that are administered routinely by classroom teachers in the course of their normal instructional activities? Teachers in the survey reported more frequent testing in mathematics than in reading, but the frequency in both subject areas was substantial. A majority of the teachers reported giving weekly or daily mathematics tests, and eighty percent reported at least monthly mathematics testing. About one-third of the teachers administered weekly reading tests, and another third reported monthly reading tests. Testing in both subject areas was less frequent in the primary grades than in the upper elementary levels.

How are Test Results Used in Schools?

Lots of testing goes on in schools, but is the information used by teachers? The survey investigated use from two perspectives: first, what

sources of information are used to make particular instructional decisions; and second, what use is made of test results? The first perspective inquires about the use of tests relative to other sources of available information; the second asks more directly about the use of particular types of tests, but gives a more limited sense of relative value.

Teachers were asked what sources of information they used most frequently at the beginning of the school year to assess student skills. Fifty-eight percent reported that test results were most important for initial reading placement, and 66 percent used test results most often for initial mathematics placement test.

While these findings imply that test results, and even those from required tests, provide important information, the picture changes as the school year unfolds. When asked the sources of information they used to assess student progress throughout the year, teachers reported relying most heavily on interactions with students, informal assessments (such as oral quizzes, reading aloud), and the results of teacher developed tests. The results of standardized tests were rarely used, and curriculum embedded tests fared only slightly better.

Test results, then, seem to provide the teacher with a quick and acceptable estimate of the ability of new students with whom the teacher is unfamiliar. However, once initial placements are made and teachers become more acquainted with their students, they are less likely to rely on standardized or curriculum tests for information about students' progress. This pattern of differential test use at the beginning of the school

year versus throughout the year parallels the findings of other researchers. (See, for example, Salmon-Cox, 1981.)

A similar picture emerged when teachers were asked more directly about how they use the results from their own tests and from required tests. Teachers indicated that they usually used the results of their own tests for several purposes: to make instructional decisions, to evaluate the effectiveness of their classroom program (e.g., teaching strategies, curriculum materials), and to provide information to others (e.g., parents, other teachers). Tests were also used to assign grades, but with somewhat less frequency.

In contrast, the results from required tests were only infrequently used for any of the above purposes. These tests were used relatively most often for reporting to parents or other staff and for evaluating the effectiveness of teaching methods and materials; but consistent with other findings in the literature, these frequencies were quite low. Required test results seemed to function for teachers as a standard of comparison, while teacher made tests reportedly were used more for instructional decision making.

What Do Teachers Know and Feel About Testing?

Most teachers reported some training, e.g., college courses and inservice sessions, in educational measurement. Thirty-nine percent reported two or more college courses related to educational testing, while 23 percent reported no college courses in this area. A majority also reported at least one inservice course in testing.

Despite this formal training in testing, however, teacher's responses about appropriate interpretations of common standardized test scores raised some questions about their levels of understanding. When presented with particular test results, only 50 percent of the teachers were able to interpret correctly percentile and grade equivalent scores--the two methods most frequently used for reporting standardized test scores.

Survey data about teachers' attitudes toward required testing were more consistent. Responses about how teachers evaluated the costs vs. the benefits of testing, their reactions to discontinuing required testing, and their opinions of what required tests measure portrayed a somewhat negative picture.

When asked to rate the amount of classroom time spent in required testing relative to the teacher and student benefits which accrued, teachers felt that a bit too much time was spent in testing. Similarly, they responded that teachers would react favorably to the discontinuation of testing, though again their responses were not extreme. Finally, teachers felt that their students' performance on required tests was influenced to some extent by their instruction, but they believed that students' motivation, test-taking skills, unusual circumstances, and test quality were more important factors. Certainly the perceived influence of these latter factors has implications for notions of the fairness of testing.

What Factors Seem to Influence the Use of Tests?

Two lines of inquiry suggested factors which influence the use of

tests by teachers. First, teachers were asked what features they considered in formulating their own classroom testing programs. Presumably, the more tests exemplify desired features, the greater the likelihood they will be used. A second avenue of inquiry was more empirical: what contextual variables were associated with more test use? Multiple one-way analyses of variance were computed to examine the possible effects of teaching experience, classroom organization (team teaching vs. self contained), grade level taught, and availability of classroom aides.

What test qualities are most important to teachers? Clear format, similarity to class material, and accurate prediction of achievement were the qualities teachers considered most important when choosing prepared tests. Similarly, when asked why they developed their own tests rather than using commercial tests, teachers cited suitability for their students and sensitivity to classroom instruction as critical reasons. Lack of funds, of time to order tests, or of information about tests were unimportant influences. Intuitive validity apparently is the essential feature for teachers: does the test match what is taught and does it provide a suitable context so that students can exhibit their skills? This criterion contrasts teachers' perceptions of required tests as being heavily influenced by students' test-taking skills and other extraneous influences.

What contextual factors seem to be associated with test use? Certainly grade level exerted a significant influence. Primary grade teachers administered fewer tests, were less likely to develop their own tests, and reacted more positively to abolishing required tests than did upper elementary school teachers.

Years of teaching experience was also related to different patterns of test use. Younger teachers, i.e., those with less than eight years of teaching experience, appeared more skeptical of testing. These teachers, relative to their more experienced peers, were more likely to use their own tests and other less formal methods (e.g., work assignments, informal quizzes, students' place in the text) to assess student progress, and less likely to use the results of required, standardized, or curriculum embedded tests. They were also less optimistic about the extent to which instruction influences students' performance on required tests, an opinion consistent with their reported behavior. Perhaps these younger teachers have been influenced during their preservice training by relatively recent criterion-referenced testing methodologies, and are, therefore, more suspicious of published tests.

The presence of aides was also associated with more frequent use of assessment data. Teachers with classroom aides, compared with those without such assistance, reported greater use of curriculum-embedded tests and used student's place in their book and other informal assessments more often to monitor their students' progress. A couple of hypotheses may explain these results. First, considerable record keeping generally is required to make good use of test data for instructional decision making. A classroom aide may ease significantly the burden in this area, and thus may be instrumental to a teachers' use of test data. A second, related, hypothesis has to do with the availability of instructional alternatives. Presumably, teachers use test data for instructional decision making to identify and better meet individual needs. The availability of aides en-

ables teachers to prescribe alternative settings for instruction, e.g., aides can give tutorial assistance, supervise small student groups, etc. Without instructional alternatives, however, teachers may have less motivation to use test data, because they lack the resources to carry out more individualized prescriptions and/or needed remediations. Consistent with this hypothesis, teachers with aides were less likely to allow failing students to progress to the next instructional unit, and were more likely to provide such students with remedial help, e.g., tutoring and additional practice.

Conclusions and Recommendations

The findings of the study reported here replicate those of other researchers: Teachers do not make much use of the many standardized tests they are required to administer. Furthermore, while they perhaps are not adamantly hostile in the face of required testing, their attitudes towards these tests, at best, are reserved. These attitudes may explain reported patterns of use--or non-use. Teachers' knowledge in testing, no doubt, is also a contributing factor, and since half of the sampled teachers could not interpret accurately two common standardized test scores, non-use at this time may be desirable. Certainly it would be unwise to promote additional teacher use of required tests without insuring adequate training in rudimentary testing concepts.

The findings indicate that required standardized tests comprise only a small fraction of classroom assessment activities. Curriculum-embedded tests and particularly teacher-made tests are not only more prevalent, but play a larger role in instructional decision making. These kinds of tests

apparently have considerably more validity for teachers in terms of their suitability for students and their curriculum coverage, two prime criteria for teachers.

What other factors contribute to teachers' use of tests? Grade level, consistent with other studies, is an important factor (see Goslin, 1965; Yeh, 1978). Less testing goes on in the primary grades. More interesting however, is the finding that the availability of classroom aides is associated with greater use of tests. It was hypothesized that aides provide a support function for the teachers--both in record keeping and in making possible instructional alternatives--that enables teachers to use test results for decision making and to implement those decisions. Necessary and sufficient resources must be available for teachers to implement any new idea--and the systematic use of test data to improve instruction is a relatively new idea.

Adequate knowledge and training in the use of tests are among the necessary resources. The survey indicates that most training related to testing occurs during preservice education. Thus, while younger teachers may have been exposed to newer approaches to testing, many older teachers perhaps have not. Given, in addition, the questions the survey raises about the efficacy of teachers' training in testing, the need for additional staff development activities seems clear.

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