Practical Assessment, Research & Evaluation

A peer-reviewed electronic journal

Copyright is retained by the first or sole author, who grants right of first publication to Practical Assessment, Research & Evaluation. Permission is granted to distribute this article for nonprofit, educational purposes if it is copied in its entirety and the journal is credited. PARE has the right to authorize third party reproduction of this article in print, electronic and database forms.

Volume 5, Number 6, November, 1996

Eight Questions about Implementing Standards-Based Education

Robert J. Marzano

Mid-continent Research for Education and Learning

How state and district standards actually apply to local classroom learning, achievement, and assessment is an issue which is of great importance to a myriad of education officials. The goal of this article is to present eight questions which pertain to how standards-based education affects classroom instruction and assessment at the local level. Various options and recommendations are provided within this article to help education officials discern the practical concerns of standards-based education.

WHERE WILL WE GET OUR STANDARDS?

Options:

- 1. Use the standards document produced by the corresponding state. Every state except one is in the process of developing or has developed state standards. Unfortunately, a study conducted by the American Federation of Teachers (AFT) reports that only 13 of 49 state documents are specific enough to be used effectively by teachers as a guide for classroom instruction or as a measure of instructor accountability.
- 2. Use the national standards documents such as the one published by the National Council of Teachers of Mathematics (NCTM) or by the federal government. These documents contain a plethora of useful information about requisite knowledge and skills. However, this material is usually embedded within lengthy descriptions of performance activities, curriculum goals, instructional strategies, etc.
- 3. Use studies that have attempted to synthesize the information in the national standards and state standards documents. For example, the Mid-continent Regional Educational Laboratory (McREL) created a database that provides a synthesized version of the standards and benchmarks found in 85 national and state level documents. The database is available in hard copy from ASCD or at http://www.mcrel.org on the world wide web.

Recommendation:

Use one of the inventory studies of national and state documents. These studies can be employed to construct district level standards or to augment the standards identified in the current state document.

WHO WILL SET THE STANDARDS?

Options:

- 1. Assign subject area teachers to identify the standards in their areas of expertise. Since subject area teachers often work independently, they will create standards that vary in format and levels of specificity. This differences can cause problems when attempting to formulate a unified set of standards.
- 2. Ask committees of teachers and community members to set standards in various content areas. Although community input is valuable, community members frequently do not have enough proficiency in technical subject areas to formulate appropriate standards. Additionally, some community members who volunteer for a standards committee may have personal agendas that are antithetical to the standards movement.

Recommendation:

Organize a steering committee to guide the standards-setting efforts in the district. This committee should be highly knowledgeable about the technical aspects of standards. The committee should oversee the development of subject area standards which, in the first instance, would be drafted by subject area teachers. The steering committee should ensure that the standards produced by the subject area specialists are written at the same level of generality and employ the same format. The collective work produced by these specialists should be considered the first draft of the district's standards. This draft would then go through several reviews by both educators and other community members until a final draft can be presented to the community at large.

WHAT TYPES OF STANDARDS SHOULD WE INCLUDE?

Options:

- 1. Construct content standards in traditional subject areas. These traditional subject areas would be the core of the curriculum. Historically, the basis for the standards movement at the national and local level has been a description of essential knowledge and skills in these subject areas.
- 2. Establish standards in general reasoning skills. Reasoning skills, such as decision making ability, and complex problem solving are typically included in every subject area. However, they often are apt to remain unevaluated because of their implied nature.
- 3. Create standards that deal with general behavior in the world of work. Skills such as managing time effectively and managing resources are needed in order to do well in the different subject areas. Nevertheless, these valuable skills often do not factor into the creation of standards because they are not addressed directly in each subject.

Recommendation:

Establish subject area standards and general reasoning standards as the core of the curriculum. Standards in the subject knowledge and reasoning skills should be considered the most pertinent to the creation of standards. Although proper work behavior can be made explicit and addressed in classroom instruction, it should not carry the same weight as subject area and reasoning standards.

IN WHAT FORMAT WILL THE STANDARDS BE WRITTEN?

Options:

- 1. Prepare standards and benchmarks as discrete elements of knowledge and skills. This approach gives teachers both direction and flexibility in terms of the specific knowledge and skills which they should address. However, teachers may tend to teach specific benchmarks as isolated fragments of information rather than integrated parts of a whole body of knowledge.
- 2. Prepare standards and benchmarks as specific performance activities or performance tasks. This method provides teachers with specific guidance for how students should apply knowledge. However, there are risks in using this method which must be taken into consideration. First, the system can be forcefully prescriptive in that the list of performance tasks or performance activities becomes a mandated set of activities in which teachers and students must engage. Also, the subject area knowledge that a performance task or performance activity is intended to address might not always be obvious.

Recommendation:

Write explicit standards and benchmarks as specific elements of knowledge and skills but include examples of performance tasks or performance activities. Using this technique, teachers are given some direction on how students can be asked to apply their knowledge.

AT WHAT LEVELS WILL BENCHMARKS BE WRITTEN?

Options:

- 1. Write benchmarks at specified levels. The use of levels or intervals communicates a clear hierarchy of knowledge and skills. Unfortunately, this practice also implies that all assessment and reporting will be done at the upper end of each interval.
- 2. Write benchmarks for each grade level. This method provides teachers with a great deal of 'itemized' guidance regarding a clear hierarchy of knowledge and skills that is grade level specific. Nevertheless, this approach does not work well at the high school level where courses are the main organizational structure.
- 3. Write benchmarks as course descriptions at various grade levels. This approach works well at the high school level. Yet, this technique does not clearly communicate a hierarchical structure of knowledge and skills at grade levels below high school.

Recommendation:

Write grade level benchmarks for grades K-8 and course descriptions for high school. This approach allows for gauge both elementary schools within their own structure. This approach allows elementary schools and high schools to describe desired educational accomplishments in terms relevant to the hierarchical structure of knowledge and skills at each level. However, education officials must be certain that the high school course descriptions contain explicit standards.

HOW SHOULD BENCHMARKS AND STANDARDS BE ASSESSED?

Options:

- 1. Use an externally developed test that employs traditional types of items. These tests which are administered outside classroom instruction and have a selected response format are easily machine scored. Yet, these often require a great deal of time. Traditional selected response item formats also do not usually require students to apply knowledge or demonstrate a deep understanding of what they were expected to learn.
- 2. Use an externally developed test that employs performance tasks. The advantages associated with performance tasks tests are that they ask students to apply their knowledge in real-world scenarios and require students to 'construct' their own answers. A disadvantage is that these tests require much time to complete as well as score.
- 3. Use assessment portfolios. Portfolios have commonly been thought to be a viable way of having students demonstrate their knowledge in a variety of content areas in an economical and holistic manner. Nonetheless, the use of portfolios has proven to be both expensive and time consuming. Furthermore, the research has indicated that portfolios are not capable of producing valid representations of students' knowledge and skills within a subject.
- 4. Use a variety of frequent assessment techniques in the classroom. This approach gives classroom teachers the responsibility for assessing their students on standards and benchmarks. In this situation, teachers are free to use a variety of assessment techniques; and assessment is integrated into regular classroom routine. Nevertheless, there is no guarantee that teacher assessments will be reliable and valid.

Recommendation:

Use a variety of frequent assessment techniques as part of regular classroom instruction as well as externally developed traditional tests and performance tests administered to a sample of students at selected grade levels. The external assessments may be used to ensure that teacher assessments are correct. These assessments also may be used to compare performance of students in the district to the performance of the students from the norming sample used to develop the test.

HOW WILL STUDENT PROGRESS BE REPORTED?

Options:

- 1. Report student progress on standards as a score on a test. This approach is straightforward and easily understood by parents. However, a single test score for a subject area cannot represent the breadth of standards within that content area.
- 2. Report student progress on standards such as grades in courses. The problem with this approach is that a single grade cannot reflect the many possible achievement profiles on multiple standards.
- 3. Report student progress on each standard using a rubric that describes various levels of knowledge and skills. The advantage of this approach is that it provides students, teachers, and parents alike with highly specific information. The disadvantage is that parents who are accustomed to traditional grading practices may react negatively to this very different way of reporting progress.

Recommendation:

Continue to give traditional grades in all courses but include a student progress report using the standards that describe levels of performance for that course. This will provide parents with a sense that the system as they knew it is still functioning. The additional student progress report will provide students and parents with highly specific and useful information about student performance on standards in each course.

WHAT WILL WE HOLD STUDENTS ACCOUNTABLE FOR?

Options:

- 1. Do not hold students accountable for specific levels of performance on any standards. This is the accountability system we currently have in place. In virtually every state, the only standard students must meet to graduate is that they obtain a certain number of "credits"; and a credit is earned by obtaining at least a "D" in a course. This means that a student can graduate without acquiring any specific skills and abilities.
- 2. Hold students accountable for all standards across all major subject areas. This technique establishes high expectations for all students in all major content areas. Nevertheless, many students who currently graduate would not graduate if they were required to meet such high standards in a variety of subject areas.
- 3. Hold students accountable for selected standards in selected content areas considered "basic" by educators and the general public (e.g., reading, writing and mathematics). This method establishes expectations for all students in those

content areas that are considered truly essential. This increase in expectations probably will also lessen the number of students who graduate. However, educators must be aware of the possibility that the expectations might devolve into a set of minimum competencies which do not challenge students.

Recommendation:

Hold students accountable for standards in those content areas considered 'basic' by diverse stakeholders in a particular school district; and articulate standards in other areas not considered basic. Students' standings relative to those standards should be reported. This dual approach should be considered an interim step which will eventually lead to student and teacher accountability for attainment of content knowledge and performance levels embedded within a common set of consensus standards.

CONCLUSION

The establishment of educational standards can have a great impact on local school systems. These eight issues are among those that state and local education officials should address. In addition to the issues previously described, education policy makers must be sure that they base their decisions about standards upon the needs of the communities which they serve.

ADDITIONAL READING

Benveniste, G. (1985). The Design of school accountability systems. Educational Evaluation and Policy Analysis, 7(3), 261-80.

Furham, S. & others. (1988). Research on education reform: Lessons on the implementation of policy. Teachers College Record 90(2), 237-57.

Marzano, R.J., & Kebdall, J.S.D. (1996) A comprehensive guide to designing standards-based districts, schools, and classrooms. Alexandria, VA: Association for Supervision and Curriculum Development.

Tyree, A.K., Jr. (1993). Examining the evidence: Have states reduced local control of curriculum? Educational Evaluation and Policy Analysis, 15(1), 34-50.

Descriptors: *Academic Achievement; Accountability; *Benchmarking; *Educational Assessment; Elementary Secondary Education; School Districts; *Standards; Student Evaluation; *Teaching Methods; *Test Use

Citation: Marzano, Robert J. (1996). Eight questions about implementing standards-based education. *Practical Assessment, Research & Evaluation*, 5(6). Available online: http://PAREonline.net/getvn.asp?v=5&n=6.