DOCUMENT RESUME

ED 452 593 EA 030 966

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TITLE	Using Student Assessment Data: What Can We Learn from Schools? Policy Issues, Issue 6.
INSTITUTION	North Central Regional Educational Lab., Oak Brook, IL.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	2000-11-00
NOTE	13p.
AVAILABLE FROM	North Central Regional Educational Laboratory, 1900 Spring Road, Suite 300, Oak Brook, IL 60523-1480. Tel: 800-356-2735 (Toll Free); e-mail: policywww@ncrelsgi.ncrel.org. For full text: http://www.ncrel.org/policy/pubs/html/pivol6/nov2000.htm. For full text: http://www.ncrel.org/policy/pubs/pdfs/pivol6.pdf.
PUB TYPE	Opinion Papers (120)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Accountability; Case Studies; Data Analysis; *Data Collection; *Data Interpretation; *Educational Assessment; Educational Research; Elementary Secondary Education; Evaluation; Evaluation Criteria; *Evaluation Methods; *Evaluation Utilization; Program Evaluation; Research Methodology; *Research Utilization
IDENTIFIERS	North Central Regional Educational Laboratory

ABSTRACT

Data from nine Michigan elementary, middle, and high schools highlight the challenges and common strategies found in the use of student assessment data to meet public demands for accountability. The information gathered from assessment tools varies by frequency and type. Educators have, historically, underutilized data to guide practice because teachers typically do not receive analytical training, familiarity with processes for using data is infrequent, and data lacks face validity. The case studies indicate how schools can better use assessment data by limiting assessments to specific purposes, aligning assessment standards with curriculum and instruction, providing professional development, and involving teachers. Success depends of defining the purpose of assessment data in monitoring progress, evaluating assessment convergence or divergence, and the efficacy of local practices. State policy makers should: 1) set clear standards; 2) align assessments to standards; 3) prioritize assessment for intermediate education agencies; 4) provide professional development; 5) encourage college courses on assessment; 6) seek assistance; and 7) investigate the face validity of assessments. Local and district policy makers should decide which tests are necessary, involve teachers in developing assessment practices, and allocate more time so teachers may analyze and utilize assessment data. Assessment data can be a valuable tool in promoting educational improvements, but only when appropriately defined and used. (Contains 22 references.) (TEJ)

POLICY ISSUES

Issue 6 November 2000

Schools are finding ways to use student assessment data from multiple sources to track student achievement.

Using Student Assessment Data: What Can We Learn From Schools?

By Allison Cromey

Introduction

New education initiatives and calls for increased accountability have raised the demands on schools to develop more effective, integrated methods for assessing student achievement. Schools typically use many different assessment methods. They are now being pressured to align those methods not only within the school system itself, but also with state and district standards, and local curriculum and instructional practice. To accomplish this goal, schools must strive to promote a unified vision for student achievement and to provide teachers and administrators with the time and training necessary to properly use data on student progress.

This edition of Policy Issues draws on information gleaned from case studies of nine Michigan public schools (five elementary, three middle, and one high school) conducted by the North Central Regional Educational Laboratory (NCREL) in 1999.[1] NCREL researchers wanted to better understand how schools were using student assessment data obtained from multiple sources. Highlighted here are the challenges faced by educators in this endeavor and common strategies used by schools to overcome these challenges. From this work and drawing on a larger body of research, we offer policymakers and practitioners recommendations to support better use of assessment data in schools.

In response to demands for higher levels of academic performance in our nation's schools, policymakers, educators, and the general public increasingly point to student achievement testing with large-scale assessments as a necessary component of, and catalyst for, education reform (McDonnell, 1994; Loveless, 2000; Simmons & Resnick, 1993; Smith & O'Day, 1991). Recent waves of new or expanded state-mandated assessments have added to the already lengthy list of student assessments used by schools, including district-administered norm-referenced tests, student portfolios, and assessments related to government-sponsored early literacy initiatives[2] (see Assessment box on page 2).

Many schools work diligently to integrate this multitude of assessments and to blend the resulting information into an overall picture of student achievement, while responding to the varying information demands of their stakeholders. The

Inside This Issue

Assessment as the Centerpiece of Reform

Most states have made student assessment the focus of their school reform and improvement efforts. Consider the following:

- 49 states have implemented a state student assessment system.
- 46 states have implemented assessments that measure student achievement relative to specified content and performance standards in core subjects such as reading, math, and science.
- State assessments are typically administered in fourth, eighth, and tenth grades, but some states are conducting assessments as early as kindergarten.

Source: CCSSO Annual Survey of State Assessment Systems, 1998.

task is a difficult and daunting one that calls for additional time, attention, and energy—challenging requirements in and of themselves to school administrators and teachers.

The information, or feedback, gained from assessments varies along several domains, including:

- Rate of feedback (infrequent vs. frequent)
- Type of feedback (general vs. specific)

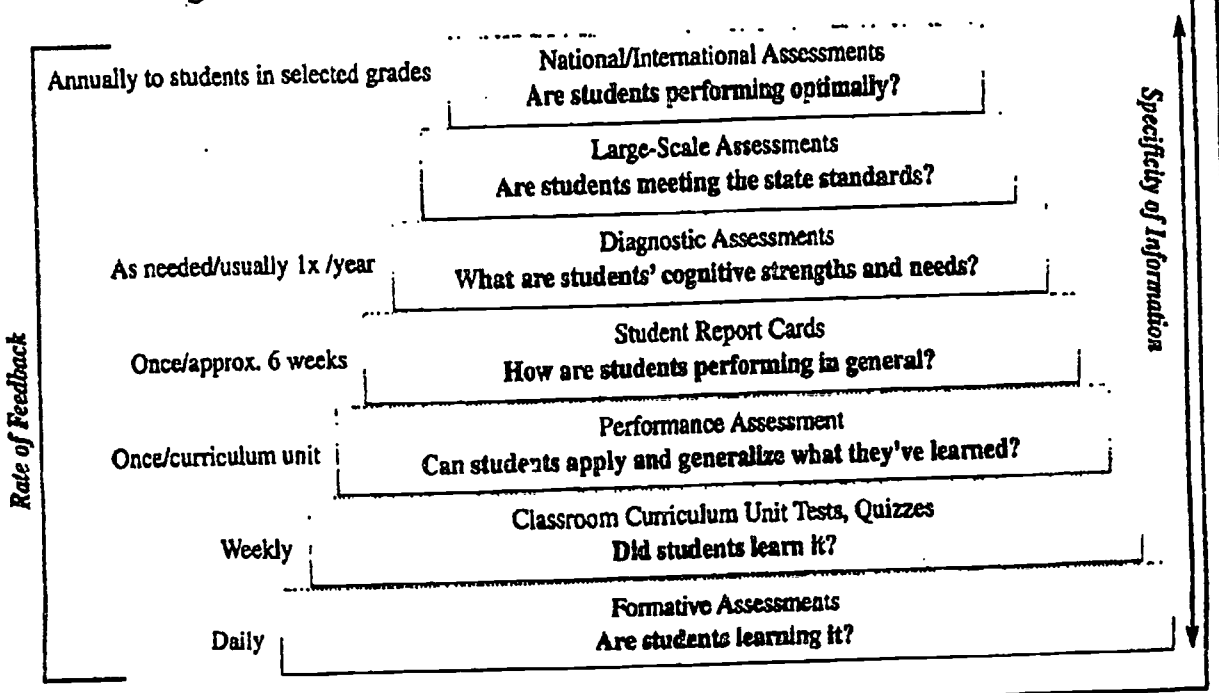
Figure 1 illustrates how different types of assessments can be tied to these variables and to evaluative questions relevant to various educational stakeholders. It also suggests the rich yet complex array of assessment data available to teachers and administrators in their efforts to improve school and student performance.

The density and range of available information contributes to the arduous task of effectively analyzing and applying assessment results to decisions about instruction, the curriculum, or educational programs. For schools with scarce resources, the scope of this task can seem overwhelming. In these cases, reams of computer-generated data from states or districts about student performance may rest untouched on shelves. Similarly, assorted performance data being generated by students may be logged into teacher gradebooks with no attempt to find common trends within classrooms or among various student demographic groups.

Understanding the Challenges

Professionals in most industries rely on data about their financial status, current inventory, weekly sales, rates

Figure 1. The Richness and Complexity of Student Assessment Data



of return, rates of employee turnover, and so on to guide their decision making. Yet educators have historically relied less on data to guide their practice than they do on intuition, teaching philosophy, or personal experiences. Several factors contribute to this tendency:

Analytical Training

Neither teachers nor administrators routinely receive formal training on how to assess students or how to apply assessment information to instruction (Cizek, 2000; Schafer & Lissitz, 1987; Wise, Lukin, & Roos, 1991). There is little to no preservice emphasis on the use of data in school improvement processes. Resources to help educators develop these skills are emerging, but are far from customary offerings on the professional development agenda.

Several school administrators in the NCREL study offered their own lack of technical expertise as a barrier to using assessment data. Few schools were fortunate to have a skilled evaluator or an analytically trained administrator working with the staff. Many schools either lacked the resources needed to build this capacity in their staffs or reported insufficient communication between those with these skills (e.g., individuals at the district level) and the school-based individuals needing the information.

Some administrators admitted to having difficulty pouring over and making sense out of standard reports from state assessments, instead relying heavily on traditional classroom quizzes, tests, and teacher observations for guidance. Others talked about their efforts to have teachers discuss student progress in various subject areas according to standardized rubrics, but they had not begun to analyze or align these quantifiable, local data to other types of assessment.

Unable to take full advantage of student assessment data, these educators seemed to struggle with increasing levels of assessment-linked accountability and the community attention to assessment data. Not surprisingly, these educators seemed to view the results from some assessments as punitive and punishing rather than vehicles for school improvement.

For educators, having a foundation in data analysis and assessment is necessary, but not sufficient for them to effectively synthesize assessment data at the school level.

Process Training

For educators, having a foundation in data analysis and assessment is necessary, but not sufficient for them to effectively synthesize assessment data at the school level. They also need a process for using these data, which supports ongoing, continuous improvement. Generally associated with industrial reformers such as Walter A. Shewhart and W. Edwards Deming, the process of continuous improvement is often described as the PDSA (plan-do-study-act) cycle, an iterative approach to systemic improvement that depends on monitoring and understanding the relationship between key outcome data. Some have begun to translate this cycle for educators through a combination of technical assistance, seminars, and publications (Bernhardt, 1998; Langford, 1999; Sargent, 2000). In addition, many states attempt to model the process of continuous improvement through the structure and language included in their school improvement templates. Nonetheless, a process for using assessment data, is not being accommodated or implemented by many educators at the school level.

When this process is absent, confusion reigns. Staff from one of the participating schools indicated that they did not see the connection among teacher-administered in-class assessments, their norm-referenced district test, and the large-scale state assessment.[3] Nor did they know what to do with this information.

One teacher reported: "We file [the data], we send it home, and then what?" The principal echoed that concern, "That is my question, too. Every building is proposing to do something different with their data in the school improvement plans they submit to the district."

At another school, the principal desired validation from an outside adviser, saying, "What we need is training regarding how to assess [students] and how to use assessment data to guide instruction. I need to know, 'Am I moving in the right direction?'"

Lack of Face Validity

Experts in assessment and research methodology recognize the importance of validity, or the extent to which a test measures what it purports to measure. The principle types of validity include content, criterion-referenced, and construct. But experts rarely cite the importance of face validity.

Face validity refers to what a test appears to measure, not what it actually does measure. Although face validity is technically unnecessary for test construction purposes, NCREL researchers found it to be critical to many practitioners as they confronted data from student assessments. For some principals and teachers, large-scale assessment data in particular were deemed invalid and untrustworthy because they were not perceived to accurately measure the achievement of their students.

Educators at one participating school with a student body of exceptional diversity felt that for many of their students, the emerging ability to read and write English introduced a bias that was not sufficiently addressed by large-scale assessments and was not clearly reflected in the results as they were reported (see also Bolon, 2000). The principal remarked that large-scale state assessments did not reflect "what we know about our students."

Under these circumstances, data from local, school-based assessments were perceived to be more "valid" at face value, perhaps because these educators had input into their selection and the methods in which they were used. Therefore, these educators reported trusting and relying on these data more often than they did with large-scale assessments.

Clearly, the tension between the technical and face validity of assessments is an important issue to be considered when helping practitioners use their assessment data.

For some principals and teachers, large-scale assessment data in particular were deemed invalid and untrustworthy because they were not perceived to accurately measure the achievement of their students.

Overcoming the Challenges

In spite of the barriers that have been described, some schools were making significant efforts to use student assessment data to guide their school improvement efforts. Each of the following strategies were used by these schools to make the task of analyzing and using assessment data more attainable, efficient, and meaningful.

Limit assessments to those with a specific purpose and those that contribute to a common "vision" for student achievement.

Much time, effort, and money is spent implementing and training staff to use student assessments. In a world where many educational initiatives, programs, and innovations compete for limited resources, schools must avoid adding more tests simply because they are convinced that having more information is better.

Adding assessments is not just a resource issue; it is also a programmatic one. Tests added to school-based student assessment systems without regard to a clear purpose, or that do not promote a common, unified vision for student achievement, may be disruptive to ongoing school programs. They may confuse students, school staff, and parents about which outcomes are valued. They may also further limit time spent on instruction. For example, one school reported discontinuing its use of an optional large-scale assessment tool because it was too costly (both financially and in terms of time away from teaching) for the minimal benefits they received. These educators found that they were not referring to these data for decision making and that the test was not sufficiently aligned with their learning standards.

Effective school-based student assessment systems consist of a deliberately organized set of assessment tools that are used for a clearly articulated purpose. They ensure that time and resources are not wasted "over-assessing" students or gathering redundant information that does not align with goals for student achievement. They provide each stakeholder group, from students to state legislators, with the best information possible to make the decisions they need to make (Cizek, 1995).

Align assessment, standards, curriculum, and instruction.

Alignment here refers to the degree of match between what students are

expected to know and what information is gathered about what they do know (Webb, 1997). Alignment is a multifaceted concept that can be evaluated along several domains, but can generally be considered according to content, articulation across grades and ages, equity and fairness, pedagogy, and systemic applicability.

When assessments are not aligned with each other, the curriculum, or the standards prescribed by the state or district, there is no sense that they are working together to provide an overall picture of student achievement. Teachers find themselves giving more than one test covering the same material. Students are asked to take tests on material that has not yet been covered in class.

Effective use of curriculum mapping can help alleviate the confusion. Curriculum mapping is the comparison of what is taught in the curriculum to the standards adopted by the school, such as those delineated by the state or district. This process helps identify areas where specific standards are not being sufficiently addressed in the local curriculum. These deficiencies are known as "curriculum gaps." For example, an administrator in this study reported that when his math teachers "mapped" their curriculum to their learning standards, they discovered that key skills for learning algebra were not being taught in earlier grades. Through this process, they discovered a potential reason for the high failure rate of students in their algebra courses.

Curriculum mapping also allows schools to identify elements of the curriculum that are being unnecessarily repeated in the same or in adjacent grades. These redundancies are known as "curriculum overlaps." Under the assumption that students learn skills to mastery, overlaps can be removed to make movement through the curriculum more efficient.

Each assessment used by schools can be individually aligned with the standards by comparing the specifications of the assessment (i.e., which knowledge and skill areas are purportedly measured) to the standards adopted by a school. Results of this process, when aggregated across all assessments used in a school, can be used to determine whether the assessments are providing a balanced evaluation of student achievement across the curriculum.

In a world where many educational initiatives, programs, and innovations compete for limited resources, schools must avoid adding more tests simply because they are convinced that having more information is better.

It is important to note that schools in this study worked on alignment over an extended period of time. The work was accomplished by teams involving teachers from different grade levels and subject areas, and the results continue to be reflected upon and modified as local needs are discovered or as state criteria change.

Provide professional development opportunities in student assessment for all teachers and staff.

Professional development is central to any attempt to improve the way student achievement is assessed in schools. Unfortunately, the preservice training typically provided on the administration, interpretation, and use of information generated by student assessments does not sufficiently prepare teachers for the demands of their jobs. Most states do not require assessment training as a condition for teacher or administrator certification.

Schools that were actively using an array of assessment data to guide their work invariably had help from a school leader or a district evaluator with a solid grounding in the use of data for continuous improvement in schools and with a vision to model and transfer these skills to teachers. These experienced leaders provided conceptual frameworks, materials, and guidance for committees of teachers as they mapped their curricula, defined their local standards, aligned their assessments to state standards, and worked to understand student needs.

Additional and more formal professional development came from local school districts or intermediate education agencies. However, current professional development on assessment rarely goes deep enough to provide teachers with information on how to build better tests. More emphasis on training that includes basic survey development, how to weight and score test items, and mapping test items to the curriculum would improve a teacher's ability to better

understand what he or she taught, what tools were the most effective, and whether students "got it."

Make time to involve teachers in planning and implementing school assessments.

Research has shown the importance of teacher participation in assessment activities. It not only enhances their expertise, but also builds a peer-based community with a "common language," which values professional judgment, collaboration, dialogue, and decision making (Jones & Chittenden, 1995; Myers & Pearson, 1996). Yet creating time during the day and the week to involve teachers is always a challenge.

The NCREL study found that schools committed to using assessment information to guide their work allocated time for teachers to meet, discuss, and make instructional decisions based on data. Schools identified the need for this time, then found it through a combination of creative scheduling (e.g., having all first-grade teachers share student data while students attend "specials" such as art and music) and priority setting (using weekly faculty meetings to analyze student data).

Define the purpose of assessment data.

The success of school-based student assessment systems depends on how teachers and administrative staff use assessment results to inform their decisions about instruction and curriculum. Schools that have committed to using student assessment data use it to:

- **Monitor student progress.** Continuous assessment does not necessarily mean "constant testing." Rather, teachers can employ several legitimate classroom-based methods of assessment that do not add to the burden placed on students. These may include ongoing measures of fluency on basic skills, observations of student participation in collaborative projects, meeting individually with students, and hosting small discussion groups. Continuous monitoring of student progress means the consideration of data obtained from multiple sources—formal and informal—in ways that lead to sound decisions about how to flexibly tailor instruction to individual students' needs (Shepard, 2000).

Schools committed to using assessment information to guide their work allocated time for teachers to meet, discuss, and make instructional decisions based on data.

- **Evaluate where assessments converge and diverge.** When schools attempt to create an alignment between their learning standards and what is measured by various assessment tools, they need to be aware that the results from assessments are not always perfectly correlated. Some tests will provide richer data in certain domains; others may test a narrower range of skills and may therefore give information that is highly consistent with the standardized test developed by their state. It is important for schools to evaluate how the information they obtain from various assessment tools may be consistent with other information they have on the student (convergent validity) and where this information may be unique, but still valuable (divergent validity).

  Schools can use the data obtained from tests administered by external agencies (e.g., the state and district) to determine whether the picture of student achievement provided by the tests is consistent with the picture provided by local assessments (e.g., teacher-designed tests). Schools must evaluate the mix of convergent and divergent information that works best for their assessment needs.

- **Judge the efficacy of local curriculum and instructional practices.** Most schools use common, universal assessment tools such as standardized tests that are administered infrequently. However, assessments that are administered and analyzed more frequently have been shown to be more effective in gauging student progress. Schools committed to measuring the rate of learning for indi-

vidual students assess and analyze these data over long periods of time to begin to see trends. These trends identify which children are learning, falling behind, or ready to move on to more challenging curricula. Localized tools and methods like this help teachers individualize their instruction according to the different needs of their students and facilitate flexible groupings within classes based on students' skills. When used districtwide, they can ensure some consistency in how children are formatively evaluated within classrooms.

Options for State Policymakers

Policymakers should consider the following steps to help schools effectively use assessment data.

1. Set clear learning standards.

Learning standards should outline expectations for what students are expected to know and be able to do with minimal ambiguity. Consider how standards will affect classrooms in local school districts and how progress will be documented and reported according to these standards (Marzano, 1996).

2. Align all state-mandated assessments to the learning standards.

Identify student performance criteria for mandated assessments that will help educators use these data to guide instruction and intervention. Educators need to know what levels of performance are "good enough" to move students on in the curriculum, what levels suggest the need for more practice, and what levels indicate that individual students need intervention to accelerate their learning. For example, state education agencies could help practitioners better align the state data with local curriculum if they (a) disseminate examples of student work that represent proficiency categories, (b) release representative test items linked to standards, and (c) disseminate lesson plans and examples of teaching that support the standards.

In addition to large-scale assessments, states should consider developing and aligning classroom-based assessments that can be used more frequently by teachers to continually track student learning according to the standards. This method creates the possibility of a "two-tiered" system of assessment, with standardized and aligned assessments at the large-scale and finer-grained classroom level (Stecher, 2000).

3. Prioritize the issue of assessment for intermediate education agencies.

Networks of intermediate education agencies can provide excellent opportunities to exchange information on the use of state assessment results and other assessments, for school-improvement planning, curriculum alignment, and developing local assessments. Intermediate education agencies often play an instrumental role in local efforts to improve school-based assessment systems. These networks could be used to:

- Disseminate information to schools and their constituencies about state curriculum frameworks, standards, and assessments.
- Advise schools on which assessments will be most useful to them and provide technical assistance on matters of assessment development and alignment, curriculum mapping, and professional development.
- Assist schools in exchanging information about successful models and strategies for developing school-based assessment systems.

State education agencies should play a coordinating role in these networks by providing intermediate education agencies with information about the state curriculum frameworks, the state assessment tool(s), state content and performance standards, sample scoring rubrics, and general guidelines for interpreting aggregated and disaggregated results.

4. Provide professional development to help local educators understand how state curriculum frameworks and assessments can guide the development of school-based assessments and improvement plans.

State agencies and commissions have developed professional development resources (e.g., state education agency Web sites and direct mailings) aimed to help educators

create assessment systems and school improvement plans. Yet these resources may not be used as extensively as anticipated since they tend to be too large and complex or can be particularly uninviting in printed form.

State departments of education should consider "live" demonstrations of these products in the field, whenever possible, and the distribution of accompanying user-friendly materials that may be used more effectively in helping schools develop assessment systems and school improvement plans. Finally, the ethical use of assessments should be an important part of these presentations (American Educational Research Association, 2000; Linn, 2000).

5. **Encourage state teacher colleges to offer courses on the role of assessment in instruction, the analysis and application of assessment data, and the use of state content and performance standards.**

Many new teachers graduate from state teacher colleges lacking the necessary knowledge about the state standards for the grade level and/or subject they teach. Few teachers are adequately trained in how to assess student achievement and how to apply the results of student assessments to their instruction. State policymakers should strongly encourage state teacher colleges to integrate information about state content frameworks, standards, and assessments into the coursework of preservice teachers. State education agencies might also consider developing curriculum units that it could recommend for use in college-level courses for preservice teachers.

6. **Seek outside assistance for schools in their efforts to develop local performance based assessments that can be linked to standards and aligned with other forms of assessment.**

Schools may choose to design assessments that are independent of those developed by the state. To do this well, many schools will need outside help. Outside organizations can provide the necessary technical support and expertise to make performance-based assessments that address the needs of local schools and districts more accessible. For example, an assessment clearinghouse could be provided and maintained on a state-by-state basis. Funded through state education agency budgets or as part of the state assessment budget, the clearinghouse could provide a common source of information, assessment tools, outcome data, and support. If the clearinghouse is Web-based, teachers could have instant access to aligned assessment tools and their specific test data to see how their school, district, or even classrooms perform relative to state standards.

State policymakers should strongly encourage state teacher colleges to integrate information about state content frameworks, standards, and assessments into the coursework of preservice teachers.

7. **Further investigate the face validity of standardized, large-scale assessments with administrators and teachers.**

This study suggests that some educators, particularly those serving children with diverse backgrounds and limited language skills, have little confidence in the data gained from large-scale assessments. This, in turn, seems to discourage them from using these data. Policymakers should probe these issues further with educators to determine if the assessments, or the methods in which results are reported, can be modified to remove potential biases.

Policy Options for Local School and District Leaders

The following steps could be taken by local school and district administrators to facilitate the effective use of assessment data:

1. **Decide which tests and assessments are truly necessary.**

Make a distinction between those tests that are truly useful and those that have been adopted because they are popularly used (WestEd, 2000). When particular assessment tools are identified as being of limited value and are costly, their use in schools should be discontinued.

2. Involve teachers in efforts to develop assessment practices that satisfy local needs, align with state frameworks, and track student progress over time.

Schools that are making the most headway in using student assessment data use what may be the most valuable resource available to them—their own teachers. Two of the characteristics that were found to be important in schools committed to using student assessment information were:

a. The degree to which teachers were involved in various phases of local assessment work

b. The degree to which schools created time for teachers to regularly meet, plan, and discuss the relationship between the multiple assessments they use

3. Allocate more time—or modify existing schedules—so that teachers may analyze and reflect upon student assessment data, plan revisions to their curricula and teaching practices, and receive inservice support on how to use student assessment data effectively.

Studies of education reform and improvement efforts invariably identify time as a major challenge. If teachers are to become more involved in the development of a student assessment system at their school, they are going to require that either additional time be allocated to this work or that the time they have in school be allocated differently.

Conclusion

Assessment is a valuable tool in the education process and is often the first place reformers look to make changes. High-quality school-based assessment systems let educators know what students have learned and what they have not, and what is being taught effectively and what needs to be taught better. However, when too many unaligned tests or assessment methods are used simultaneously with no clear and unified vision, the resulting data not only can be confusing, but conflicting. No real change can be made without an accurate, definitive picture of where the changes need to be made.

High-quality school-based assessment systems let educators know what students have learned and what they have not, and what is being taught effectively and what needs to be taught better.

By considering the strategies used by some of the schools in this study and by applying the policy options listed above, teachers, administrators, and policymakers can begin to provide the necessary support for schools as they attempt to identify the learning needs of students who are increasingly diverse in their cultural and academic backgrounds.

Acknowledgments

Many thanks go to the Michigan educators who participated in the case studies that formed the basis of this report. I would like to recognize the work of Matthew Hanson, who helped implement the case studies and write the initial report.* Chris Otto was instrumental in condensing these findings for a policy audience.

The following individuals reviewed and provided important feedback on this report. Thank you for your time and effort:

- Lizanne DeStefano, Bureau of Educational Research, University of Illinois at Urbana-Champaign
- Paul Kimmelman, former superintendent, West Northfield District 31, Northbrook, Illinois
- Paul St. Germaine, executive director, Curriculum & Staff Development, Gaylord Community Schools, Gaylord, Michigan
- Mary Steams, principal, Sparta Middle School, Sparta, Michigan
- Roger Trent, Ohio Department of Education
- Mike Williamson, Michigan Department of Education

Finally, the responsibility for the final content of this report rests entirely with the author.

*To order a free copy of this report, entitled *An Exploratory Analysis of School-Based Student Assessment Systems*, call our toll-free order number (800) 356-2735. Quantities are limited.

References

American Educational Research Association. (2000). *AERA position statement concerning high-stakes testing in prek-12 education.* [Online]. Available: www.aera.net/about/policy/stakes.htm

Bernhardt, V. L. (1998). *Data analysis for comprehensive schoolwide improvement.* Larchmont, NY: Eye on Education.

Bolon, C. (2000). School-based standard testing. *Education Policy Analysis Archives, 8*(23). [Online]. Available: http://olam.ed.asu.edu/epaa/v8n23/

Cizek, G. J. (1995). The big picture in assessment and who ought to have it. *Phi Delta Kappan, 77,* 246-249.

Cizek, G. J. (2000, Summer). Pockets of resistance in the assessment revolution. *Educational Measurement: Issues and Practice,* 16-33.

Council of Chief State School Officers. (1998). *Annual survey of state student assessment programs.* Washington, DC: Author.

Jones, J., & Chittenden, E. (1995). *Teacher's perceptions of rating an early literacy portfolio* (Center for Performance Assessment Report No. MS #95-01). Princeton, NJ: Educational Testing Service.

Langford, D. (1999). *Quality learning training manual* (Vol. 7.0). Molt, MT: Langford International, Inc.

Linn, R. (2000, March). Assessments and accountability. *Educational Researcher,* 4-16.

Loveless, T. (2000). *The Brown Center report on American education: 2000. How well are American students learning?* [Online]. Available: http://www.brook.edu/GS/brown/bc_report/BC_Report_hp.htm

Marzano, R. J. (1996). Eight questions about implementing standards-based education. *Practical Assessment, Research & Evaluation, 5*(6). [Online]. Available: http://ericae.net/pare/getvn.asp?v=5&n=6

McDonnel, L. M. (1994). *Policymakers' views of student assessment.* (CSE Technical Report No. 378). Los Angeles, CA: National Center for Research on Evaluation, Standards, and Student Testing.

Myers, M., & Pearson, P. D. (1996). Performance assessment and the literacy unit of the New Standards Project. *Assessing Writing, 3*(1), 5-29.

O'Day, J. A., & Smith, M. S. (1993). Systemic reform and educational opportunity. In S. H. Fuhrman. (Ed.), *Designing coherent educational policy* (pp. 250-312). San Francisco: Jossey-Bass.

Sargent, J. W., & Smejkal, A. E. (2000). *Targets for teachers: A self-study guide for teachers in the age of standards.* Winnepeg, Canada: Portage & Main Press.

Schafer, D., & Lissitz, R. W. (1987). Measurement training for school personnel: Recommendations and reality. *Journal of Teacher Education,* 57-63.

Shepard, L. A. (2000). *The role of classroom assessment in teaching and learning* (CSE Technical Report 517). Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing.

Simmons, W., & Resnick, L. (1993). Assessment as the catalyst of school reform. *Educational Leadership, 50*(5), 11-15.

Stecher, B. (2000, September). *Improving district and state accountability systems.* Presentation at the annual conference of the National Center for Research on Evaluation, Standards, and Student Testing, Los Angeles.

Webb, N. L. (1997). Determining alignment of expectations and assessments in mathematics and science education. *NISE Brief, 1*(2). [Online]. Available: www.wcer.wisc.edu/nise/publ...briefs/vol%5F1%5Fno%5F2/index.html

WestEd. (2000). *Policy Brief: The high stakes of high-stakes testing.* San Francisco, CA: Author.

Wise, S. L., Lukin, L. E., & Roos, L. L. (1991). Teacher beliefs about training in testing and measurement. *Journal of Teacher Education,* 37-42.

Executive Summary:

Using Student Assessment Data: What Can We Learn From Schools?

New education initiatives and calls for increased accountability have raised the demands on schools to develop more effective, integrated methods for assessing student achievement. Many schools work diligently to integrate a multitude of assessments and to blend the resulting information into an overall picture of student achievement, all while responding to the varying information demands of their stakeholders. The task is a difficult and daunting one that calls for additional time, attention, and energy—challenging requirements in and of themselves to school administrators and teachers.

To better understand the barriers related to this problem, consider the following:

- Most educators have received little formal training in student assessment and the use of related data to improve teaching and learning.
- Educators lack a process for using data that supports ongoing, continuous improvement in their schools.
- Large-scale assessments, in particular, lack face validity with some educators. Although technically unnecessary for test construction purposes, face validity can be important. Assessments that are weak in face validity may be perceived as inaccurate and untrustworthy measures of achievement by some educators.

Policymakers should consider the following steps to help schools overcome these challenges and effectively use assessment data:

- **Align all state-mandated assessments to clearly defined learning standards.** Learning standards should outline expectations for what students are expected to know and be able to do with minimal ambiguity. Mandated tests should align to these standards, and performance criteria should be delineated to help educators use resulting data to guide instruction and intervention.
- **Prioritize the issue of assessment for intermediate education agencies.** Networks of intermediate education agencies can exchange information on the use of state and other assessment results for school improvement planning, curriculum alignment, and developing local assessments.
- **Provide professional development to help local educators understand how state curriculum frameworks and assessments can guide the development of school-based assessments and improvement plans.** State departments of education should consider "live" demonstrations of existing products in the field and the distribution of accompanying user-friendly materials that may be used more effectively in helping schools develop assessment systems and school improvement plans.
- **Encourage state teacher colleges to offer courses on the role of assessment in instruction, the analysis and application of assessment data, and the use of state content and performance standards.** State education agencies might also consider developing curriculum units that it could recommend for use in college-level courses for preservice teachers.
- **Further investigate the face validity of standardized, large-scale assessments with administrators and teachers.** Policymakers should probe these issues with educators to determine whether the assessments, or the methods in which results are reported, can be modified to remove potential biases.

The following policy options can be considered by local school and district administrators to facilitate the effective use of assessment data:

- **Decide which tests and assessments are necessary.** Assessment tools that are of limited value should be discontinued.
- **Involve teachers in efforts to develop assessment practices that satisfy local needs, align with state frameworks, and track student progress over time.** Schools that are making the most headway in using student assessment data use what may be the most valuable resource available to them—their own teachers.
- **Allocate more time—or modify existing schedules—so that teachers may analyze and reflect upon student assessment data, plan revisions to their curriculum and teaching practices, and receive inservice support on how to use student assessment data effectively.** If teachers are going to become more involved in the development of a student assessment system at their school, they are going to require that either additional time be allocated to this work or that the time they have in school be allocated differently.

Endnotes

1. Schools were selected for the study based on nominations made by Michigan State Board of Education staff. Selected schools were located in different regions of the state and were diverse in terms of student enrollment figures and key student characteristics (e.g., SES, ethnicity). NCREL researchers performed on-site, semistructured interviews related to school-based assessment practices with teachers, principals, and district-level staff. A total of 46 interviews were conducted in nine sites. Teachers were selected for participation by their curriculum director or principal based on their prior experience with using student assessments and data. Participants were also asked to provide documentation that could help researchers better understand the student assessments being developed and used locally, and information about local efforts to set standards, align curriculum, or both. The study can be downloaded by the end of November 2000 at: http://www.ncrel.org/policy/pubs/.

2. A growing number of state and local initiatives to improve student learning, particularly in the area of early literacy, have increased the number of student assessments schools use in the primary years. Indiana, for example, has funded a whole-school intervention program that enables schools to restructure regular classroom reading instruction in a manner compatible with Reading Recovery®. Early literacy programs in Illinois, Michigan, and Ohio also introduce new student assessments to classrooms such as running records, spelling inventories, and writing samples.

3. The issue of alignment is described in more detail on pages 4-5. However, a detailed description of the alignment process is beyond the scope of this paper. For more details on alignment, see Webb, 1997.

4. For example, NCREL has developed a Web site (www.ncrel.org/currmap) designed to assist districts in their efforts to map out new mathematics and science curricula. Users can access rich international mathematics and science curriculum maps from top-achieving nations. Comparable maps of state standards will be available on this Web site in the next year.

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