

Research Institute on Secondary Education Reform for Youth with Disabilities Brief

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Secondary School Reform, Inclusion, and Authentic Assessment

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The Research Institute on Secondary Education Reform for Youth with Disabilities (RISER) is committed to exploring whether and how secondary students with disabilities are included in secondary education reforms. To accomplish this task, RISER members have identified Schools of Authentic and Inclusive Learning (SAILs). (The methods for identifying SAILs, and the principles of SAILs, are described in RISER Brief #1, Hanley-Maxwell, Phelps, Braden, & Warren, 1999). RISER researchers are studying the instructional, organizational, and professional mechanisms that SAILs use to promote effective inclusion and reform and will share these practices with educators through RISER Briefs. The research questions RISER is addressing appear at the end of this paper.

In this brief, we address the literature describing the intersection of reform, inclusion, and assessment (research questions 1 and 3). We define each of these concepts from the SAILs perspective and explore their implications for secondary education. Then, we offer recommendations for assessment practices that are inclusive and that encourage effective secondary school reforms.

Defining Terms: Reform, Inclusion, and Authentic Assessment

Reform

Educational reform implies substantial, not superficial, changes to traditional educational practices (Newman & Associates, 1996; Smith & O'Day, 1990). However, even substantial changes in customary ways of doing things (e.g., moving from period to block scheduling, creating school/work community partnerships) are not sufficient to bring about effective educational reform. The Center on Organization and Restructuring of Schools (CORS) (Newman & Wehlage, 1995) found that changes in instruction, school organization, or school community partnerships have little impact on school effectiveness if they are not accompanied by a focus on authentic student learning. Or, to put it another way, schools that clearly defined and committed themselves to authentic student learning were more effective in reforming educational practices than those that did not.

A focus on authentic student learning is the hallmark of effective education reform. Authentic learning is defined by three attributes:

1. Construction of knowledge,
2. Disciplined inquiry, and

3. Value beyond school.

Each of these attributes is defined in greater detail elsewhere (e.g., Newmann & Wehlage, 1995; Newmann, Wehlage, & Secada, 1995). The essential element of effective education reform is to promote authentic learning; the primary vehicle for doing so is to engage students in tasks with high authenticity. That is, authentic pedagogy provides and supports tasks demanding construction of knowledge, disciplined inquiry via extended written communication; and tasks that have value beyond the school setting. All other elements of education reform, such as instructional materials, school organization, and community partnerships, are less important only if they promote authentic learning.

Inclusion

Education reformers assume that poor student performance is primarily caused by a lack of opportunity to learn. That is, secondary schools graduate students with low levels of academic proficiency because schools neither teach nor demand high levels of academic proficiency. A focus on authentic learning clearly demands that teachers to provide high quality, authentic instructional opportunities, and that students produce high quality, authentic work in response to those demands. Moreover, providing and demanding authenticity for all students creates more equitable educational outcomes across ethnic groups (Newmann, Marks, & Gamoran, 1995). Thus, a cornerstone of education reform is to demand that historically low-performing students (e.g., ethnically, culturally, and linguistically diverse students; students from high poverty communities) be provided with the same authentic learning opportunities and demands as other students.

Advocates for students with disabilities also believe that students with disabilities must be provided with the same authentic learning opportunities and demands as other students. Federal legislation reflects these equity demands. For example, the Americans with Disabilities Act (ADA, 1990) and the Individuals with Disabilities Education Act (IDEA) Amendments (1997) require educators to provide students with disabilities access to the core curriculum and general educational experiences whenever possible. Legislation and advocacy share the fundamental assumption that inclusion, defined here as providing opportunities for authentic learning and demanding similar levels of performance similar to those of other students, is in the best interests of students with disabilities. The focus of inclusion, then, is to provide students with disabilities access to the standard core curriculum through accommodations and supports. Inclusion advocates generally assume that this access should take place in the general education classroom. In other words, the best place to access the general education curriculum is in the general education classroom.

Although advocates of educational equity for minority and disability communities share the assumption that poor academic performance is encouraged, if not caused, by inequitable learning opportunities and demands, general education reform and special education inclusion movements have proceeded in isolation from each other. Research addressing education reform and authenticity rarely examines students with disabilities. Likewise, inclusion literature rarely mentions authentic learning (Braden, Schroeder, & Buckley, 2000). However, a commitment to educational equity demands inclusion. Students cannot learn what they have not been taught;

educators must include students with disabilities in opportunities to learn, and they must provide the supports those students need to gain access to general education.

Authentic Assessment

Assessment in the context of education reform focuses on the outcomes of teaching and learning. Education reform movements embrace standards and use assessments to measure progress towards those standards. Educational standards define what students should know; assessments show what students can do, and how well they can do it. Because assessment informs educators, students, and the greater community whether and how well educational goals were achieved, assessment can be a powerful catalyst to drive education reform (see Haertel, 1999; Linn, 2000 for critical reviews of assessment-based reforms).

Authentic assessment provides the means to evaluate and guide successful secondary school reform. Reforms that increase the amount and quality of authentic student work are successful. Reforms that do not affect the authenticity of student work are unsuccessful. Authentic assessment, defined as student work demonstrating construction of knowledge, disciplined inquiry, and elaborated written communication, transforms standards (what students should know) into reality (what students do and how well they do it). Although successful reform efforts also require other substantial changes to schools' organizational structures (e.g., extended class periods to allow for authentic work, school/community partnerships, increased opportunities for substantive conversations in classrooms, professional communities to support teachers), none of these changes in and of themselves indicate successful reforms. Ultimately, changes in school structures and teaching practices must be accompanied by increased authentic student learning, as reflected in assessments of student work (Newmann & Wehlage, 1995).

The role of assessment in an authentic reform framework differs from the traditional role of assessment in special education. The traditional role of assessment for students with disabilities has been diagnosis and prescription. That is, students with disabilities are assessed for diagnosis (e.g., eligibility for disability status), and educational prescription (e.g., planning appropriate educational modifications). Although diagnostic and prescriptive assessment may be essential to determine eligibility and specific needs for special education services, it is irrelevant to education reform (and may have limited value even for diagnosis and intervention; see Reschly, 1997). In contrast, reform-related assessment measures authentic student learning through tasks that demand knowledge construction, disciplined inquiry, elaborated communication, and that have a value or audience beyond the school or classroom.

Assessment in an authentic reform framework is also different from the large-scale, standards-based assessment movement. States and school districts use large-scale assessment to evaluate schools' success in meeting educational standards. Although the process of using assessment to measure standards is similar in large-scale and authentic reform efforts, the quality of large-scale assessment is usually insufficient to measure authentic student learning. Large-scale assessments rely primarily (in some cases, exclusively) on selected-response or short answer test items that students complete in a brief time frame. Such large-scale assessments have little authenticity; they do not solicit construction of knowledge, do not require disciplined inquiry expressed through elaborated communication, and have little or no value beyond school. Successful reform

is guided by academic standards that teachers define, share, and support—for example, common standards for authentic student work and assessments. The CORS research demonstrates that local (i.e., site-based) reforms that transform standards into authentic assessment of student learning are successful (Newmann, King, & Rigdon, 1997). Because authentic student performance and assessment are essential to successful reform, large-scale, top-down reforms driven by inauthentic assessments at best are unlikely to succeed and at worst, inhibit effective reform.

Given the importance of assessment in education reform, it is essential to include students with disabilities in assessments that demand authentic student work. Inclusion in assessment helps educators and students. Inclusion helps educators to understand the effects of education reform on all students, including those students with disabilities. Inclusion helps students by ensuring opportunity to learn. That is, if students, teachers, and parents know the student will be expected to produce high quality work, they will ensure the student has the opportunity to learn what is expected. These themes can be expressed simply: (1) if students are not counted, they don't count, and (2) students do what they are asked to do. Excluding students with disabilities from assessments sends the message that education reforms need not address students with disabilities, and it suggests students with disabilities are incapable of producing high-quality work. Although systematic exclusion from state and district assessment programs is now prohibited (e.g., IDEA, 1997), the potential for excluding students from classroom assessments and tasks still exists (e.g., teachers and students may alter classroom assessments to be less authentic).

It is essential to distinguish the authentic forms of assessment — those that encourage successful secondary education reform — from other uses of the terms authentic and assessment. First, some proponents of specific assessment methodologies (e.g., portfolios, performance assessments) refer to these methods as authentic because they elicit more realistic, elaborated student work (e.g., Campbell, 2000). However, we use the term authentic assessment to mean assessment containing the three features of authenticity defined by Newmann and Wehlage (1995). Portfolios, projects, and performance assessments in and of themselves may or may not elicit construction of knowledge, disciplined inquiry, and value beyond school. For example, a portfolio containing a series of worksheets is not authentic. Second, the term assessment includes state or district accountability programs, and there are federal statutes (e.g., IDEA 1997) that direct states to include students with disabilities in these types of assessments. We use term assessment to mean the tools employed by teachers and students to reflect and evaluate student learning. Such tools are not covered by IDEA accountability mandates, but rather by IDEA mandates to provide access to and progress in the general curriculum. Although there is a substantial body of research on inclusion of students with disabilities in state and district accountability assessments (see the National Center on Educational Outcomes, 1999), there is little systematic research on students with disabilities in classroom assessments used to spur secondary education reforms.

A Framework for Reform, Inclusion, and Authentic Assessment

If students with disabilities must be included in assessment to be included in assessment to be included in education reforms, educators must have a conceptual framework for promoting inclusion and authenticity. To suggest a framework to guide inclusion of students with

disabilities in authentic assessments and education reforms, we draw on work that defines (1) assessment accommodation parameters, (2) assessment invalidity, and (3) disability assessment rights.

Assessment Accommodation Parameters

Research on assessment accommodations (Braden, 1999; Elliott, Kratochwill, & Schulte, 1999; National Center on Educational Outcomes, 1999) identifies four parameters that assessors can alter to accommodate the needs of students with disabilities:

1. Setting (e.g., accessibility furniture, isolated seating to avoid distractions, familiar environment to reduce anxiety).
2. Timing (e.g., extended time, rest breaks to avoid fatigue, dividing a long assessment into shorter periods).
3. Administration (e.g., signing or saying assessment directions, large print, cuing to direct attention).
4. Response (e.g., allowing oral, signed, pointing, or dictated responses, providing a keyboard or response console).

Assessment accommodations alter one or more of these parameters to meet the needs of students with disabilities. Assessment accommodations tend to occur in clusters or packages (e.g., extra time in an isolated setting and reading test directions aloud to the student) (Elliott & Braden, 2000, in press). Assessment accommodations rarely change a single feature of the assessment.

It is useful to distinguish assessment accommodations from assessment modifications, and instructional supports. Accommodations change the assessment process (i.e., setting, timing, administration, or response), but do not affect assessment content (i.e., what is assessed). In contrast, assessment modifications alter assessment content (e.g., assessing skills at a lower level, eliminating some skills from the assessment), and thus change the nature of the assessment. Finally, instructional supports (sometimes called instructional modifications) help students with disabilities gain access to the general education curriculum. Instructional supports may change instructional processes and instructional content (e.g., scaffolding curricula changes both the process and content of what is taught). Unfortunately, these terms are often used interchangeably in practice (see Haigh, 1999, for a discussion) and in legislation (see Heumann & Warlick, 2000). We will focus on assessment accommodations as a framework for including students with disabilities in authentic assessments.

Although changes to assessment processes are helpful in defining accommodation options, they are not useful for determining which options are appropriate. To determine which accommodations are appropriate, educators should consider assessment invalidity and disability assessment rights.

Assessment Invalidity

Assessment validity may be compromised by two factors: (1) construct-irrelevant variance, and (2) construct underrepresentation (Messick, 1995). Construct-irrelevant variance invalidates

assessments when the assessment performance is influenced by factors that are irrelevant to the meaning of the assessment. For example, giving a standard print reading assessment to a student with poor visual acuity would invalidate the assessment as a measure of reading because the student's performance would be influenced by a factor (visual acuity) unrelated to the construct (reading skill).

Conversely, construct underrepresentation occurs when the assessment fails to capture or underrepresents the intended construct. For example, a reading assessment that a teacher reads aloud to a student with poor visual acuity would invalidate the assessment, because it would fail to represent the intended construct (reading).

The assessment invalidity framework encourages educators to provide accommodations that reduce or eliminate construct-irrelevant variance, while retaining adequate representation of the construct. In the context of SAILs, this means eliminating non-authentic influences on student performance, while retaining high levels of authenticity in the assessment. For example, allowing a student extra time, multiple drafts with corrective feedback, use of a computer for word processing, books on tape, or use of videos to replace books as information sources might reduce or eliminate influences on the assessment unrelated to authenticity. However, asking a student to demonstrate knowledge on a multiple-choice test, breaking work into discrete, unrelated tasks, or substituting tasks with no value beyond school (e.g., worksheets) would not be appropriate accommodations, because these accommodations would underrepresent authenticity in the assessment task.

We believe there is one important exception to the injunction that accommodations should retain authenticity, and that exception applies to elaborated written communication. CORS argued an assessment task must demand elaborated writing (Newmann & Associates, 1996; Newmann & Wehlage, 1995). For students whose disabilities limit their written language production (e.g., limited dexterity, severe written language disabilities), it might be appropriate to consider other forms of elaborated communication (e.g., speaking, video production, demonstration) to demonstrate construction of knowledge and disciplined inquiry. However, educators should use nonwritten elaborated communication accommodations sparingly for two reasons. First, elaborated writing is a richer vehicle to spur authentic reforms than other methods of communication (Newmann & Associates, 1996). Second, written language literacy should be a goal for all students.

Disability Assessment Rights

Phillips (1993, 1994) argues that disability-related legislation and policy require assessors to provide accommodations that encourage access to the assessment setting. However, assessors are also required to ensure the validity and accuracy of their assessments. To reconcile the right to accommodations with the need to ensure accuracy, Phillips suggests assessors distinguish access skills from target skills. Access skills are those skills that are presumed by, or prerequisite to, the assessment task. For example, furniture adapted to wheelchairs is essential for a wheelchair user to access a reading assessment. Similarly, visual acuity is an access skill for a standard-print reading test. Target skills, on the other hand, are those abilities that an assessor intends to assess. For example, reading competencies are the target skills in a reading assessment, whereas visual

acuity or ability to fit into a standard table and chair are access skills. {Access skills are potential sources of construct-irrelevant variance because the assessment measures access skills (which are irrelevant to the construct) as well as target skills (which are the target construct).}

Individuals with disabilities have the right to accommodations that seek to eliminate the effects of access skills, but they do not have the right to accommodations that affect target skills. For example, although an individual with a disability is entitled to a large-print version of a reading test or a wheelchair-accessible setting, that same individual is not entitled to take the reading test by having the test read aloud. The accommodation should address the access skills required by an assessment, not the target skills the assessment is intended to measure.

The distinction between access and target skills is useful, but not without problems. For example, in an assignment in which students are asked to read a book and write an essay about the book, it is unclear whether reading is an access or a target skill. Likewise, a teacher might offer extra time in a reading assessment for a student with a learning disability to improve the student's access to the reading material, but extra time might also affect the target skill (e.g., reading fluency is a central component of reading) (National Reading Panel, 2000).

Finally, we note that there is one feature of authentic assessment tasks that is considered essential, but is more of a feature than a targeted skill. That essential element is value beyond school. Authenticity demands that tasks require construction of knowledge and disciplinary inquiry via elaborated communication, and have some connection to students' lives or communities outside school. Construction of knowledge and disciplined inquiry expressed through elaborated communication reflect students' performance. In contrast, value beyond school reflects task (i.e., instructor) demands. For example, an analysis of nitrate levels in a local pond reflects a student's construction of knowledge and disciplined inquiry; the value beyond school is either high (the instructor requires students to submit the report to the local water quality board) or low (the instructor is the only one who reads the report, and it exists solely to produce a grade in a course) because of the way the instructor frames the task. Therefore, accommodations should retain value beyond school as an essential feature of an authentic assessment task, even though value beyond school is not a target skill in the assessment.

Applying The Assessment Accommodations Framework to Inclusion and Reform

We suggest a set of principles to help educators implement education reform, inclusion, and authentic assessment. These principles may guide teachers who want to include students with disabilities in authentic assessments and classroom tasks (see Assessment Accommodations Framework: Principles for Implementation).

Unfortunately, the research base and technologies needed to implement these guidelines lags behind the conceptual arguments in support of them. However, our recommendations are based on research examining reform in general education settings, principles and practices of inclusion, assessment accommodations, and disability assessment rights. Although these guidelines are not based on direct research investigations of secondary students with disabilities in schools with successful reforms who participate in authentic assessments, RISER is conducting research and will report the results of that research in future RISER Briefs.

References

Americans with Disabilities Act of 1990, Pub. L. No. 101-336, § 201, 104 Stat. 327.

Braden, J. P. (1999). Accommodations in testing: Methods to ensure validity. *Assessment Focus*, 8(1), pp. 1-3 (published by The Psychological Corp.
<http://www.psychcorp.com/pdf/assessspr99.pdf>).

Braden, J. P., Schroeder, J. L., & Buckley, J. A. (2000). Inclusion, assessment, and authentic school reform. Manuscript in preparation, Wisconsin Center for Education Research, Madison, WI.

Campbell, D. (2000). Authentic assessment and authentic standards. *Phi Delta Kappan*, 81(5), 405-407.

Elliott, S. N., & Braden, J. P. (2000). Educational assessment and accountability for all students. Madison, WI: Department of Public Instruction.

Elliott, S. N., & Braden, J. P. (in press). Assessing one and all: Educational accountability for students with disabilities. Reston, VA: Council for Exceptional Children.

Elliott, S. N., Kratochwill, T. R., & Schulte, A. G. (1999). *Assessment accommodations guide*. Monterey, CA: CTB/McGraw Hill.

Haertel, E. H. (1999). Validity arguments for high stakes testing: In search of the evidence. *Educational Measurement Issues and Practice*, 18(4), 5-9.

Haigh, J. (1999). Accommodations, Modifications, and Alternates for Instruction and Assessment (Maryland/Kentucky Report 5). Minneapolis, MN: National Center for Educational Outcomes. Available: <http://www.coled.umn.edu/NCEO/OnlinePubs/MdKy5.html>.

Hanley-Maxwell, C., Phelps, L. A., Braden, J. P., & Warren, V. (1999). Schools of authentic and inclusive learning (Research Institute on Secondary Education Reform for Youth with Disabilities Brief No. 1). Madison, WI: Wisconsin Center for Education Research.

Heumann, J. E., & Warlick, K. R. (2000, August 24). Questions and answers about provisions in the Individuals with Disabilities Education Act Amendments of 1997 related to students with disabilities and state and district-wide assessments (Office of Special Education Programs Memorandum 00-24). Washington, DC: Office of Special Education Programs. Available: <http://www.ed.gov/offices/OSERS/OSEP/OSEPMemo0024Assessment.pdf>.

Linn, R. L. (2000). Assessments and accountability. *Educational Researcher*, 29(2), 4-14. Available: <http://www.aera.net/pubs/er/arts/29-02/linn01.htm>.

Messick, S. (1995). Validity of psychological assessment. *American Psychologist*, 50(9), 741-749.

National Center for Educational Outcomes (1999). Participation of students with disabilities. Minneapolis, MN: Author. Available:
http://www.coled.umn.edu/NCEO/TopicAreas/Participation/participation_FAQ.htm.

National Reading Panel (2000). Teaching children to read: An evidence based assessment of the scientific research literature on reading and its implications for reading instructions. Washington, DC: National Institute of Child Health and Human Development. Available:
<http://www.nichd.nih.gov/publications/nrp/report.htm>.

Newmann, F. M. & Associates (1996). Authentic achievement: Restructuring schools for intellectual quality. San Francisco: Jossey-Bass.

Newmann, F. M., King, M. B., & Rigdon, M. (1997). Accountability and school performance: implications from restructuring schools. *Harvard Educational Review*, 67(1), 1-41.

Newmann, F. M., Marks, H. M., & Gamoran, A. (1995). Authentic pedagogy and student performance. Madison, WI: Wisconsin Center for Education Research.

Newmann, F. M., Secada, W. G., & Wehlage, G. G. (1995). A guide to authentic instruction and assessment: Vision, standards and scoring. Madison, WI: Wisconsin Center for Education Research.

Newmann, F. M., & Wehlage, G. G. (1995). Successful school restructuring: A report to the public and educators by the Center on Organization and Restructuring of Schools. Madison, WI: Wisconsin Center for Education Research.

Phillips, S. E. (1993). Testing condition accommodations for disabled students. *West's Education Law Quarterly*, 2(2), 366-389.

Phillips, S. E. (1994). High stakes testing accommodations: Validity versus disabled rights. *Applied Measurement in Education*, 7(2), 93-120.

Reschly, D. J. (1997). Utility of individual ability measures and public policy: Choices for the 21st century. *School Psychology Review*, 26(2), 234-241.

Smith, M. S., & O'Day, J. (1990). Systemic school reform. In S. H. Fuhrman & B. Malen (Eds.), *The politics of curriculum and testing: The 1990 yearbook of the Politics of Education Association* (pp. 233-267). New York: Falmer Press.

Assessment Accommodations Framework: Principles for Implementation

1. Students should not receive accommodations unless they are needed. Many students with disabilities can participate in authentic assessment tasks without any accommodations. Just because a student has a disability does not mean the student needs assessment accommodations. If educators are unsure whether to offer accommodations on a particular task or assessment, they should encourage the student to try the task without accommodations. Offering the option for accommodations later (e.g., retaking or doing the task over) without penalty will encourage risk taking, which is an essential element of education reform.
2. Accommodations decisions presume target and access skills are clearly identified. Teachers must clarify the intended targets of the assessment (the knowledge and skills the assessment intends to measure), and the skills that are required for access (the skills the student must have to understand or respond to the assignment). For example, reading skills are often targeted in language arts assignments, but are often access skills for mathematics, social studies, or science assessments.
3. Accommodations should address access, not target, skills. An accommodation is appropriate if it allows students with disabilities access to the assessment task, but not if it changes the skill targeted by the assessment. This means an accommodation may be appropriate in one instance, but not another. For example, extra time might be an appropriate accommodation if the assessment targets reading comprehension skills, but it would be inappropriate if the assessment targets reading fluency skills.
4. Target skill complexity should be modified when access is insufficient to allow for reasonable assessment of skills. Some students (usually those with more severe disabilities) have skill levels that are so far below the level targeted in an assessment that inclusion in the assessment, even with successful access, is of no educational value. For example, a student with a severe cognitive delay may lack the language and concepts needed to understand a science task, even if accommodated (e.g., being reading the assessment, provided extra time, or offered writing help) to allow access to the assessment task. In these cases, teachers should consider modifying the assessment to assess a less complex level of targeted skills.
5. Assessments should retain authenticity, even if they are modified to a simpler skill level. When teachers modify tasks to assess a lower level of targeted skill, they should retain assessment authenticity (i.e., construction of knowledge, disciplinary inquiry via elaborated communication, and value beyond school). For example, a teacher should modify a science/mathematics assessment on rocketry by inviting a disabled student to produce a simpler experiment (e.g., assessing Newton's third law of motion) instead of studying the multiple effects of aerodynamics, gravity, acceleration, and propulsion. The teacher should not substitute an assessment with limited authenticity (e.g., labeling the parts of a rocket on a diagram, filling in the blanks, calculating answers to specific questions, matching definitions to terms).

Institute Mission

The mission of the institute is to expand the current knowledge base related to practices and policies in secondary schools that enhance learning, achievement, and postschool outcomes for students with disabilities.

Core Research Questions

1. What are critical features of instruction, assessment, and support strategies that promote authentic understanding, and achievement (and performance) for all students?
2. How have changes in authentic inclusive learning and schooling practices affected the school and postschool outcomes (and their interaction) for students with disabilities (collectively and disaggregated) using frames of reference focused on equity, value added, and accountability?
3. How do schools accommodate district and state outcome assessments, and how do such accommodations affect the participation in, reporting of, and validity of assessment?
4. In school evolving toward authentic and inclusive instruction, what are the roles and expectations of stakeholders as they engage in planning for secondary and postsecondary experiences?
5. What contextual factors are required to support and sustain the development of secondary-level learning environments that promote authentic understanding, achievement, and performances for all students?
6. What strategies are effective in providing both information and support to policymakers, school administrators, teachers, human service personnel, and the community so they utilize the findings to create and support learning environments that promote authentic understanding, achievement and performance for all students?

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