



Challenges in Assessing Student, School, District, State, and National Performance at the High School Level

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High School Assessments

Presentation outline

- **High School Assessment Questionnaire**
 - **Self Assessment**
- **Key Technical Issues**
 - **Focus on Issues Unique to High School Assessments**
- **Some Alternative Models**
 - **Table Talk**

High School Assessment Questionnaire

- Please take a few minutes to complete my high school assessment questionnaire.



- What questions are you interested in answering?
 - What types of assessments are you interested in using at the high school level?
- Intended to help you frame questions to ask during this presentation.
 - *(This is the interactive part).*

Questions in Search of Data

- About Students:
 - Mastery of basic skills
 - Mastery of advanced skills
 - Diagnosis of strengths and weaknesses
 - Readiness
 - Non-academic traits
- For:
 - Promotion/graduation decisions
 - Targeting remediation
 - Improving instruction
- About Schools (states, the nation, the world):
 - Average score of students
 - Value-added
 - ✓ All students
 - ✓ Targeted groups
 - Who is being left behind?
- For:
 - Rewarding high-performing schools
 - Shaming other schools (or worse)
 - Teacher pay decisions
 - Improving instruction

The Many Types of Assessment

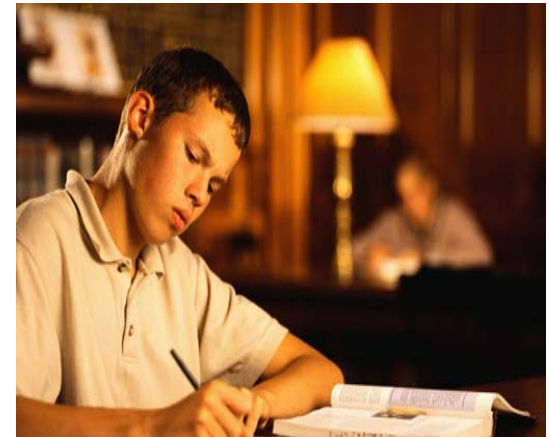
- Classroom assessments
 - For diagnosis
 - For grading
- State-wide end-of-course tests
 - Including AP like assessments
- Assessments linked to grade-level standards
- Nation-wide assessments
 - With national norms
 - Linked to “generic” standards
- International assessments
- College entrance tests
 - General skills
 - Subject-specific tests
- College placement tests
- Work-readiness tests
- Vocational interest and guidance tests
- Personality tests

Overview of Key Technical Issues

- Technical Issues for All Assessments
 - Validity – Does the assessment measure what we want it to?
 - ✓ Clarity of Content Specifications
 - ✓ Alignment Studies
 - Reliability – How accurate are the resulting scores?
 - ✓ Classification or Decision Accuracy
 - Diagnostic Utility – Do results indicate strengths and weaknesses?
 - Accessibility for English Learners and Students with Disabilities
- Particular Concerns for High School Assessments
 - Participation and Effort
 - Curricular/Instructional Validity
 - Accounting for Dropouts

Participation and Effort

- The main barrier to state-level 12th grade assessments for NAEP is perceived problems with participation and effort.
 - Even if school participation is made mandatory, student participation is not; recent rates have been dangerously low.
 - Students may be unavailable for a variety of reasons, ranging from frequent absences to participation in co-enrollment programs.
 - Results have absolutely no consequences for students and schools.
 - ✓ Confidentiality is a key concern for both students and schools.
 - ✓ Due to matrix sampling, scores for individual students and small schools would have low reliability.
 - Myth and anecdote concerning a “senior slump” are hard to overcome with data.



Participation and Effort (Continued)

- Also a problem for some state assessments.
 - Not perceived as a problem if results have consequences for the students, such as:
 - ✓ Classroom or end of course tests that affect student grades
 - ✓ Graduation or college entry tests
 - Participation problems generally solved for census tests used for NCLB.
 - Student effort on NCLB tests with no consequences for students is an open question.
 - ✓ Seniors know what “voluntary” means (unfortunately).

Possible Solutions to Participation and Effort Concerns

- Increasing Participation
 - Provide incentives to schools for high student participation.
 - ✓ This is how GED gets participation in norming studies.
 - ✓ NCLB provides negative incentives.
- Assuring Effort
 - Measure it! (e.g., fit indices, quitting, ref. Cohen)
 - Provide incentives for schools for high levels of student effort.
 - ✓ Different incentives work for different students.
 - Introduce (possibly positive) consequences for students
 - ✓ Seals and certificates, competitions among classes or schools.

Curricular/Instructional Validity

- What this really means is:
 - Does the student's curriculum cover the knowledge and skills being assessed?
 - Is instruction in this curriculum adequate?
- What it could also mean is:
 - Does the assessment have a positive impact on curriculum and instruction?
- These are legal issues if the assessment has important consequences for students!

Curricular/Instructional Validity

- These issues are particularly salient in high school assessments because:
 - Different students take different courses.
 - There may also be alternative versions of a single course
 - ✓ Two-year and one-year Algebra I courses
 - Teachers are generally expected to have credentials for the subject(s) they teach.
 - English learners and many students with disabilities are further behind and their courses are less likely to cover the general education curriculum.
 - Graduation tests trigger extreme legal scrutiny with respect to these issues.

Options for Dealing with Curriculum Diversity

- Option 1: Only test material all students should master.
 - Advantages:
 - ✓ Allows all students to be included.
 - ✓ Focus on whether students are being left behind.
 - Disadvantages:
 - ✓ Ignores high school contributions through elective courses.
 - ✓ May lead to focus on “pre-high school” content (or minimal competencies)
 - ✓ Still requires evidence that all students have received adequate instruction in this material.
 - ✓ Timing questions if instruction follows or significantly precedes the assessment.

Options for Dealing with Curriculum Diversity

- Option 2: Only test students completing specific courses.
 - Advantages:
 - ✓ Enables tight correspondence between assessment and curriculum.
 - ✓ Allows inclusion of higher-level courses.
 - Disadvantages:
 - ✓ Might promote “gaming” the system by restricting who can take critical courses.
 - ✓ Might fail to identify students being left behind because they do not take the course.
 - ✓ Difficulties in comparing proficiency across different courses.
 - ✓ Students might take course prior to high school.
- Hybrid Example: Virginia Graduation Requirement
 - Students must pass a fixed number of required and elective end-of-course tests.

Options for Dealing with Curriculum Diversity

- **Option 3: Assess “Readiness”:** What all students need for success in college, job training, and entry into the military.
 - Advantages:
 - ✓ Content can be based on predictive rather than curricular validity – leave it to districts and schools to figure out how to develop the skills.
 - ✓ Likely to include skills (e.g., higher order thinking) beyond minimum competencies.
 - Disadvantages:
 - ✓ Difficulty in getting agreement on readiness skills:
 - Limited to verbal and quantitative reasoning?
 - Include skills such as teamwork or listening skills or academic learning skills?
 - Predictive validity studies can be difficult and time-consuming.
 - ✓ Still leaves out much of what high school currently offer:
 - Specialized content covered by elective courses.
 - Watch 12th Grade NAEP for progress on this option!

Options for Dealing with Curriculum Diversity

- Case Study: NAEP efforts to assess Foreign Language
 - Pilot Test covered Spanish only
 - Two levels:
 1. Students with at least one year of instruction in Spanish
 2. Students with more than two years of instruction.
 - Argument about inclusion of native speakers of Spanish.
 - ✓ Assessing impact of instruction versus ability of American youth to speak Spanish?
 - Experts insisted on assessing listening and speaking as well as reading and writing in Spanish.
 - Outcome of a Pilot Test:
 - ✓ Logistical issues in identifying appropriate students to test.
 - ✓ Reliability and logistical concerns in assessing listening and speaking.
 - ✓ Assessment of foreign language deferred indefinitely!

Dropouts

- What can we say about dropouts?
 - Not generally feasible to survey/assess students who have already dropped out.
 - Can we say anything about what they learned prior to dropping out?
 - Less of a problem for 10th grade census tests, than for 12th grade assessments.
- NCLB requires separate accountability for graduation rates.
- Better data systems are needed!
 - Privacy protection may not be beneficial to students if it means no one realizes that they need help.

What States are Doing

- See handouts for some information on how states are implementing high school accountability and, in some cases, graduation exams.

Audited Transcript Model for High School Assessment

- A New/Old Model: Use transcripts to assess student achievement during high school.
 - Audit/adjust grades through end-of-course assessments.
 - ✓ Census or sample assessments
 - ✓ Similar to tests used to certify performance in AP courses.
 - ✓ Universities often adjust for differences in grading practices based on external test scores or first-year college success.
 - ✓ Audit feedback might also improve consistency in grading practices.
 - The National Center for Education Statistics regularly conducts high school transcript studies.

Audited Transcript Model

➤ Some advantages:

- Comprehensiveness: covers all high schools academic content.
- Uses available information: transcripts already maintained for other uses.
- Provides information on particular subjects (percent taking and performance) as well as overall (g.p.a.)
- Includes dropouts.
- Grade metric familiar to policy-makers and the public (arbitrary assessment scales are not).

Audited Transcript Model

- Disadvantage: Details not yet worked out.
- Research Needs:
 - How to value different transcripts.
 - ✓ Importance of different types of courses for readiness.
 - ✓ Adjusting for course difficulty and grading practices.
 - How to report results.
 - ✓ Overall achievement
 - ✓ Subject specific achievement
 - Logistical difficulties
 - ✓ Obtaining transcripts
 - ✓ In a common electronic form.

Table Discussion

- Time Permitting:
 - Pick one or two needs of high school assessments that are important to those at your table.
 - Suggest the best type(s) of assessments to meet these needs.
 - Suggest models for dealing with the technical issues discussed here:
 - ✓ Participation and effort
 - ✓ Curricular diversity
 - ✓ Accounting for dropouts

Some Useful References

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