

Communicating About Achievement Gaps

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Validity

Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests.

AERA, APA, NCME. (1999). *Standards for educational psychological testing*. Washington DC: AERA.

Validation

The gathering of evidence to support those interpretations and uses.

To validate an interpretation or use of test scores is to evaluate the plausibility of the claims based on the test scores. (Kane, 2013)

Michael Kane (2013). JEM, 50(1).

The argument-based approach to validity facilitates the process of validation:

- State the claims that are being made in a proposed interpretation or use (IUA)
- Evaluate these claims (the validity argument)
 - the IUA is clear, coherent, and complete
 - its inferences are reasonable
 - its assumptions are plausible

Today's Goal

To provide sound guidance, we clarify the extent to which ambiguity in our definitions and methods of identification of subgroups interferes with consistent estimation and reporting. We then provide methodological advice on analysis and estimation of gaps. Finally, we offer guidance on reporting and communicating results – in an effort to maximize meaning, relevance, and utility of such information.

Definition?

Achievement gaps represent the condition when **achievement can be predicted by non-academic factors, such as race, ethnicity, neighborhood, income, or other construct-irrelevant factors.** Whereas demographics are generally outside the control of schools, families, and communities – achievement is not. If this view is taken, to close the achievement gap is to eliminate the predictive power of demographics.

Definition?

- The goal of *closing the achievement gap* is too limiting – a more rigorous, valuable, and perhaps necessary goal for the future of our society is to **elevate the educational achievement of all to a high standard and provide access and opportunities to higher education and desired careers to all who seek them.**

Test Score Interpretation

Traditional interpretations of test scores as indicators of achievement are generally supported through the evidence collected during the test development process and psychometric evaluation of test score quality. We assume that the test is an appropriate tool to make inferences about what students know and can do relative to state standards (now adopting common core standards).

We also note that significant achievement gaps exist among student subgroups, suggesting important limitations in what students know and can do. Such interpretation informs educational and policy-relevant decisions regarding instruction and resources (among others).

The use of district and state test scores addresses many stakeholders at local, state, and federal levels. Score use also addresses local evaluation of educational programming and instructional practices.

Striving for the World's Best Workforce

- all students meet school readiness goals
- all third grade students achieve grade-level literacy
- Close the academic **achievement gap** among all racial and ethnic groups of students and between students living in poverty and their more privileged peers
- all students graduate from high school
- all students attain college and career preparedness

Performance Measures

- Student performance on the National Association of Education Progress (NAEP)
- Reduction of the academic achievement gap by student subgroup
- Student performance on the MN Comprehensive Assessments
- College and career readiness under section 120B.30, subdivision 1

School Plans

- School board is to develop a plan to support and improve teaching and learning that is aligned to the World's Best Work Force:
 - Clearly defined student achievement goals and benchmarks
 - Process to evaluate each student's progress toward meeting the state and local academic standards

Underlying Assumption

we assume a uniform and consistent level of access and engagement to high quality instruction relevant to curriculum providing opportunities to learn the content embodied in the state standards (CC).

Assumptions

- high quality instruction (teacher preparation and professional development, school policies regarding instructional practices)
- high quality curriculum (content relevance, representativeness of the rigor required in the standards, meaningfulness to students)
- student engagement (including the support and encouragement received in their schools, families, communities)
- test quality (content representation, absence of construct-irrelevant characteristics).

The validity of these assumptions do not necessarily interfere with the inference regarding student knowledge and abilities (with the exception of test quality), but may interfere with the appropriateness of test score use.

Other Assumptions

When estimating achievement gaps based on specific subgroup performance, we introduce another set of assumptions, regarding the definition and interpretation of subgroup membership. These assumptions must be examined to appropriately and meaningfully interpret and use test scores as intended.

Our Work Today

- Hear from a few colleagues
- Consider definitions
- Make context explicit
- Make assumptions explicit
- Consider the possibility of moving toward consensus regarding language and practice

National Partnership for Educational Access

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