

Science

Instruction, Assessment and Evaluation

Validity Check

Validity is the extent to which a measurement is well-founded.

Test Validity is the degree to which evidence and expectations agree.

Measuring test validity requires an in-depth examination of both instruction and assessment. An assessment is not valid unless all parts of the assessment are valid. Each individual question must have its validity evaluated. There are many types of validity but the three most relevant are: expected validity, instructional validity and depth validity.

Expected Validity – Is a measure of how well the assessment is expected to measure student mastery. In other words, how well does the teacher expect the students to perform on the assessment?

- Is this an easy or hard assessment in the eyes of the teacher?
- Are student performance and teacher expectations in agreement? If not, why?

Instructional Validity – Is a measure of how well the test measures objectives and skills. Objectives and skills are knowledge level objectives and reflect the successfulness of instruction

Learning begins with acquiring knowledge. If the knowledge is not conveyed well, the assessment will be invalid.

Depth Validity – Is a measure of how well the test measures depth of content. A test should have more than just knowledge level questions. It should include both comprehension and application level questions which allows students to demonstrate depth of understanding.

Moving students from knowledge level thinkers to comprehension and application level thinkers requires teacher modeling and student practice. If an assessment does not require students to think, then the opportunity to grow student thinking has been lost.

A fair assessment meets all three validities. A fair assessment does not necessarily equate to a fair evaluation. Analysis of student performance and adjusting the grading scale to reflect the outcome of the assessment are necessary to make a proper evaluation. An assessment must be evaluated prior to administration for validity and post administration for proper evaluation.

