



The New NRT Model

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Introduction

Traditionally, there have been distinct differences in the purpose, use and development guidelines for a norm-referenced test (NRT) and for a criterion-referenced test (CRT). This historical distinction no longer has validity. The purpose of this paper is to present the reasons why this difference is no longer accurate and to present the unique features of the new NRT model in today's world of standards-based accountability.

Historical Context

For publishers of norm-referenced tests, the goal has been to identify those commonly valued educational outcomes in reading, mathematics, science, social science, etc. and then build a test around those common values that allowed the customer to identify the range (rank order) of student achievement on those educational outcomes. Before the existence of state content standards, the publishers relied on reviews of curriculum materials, scope and sequence documents, instructional materials, etc. The publishers deduced and inferred the common values from these various resources.

State-approved content standards have made it much clearer to the publishers what the states value and what they want their students to know and be able to do. Norm-referenced test publishers now know explicitly what the states want to test.

Each norm-referenced test publisher now has an opportunity to use those state content standards as the basis for their product blueprint. To the extent that publishers recognize the importance of the state content standards and integrate them into their products, norm-referenced tests can and will reflect those standards.

Implications on Normative Interpretation

The selection criteria for items to be included in a norm-referenced product are often different from the selection criteria for criterion-referenced tests. Typically, the selection criteria for an NRT are more stringent than for a CRT. Specifically, because an NRT is intended to distribute achievement across a continuum and to



be able to identify precisely different levels of achievement along that continuum, items must be selected to elicit this distribution as well as measure important content.

Criterion-referenced tests typically have item selection criteria that focus the maximum precision of measurement at the cut-scores, not along the entire continuum.

These approaches are not right or wrong but rather different decisions that result in different levels of score precision.

Using an NRT as the Product Base for a Standards-Based Test

If the NRT is designed to maximize alignment to the content standards of a specific state, this base product can be augmented to complete the alignment. States can use the NRT subtests as the base, augment with items from the company's item bank, and further augment with custom-developed items to round out the assessment. This solution enables states to report standards-based information (content standards scores), performance levels (cut-scores), and percentile rank information for every student. Released item requirements can be met by rotating out a sample of augmented content each year. Furthermore, this procedure has been approved for use to meet the requirements of the *No Child Left Behind Act* of 2001 (NCLB).

Advantages of Using an NRT as the Base for a Standards-Based Test

The criterion-referenced assessment resulting from the augmented model results in a rigorous, standards-based assessment with complete coverage of a state's chosen content standards. This model also allows for the following advantages as compared to the custom-created criterion-referenced assessment.

- There is no need to develop all new items for each form of the test.
- Tests can be unique each year due to the development of multiple forms of the norm-referenced core.
- Reports allow a comparison to student performance across the nation as well as information about student performance on the state's particular content standards.
- The extensive research conducted on each item in the NRT core and in the company's item bank maximizes the reliability, fairness, and validity of the assessment.
- A vertical scale made possible by the NRT core allows the tracking of student progress from grade to grade.

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- The NRT scores provide an external check to demonstrate the rigor of the state's content standards.
- The untimed norms of the new NRTs facilitate the accommodations necessary for an appropriate assessment of all students including limited English proficient students and students with disabilities.

Summary

The augmented NRT model offers states the opportunity to maximize the information they receive from their state assessments. Simultaneously, this model offers a cost-effective assessment solution that is approved for use to meet the requirements of NCLB. Given the characteristics of the new NRTs, states are well served to consider the augmented NRT model for their state assessment programs.

References

- Salvia, J., & Ysseldyke, J. (2001). *Assessment* (8th ed.). Boston: Houghton Mifflin Company.
- Tindal, G., & Haladyna, T. M. (Eds.). (2002). *Large-scale assessment programs for all students: Validity, technical adequacy & implementation*. Mahwah, NJ: Lawrence Erlbaum Associates.

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