

Differential Item Functioning (DIF) Study

Data: Item-level SAT 9 Reading Comprehension (RC) and Word Analysis (WA) from two states:
 - State X:
 Grade 3 – 6,611 (6.8% w/ disabilities)
 Grade 9 – 5,287 (9.9% w/disabilities)
 - State Y:
 Grade 3 – 6,611 (6.8% w/ disabilities)
 Grade 9 – 5,287 (9.9% w/disabilities)

Statistical Design: Logistical regression approach. Item order effects also examined.

Criterion Variable: Correct vs incorrect response.

Predictor Variables: Disability status, total score on test, interaction between disability status and total score on test.

Findings: Items shown to exhibit DIF for students with disabilities were more likely to be located in the second half of the assessments in grade 9. Students with disabilities consistently underperformed on items from the second half of the assessments.

Fewer items in grade 3 were shown to exhibit DIF for students with disabilities. Those items showing DIF in grade 3 were **not** more likely to be located in the second half of the test. These findings held for both RC and WA.

Conclusion: Factors other than test content (e.g., frustration, motivation, fatigue) may contribute to diminishing performance of students with disabilities as test progresses. These factors reflect construct irrelevant variance.

Differential Distractor Functioning (DDF) Study

Data: Item-level SAT 9 Reading Comprehension (RC) and Word Analysis (WA) subscales.

Students:

Grade 3 – 6,611 (6.8% w/disabilities)
 Grade 9 – 5,287 (9.9% w/disabilities)

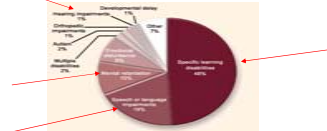
Statistical Design: Logistical regression approach. Item order effects also examined. Only incorrect responses considered.

Criterion Variable – Distractor selection (most common incorrect vs other incorrect)

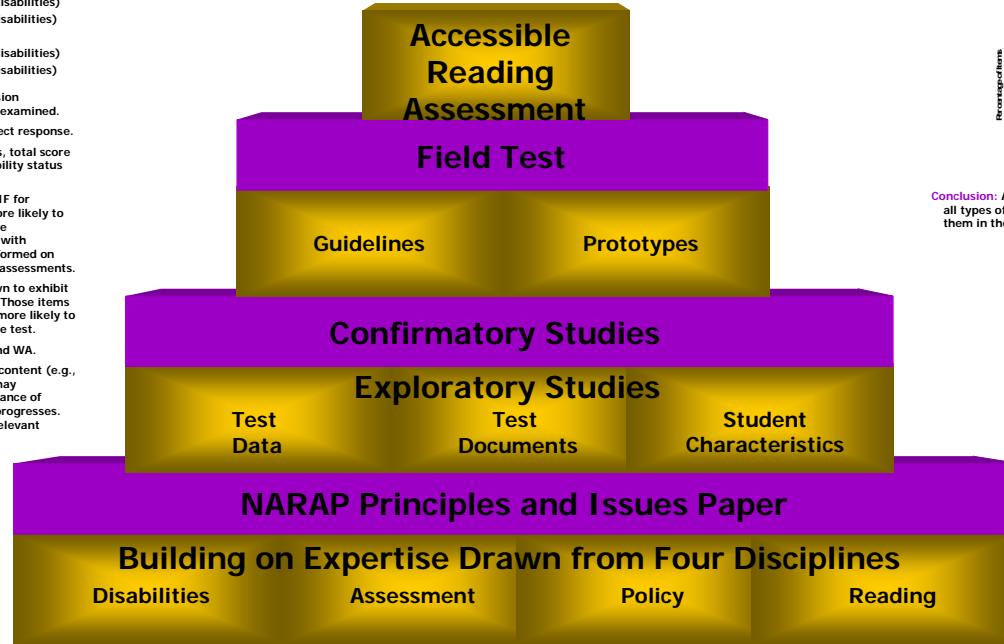
Predictor Variables – SD status, total score on subscale, interaction between SD status and total score on subscale.

Findings: DDF was present for grade 9 test items but not for grade 3 item. Items shown to exhibit DDF for students with disabilities were more likely to be located in the second half of the assessments in grade 9. Students with disabilities in grade 9 appear to be more randomly selecting one of the four response options rather than making an "educated guess" for items in the second half of the assessments.

Conclusion: Factors other than test content (e.g., time pressures, cognitive overload) may contribute to differential distractor functioning for students with disabilities, especially in the latter half of tests. These factors reflect construct-irrelevant variance.



Education Week. Quality Counts 2004. Count Me In: Special Education In An Era of Standards, p. 10.



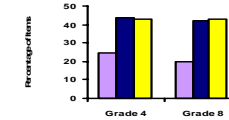
- Disability Reports
- Accommodations
•Universal Design
•Alternate Assessment
- State Standards Analyses
- Definition Panel
•Focus Groups

Test Blueprint Study

Data: Reading test blueprints or specs from 38 states

Analysis: Coded skills to be assessed.

Findings: Foundational skills are less often assessed in state assessments, yet are still the focus of assessments, even in grade 8. Reading comprehension is most often targeted skill of state reading assessments.

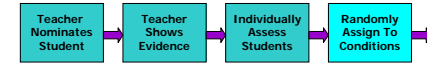


Conclusion: Accessible assessments will have to consider all types of skills and how to increase access to all of them in the most valid and effective ways.

Student Characteristics Study

Purpose: Establish process for assigning students to experimental conditions.

Procedures:



Materials: Questionnaire based on feedback from 23 experts; school test data and student work samples; differentiated packets of assessment tools and interview protocols.

Findings: Teachers have used three of four designations in nominating students who need accessible reading assessment.

Conclusion: General procedures for identifying students for experimental conditions seem workable. Nomination questionnaire and assessment packets need further refinement.