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# Partnership for Accessible Reading Assessment (PARA) Project Overview, Results, Next Steps

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# PARA Partners

- University of Minnesota - NCEO (National Center on Educational Outcomes) and Department of Curriculum and Instruction
- CRESST (Center for Research on Evaluation, Standards, and Student Testing, University of California, Los Angeles) and University of California, Davis
- Westat

# PARA Research Program Assumptions

- **Assumption #1:** We don't know everything about what goes into accessible reading assessment yet.
- **Assumption #2:** Preliminary research must inform design of "testlets."
- **Assumption #3:** Both preliminary and experimental research will inform our knowledge of Principles and Guidelines (Goal 3) for future assessments.

## Three Major Research Question Areas

- What characteristics of students require more accessible assessment of reading?
- What characteristics of current assessment practices hinder accessibility?
- What characteristics would accessible assessment have?

## PARA Activities and Findings

- Disability Reports
- Differential Item Functioning Analysis
- Differential Distractor Functioning Analysis
- Test Characteristics Study
- Student Characteristics Pilot Study
- Projects Underway – Chunking, Student Characteristics, Motivation

## Differential Item Functioning (DIF) Analysis

- Used to examine differences between students with and without disabilities – to see whether items functioned differently.
- Found that many items exhibited DIF, especially for grade 9 students with disabilities, most often in the second half of the assessment.
- Several issues with the data limited findings – NRT, no access to category of disability or accommodations information; concern about high omission rate.

# Differential Distractor Functioning ( DDF) Analysis

- Used to examine patterns of selecting distractors – to see whether students with disabilities exhibited a differential pattern of selecting distractors compared to students without disabilities.
- Found that many items exhibited DDF for students with disabilities in grade 9, especially in the second half of the assessment.
- Several issues with the data also may limit these findings – NRT, no access to category of disability, accommodations information; concern about high omission rate.

# Student Characteristics Pilot Study

- Had teachers identify students they believed have reading skills that are not accurately measured by state reading assessments.
- Found that teachers believe they are able to identify students, but they struggled with consistently assigning them to a single explanatory category.
- Found that our brief follow-up interview and examination protocol needing refining.

# Chunking Study

**Purpose:** To examine the effects of chunking/segmenting\* reading passages on the performance of students with disabilities, and to compare this effect to the effect on the performance of students without disabilities.

\*Chunking/segmenting refers to the concept of building breaks directly into the test booklet by separating the passage into more manageable “chunks” or “segments,” and adding relevant test questions directly after each chunk/segment.

# Design

Grade 8 students with and without disabilities will be randomly assigned to either Version A (standard) or Version B (chunked/segmented) of 3 passage multiple choice test. All students will be given background questions, feedback questions related to fatigue and mood, and a student motivation scale.

# Student Characteristics Study

**Purpose:** (1) To identify students whose reading skills are not accurately measured by state reading assessments as judged by teachers and verified by brief interviews and examinations; and (2) To check the prevalence of “less accurately measured students” (LAMS) with various characteristics.

# Possible Sources of Measurement Inaccuracy

1. Fluency limitations obscure comprehension skills
2. Comprehension limitations obscure other reading skills
3. Strengths exist outside of what most reading tests cover
4. Responds poorly to standardized testing circumstances or materials

# Prevalence Study

Teachers complete survey about all of their LAMS, indicating which distorting characteristics are found among students in their classrooms

# Motivation Study

**Purpose:** To examine whether improving the motivational characteristics of a large-scale reading assessment increases its accessibility for students with disabilities, and in so doing provides a more valid assessment of these students' reading proficiency due to their increased engagement.

# Design

Counterbalanced stratified random assignment design with experimental – choice (C) – groups that select the passages read for the assessment and control – no choice (NC) – groups that do not select passages read for the assessment. C and NC groups for both students with and without disabilities; those with disabilities include students with learning disabilities, speech-language impairments, deafness or hard of hearing, and students with mental retardation.

## Design—cont.

- Students in the experimental conditions will be allowed to “design your own assessment.”
- The assessments will include 4 total passages (two literary-fiction and two informational-expository—based on the NAEP 2009 Reading Framework).
- Separate pools of passages will be provided for 4th and 8th grades to select from; each passage will be followed by 5-6 multiple choice items.

# Attending to Issues of Motivation

- Situated motivation questions will be woven into the test booklets for the choice and no choice conditions and will be placed after the items that go with each question; these questions will indicate students' perceptions of the texts they read (e.g., difficulty; interest) and their sense of self-efficacy in reading and completing the items following the passage (the task).
- A pre-assessment general motivation survey will be given to all students to provide information on student feelings about "self as reader" (e.g., Motivation for Reading Questionnaire-MRQ).

# Questions?