



Partnership for Accessible Reading Assessments



Partnership for Accessible Reading Assessment (PARA): Motivation Study

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IES Conference, 2007



PARA Research Program Assumptions

Assumption #1: We do not know everything about what goes into accessible reading assessment yet.

Assumption #2: Preliminary research must inform design of accessible assessment.

Assumption #3: Both preliminary and experimental research will inform development of Principles and Guidelines for future assessments.



Three Major Research Question Areas

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



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.



Research Questions

1. Does the option of exercising choice in the selection of reading comprehension passages, which is hypothesized to improve student motivation and engagement on a large-scale assessment, produce significantly higher measured reading comprehension for all students?
2. Is there a significant difference in reading scores of students with disabilities versus general education students on large-scale reading assessments?
3. Is there a significant difference in student performance on text type (literary-fiction versus informational-exposition passages) on large-scale reading assessments?



Research Questions

4. Is there an interaction effect between choice, type of text, and type of student?
5. Is there a correlation between students' general motivation to read (e.g., as measured by the MRQ-Motivation to Read Questionnaire) and their performance on a large-scale reading assessment? Are participants who are more motivated to read (as measured by the MRQ), more likely to benefit from the choice option on a large scale reading assessment?



Design: Calibration Study

- Prior to the motivation study, 32 reading passages (16 each for grades 4 and 8) with 10 items each, will be calibrated to empirically determine the comparability of the passages
- Calibration requires the placement of all passages & questions on a common IRT-based equal-interval measurement scale, the development of passage scoring tables, & the use of a mechanism for equating scores across passages
 - Item fit analysis will be employed to determine which items will be retained or eliminated
 - Students will rate passages to indicate interest and difficulty
- Participants include 400 students in grades 3-5 and 400 students in grades 7-9 from intact classrooms, including students with and without disabilities



Design: Motivation Study

- Participants include 280 students who are fluent in English—140 students from 4th grade and 140 from 8th grade, including targeted samples of students representing a range of disability groups
- The motivation assessment includes 2 literary-fiction and 2 informational-expository passages for both grade 4 & grade 8; each passage will be followed by 5-6 multiple choice items; the assessment is untimed & completed on a computer-based platform
- Interviews will be conducted after testing with subsets of students from the control and experimental groups at both grade levels



Attending to Issues of Motivation

- General motivation will be measured prior to the test to obtain information on students' feelings about "self as reader" (e.g., Motivation for Reading Questionnaire-MRQ).
- Situated motivation will be measured using questions woven into the test booklets for the choice and no choice conditions (placed after the comprehension items); specific questions will tap
 - students' perceptions of the texts they read (e.g., difficulty; interest), and
 - students' sense of self-efficacy in reading and completing the items following the passage (the task).



Design & Analysis: Motivation Study

- A counterbalanced stratified random assignment design will be used with experimental *choice* (C) groups that select reading passages for the assessment (“design your own assessment”) and control *no choice* (NC) groups that do not select passages
- The dependent measure is comprehension performance; the factors include choice condition (choice/ no choice), disability status (youth with disabilities/ youth without disabilities) and text type (literary-fiction/informational-exposition)



Design & Analysis: Motivation Study

- The design is a split-plot design with two between-subjects factors (A = passage choice and B = disability status), one within-subjects factor (C = text type), one blocking variable (S = subject), and one covariate (X = motivation as assessed on the MRQ) at the between-subject level; A, B, C, and X are fixed effects, and S is a random effect
- Analysis of variance will be used to evaluate various effects; correlations of students' performance on the comprehension test & responses on the MRQ and situated motivation questions will be calculated