

Developing Accessible Reading Assessments for Students with Disabilities

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Project Goals:

- 1: Develop a definition of reading proficiency.
- 2: Research the assessment of reading proficiency.
- 3: Develop research-based principles and guidelines making large-scale reading assessments more accessible for students who have disabilities that affect reading.
- 4: Develop and field trial a prototype reading assessment.



Principal Investigator: Cara Cahalan-Laitusis, Linda Cook

Focus: The DARA project is focused on the development of an accessible reading assessment for students with reading-based learning disabilities. DARA takes a component approach to assessing reading skills such as word recognition, reading fluency, vocabulary knowledge, and comprehension.

Program of Research:

DARA is examining the possibility of measuring comprehension in an audio format, while assessing word recognition and fluency separately.

Assessment Tools:

GMRT Reading Comprehension
State English-Language Arts assessment

Read Aloud Modification:

Providing the reading assessment in an audio format produced a significant differential boost in the reading scores of students with reading-based learning disabilities, whereas the scores of students without learning disabilities were not significantly changed.

Psychometric Research:

The DARA project uses data from both state assessments and experimentally designed research studies to determine how effectively current reading and ELA assessments perform for students with or without disabilities. Analysis of DIF shows little difference in item performance by assessment format or by disability status. The results of a multi-group confirmatory factor analysis provide evidence that the GMRT and the state English-Language Arts assessments measure the same single construct for students with and without disabilities who take the test with and without a read aloud test change.



Principal Investigators: Martha Thurlow, Deborah Dillon

Focus: All disabilities that impact reading, particularly learning disabilities, speech or language impairments, mental retardation, and deafness or hard of hearing

Program Assumptions:

- 1: We do not know everything about what goes into accessible reading assessment yet.
- 2: Preliminary research must inform design of accessible assessment.
- 3: Both preliminary and experimental research will inform development of Principles and Guidelines for future assessments.

Major Research Question Areas:

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

Segmenting Study

Purpose: To examine the effects of 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.

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.

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.



Principal Investigators: Cara Cahalan-Laitusis, Martha Thurlow

Focus: Research and development to improve reading assessments for students with visual impairments or blindness.

Specific Focus: The project examines the properties of existing assessments for these students and aims to aid in the development of an assessment of reading with a particular focus on independent technology assisted reading.

Programs of Research:

- 1: Psychometric research, which uses data from operational state assessments to determine how effectively current reading and English language arts assessments perform for students with visual impairments or blindness
- 2: Focus groups and observational interviews with assistive technology readers to determine the necessary skills required to be an independent and efficient assistive technology (AT) reader
- 3: Survey of AT readers to define the population of students who would benefit from an assessment of technology assisted reading and to inform the test blueprint
- 4: Usability studies to ensure the prototype assessments created for both the TARA project and the other NARAP projects are accessible and valid for students with visual impairments and blindness

Research Plan:

- Phase 1: Survey of AT Users
Phase 2: Develop Test Blueprint and Prototype Items
 Stage 1: Test Blueprint
 Stage 2: Prototype Items
Phase 3: Pilot Test Items
Phase 4: Revise Items and Finalize Test

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