

# Standard Setting Report for the MKAS<sup>2</sup> 3rd Grade Reading Assessment

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# The Center for Assessment

- The National Center for the Improvement of Educational Assessment (NCIEA or “Center for Assessment”) is a non-profit firm established in 1998 with the mission of improving student learning through improved assessment and accountability practices
- The Center works with 35 states/entities (including Washington, DC, Puerto Rico), five school districts, and 18 non-governmental organizations
  - Almost all are long-term engagements designed to provide technical and design support for a range of assessment and accountability issues
- Purposely small—15 full-time professionals
  - All with doctoral degrees, but who have worked in the “real world”

# MKAS<sup>2</sup> 3<sup>rd</sup> Grade Reading Test

- Among the purposes of the Mississippi K-3 Assessment & Support System (MKAS<sup>2</sup>) is to serve as a summative assessment of 3<sup>rd</sup> grade reading ability
- This assessment supports § 37-177-9 the *Mississippi Literacy-Based Promotion Act*, which states beginning in the 2014-15 school year, if a student's reading deficiency is not remedied by the end of the student's third grade year, as demonstrated by the student scoring at the lowest achievement level in reading on the state annual accountability assessment or on an approved alternative standardized assessment for third grade, the student shall not be promoted to fourth grade

# Standard Setting Overview

- Standard Setting is the process of determining ‘cut scores’ for the third grade reading test that indicate whether a student has achieved an established level of performance
  - More directly, standard setting answers the question, “what performance is ‘good enough’ to pass?”
- The process used for the third grade reading test is termed ‘ID Matching,’ which has been used in many large-scale standardized achievement testing programs and has a strong foundation in the psychometric literature
- Standard setting necessarily involves expert judgment and is informed by data

# Standard Setting Overview

- Standard Setting was conducted on May 4-5, 2015
- 24 Mississippi educators and stakeholders with expertise in 3<sup>rd</sup> and 4<sup>th</sup> grade reading served as panelists
- The Mississippi Reading Panel was represented among the standard setting participants
- Mississippi's National Technical Advisory Committee (TAC) reviewed detailed plans and procedures on multiple occasions prior to the event and following the event
- The event was facilitated by Dr. Mike Beck, contracted by Renaissance Learning
- The event was monitored by independent experts from NCIEA, Dr. Christy Schneider, and Research in Action, Dr. J.P. Beaudoin
  - These individuals are well-known nationally for their expertise and experience in standard setting

# The Standard Setting Process

- The standard setting process blends empirical evidence and professional judgment
- Broadly, the panelists study test items ordered by difficulty and match them to detailed Performance Level Descriptors (PLDs) for ‘Not Passing’ and ‘Passing’
  - PLDs are narrative statements that indicate what students should know and be able to do
  - PLDs are directly linked to the state standards
- This occurs in multiple rounds, successively informed by discussion and data

# Standard Setting Process

## Day 1

- Orientation and training
- Reviewed the test
- Study and clarify PLDs
- Round 1 independent ratings

## Day 2

- Group discussion informed by item data
- Round 2 independent ratings
- Review and discussion of informed by overall impact data
- Final judgments and evaluation

# Recommendation

- The cut score recommendation resulting from the process is a score of 926
- If this cut score is approved, it is estimated that 85% of third graders will pass and 15% will not pass the first test administration



# On what basis do we have confidence in this recommendation?

- Mississippi educators and stakeholders followed an established process made recommendations based on a review of items and performance expectations
- The MDE and its technical advisors considered multiple sources of additional evidence:
  - The statistical procedure used to translate the cut score recommendation to the reporting scale is consistent with psychometric procedures found in the literature and practice
  - Trend data from previous administrations of MCT2 3<sup>rd</sup> grade Reading/ Language Arts reveal that the percent of students classified as 'Minimal' varies between 13% and 17%
  - Renaissance Learning conducted a statistical linking study to estimate the relationship between performance on the third grade reading test and MCT2 Basic and the recommended cut is very close to this value
- In summary, based on multiple sources of data in combination with policy and expert judgment we have confidence that this recommendation is appropriate