# CCSS Assessments and Students with Disabilities and English Language Learners

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# Overview

- Disclaimers re insider information
- Some important background on SBAC and PARCC for English Learners and Students with Disabilities
- Aspects of the CCSS and Assessments that are positive for English Learners and Students with Disabilities
- Causes for Concern
- Some thoughts on the Past and Future of Accommodations



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# Disclaimers re Insider Information

- Only know about SBAC and PARCC through
  - what I have read and heard in public presentations, and
  - my involvement in the NRC's Board on Testing and Assessment (BOTA)
- Not an advisor to either consortium
  - Advantages
  - Disadvantages
- All of the information on PARCC and SBAC comes directly from their respective websites and released documents



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# Important Background on PARCC and SBAC

- Both PARCC and SBAC were commissioned to approach assessment through a systems level lens
- This lens requires that assessment and instruction be viewed as complementary, integrated activities in the learning-development-knowledge acquisition, and performance cycle



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# From PARCC

- "*The PARCC development process prioritized understanding the Standards and high quality instruction first. To ensure that the assessment will be based on a rich model of instruction aligned with the CCSS, the PARCC Model Content Frameworks for educators were developed based on the Standards before the assessment blueprints were designed. …The Frameworks highlight key elements of excellent instruction aligned with the CCSS, and in turn, informed the assessment blueprint design.*"
- "*PARCC is designed to reward quality instruction aligned to the Standards, so the assessment is worthy of preparation rather than a distraction from good work*".

# From SBAC

- *"The purpose of the consortium (is)*
  - *To develop a **comprehensive and innovative** assessment system for grades 3-8 and high school in English language arts and mathematics aligned to the Common Core State Standards, so that...*
  - *•...students leave high school **prepared for postsecondary success** in college or a career through increased student learning and improved teaching"*

# Things to Like

- This integration of instruction and assessment should yield positive benefits for all students, but especially special needs students
  - Assessment will be less decontextualized, less divorced from the everyday activities of schooling
  - Assessments to guide instruction will be more closely tied to the same standards and to the assessments used to measure students' proficiency with those standards
  - Assessments to monitor growth and progress will be designed to measure learning progressions and progress toward standards

# Things to Like

- Tighter integration of standards and assessments across years *should* increase predictive validity
- Increased use of performance assessments *should* yield inferences about learning that better predict future performance in and outside of school for SWD and ELs
- New assessments *should* be more engaging for students



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# Things to Like

- Use of computerized and adaptive assessments has many advantages
  - Wider variety of item formats,
  - Novel stimuli,
  - Greater efficiency,
  - Wider array of potential accommodations

# Things to Like

- Focus on core, high impact vocabulary *should* increase instructional focus on core vocabulary

# Reading for Understanding Network Study of Comprehension in Grades 7 – 12

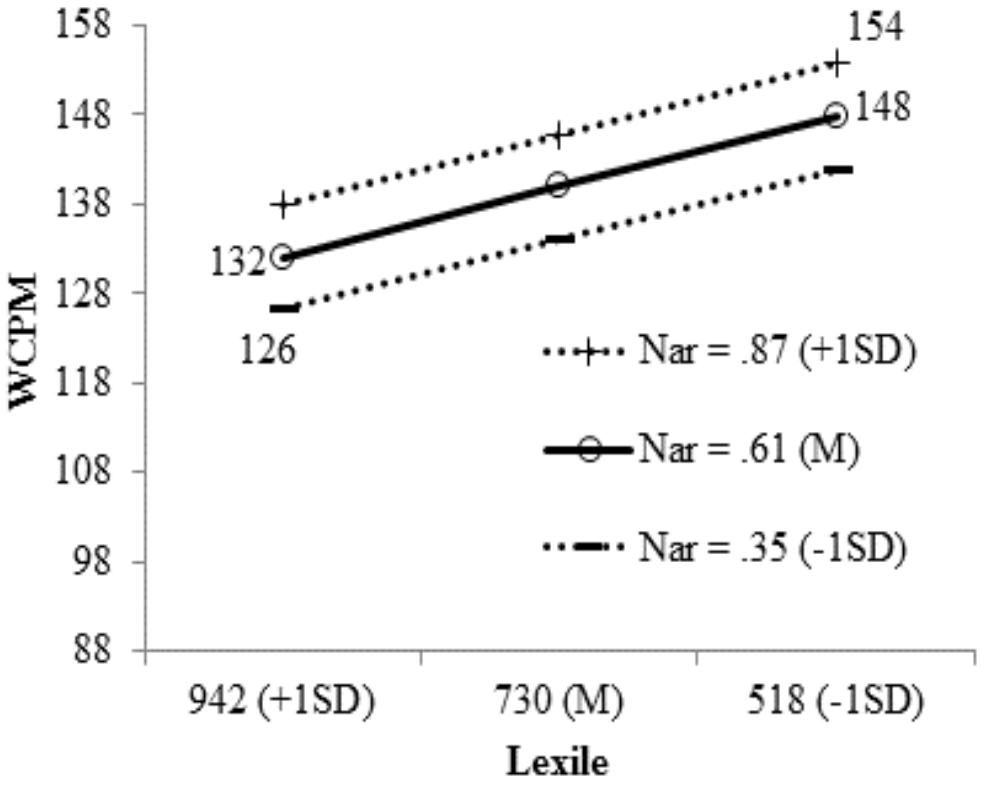
- Latent Variable Correlations between
  - Background Knowledge and Vocabulary
    - 0.81, 0.97, 0.98, 0.94, 0.96, 0.99
  - Vocabulary and Comprehension
    - 0.98, 0.96, 0.99, 0.96, 0.99, 0.94

- These correlations highlight the potential value of instruction that builds knowledge of the world and knowledge about words

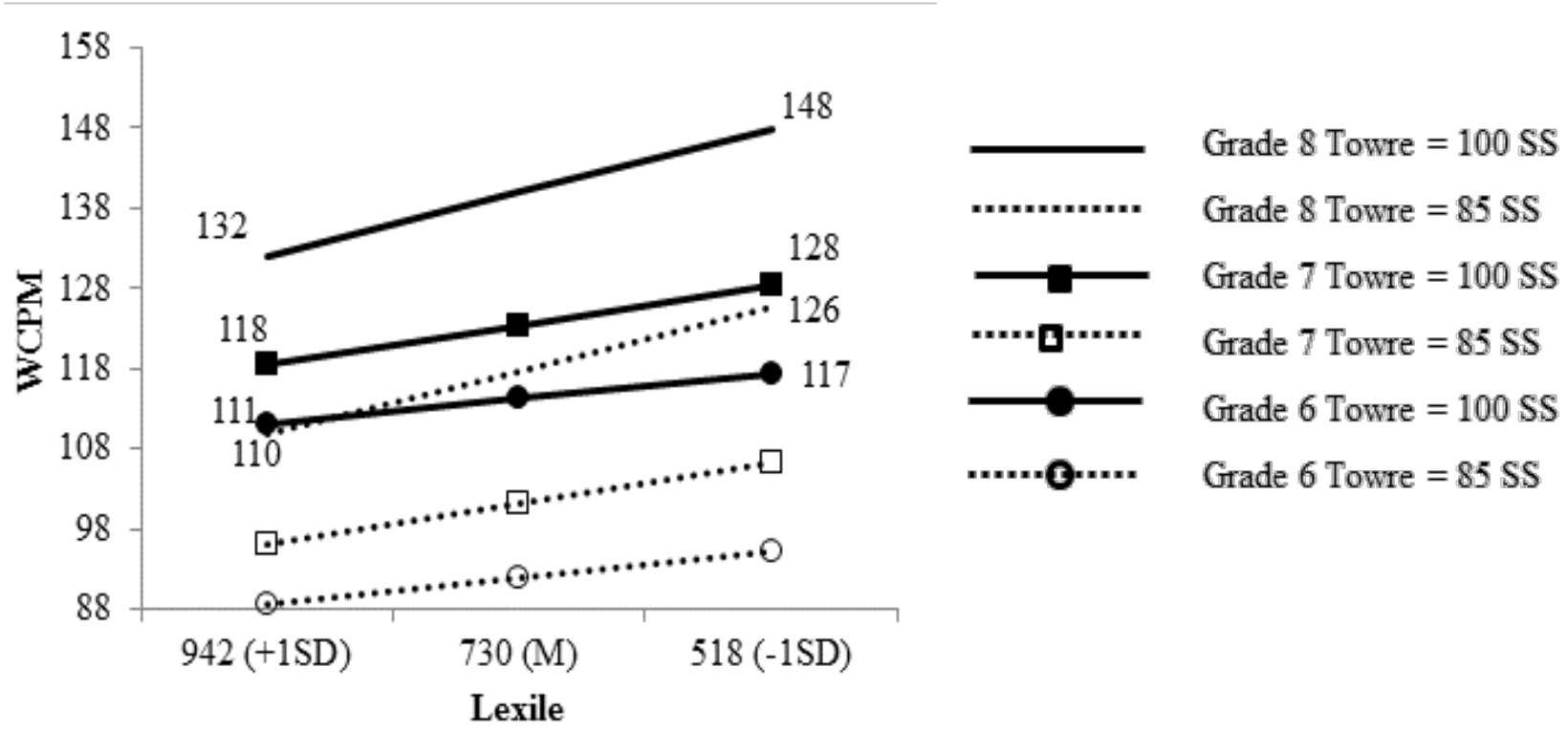
# Things to Like

- Focus on close reading *should* reduce the impact of speed and increase the impact of depth of processing
- However, effects of text difficulty vary across students, even when characteristics of readers and texts are controlled

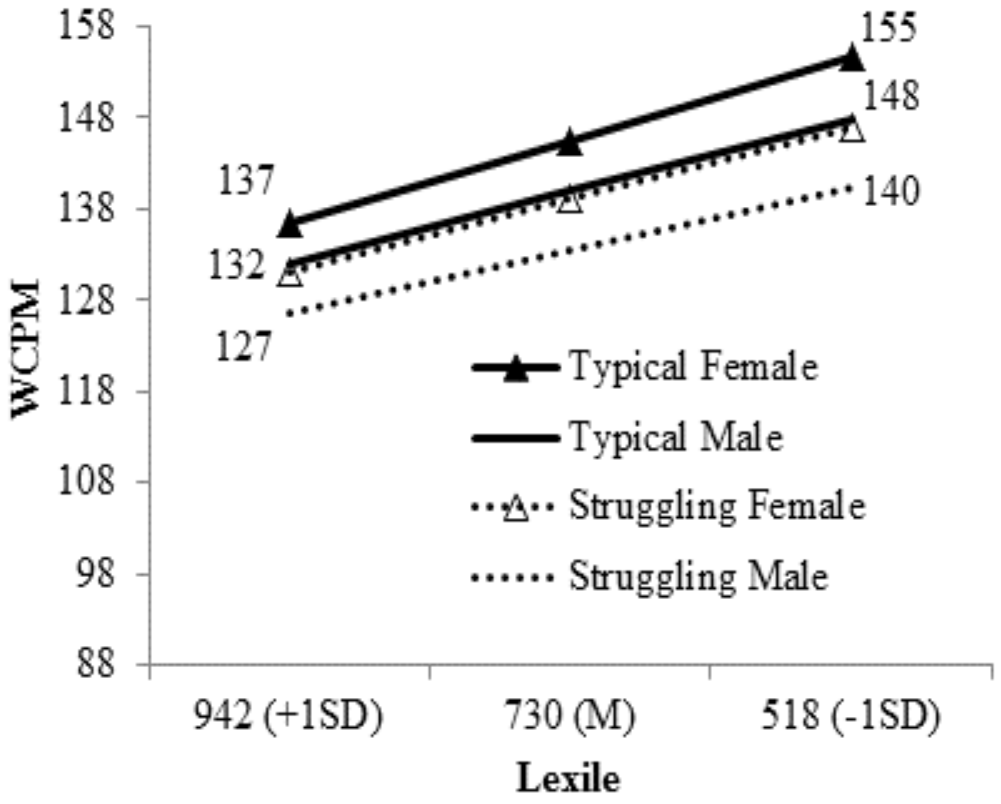
# Text - Text Interaction: Effects of Narrativity and Text-Difficulty on Oral Reading Fluency



# Reader - Text Interaction: Grade & Decoding Fluency with Text Difficulty



# Reader - Text Interaction: Gender & Reader Type with Text Difficulty



# Summary of Reader – Text Interactions

| Student/Text Interactions: | Estimate | s.e. | *P - value* |
|---|---|---|---|
| **Lexile x Grade 6** | 4.65 | 7.48 | <.01 |
| **Lexile x Grade 7** | 2.90 | 3.91 | <.01 |
| **Lexile x Gender (Female)** | -1.15 | -2.22 | .03 |
| **Lexile x Reader Type (Struggling)** | 1.08 | 2.06 | .04 |
| **Narrativity x Grade 6** | 0.92 | 2.04 | .04 |
| **Narrativity x Grade 7** | -1.03 | -1.92 | .06 |
| **Narrativity x Gender (Female)** | 1.37 | 3.56 | <.01 |
| **Narrativity x Reader Type (Struggling)** | -1.91 | -4.88 | <.01 |

Note: Effects of text difficulty vary randomly across students (i.e., effects are student specific) even after reader characteristics are controlled..



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- These factors and the multi-dimensional nature of the planned tests create significant challenges for the test developers to build equitable assessments
- We may need to re-examine our models and methods for judging test equivalence
- While the challenge is great, it need not be insurmountable

# SBAC Technical Advisory Committee

- Jamal Abedi
- Randy Bennett
- Derek C. Briggs
- Gregory J. Cizek
- David T. Conley
- Linda Darling-Hammond
- Brian Gong
- Edward Haertel
- Joan Herman
- G. Gage Kingsbury
- James W. Pellegrino
- W. James Popham
- Joseph Ryan
- Martha Thurlow



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# PARCC Technical Advisory Committee

- Henry Braun
- Bob Brennan
- Derek Briggs
- Wayne Camara
- Linda Cook
- Ronald Hambleton
- Gerunda Hughes
- Huynh Huynh
- Michael Kolen
- Suzanne Lane
- Richard Luecht
- Jim Pellegrino
- Barbara Plake
- Rachel Quenemoen
- Laurie Wise



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# SBAC Committee on ELs

- Jamal Abedi
- Edward Bosso
- Donna Christian
- Richard Durán
- Kathy Escamilla
- James Green
- Kenji Hakuta
- Okhee Lee
- Robert Linquanti
- Maria Santos
- Guadalupe Valdes



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# SBAC Committee on Students with Disabilities

- Carol Allman
- Bridget Dalton
- Donald D. Deshler
- Barbara Ehren
- Jack M. Fletcher
- Jacqueline F. Kearns
- Susan Rose
- Ann C. Schulte
- Richard Simpson
- Stephen W. Smith
- Martha L. Thurlow



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# PARCC TWG

- **English Learners**
  - Diane August
  - H. Gary Cook
  - Kenji Hakuta
  - Charlene Rivera
- **SWD**
  - Dave Edyburn
  - Claudia Flowers
  - Diane Spence
  - Martha Thurlow
  - Daniel Wiener



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- The composition of these committees is outstanding and bodes well for the outcomes of the test development process for EL and SWD
- However, the devil is always in the details
- A strong TWG is a necessary, but not a sufficient condition for success
- We should take some comfort in the presence and composition of these committees

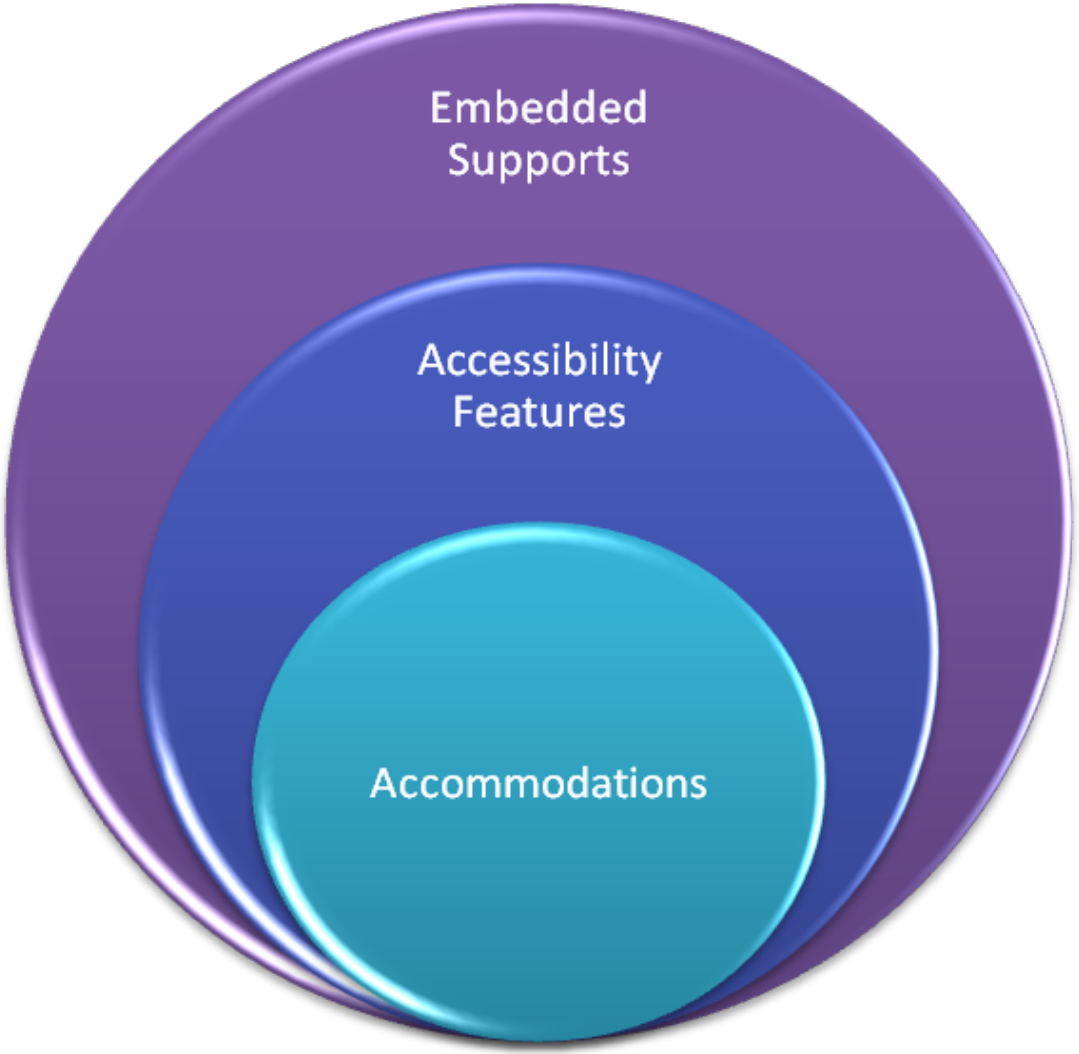
# PARCC News

- Released yesterday (4/18/13) its draft guidelines for accommodations and asked for public comment
  - http://www.parcconline.org/parcc-releases-draft-accommodations-manual-public-comment
- Focus is on accessibility and accommodations for computer-delivered Performance-Based, End-of-Year, and Mid-Year PARCC assessments in mathematics & ELA/literacy.

# PARCC Draft Manual on Accommodations

- Developed and reviewed over the past year:
  - State experts serving on the PARCC Accommodations, Accessibility and Fairness Operational Working Group;
  - K-12 PARCC State Leads;
  - Additional state agency experts
  - External experts
  - National advocacy groups for SWD, ELs, and equity and fairness;
  - Staff from PARCC's project management partner Achieve.

# PARCC Comprehensive Accessibility Policies



# Proposed Embedded Supports

- Tool, support, scaffold, or preference that is built into the assessment system that can be activated by ***any student***, at his or her own discretion.
- Universal Design features expected to benefit a diverse array of students and are available to all students.
- Provided onscreen, stored in a toolbar, or are accessible through a menu or control panel, as needed.
- During the assessment, students can choose which embedded supports they need for specific items. Examples include: audio amplification, highlighting, pop-up glossary, etc.

# Proposed Embedded Supports

| Embedded Supports |
| --- |
| Audio Amplification |
| Blank Paper (not embedded) |
| Eliminate Answer Choices |
| Flag Items for Review |
| General Administration Directions Read Aloud and Repeated as Needed |
| Highlight Tool |
| Magnification/Enlargement Device |
| Noise Buffers |
| NotePad |
| Pop-Up Glossary |
| Redirect Student to Test (not embedded) |
| Spell Checker |
| Writing Tools |

# Proposed Accessibility Features

- Available to *all students* (i.e., not limited to students with IEPs, 504 plans, or ELs), but will be selected and "turned on" by a school-based educator prior to the assessment, based on each student's Personal Needs Profile (PNP).
- Based on each student's individual needs, a PNP is created for the student to ensure that he or she receives appropriate access without the distraction of other tools and features that are *not* required by the student.
- Although a school-based educator will enable specific accessibility features for students, the student will decide whether or not to use the feature. Accessibility features will be readily available on the computer-delivered testing platform.

# Proposed Accessibility Features

| Accessibility Features |
| --- |
| Answer Masking |
| Background/Font Color (Color Contrast) |
| General Administration Directions Clarified (must be done by human test administrator) |
| Line Reader Tool |
| Masking |
| Text-to-Speech for the Mathematics Assessments |

# Proposed Accommodations for SWD

# Proposed Accommodations for SWD

| Category | Accommodation |
|---|---|
| **Presentation** | Assistive Technology |
| | Braille Edition (Hard Copy – ELA/Literacy & Math; Refreshable – ELA/Literacy |
| | Closed-Captioning of Video |
| | Descriptive Video |
| | Familiar Test Administrator |
| | Paper-Pencil Edition of the ELA/Literacy and Math Assessments |
| | Tactile Graphics |
| | Video of Human Interpreter for Math Assessments (deaf or hard-of-hearing) |
| | Video of Human Interpreter for Test Directions (deaf or hard-of-hearing) |
| **Response** | Assistive Technology |
| | Braille Note-taker |
| | Scribing/Speech-to-Text for the Mathematics Assessments |
| **Timing & Scheduling** | Extended Time |
| | Frequent Breaks |
| | Time of Day |
| **Setting** | Adaptive or Specialized Furniture |
| | Separate or Alternate Location |
| | Small Group |
| | Special Lighting |
| | Specified Area or Preferential Seating |

# Proposed Special Access Accommodations (SWD)

| Special Access Accommodations (SWD) |
| --- |
| **Calculation Device** |
| **Read Aloud or Text-to-Speech for the ELA/Literacy Assessments, including items, response options, and passages** |
| **Scribe or Speech-to-Text (i.e., Dictating/ Transcription) for the ELA/Literacy Assessments** |
| **Video of a Human Interpreter for the ELA/Literacy Assessments, including items, response options, and passages for a student who is deaf or hard of hearing** |
| **Word prediction on the ELA/Literacy Performance-Based Assessment** |

# SBAC Accommodations

- Information released to date is somewhat more limited
- FAQ on Sample Items
- Manual on Test Translations
- Two literature reviews on accommodations, one on EL students and one on SWD that are guiding their work
- Details are still in development as the following slides demonstrate.

# SBAC FAQ on Sample Items: What tools are available for students with special needs?

*"Smarter Balanced is committed to providing valid, fair, and reliable measures of achievement and growth for English language learners and students with disabilities. The sample items and tasks do not include accessibility tools and accommodations options that will be available when the assessments are administered to students in the 2014-15 school year—such as Braille, translation options, and the ability to change font size, highlight text, or magnify portions of items."*



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## Support for English language learners, students with disabilities, and other students with special needs

- *The Smarter Balanced assessment system will provide accurate measures of achievement and growth for students with disabilities and English language learners.*
- *The assessments will address visual, auditory, and physical access barriers—allowing virtually all students to demonstrate what they know and can do.*

http://www.smarterbalanced.org/resources-events/faqs/#2443



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# SB: Designed for All Students

- *The Smarter Balanced assessment system uses technology to deliver assessments that fit the needs of individual students.*
- *Items and tasks will be associated with a variety of accessibility tools and accommodations that can be delivered to students automatically based on their profile.*
- *Accessibility tools include, but are not limited to: foreground and background colors; tactile presentation of content (e.g., Braille); and translated presentation of content in signed form and select languages.*
- *Online delivery of Smarter Balanced assessments ensures that students can take a test individualized to meet their needs at the same time as their peers.*

http://www.smarterbalanced.org/wordpress/wp-content/uploads/2012/07/SmarterBalanced_Accessibility_Factsheet.pdf

- *The Smarter Balanced assessment system will provide accurate measures of achievement and growth for students with disabilities and English language learners. The assessments will address visual, auditory, and physical access barriers—as well as the unique needs of English language learners—allowing virtually all students to demonstrate what they know and can do.*

*http://www.smarterbalanced.org/parents-students/support-for-under-represented-students/*

- With the release of their draft manual on accommodations and accessibility, it seems that PARCC is a bit ahead of SBAC in the area of accommodations.
- However, I would add that both groups are working from the same literature and relying on many of the same experts.
- I can say that there has been tremendous progress since the consortia first met with the Board on Testing and Assessment.
- It is somewhat disappointing that they do not appear to be working together in a more unified and collaborative way on these difficult issues.

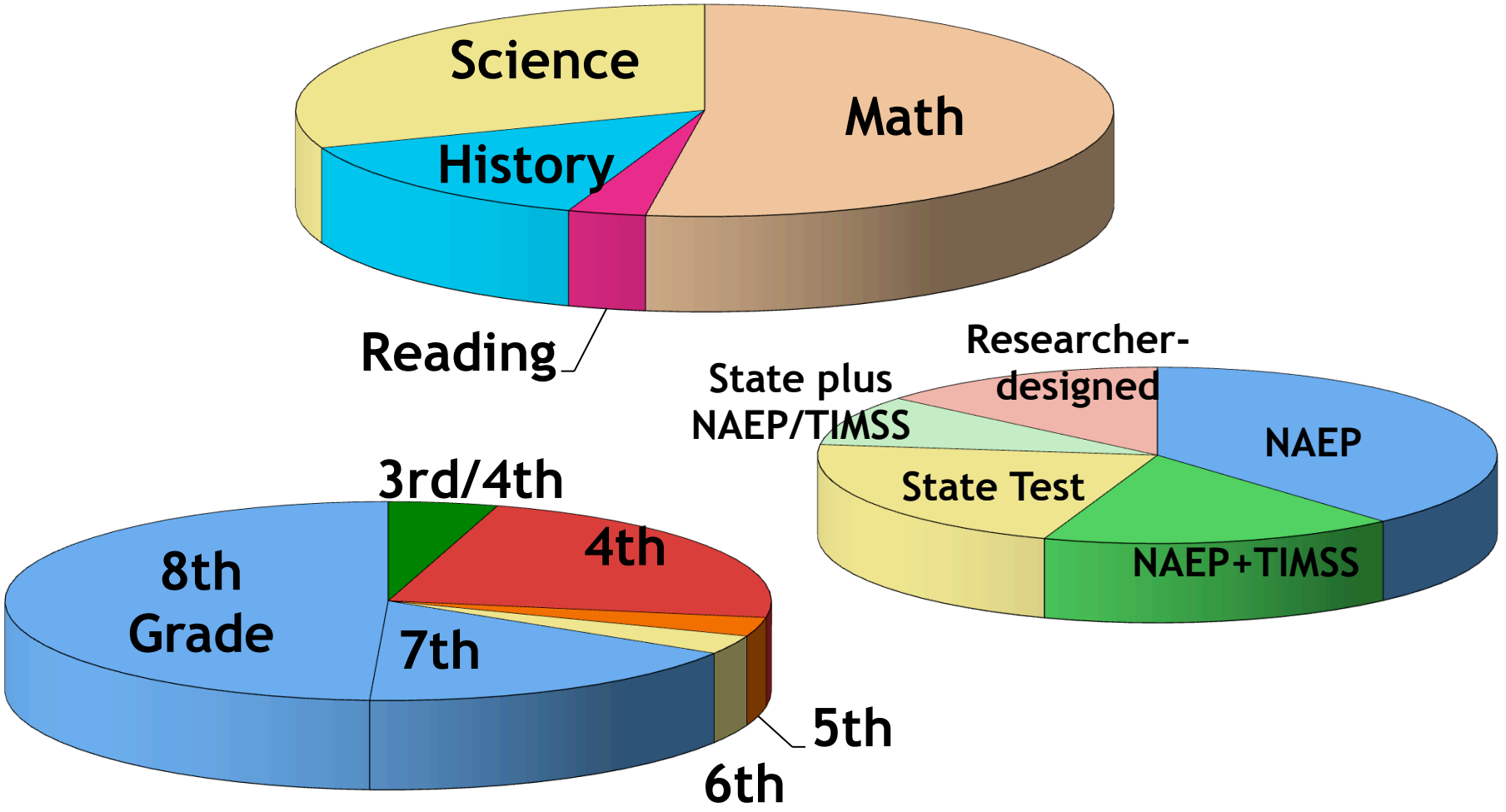
# Causes for Concern

- The research base on accommodations for EL students is growing, but is still lacking in very significant ways
  - Few studies on English Language Arts
  - Few studies in some grades
  - Limited research on many accommodations
  - Few studies on state accountability tests
  - Few studies on bundled accommodations

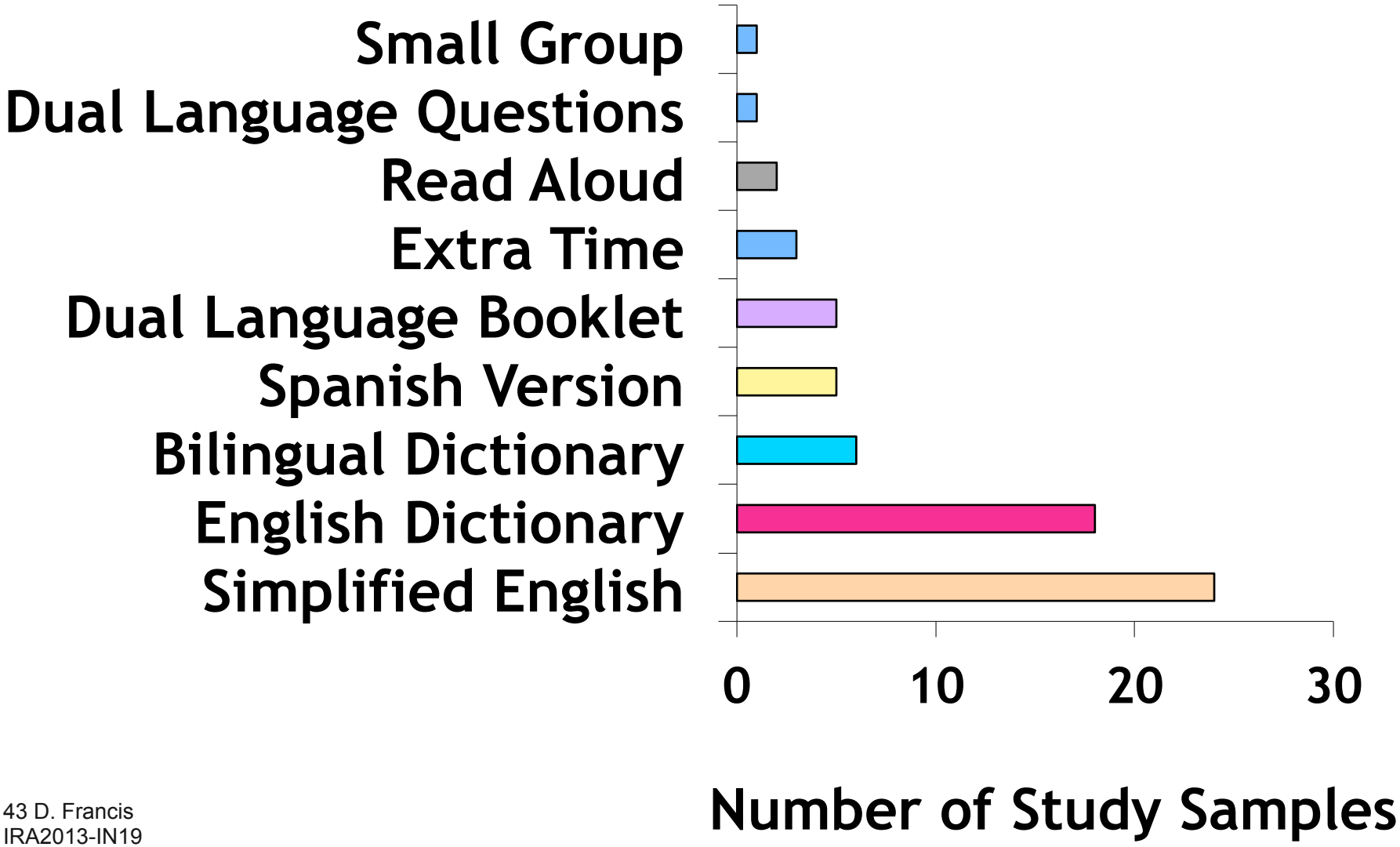
# *Study Sample Descriptions*

- Grades included
  - 4th: *n*=15 (*n*=11)
  - 7th: *n*=11 (*n*=0)
  - 8th: *n*=32 (*n*=23)
  - 3rd/4th(combined):*n=3* (*n*=0)
  - 5th or 6th: *n*=2 each (*n=2* each)
- Subject Areas
  - Math: *n*=34 *(n*=17)
  - Science: *n*=20 (*n*=20)
  - History: *n*=9 (*n*=0)
  - Reading: *n*=2 (*n*=1)
- Type of test
  - NAEP items: *n*=25 (*n*=23)
  - NAEP and TIMSS: *n*=11 (*n*=6)
  - State Accountability Assessment: *n*=14 (four different states) (*n*=9 and 2 states)
  - State Accountability Assessments plus NAEP and/or TIMSS items: *n* = 6
  - Researcher-designed Performance Assessment: *n* = 9 (1 study)

# *20 Studies yielding 65 Effect Sizes*

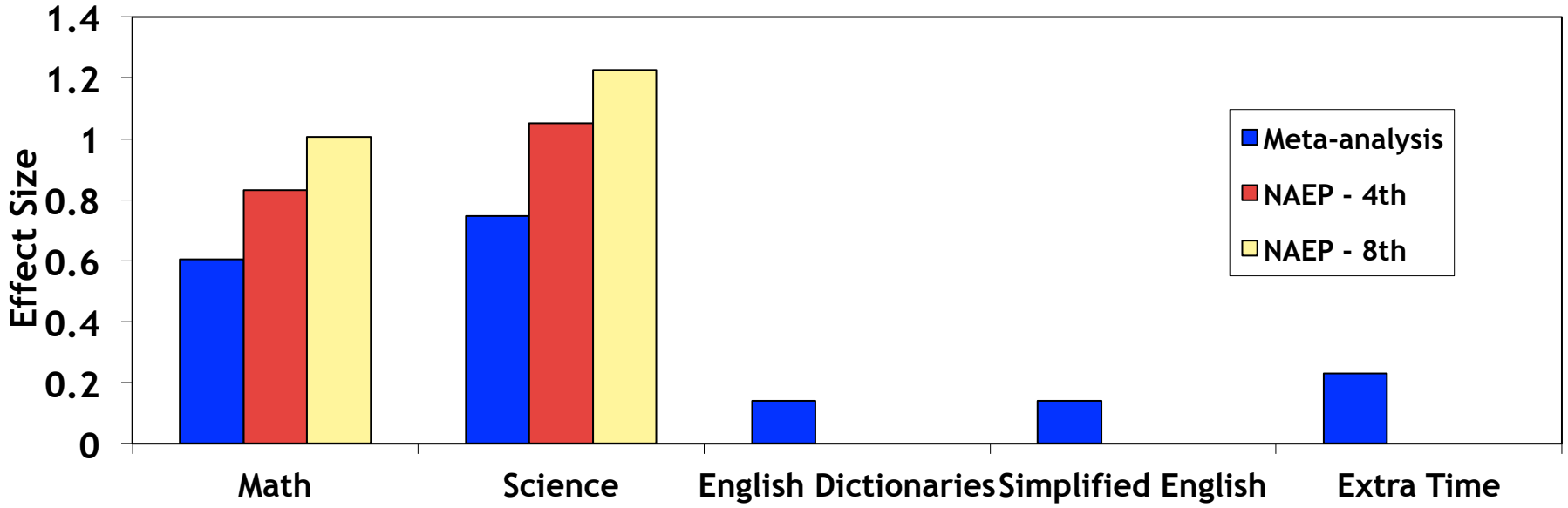


# *Types of Accommodations Studied*



# *Findings: Effectiveness*

- Of the accommodations studied, three accommodations had significant effects.
  - English Dictionaries/Glossaries (Hedges' $g^u = 0.14$; $p < .001$)
  - Simplified English (Hedges' $g^u = 0.14$; $p < .001$)
  - Extra Time (Hedges' $g^u = 0.23$; $p = .026$)
  - Yielded 9% to 31% reduction in achievement gaps.



# General Conclusions from the Research on Accommodations

- Despite increased research on test accommodations, significant limitations remain in the research portfolio.
- On balance there is a consensus that some accommodations are effective, but the set is small
- There are none that have been thoroughly investigated to the point where there remain no open questions regarding how best to deploy them in all circumstances

# The Bigger Concern with SBAC and PARCC

- As the assessments becomes more complex, the potential sources of variability in test performance will grow
- The potential for test bias is even greater.
- This added complexity creates new challenges for designing and implementing effective accommodations and testing special needs students.
- There is a lot to like in what has been discussed, but many details remain to be worked out.

# Moving Forward

- The use of computerized assessments also creates the opportunity to completely revolutionize the way we think about accommodations.
- Instead of controlling these sources of irrelevant variance throughout the test, we could use the computerized test platform to estimate the effect of the accommodation for a given student.
- All students would take items with and without accommodations.

# Leveraging Online Assessment to Add Value to Accommodated Assessments

- Such an approach would allow ability to be estimated with AND without the accommodation
- Each student would have three scores from one testing,
  - one estimating ability as if all items had been administered without accommodations,
  - one estimating ability as if all items had been administered with accommodations,
  - and one estimating ability under the tested conditions.
- These scores, and the differences among them, tell us different things about the student and their content mastery and language ability ***as it relates to the content***

# Leveraging Online Assessment to Add Value to Accommodated Assessments

- A test administered under such circumstances could
  - Be administered to all students (EL and non-EL) in the same way
  - Yield an estimate of the impact of the accommodation for a particular student
  - Yield an estimate of the impact of the accommodation for all students in a given group
  - Students not needing the accommodation would not benefit from their availability and would not see a difference in their scores

# Leveraging Online Assessment to Add Value to Accommodated Assessments

- What we would learn about the student from a test administered in this way has implications for instruction of the student and the use of accommodations in instruction
- Such a test would also provide supplementary information about the student's language proficiency
  - Over time, as a student becomes proficient, the accommodations would have less impact on that student's performance.

- The CCSS pose significant challenges and opportunities for improving instruction and assessment of students with special needs.
- Whether we capitalize on those opportunities or fall victim to the challenges remains to be seen.
- I am optimistic because I have great confidence in the teams and in the value of setting high expectations for all students

*Acknowledgements: Some of the slides contain information taken directly from the PARCC and SBAC websites and released documents. I have tried to include links to the specific documents where that is the case, but some links may have been accessed for multiple slides. I am grateful to both consortia for the information that they have made available to date.*

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Thank You!

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