Strengthening Assessment for English Learner Success: Key Challenges and Opportunities under Common Core Standards

CREATE Conference
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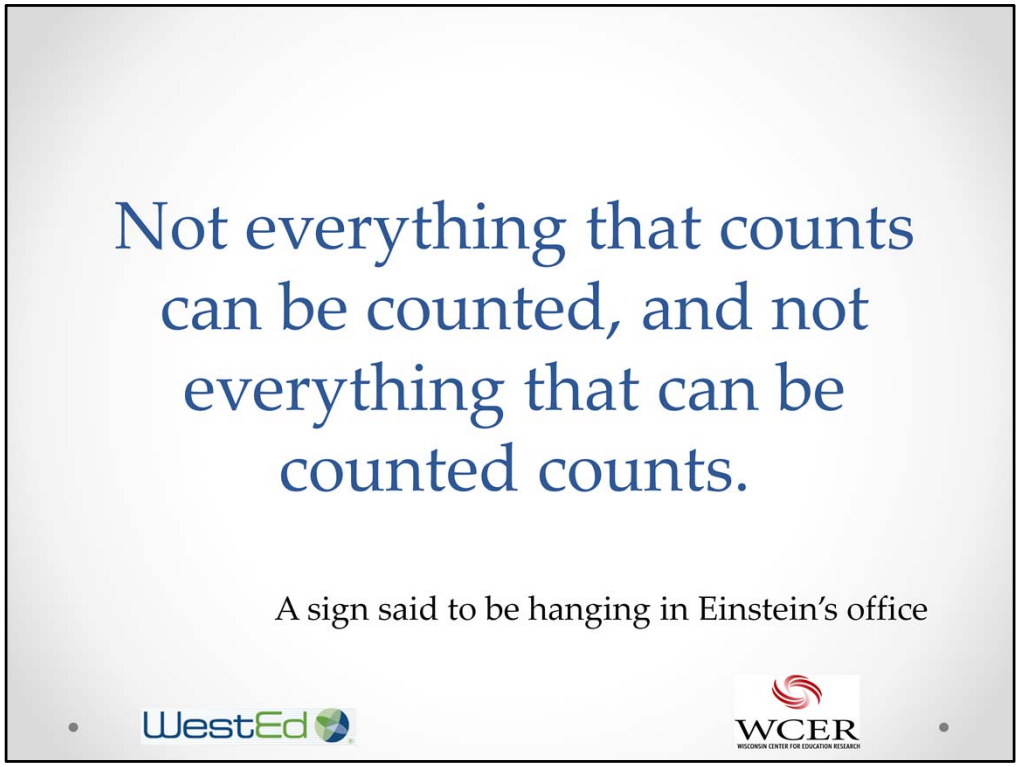
Purpose of Session

- Examine the relationship language to content assessment items
- Frame the reality of EL performance on content assessments
- Discuss ways to support and enhance ELs' academic English language proficiency and content performance


Not everything that counts can be counted, and not everything that can be counted counts.
A sign said to be hanging in Einstein's office
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ACTIVITY

EXAMINING LANGUAGE COMPLEXITY

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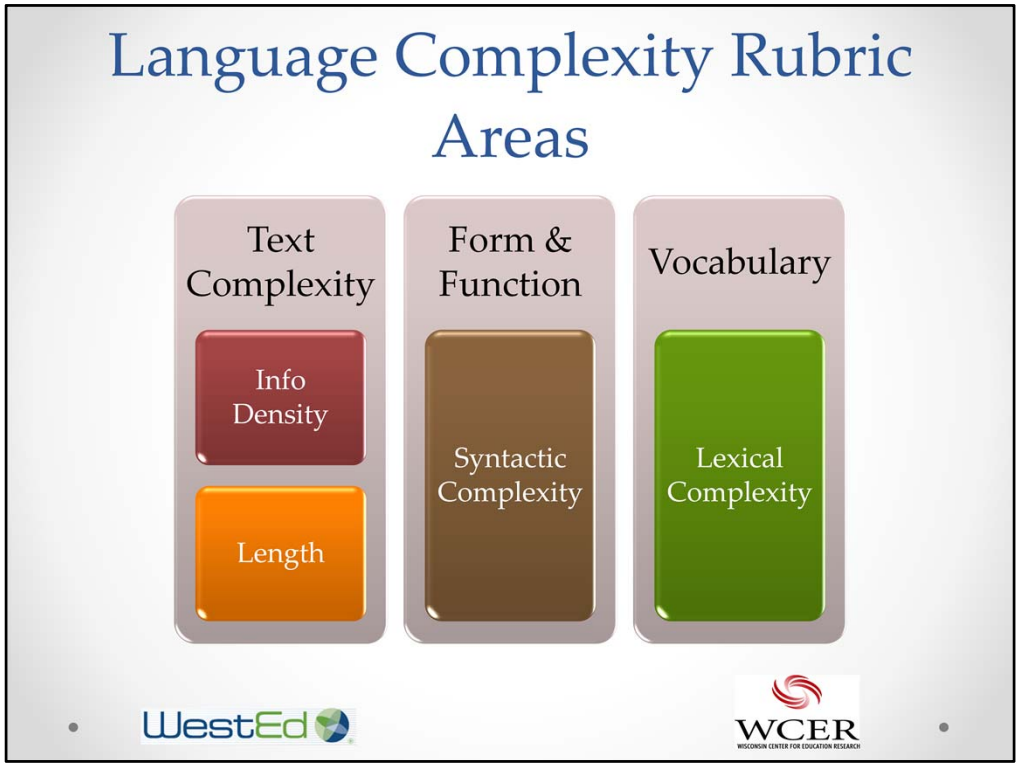
Language Complexity Rubric Areas
Text Complexity
Info Density
Length
Form & Function
Syntactic Complexity
Vocabulary
Lexical Complexity
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Language Complexity Rubric

Language Complexity Rubric

		Descriptors			
		1	2	3	4
TEXT DENSITY	Information Density	An average of one to three verbs, nouns or adjectives per sentence	An average of four to six verbs, nouns or adjectives per sentence	An average of seven to ten verbs, nouns or adjectives per sentence	An average of greater than 10 verbs, nouns or adjectives per sentence
	Passage Length	One to three paragraphs	Four to six paragraphs	Six to ten paragraphs	More than ten paragraphs
LANGUAGE FORM AND STRUCTURE	Language Forms	Simple sentences and simple grammatical forms	A few sentences and/or grammatical forms that are more sophisticated (e.g., compound S, prepositional phrases)	An even mix of sophisticated and simple sentences or grammatical forms	Over half of the passage consists of more complex sentences and/or grammatical forms (e.g., relative clauses, adverbials, passive voice, reported speech)
VOCABULARY	Vocabulary	All high frequency, commonly used vocabulary	Few content-specific,, metaphoric, uncommon meaning, or idiomatic words	A number of content-specific, technical, metaphoric, uncommon meaning and/or idiomatic words or expressions	A large number of content-specific, technical, metaphoric, uncommon meaning or idiomatic words or expressions

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Scoring Language Complexity Tool

- Three main areas with a maximum of 4 in each area
- Text complexity is the average of two scores:
  - Information density
  - Passage Length
- Total scores range from 4 to 12
- Score
  - Prompts, items and directions (MC and CR items)
  - For CR items the following is scored
    - Prompt & directions
    - Passage – if applicable
    - Satisfactory student response

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Application

- To support assessment item development
- To support assessment item review
- To establish expectation for CCSS and NGSS standards relative to language complexity
- To support validation of assessments
- To provide information to explore how items function for students with differing levels of language proficiency

The item – Mathematics, grade 8

18. Leroy has one quarter, one dime, one nickel, and one penny. Two of the coins are in his left pocket andthe other two coins are in his right pocket. The coins have been randomly placed in the two pockets.

What is the probability that Leroy will be able to purchase a 30-cent candy bar with the two coins inhis left pocket?

Using the coins, explain your reasoning.

See Handouts

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Your task (15 minutes)

- Familiarize yourself with the LC tool
- Rate the NAEP item using the LC tool
- Rate the satisfactory student response using the LC tool
- As a group, reflect on…
  - what the ratings communicate to content assessment developers
  - What the ratings communicate to ELP assessment developers

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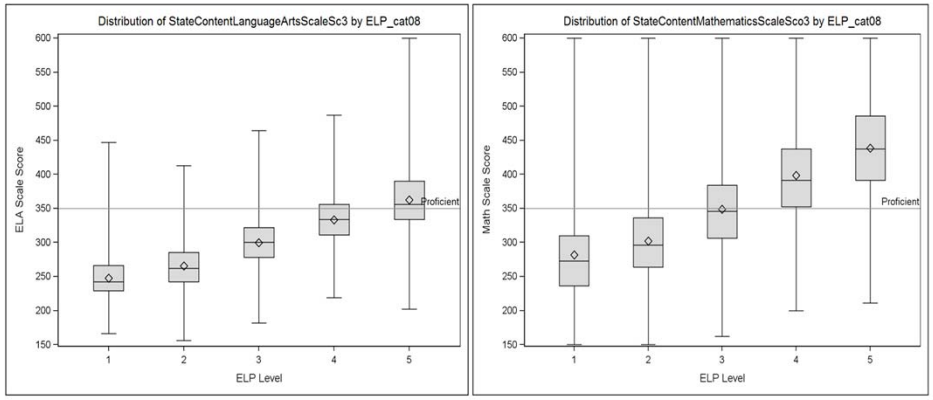
Report Out

The Reality

Exhibit 18
Education Agency 1, Grade 3: Box Plots of English Language Arts and Mathematics Scale Scores, by ELP Performance Level (2007–08)



Cook, Linquanti, Chinen & Jung, 2012

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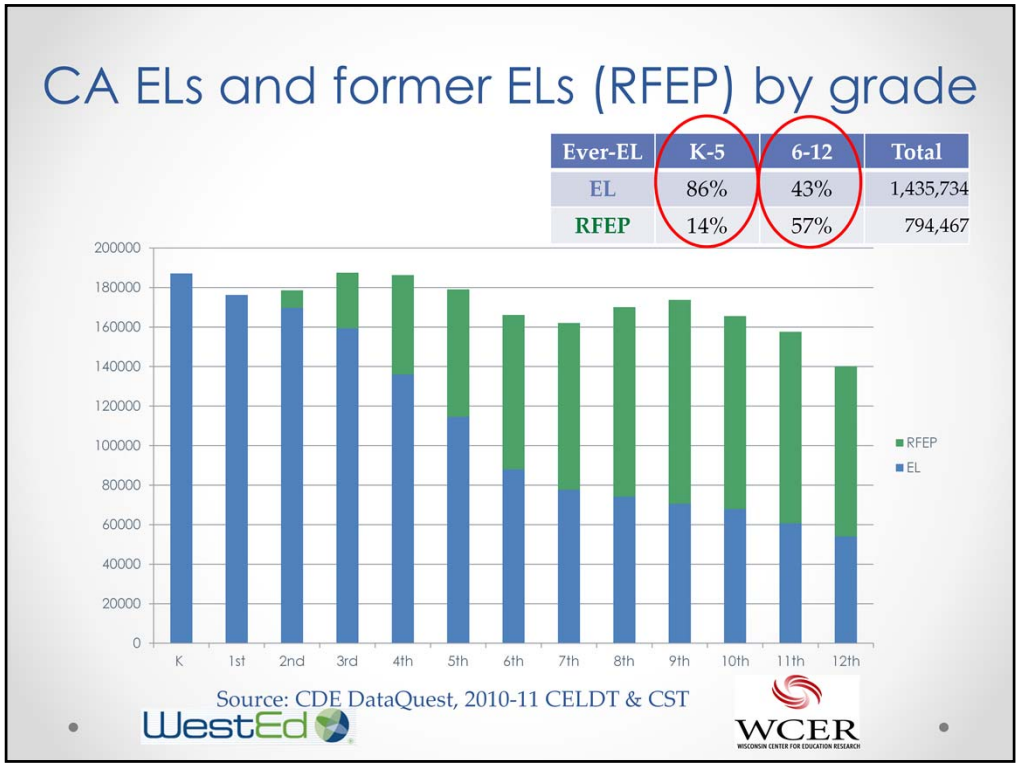

Overall (K-12): EL: 64%, RFEP: 36%

District A ELs, Long-Term ELs and Former ELs (RFEP) by grade

	K	1	2	3	4	5	6	7	8	9	10	11	12	
RFEP	0%	0%	13%	25%	38%	46%	57%	61%	64%	58%	62%	69%	70%	45%
L-T EL	0%	0%	0%	0%	0%	36%	32%	29%	28%	32%	26%	21%	24%	18%
EL	100%	100%	87%	75%	62%	18%	11%	10%	8%	10%	12%	10%	7%	37%
L-T EL:EL Ratio:						2:1	3:1	3:1	3.5:1	3:1	2:1	2:1	3.5:1	

Long-term EL: 6 or more years in LEA

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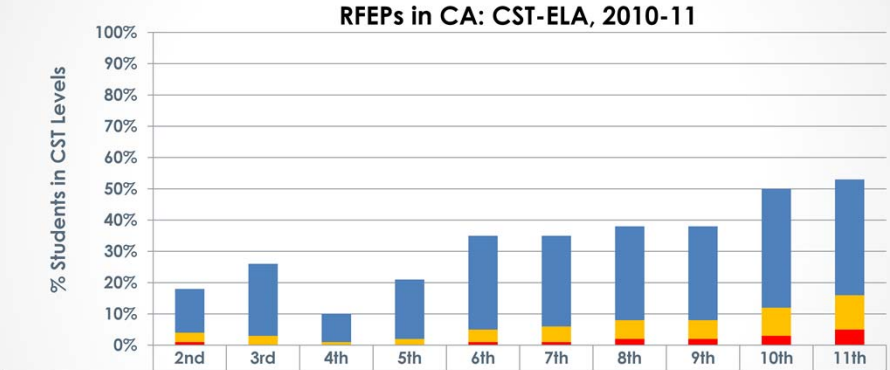
Many **Former** ELs (RFEPs) need academic support after exiting



	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th
Basic	14%	23%	9%	19%	30%	29%	30%	30%	38%	37%
Below Basic	3%	3%	1%	2%	4%	5%	6%	6%	9%	11%
Far Below Basic	1%	0%	0%	0%	1%	1%	2%	2%	3%	5%

37% of former ELs score below grade level on CST-ELA exam

Source: CDE 2011

79% of all former ELs tested are in grades 6-11

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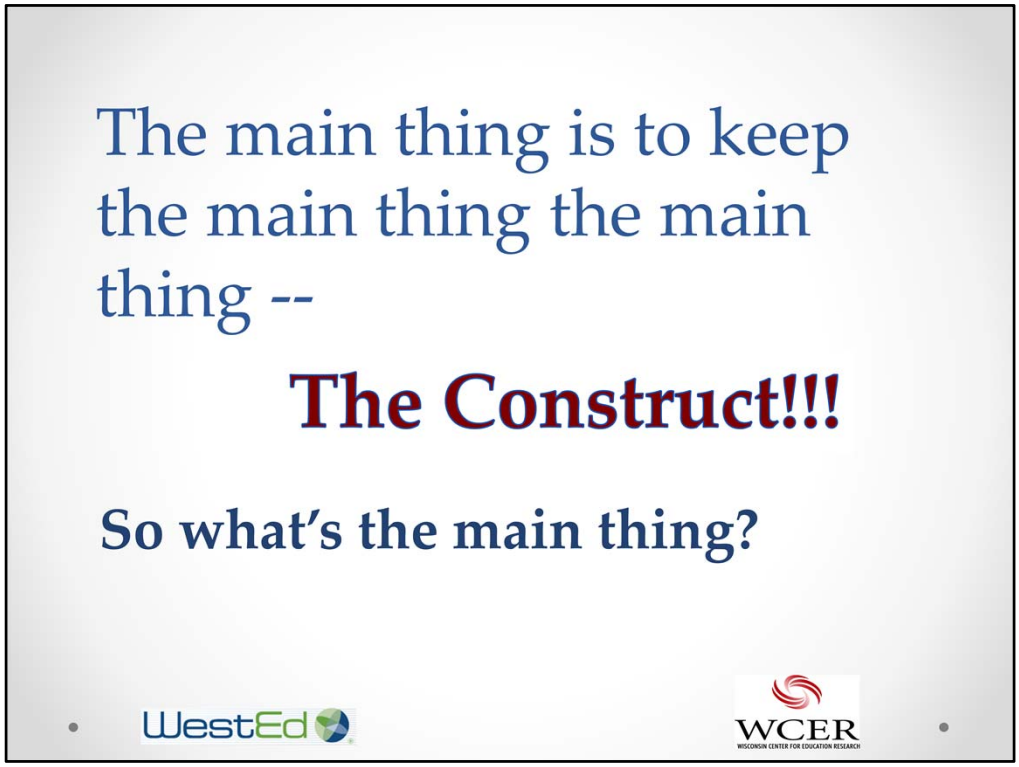
What are the issues?

- Why do ELs at low ELP levels consistently underperform?
- What keeps "long-term ELs" from attaining proficiency?
- How do we meaningfully assess these students' language and content proficiency?


The main thing is to keep the main thing the main thing --
The Construct!!!
So what's the main thing?
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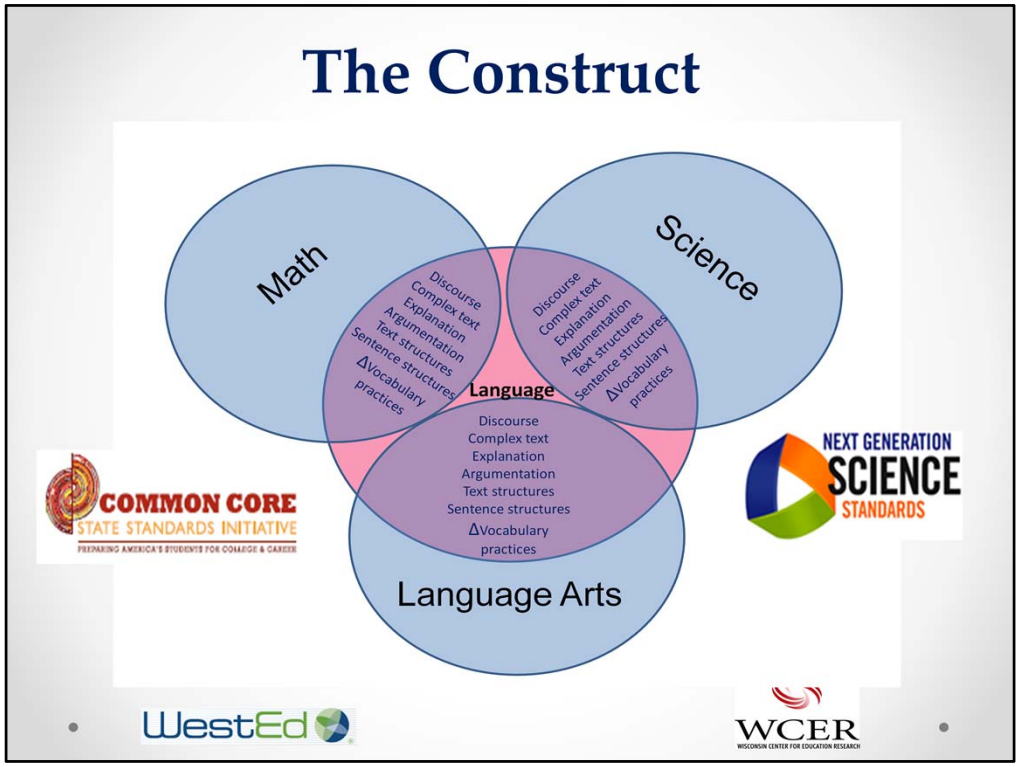
The Construct
Math
Science
Language Arts
Discourse
Complex text
Explanation
Argumentation
Text structures
Sentence structures
ΔVocabulary practices
Language
COMMON CORE
STATE STANDARDS INITIATIVE
PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER
NEXT GENERATION
SCIENCE
STANDARDS
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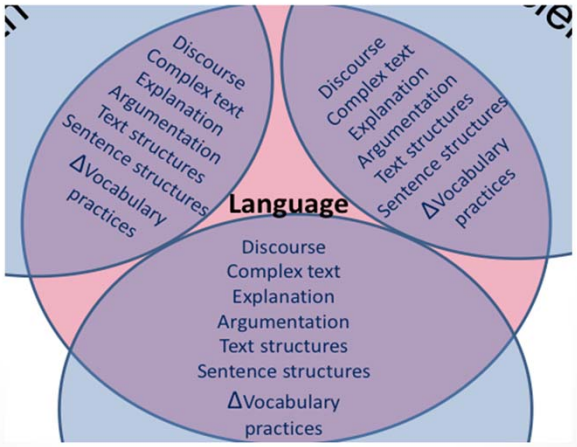
So what is this?



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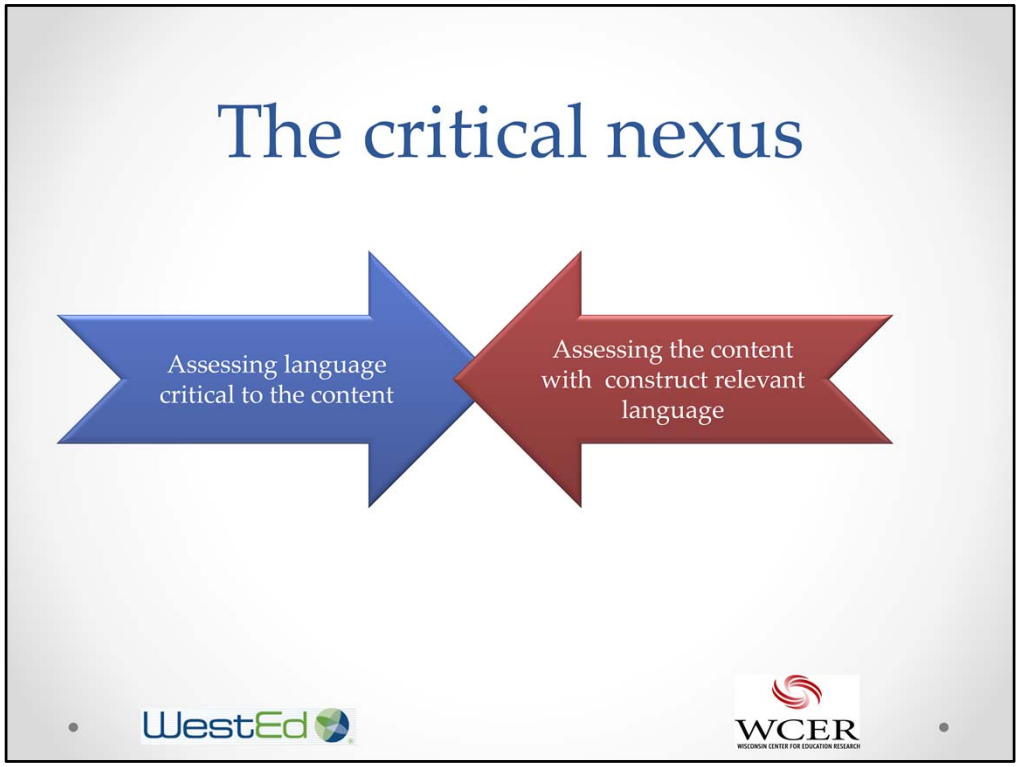
The critical nexus
Assessing language critical to the content
Assessing the content with construct relevant language
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The ELPD Framework
CCSSO
Council of Chief State School Officers
Framework for English Language Proficiency Development Standards corresponding to the Common Core State Standards and the Next Generation Science Standards
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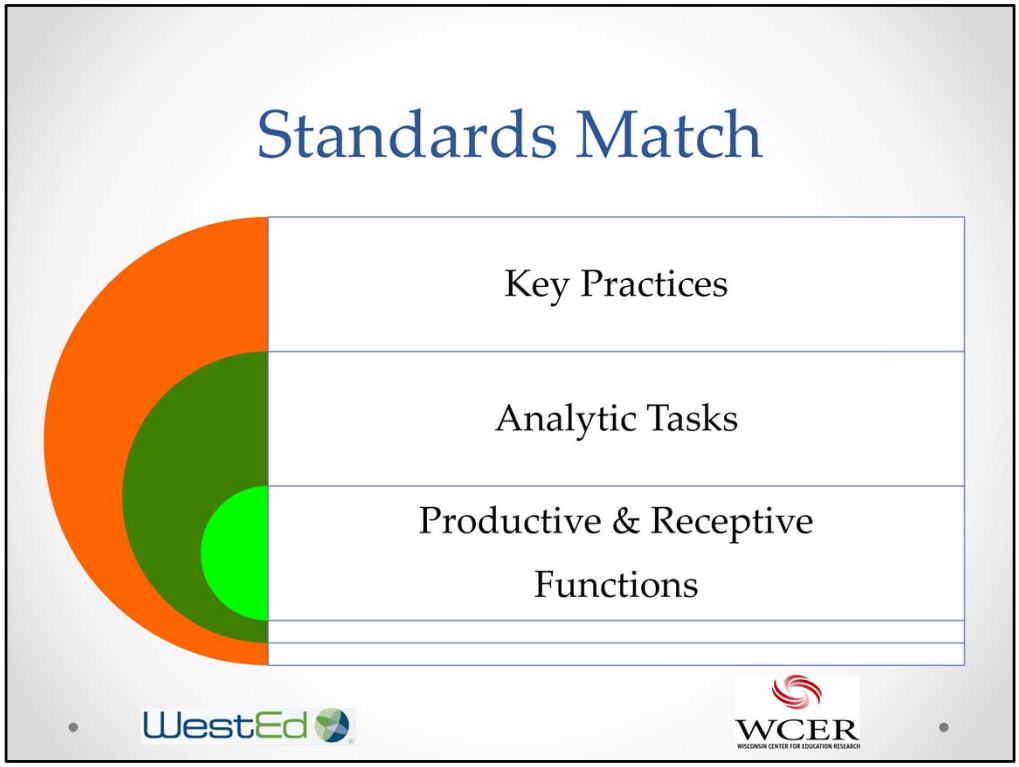
Standards Match
Key Practices
Analytic Tasks
Productive & Receptive Functions
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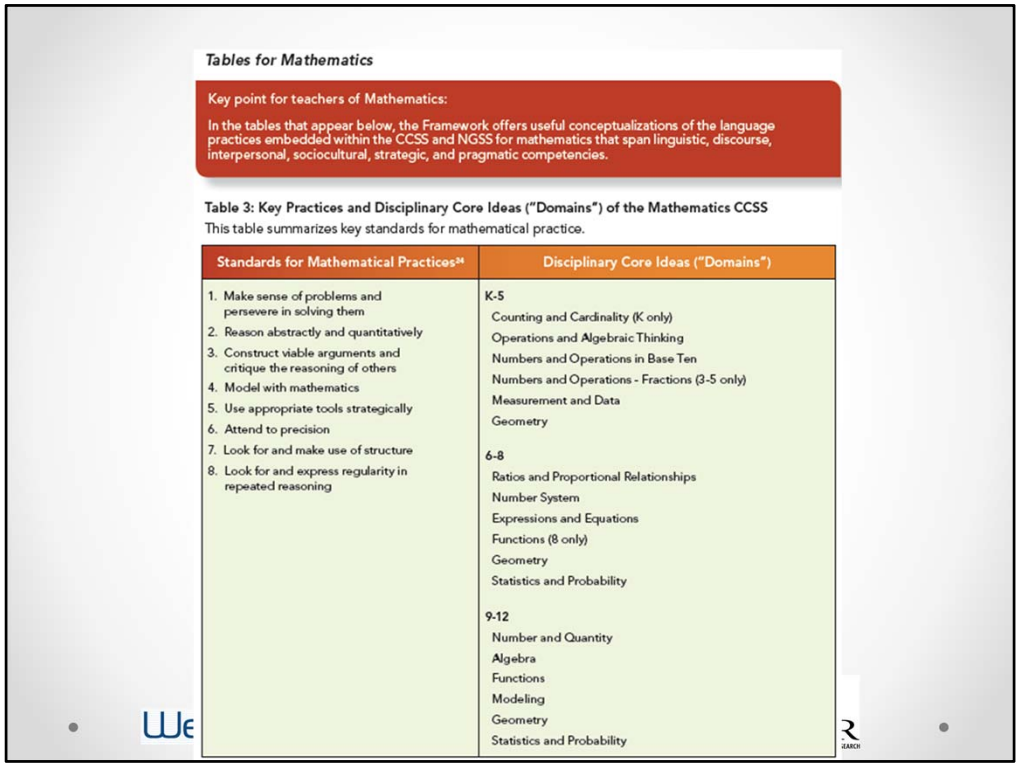


Tables for Mathematics

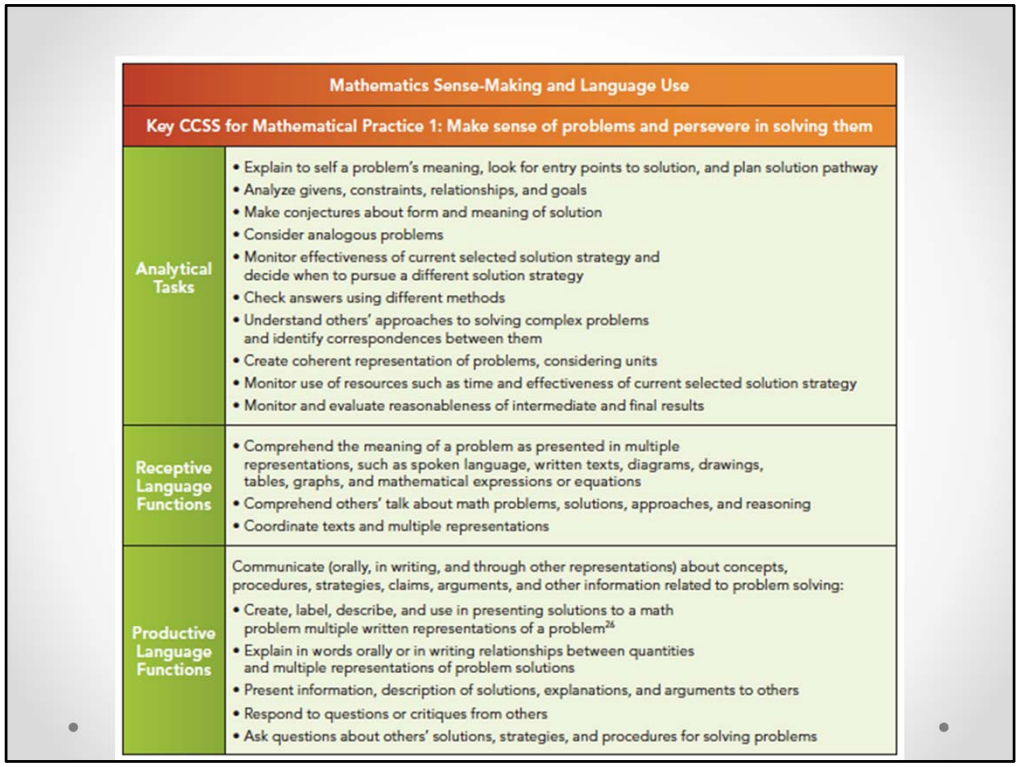
Key point for teachers of Mathematics:

In the tables that appear below, the Framework offers useful conceptualizations of the language practices embedded within the CCSS and NGSS for mathematics that span linguistic, discourse, interpersonal, sociocultural, strategic, and pragmatic competencies.

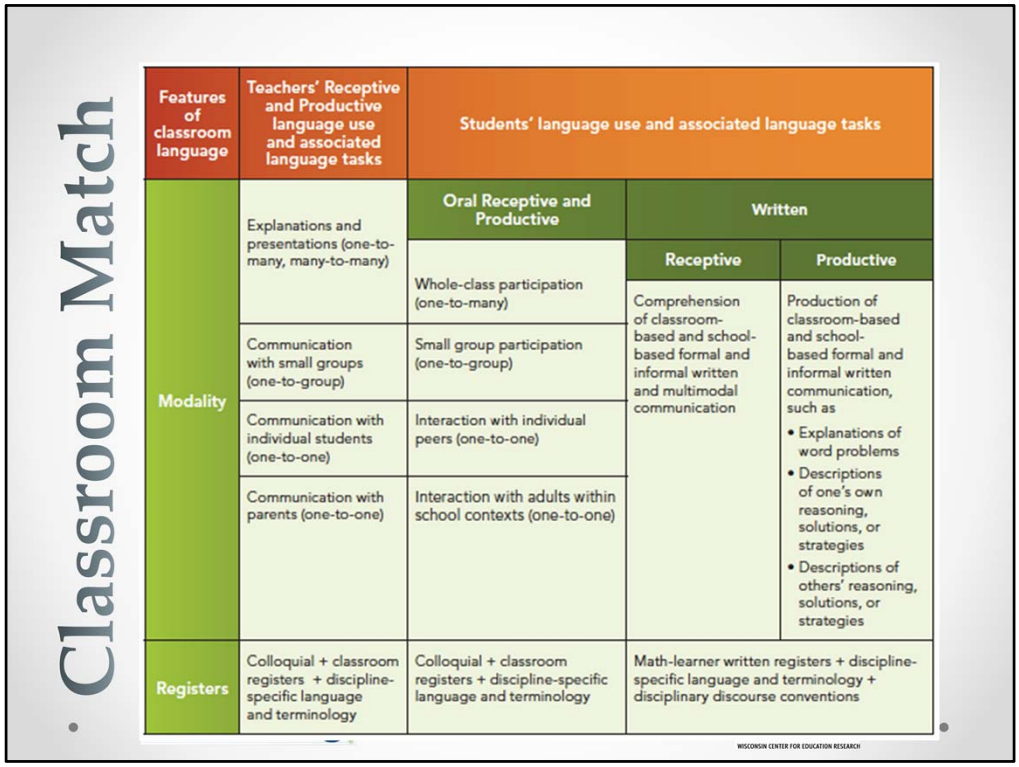
Table 3: Key Practices and Disciplinary Core Ideas ("Domains") of the Mathematics CCSS

This table summarizes key standards for mathematical practice.

Standards for Mathematical Practices[24]	Disciplinary Core Ideas ("Domains")
1. Make sense of problems and persevere in solving them 2. Reason abstractly and quantitatively 3. Construct viable arguments and critique the reasoning of others 4. Model with mathematics 5. Use appropriate tools strategically 6. Attend to precision 7. Look for and make use of structure 8. Look for and express regularity in repeated reasoning	**K-5** Counting and Cardinality (K only) Operations and Algebraic Thinking Numbers and Operations in Base Ten Numbers and Operations - Fractions (3-5 only) Measurement and Data Geometry **6-8** Ratios and Proportional Relationships Number System Expressions and Equations Functions (8 only) Geometry Statistics and Probability **9-12** Number and Quantity Algebra Functions Modeling Geometry Statistics and Probability



Mathematics Sense-Making and Language Use	
Key CCSS for Mathematical Practice 1: Make sense of problems and persevere in solving them	
Analytical Tasks	• Explain to self a problem's meaning, look for entry points to solution, and plan solution pathway • Analyze givens, constraints, relationships, and goals • Make conjectures about form and meaning of solution • Consider analogous problems • Monitor effectiveness of current selected solution strategy and decide when to pursue a different solution strategy • Check answers using different methods • Understand others' approaches to solving complex problems and identify correspondences between them • Create coherent representation of problems, considering units • Monitor use of resources such as time and effectiveness of current selected solution strategy • Monitor and evaluate reasonableness of intermediate and final results
Receptive Language Functions	• Comprehend the meaning of a problem as presented in multiple representations, such as spoken language, written texts, diagrams, drawings, tables, graphs, and mathematical expressions or equations • Comprehend others' talk about math problems, solutions, approaches, and reasoning • Coordinate texts and multiple representations
Productive Language Functions	Communicate (orally, in writing, and through other representations) about concepts, procedures, strategies, claims, arguments, and other information related to problem solving: • Create, label, describe, and use in presenting solutions to a math problem multiple written representations of a problem[26] • Explain in words orally or in writing relationships between quantities and multiple representations of problem solutions • Present information, description of solutions, explanations, and arguments to others • Respond to questions or critiques from others • Ask questions about others' solutions, strategies, and procedures for solving problems


Classroom Match
Features of classroom language
Teachers' Receptive and Productive language use and associated language tasks
Students' language use and associated language tasks
Modality
Explanations and presentations (one-to-many, many-to-many)
Oral Receptive and Productive
Written
Receptive
Productive
Whole-class participation (one-to-many)
Comprehension of classroom-based and school-based formal and informal written and multimodal communication
Production of classroom-based and school-based formal and informal written communication, such as
• Explanations of word problems
• Descriptions of one's own reasoning, solutions, or strategies
• Descriptions of others' reasoning, solutions, or strategies
Communication with small groups (one-to-group)
Small group participation (one-to-group)
Communication with individual students (one-to-one)
Interaction with individual peers (one-to-one)
Communication with parents (one-to-one)
Interaction with adults within school contexts (one-to-one)
Registers
Colloquial + classroom registers + discipline-specific language and terminology
Colloquial + classroom registers + discipline-specific language and terminology
Math-learner written registers + discipline-specific language and terminology + disciplinary discourse conventions
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Strategies

- Create assessments that assess *construct relevant language*
- Provide support for low level ELs (accommodations)
- Develop a comprehensive system

Accommodations can improve access & validity *when configured correctly*

- Accommodations research findings mixed
- Hard to disentangle reasons for this
- Promising practices: Assign configurations of accommodations by student profile/need

Kieffer et al., 2009; Kopriva et al., 2007

EL-responsive accommodations

English-language supports:

- English dictionary/glossary with extra time
- Plain English**

Primary-language supports:

- Primary-language versions (at Low ELP levels or receiving L1 instruction)
- Dual language (parallel bilingual) with extra time

(Pennock-Roman & Rivera, 2011)

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EL-responsive assessment innovations hold promise and risk: Pursue carefully!

- **Multi-semiotic approaches:**
- Target ELs at lowest ELP levels in math and science
- "Language minimizing" must be seen as temporary

Computer adaptive assessment:

- Should differentiate language load of construct-equivalent items
- Automated scoring routines should recognize inter-language features

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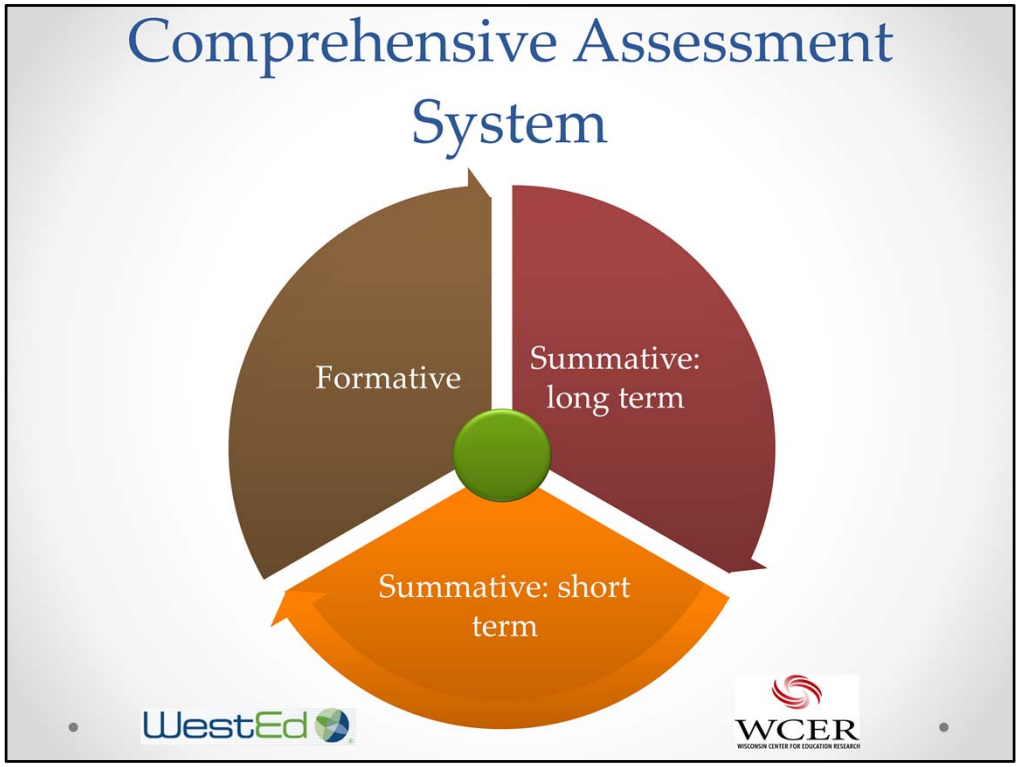
Comprehensive Assessment System
Formative
Summative: long term
Summative: short term
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Recap of Key points

1. Defining & monitoring EL population is critical
2. English-language proficiency is fundamental to academic achievement
3. Common core standards change the game for ELs and their teachers

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Recap of Key points

4. *Comprehensive* assessment systems can better respond to EL strengths & needs
5. Accommodations – no panacea – can improve access and validity when configured correctly
6. EL-responsive assessment innovations hold promise and risk: Pursue carefully
7. ELP & academic assessment developers must collaborate for ELs to benefit

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