We're not in Kansas anymore

Key changes in State Standards and Assessments

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npo solutions

Intended Outcomes

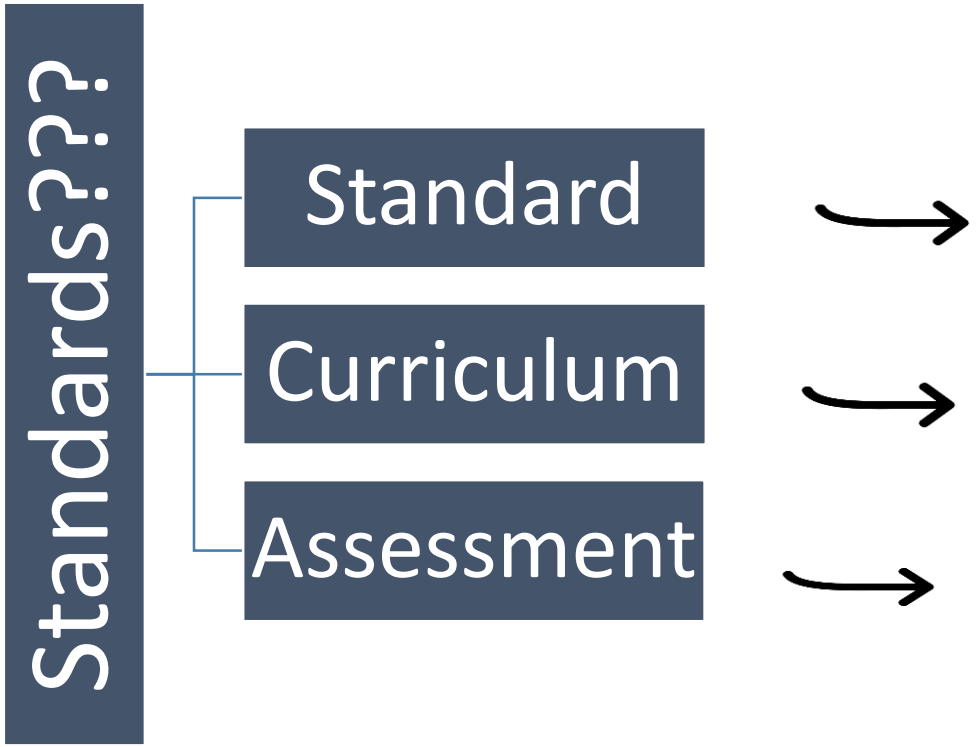
You should understand….

Key instructional shifts in English and Mathematics under State academic standards.

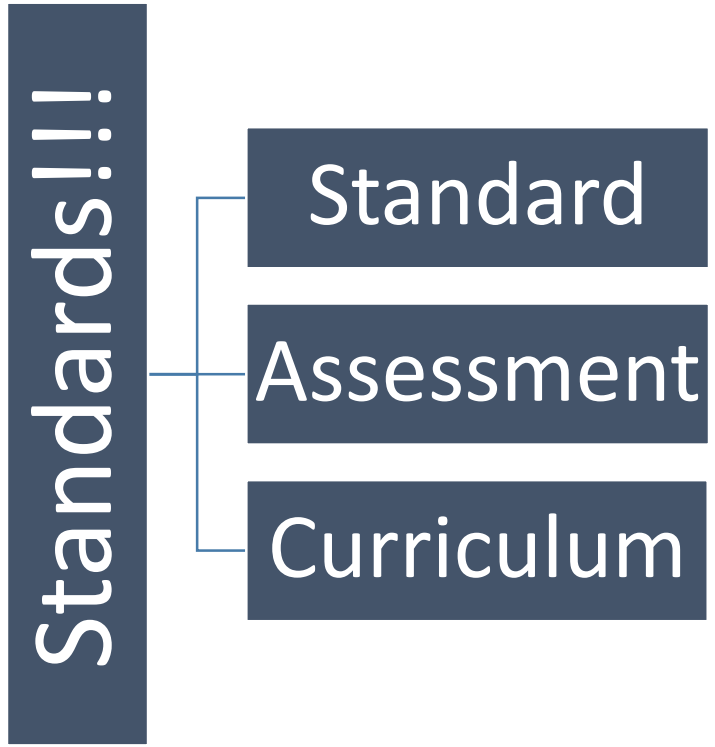
Key differences in how students are being assessed in relation to these standards.

The Standards Based Paradigm

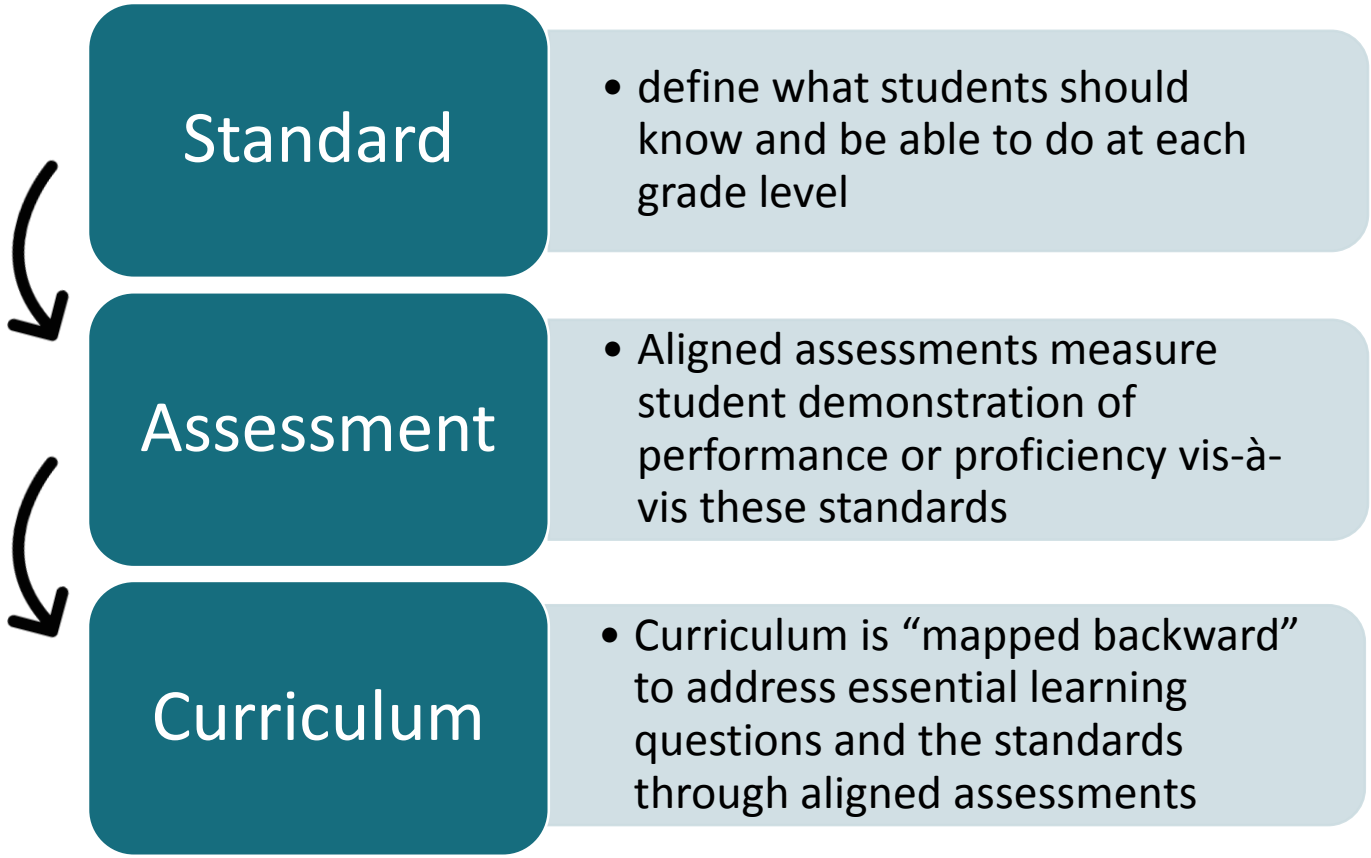
Old Model



New Model



The Standards Based Paradigm



CA Standards Timeline

English/Language Arts

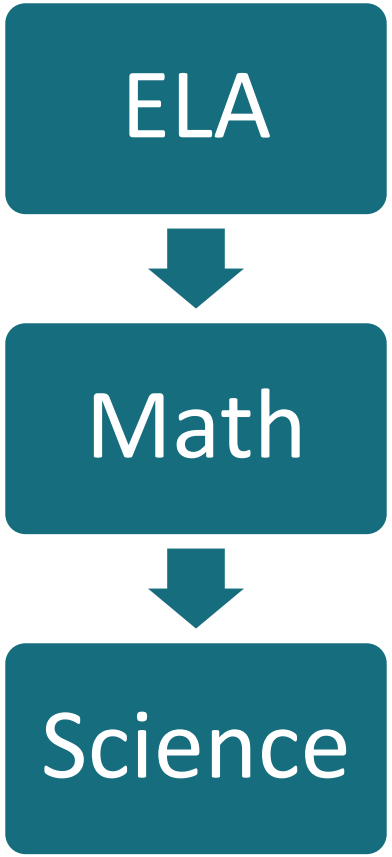
- Standards 2010, Framework 2014

Mathematics

- Standards 2010, Framework 2013

Science

- Standards 2013, Framework 2016



Why a new set of Standards?

- NCLB highlighted vast differences in state standards and measures of proficiency
  - Intended to establish cohesion and a single lens to measure student achievement and progress
  - Desire to build on the "best" of existing state standards

- Increased recognition of importance of college readiness and need to work backward from postsecondary rigor
  - Define the most essential knowledge and skills all students need to succeed in college and careers.

HS Grad vs. College Degree Attainment in CA (2016)

84% of students graduated from HS

- 81% of Latinos
- 73% African American

55% earned AA (within 3 years) or BA (within 6 years)

- 47% of Latinos
- 38% of African Americans

ELA Standards Structure

Reading	Language	Writing	Speaking & Listening
• Key Ideas and Details • Craft and Structure • Integration of Knowledge and Ideas • Range of Reading and Text Complexity	• Conventions of Standard English • Knowledge of Language • Vocabulary Acquisition and Use	• Text Type and Purposes • Production and Distribution of Writing • Research to Build and Research Writing • Range of Writing (Narrative, Argumentative, Informational/Explanatory, Research)	• Comprehension and Collaboration • Presentation of Knowledge and Ideas

Key Instructional Shifts in ELA

Balanced Literacy

- More non-fiction text and more informational/explanatory and argumentative writing

Citation of Evidence

- Close reading with frequent discussion and dialogue that refers back to text; rhetorical reading and text-dependent questions

Academic Language

- Text complexity and focus on both content specific (Tier III) and "functional" academic language (Tier II) used across disciplines

What has changed in ELA?

- Increased **informational reading and writing** at all grade levels and subject areas.
- More emphasis on close **analytical reading** of text and **citation of evidence**
- More emphasis on **writing to persuade** and **writing to explain**
- Recognition of the importance of **oral communication** and **collaborative discussion** to build understanding and solve problems
- Clearer guidance on specific **language skills** by grade level

Key Instructional Shifts in Math

Balanced Numeracy

- Equal classroom emphasis on Procedural skills/fluency, Conceptual Understanding, and Applications

Citation of Evidence

- Students able to articulate mathematical reasoning in oral and written form; classroom discussion and debate about multiple methods and approaches to problem-solving

Integration and Focus

- Greater coherence and focus with integration of topics across grade levels

Math Practice Standards

1. Make sense of problems and persist 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 mathematical precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

HS Math Standards: Critical Areas by Course

Algebra I

- Understand linear and exponential relationships
- Contrast linear and exponential relationships, including analysis, solving, and using quadratic functions
- Extend laws of exponents to square and cube roots
- Apply linear models to data that exhibit a linear trend

Algebra II

- Relate rational expressions to rational numbers
- Expand understanding of functions and graphing to include trigonometry
- Extend understanding of exponential functions to logarithms
- Relate data display and summary statistics to probability and a variety of data collection methods

Geometry

- Establish criteria for congruence of triangles
- Establish criteria for similarity of triangles based on dilations and proportional reasoning
- Develop explanations of circumference, area, and volume formulas
- Apply the Pythagorean Theorem to the coordinate plane
- Prove basic geometric theorems
- Extend work with probability

Assessment (SBAC) Overview

Big changes in expectations for students AND how students demonstrate proficiency:

- Multiple choice replaced by selected response
- More short written (constructed) responses
- Fewer questions but more rigorous tasks
- Performance tasks for all test takers
- Tailoring of item difficulty based on student response (computer adaptive)
- More interactive technology
- Built in test accommodations and supports

SBAC Performance Tasks

HS ELA

- Read, analyze, and categorize (provided resources) on pro/con of nuclear power.
- Write essay advising a legislator on whether to situate nuclear power plant in state

HS Math

- Develop a model of correlation between cricket chirping and ambient air temperature.
- Graph the relationship and explain why your data might depart from the predicted model developed by scientists.

SBAC Overview (Cont'd)

SBAC has two parts:

- Computer Adaptive Test (CAT)
- Performance Tasks (PT)

Test items coded by Depth of Knowledge (DOK):

1=Recall

2=Basic Application

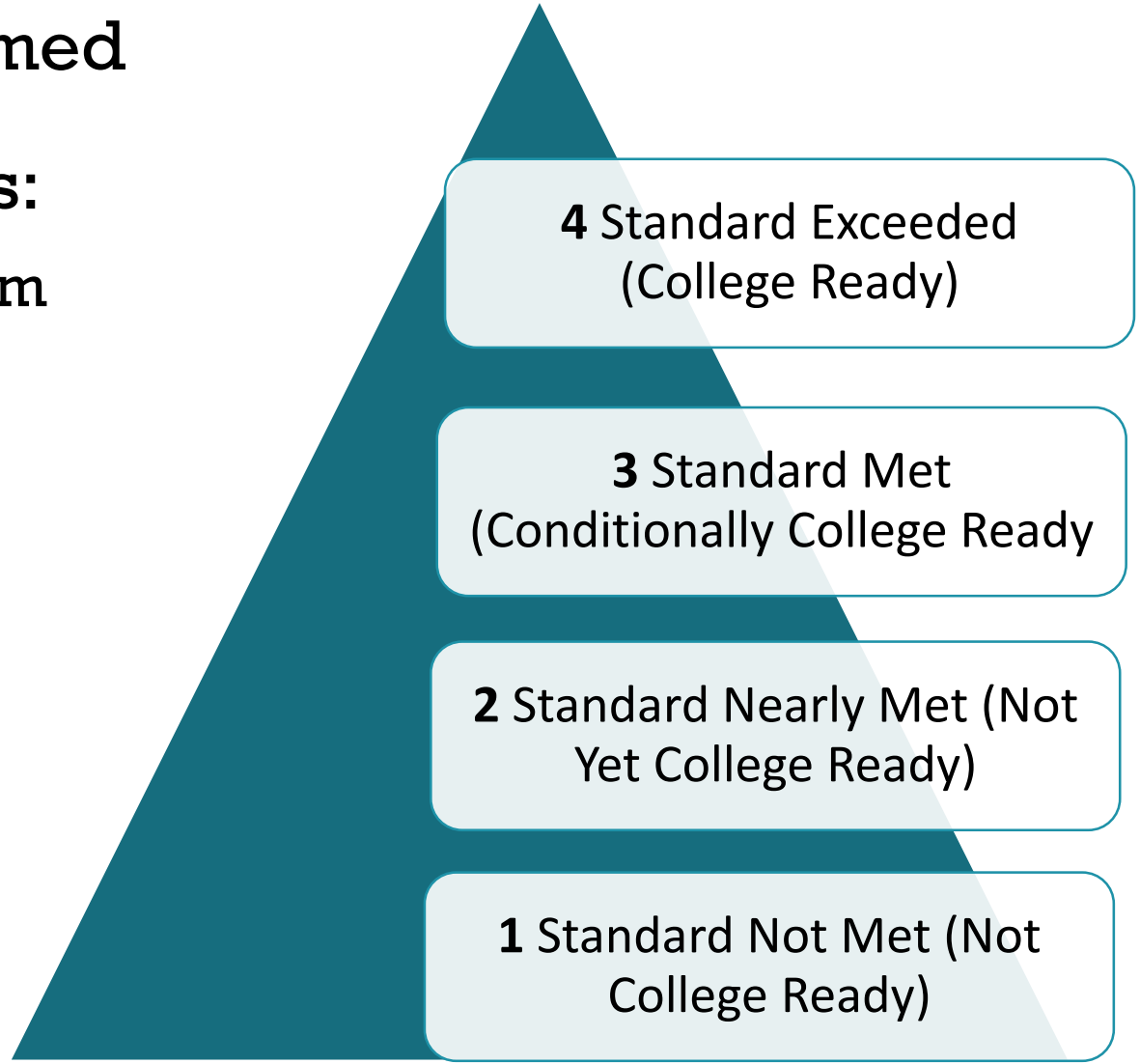
3=Strategic Thinking

4=Extended Thinking

SBAC Scoring

Scoring: Raw scores transformed into scale scores that place student into proficiency levels:

"Weighting" takes into account item difficulty (DOK)



SBAC Scoring (Cont'd)

Data also provided at "Claim" level specifying below, at/near, or above standard:

ELA	Math
• Reading	Problem Solving
• Writing	Using concepts & procedures
• Listening	Communicating reasoning
• Research	

Experiencing SBAC Yourself

Check out released sample items for yourself!

- http://sampleitems.smarterbalanced.org

Take a practice test for yourself!

- http://www.smarterbalanced.org/assessments/practice-and-training-tests/

Summary Implications: Pedagogy

- Cross curricular literacy
  - Reinforce academic vocabulary and precision
  - Close reading for author's purpose and meaning
  - Writing to learn
- Use of evidence
  - Cite/elaborate evidence to justify reasoning or approach
  - Compare and contrast relevant information/data
  - Consider credibility of information/data source
- Collaborative discussions and debates
  - Multiple methods/representations to problem-solve or approach tasks

Summary Implications: Assessment

- More formative assessment
- Expand assessment formats beyond Multiple Choice
- More use of rubrics
- Make data analysis and student work examination key features of teacher collaboration

Next Steps: Possible Additional Learning

- Instruction
  - Collaborative lesson planning
  - Research-based pedagogy/practices
- Curriculum
  - Learning progressions
  - Curricular maps
  - Textbooks
- Assessment and Use of Data
  - Summative
  - Benchmark
  - Formative