

What Works in Curriculum and Instruction

CSAI Resources to Support Instruction and Formative Assessment

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THE CENTER ON
**STANDARDS &
ASSESSMENT
IMPLEMENTATION**

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Curriculum & Instruction: Goals

- Provide guidance for teachers and those who support teachers on developing instructional plans from the Common Core State Standards (CCSS) that include formative assessment practices
- Create a coherent and accessible process of moving from the CCSS to daily classroom practice



Focus on Learning

- CCSS intended to support deep learning
- Provide a conceptual framework for learning

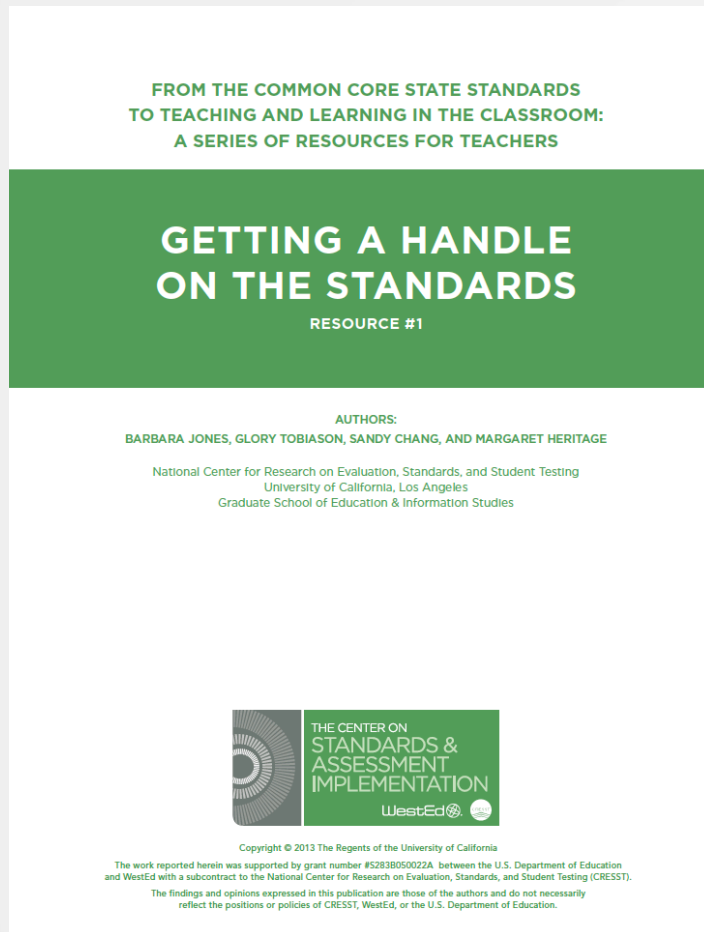
Resource Development Approach

If you give a man a fish he is hungry again in an hour. If you teach him to catch a fish you do him a good turn.

Anna Thackeray Richie, *Mrs. Dymond* (1885)



Resource #1: Getting a Handle on the Standards



- A step-by-step process for developing an in-depth understanding of the CCSS
- Includes a process for evaluating existing curricula in relation to CCSS

Resource #1: Getting a Handle on the Standards

INTRODUCTION

SHIFTS

The table below highlights the major shifts from current practice found in the Mathematics CCSS.

- Focus on fewer standards and in greater depth
- Build student understanding from grade to grade and show relationships between and among standards within the grades
- Balance conceptual knowledge and procedural fluency
- Emphasize specific mathematical practices, including reasoning abstractly and quantitatively, constructing viable arguments, and critiquing the reasoning of others

Sources: Moschkovich, 2012; Rothman, 2012

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Resource #1: Getting a Handle on the Standards

INTRODUCTION

THEMES

The CCSS embody key, reoccurring themes for student learning that can serve as guideposts in analyzing and understanding the standards. Below are the themes found in the Mathematics CCSS:¹

1. ***Students value evidence.*** They understand and use stated assumptions, definitions, previously established results, and counterexamples as they reason through an argument to a conclusion, and they are able to critique others' reasoning and use of evidence.
2. ***Students communicate effectively.*** In discussions with others and in their own reasoning, they use clear definitions, specify units of measurement, label quantities, and use precise language. They can ask useful questions to challenge or clarify mathematical reasoning.
3. ***Students develop a deep understanding*** of mathematical topics and make connections within and across topics and domains.

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Resource #1: Getting a Handle on the Standards

MATHEMATICS CCSS ARCHITECTURE

OVERARCHING STANDARDS

Standards for Mathematical Practice

MATHEMATICS CONTENT STANDARDS

K-8 Grade Level Content Standards
by Domain

High School Standards by Conceptual
Category

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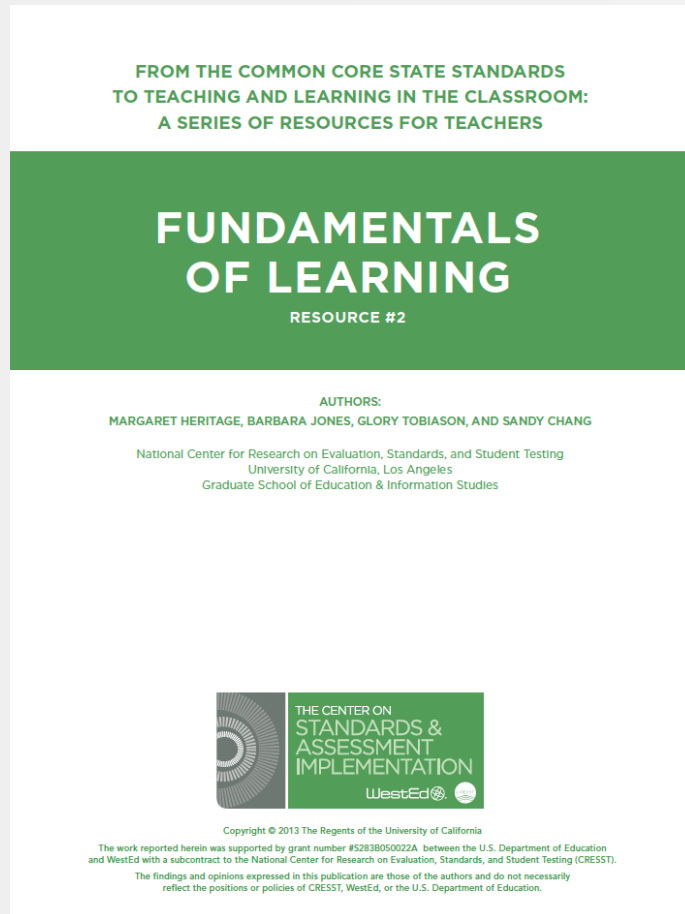
Resource #1: Getting a Handle on the Standards

- Process of Standard Analysis (Math)
 - Step 1: Browsing the Standards (p.9)
 - Step 2: Interpreting the Standards for Mathematical Practice (p.10)
 - Step 3: Analyzing the Mathematical Content Standards by Type (p.10)

Resource #1: Getting a Handle on the Standards

- *Process of Standard Analysis (ELA & Literacy)*
 - Step 1: Understanding How the New ELA & Literacy CCSS are Different from Prior Standards (p.15)
- *For ELA & Literacy and Math*
 - How Skills and Understandings Develop Progressively Across Grade Levels (p.19)
 - Implementation Coding (p.21)

Resource #2: Fundamentals of Learning



- Provides a framework to assist in transitioning to classroom practices called for in the CCSS
- Developed from leading theory and research

Resource #2: Fundamentals of Learning

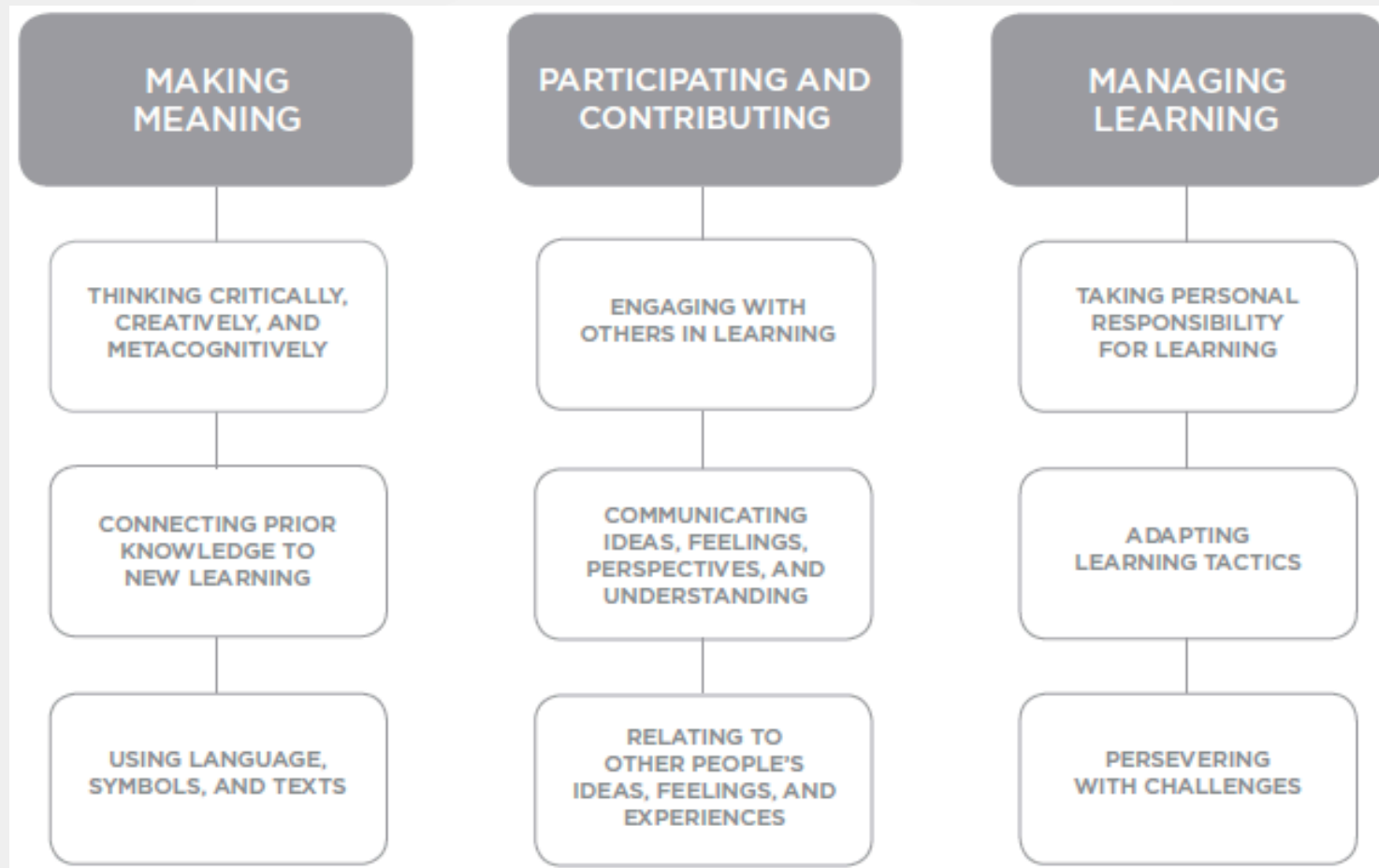
FRAMEWORK



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Resource #2: Fundamentals of Learning



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Resource #2: Fundamentals of Learning

IN PRACTICE

- What the FOLs look like in practice:
 - Students
 - Teachers
 - Resources
 - Activities and tasks
 - Classroom culture
 - Language



Resource #2: Fundamentals of Learning

IN PRACTICE

STUDENTS ARE LIKELY TO:

- Ask questions of themselves, the teacher, and others
- Take time to think
- Tackle real and interesting problems and devise solutions
- Reason and justify thoughts
- Draw on personal knowledge and experience

MAKING
MEANING

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Resource #2: Fundamentals of Learning

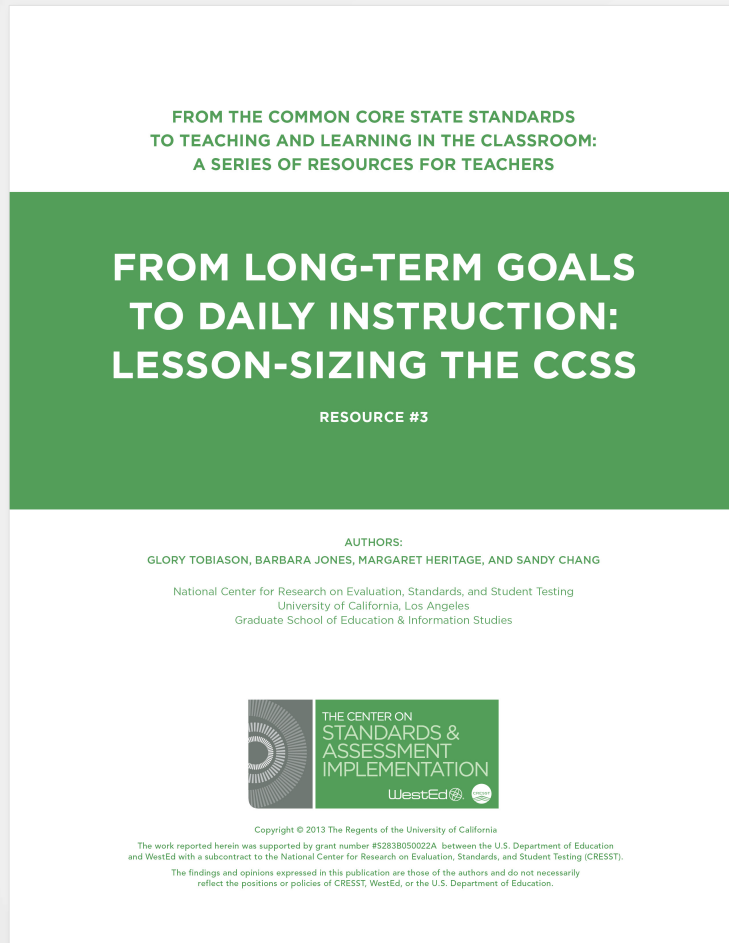
DISCUSSION TOOL



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Resource #3: From Long-Term Goals to Daily Instruction



- Provides guidance on:
 - Developing daily lesson goals and formative assessment strategies from the CCSS
 - Grouping, organizing, and sequencing the CCSS into a coherent instructional plan

Resource #3: From Long-Term Goals to Daily Instruction

- From Standards to Building Blocks
- From Building Blocks to Learning Goals
- Combining Standards into Pods
- Sequencing Pods of Standards

Resource #4: Developing & Refining Lessons to Address the CCSS



- Presents key features of instructional practice aligned to the CCSS
- Provides several tools to assist teachers in developing and refining lessons to support students in achieving the CCSS

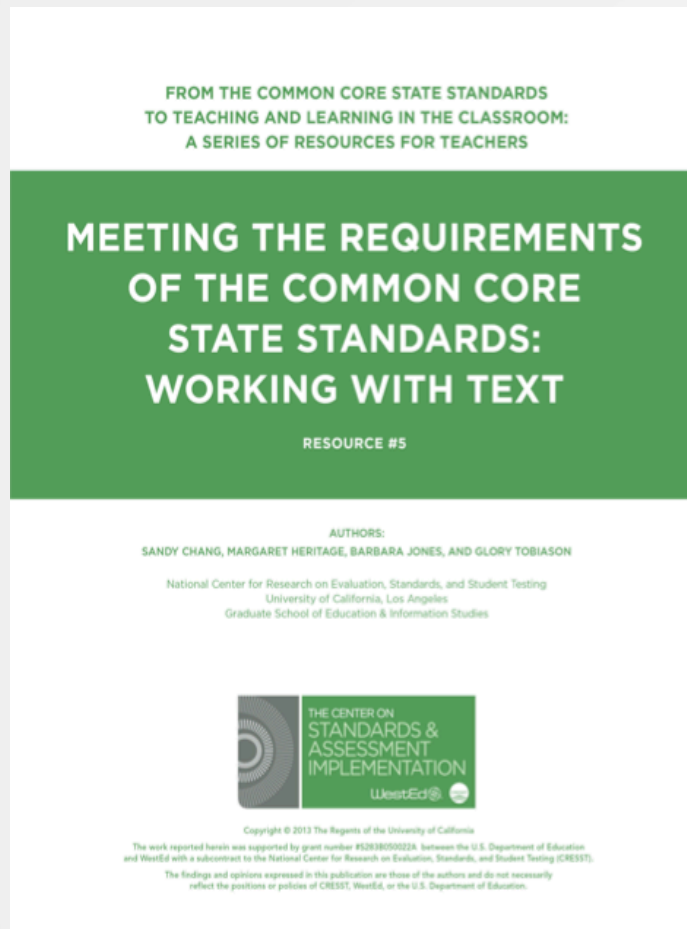
Resource #4: Developing & Refining Lessons to Address the CCSS

- Key Features of Instructional Practice
 - Prior Knowledge and Anticipated Challenges
 - Designing Classroom Interactions to Support Thinking and Learning
 - Communication and Collaboration in the CCSS
 - Deliberate and Responsive Instruction

Resource #4: Developing & Refining Lessons to Address the CCSS

- Six Tools for Developing and Refining Lessons
 - Tool 1: Lesson Overview
 - Tool 2: Lesson Cliff Notes
 - Tool 3: Lesson Hotspots
 - Tool 4: FOL Menu
 - Tool 5: Lesson Annotation Protocol
 - Tool 6: Lesson Debrief

Resource #5: Supporting Students in Close Reading



- Includes information on close reading drawn from the literature
- Provides examples of how teachers can select and annotate text for lesson planning
- Gives guidance for developing text-dependent questions

Resource #5: Supporting Students in Close Reading

- Selecting Text
- Planning for Close Reading of Text
- Priming Text
 - Text Coversheet & Annotation Protocol
- Text Dependent Questions
- Instructional Considerations

