Supporting Instruction and Formative Assessment for College and Career Ready Standards (CCRS)

Central Comprehensive Center (C3)
South Central Comprehensive Center (SC3)
Center on Standards and Assessment Implementation (CSAI)

Norman, Oklahoma
January 13-14, 2016

Welcome and Context Setting

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Preview of Day 1

Jennifer Watson
C3/SC3 Literacy Technical Assistance Coordinator

Introduction of CSAI Presenters

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CSAI Resources to Support Instruction and Formative Assessment

Norman, Oklahoma

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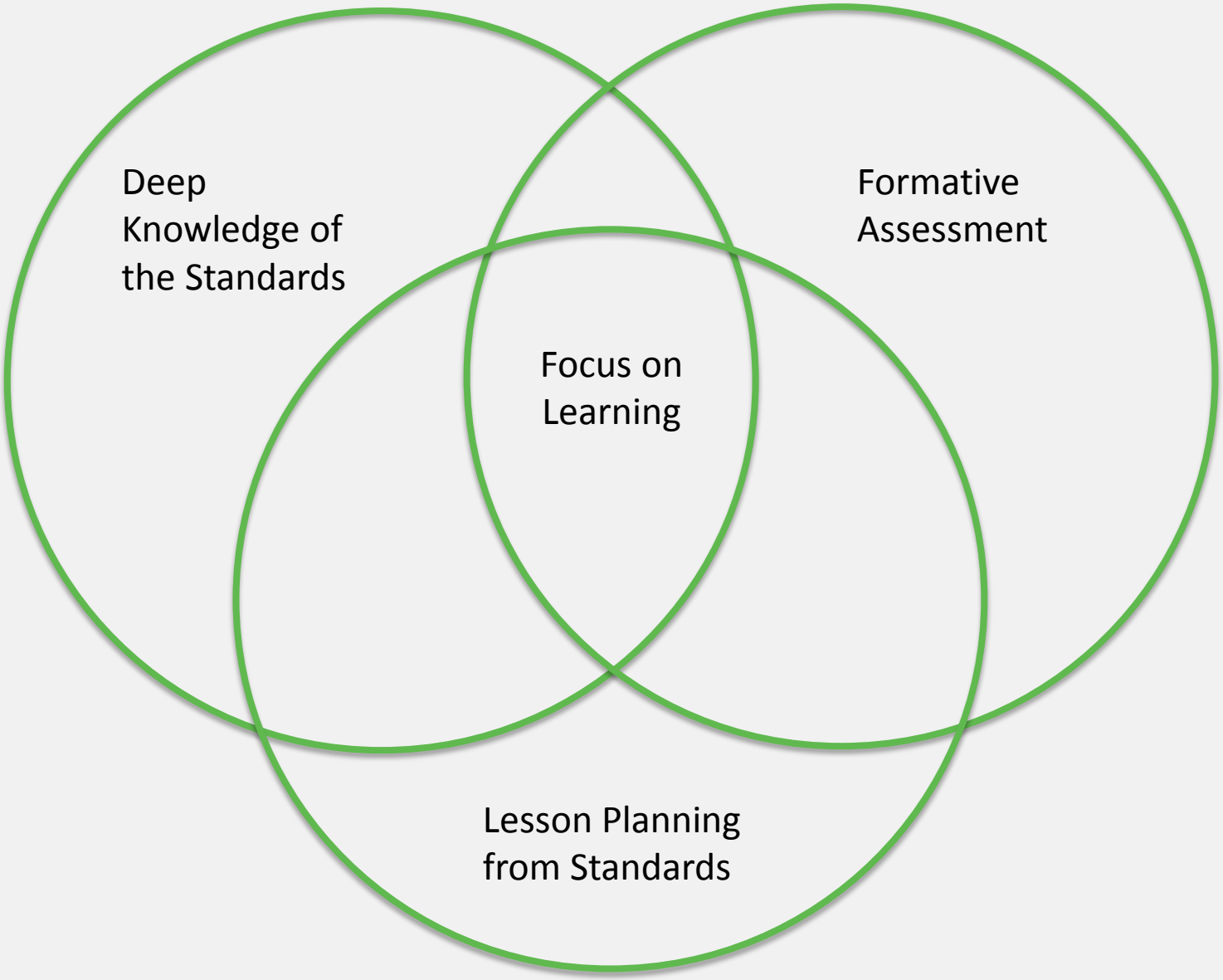
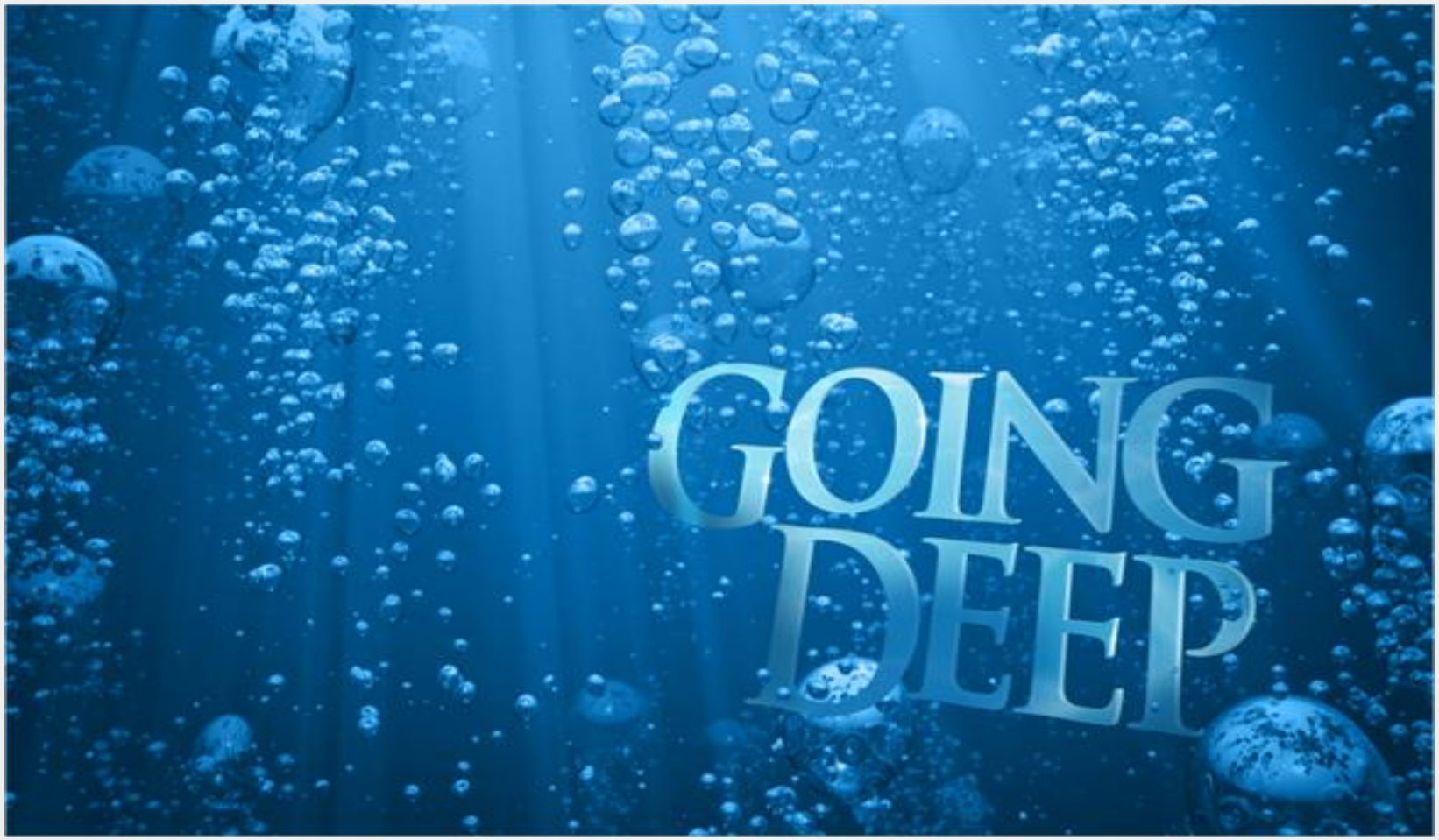
Resource: Goals

- Coach teachers' thinking
- Deepen teachers' content knowledge
- Develop connected learning pathways
- Create a coherent and accessible process of moving from the CCRS to daily classroom practice with formative assessment


Deep
Knowledge of
the Standards
Formative
Assessment
Focus on
Learning
Lesson Planning
from Standards

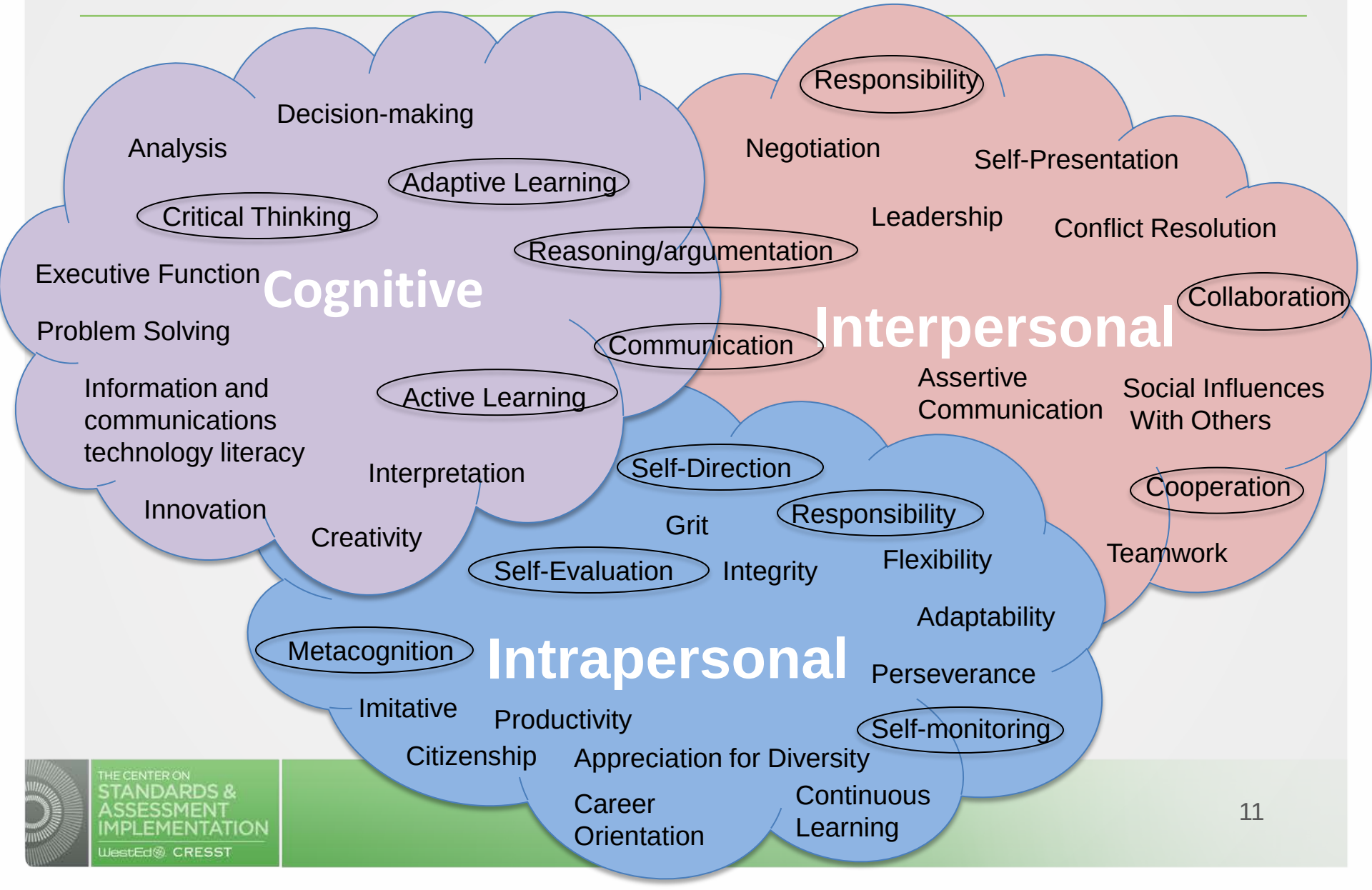
Current Context

CCRS

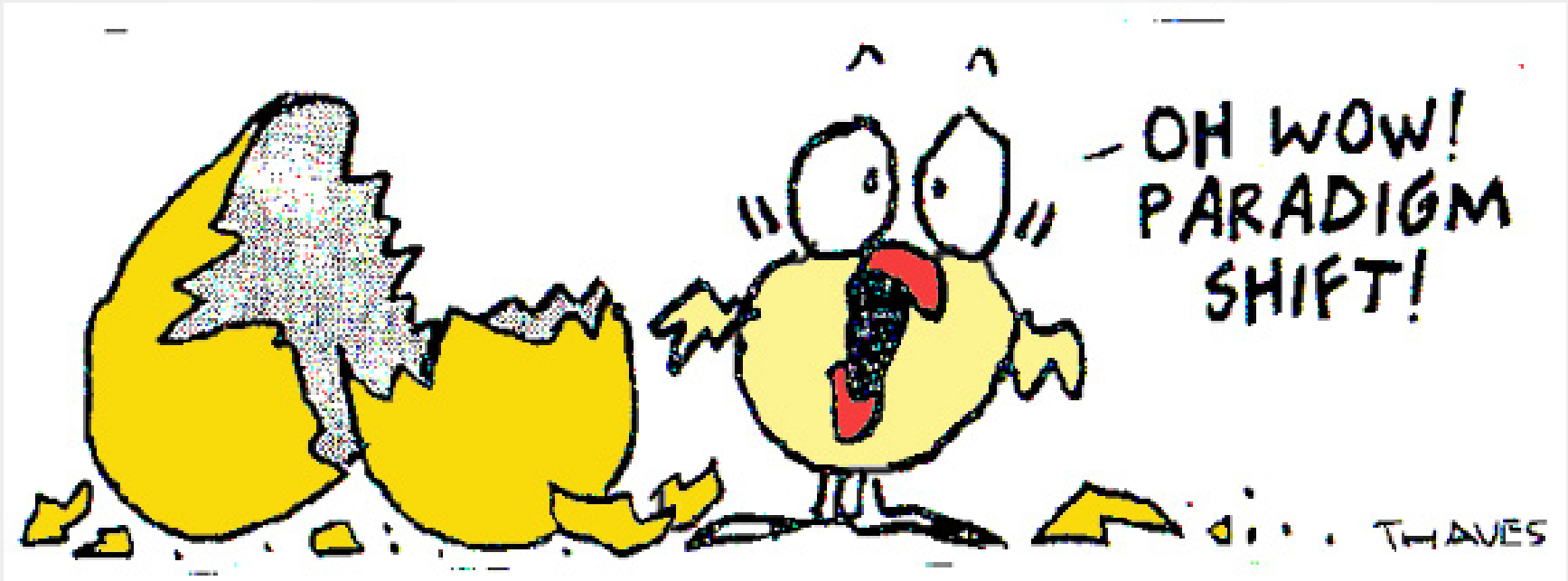


Transferable Knowledge and Skills

Three Domains of Competence (NRC, 2012)



Shifts in Practice



From: Traditional Lesson Paradigm

- Review
- Demonstration
- Practice

(NCTM,2014)

To : **Use and connect mathematical representations**

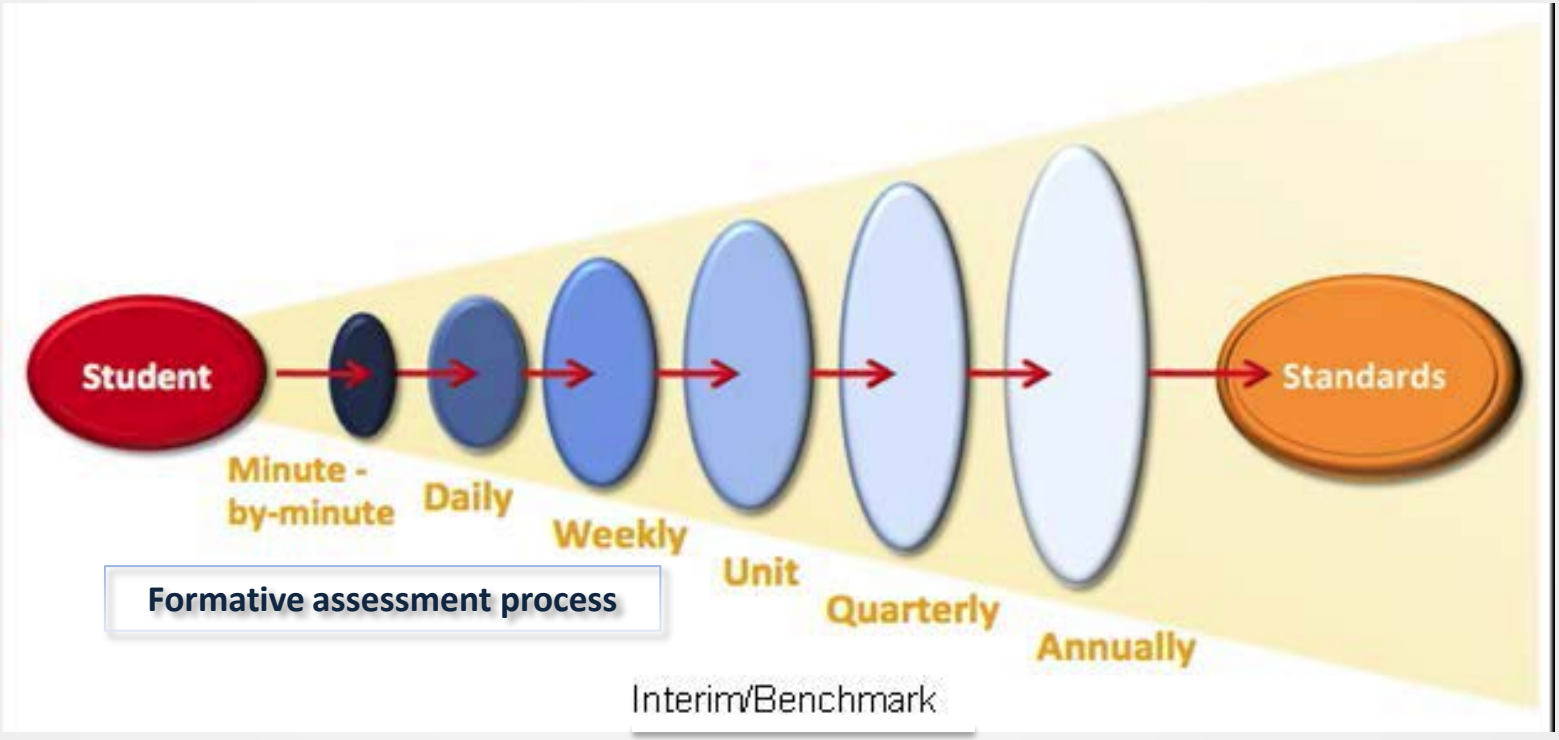
Teacher and student actions

What are *teachers* doing?	What are *students* doing?
Selecting tasks that allow students to decide which representations to use in making sense of the problems.	Using multiple forms of representations to make sense of and understand mathematics.
Allocating substantial instructional time for students to use, discuss, and make connections among representations.	Describing and justifying their mathematical understanding and reasoning with drawings, diagrams, and other representations.
Introducing forms of representations that can be useful to students.	Making choices about which forms of representations to use as tools for solving problems.
Asking students to make math drawings or use other visual supports to explain and justify their reasoning.	Sketching diagrams to make sense of problem situations.
Focusing students' attention on the structure or essential features of mathematical ideas that appear, regardless of the representation.	Contextualizing mathematical ideas by connecting them to real-world situations.
Designing ways to elicit and assess students' abilities to use representations meaningfully to solve problems.	Considering the advantages or suitability of using various representations when solving problems.

DEFINITIONAL CLARITY

One Size Does Not Fit All

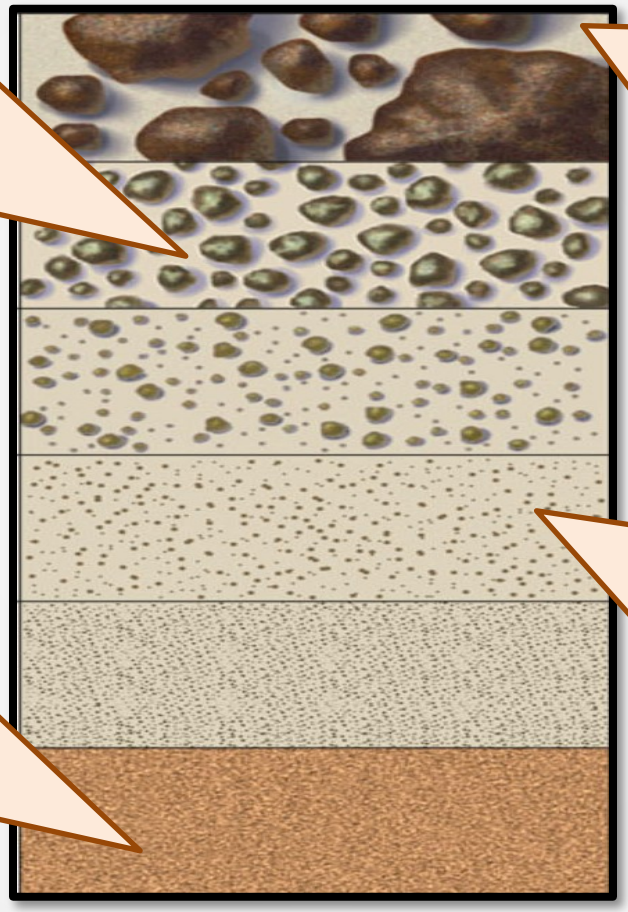
Assessment in the System



(CDE ELA/ELD Curriculum Framework, 2014, adapted from Herman & Heritage, 2007)

Different Levels of Detail

Quarterly



Annual

End-of-Unit

Minute-by-minute, Daily, Weekly

Discussion

Read the definitions on Handout 1.

On your own, decide what are three key ideas about formative assessment.

Discuss why you made these selections in your table groups.

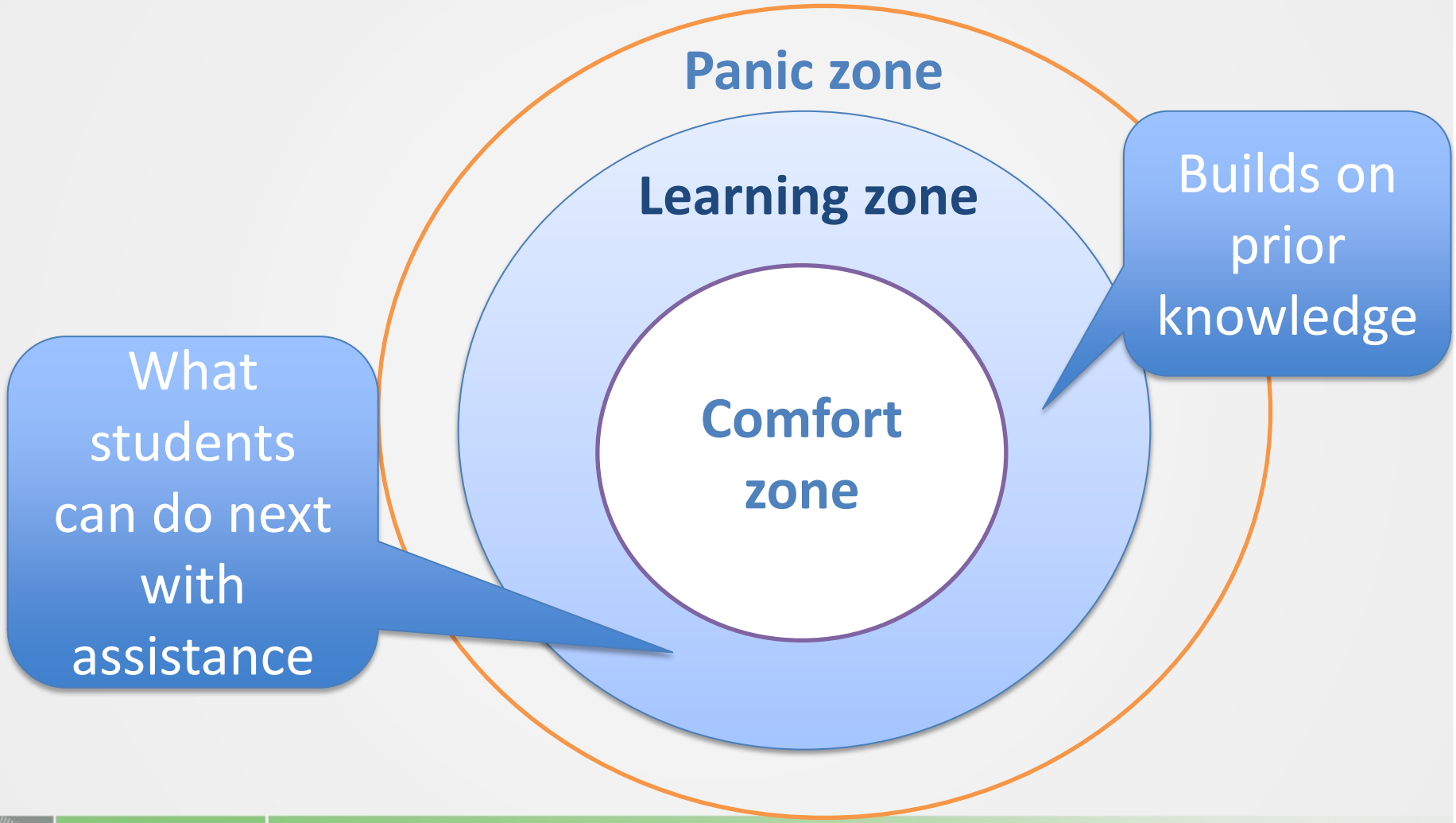
Formative Assessment Is….	Formative Assessment Is Not….
generating evidence **intentionally** in the course of continuous teaching and learning, engagement with learners through observation, discussion, questioning, and review and analysis of tasks/work	giving a test at the end of an instructional cycle or on a predetermined basis (e.g., quarterly, annually)
gauging how student learning is progressing while students are in the process of learning	evaluating student achievement at the end of a sequence of learning
using evidence to inform immediate or near-immediate teaching and learning	using test data to make decisions about medium- and long-term instructional/curricular plans

Formative Assessment Is….	Formative Assessment Is Not….
providing ongoing descriptive feedback to learners	assigning grades /reporting achievement
involving students in the assessment process through peer and self-assessment	telling students the results of a test

Focus on Formative Assessment

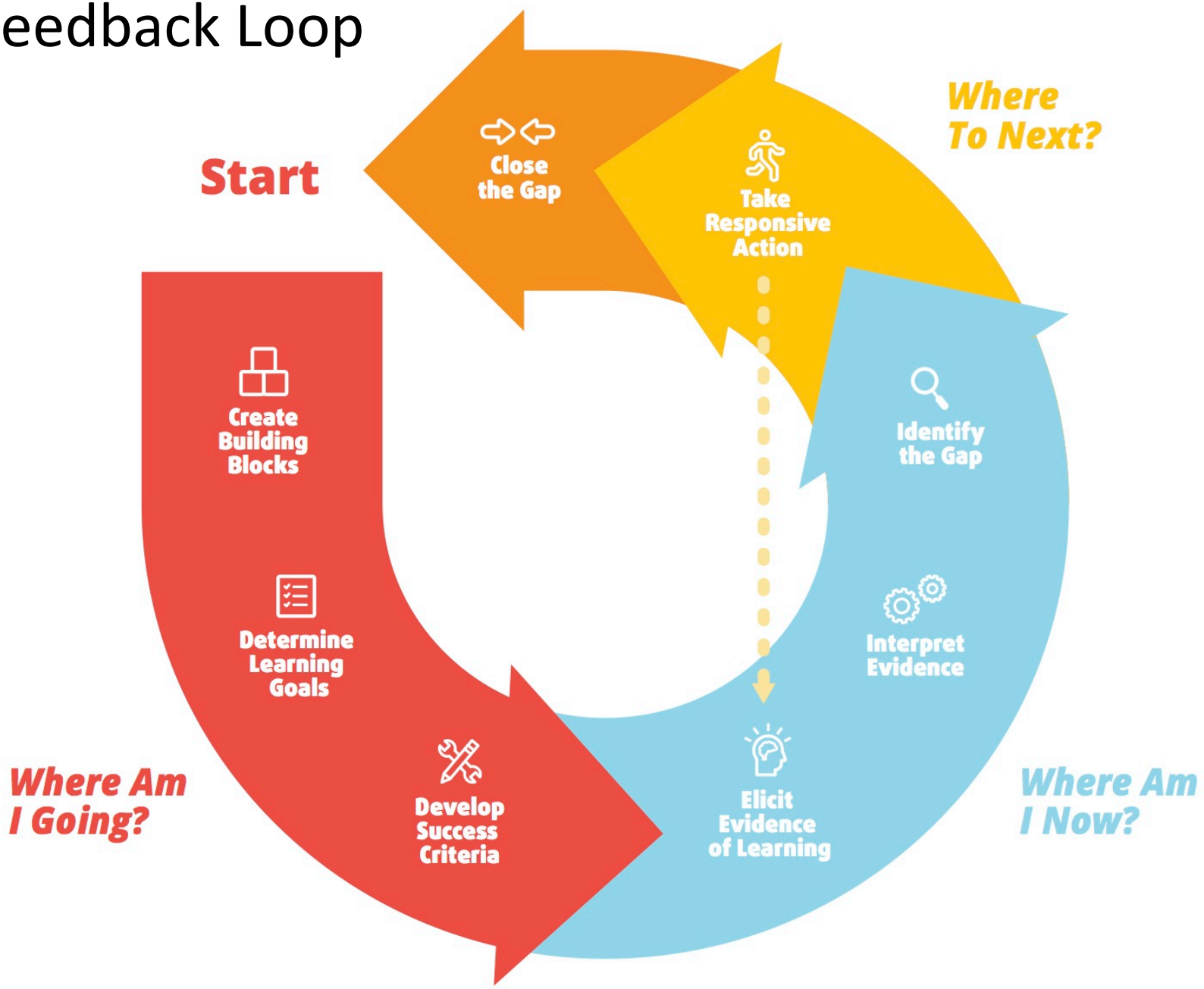
Formative assessment occurs hand in hand with the teaching and learning process and is an integral component of teaching and learning for transfer.

(NRC, 2012)



Source: Colvin, 2009

A Feedback Loop




Start
Create Building Blocks
Determine Learning Goals
Develop Success Criteria
Where Am I Going?

Too Big For Lesson Goals

End-of-grade level expectations

End-of-grade level expectations

End-of-grade level expectations

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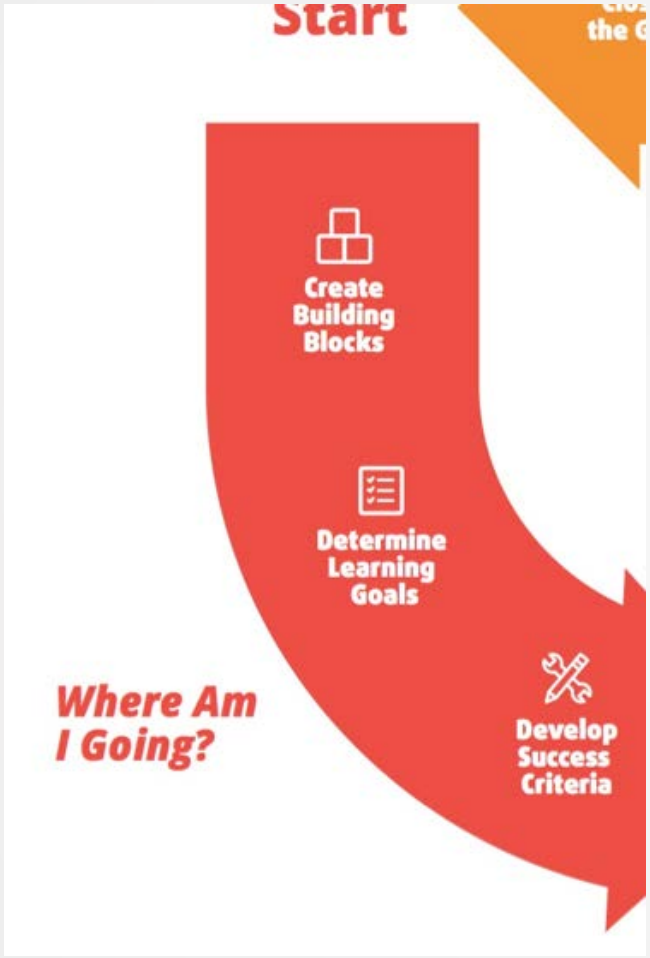
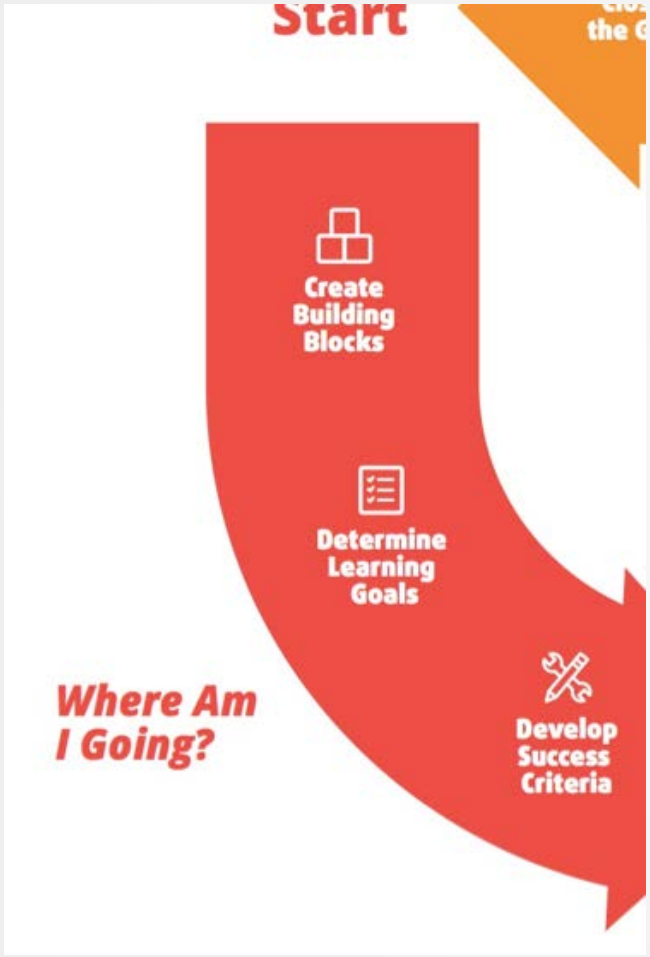
Intermediate Steps

Learning Goals



- What students will learn (not what they will do) during a lesson – one or more periods of learning
- Conceptual, Analytic, Linguistic

Success Criteria



- Performances of learning
- Clearly understood by students
- Aligned to learning goal(s)
- What students will say, do, make or write

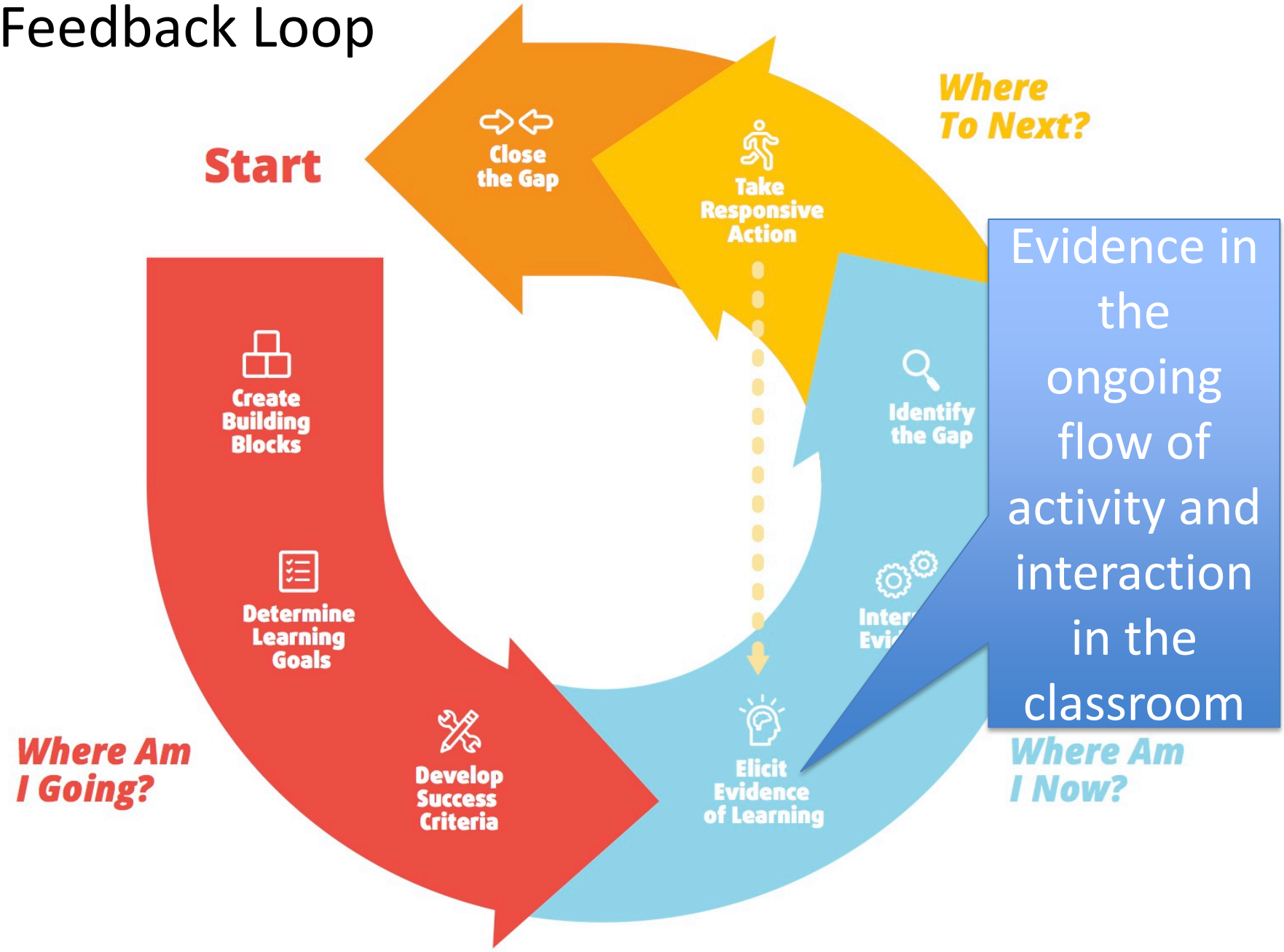
Discussion

How does this teacher support students to develop success criteria?

How are students involved in the assessment process?


Identify the Gap
Interpret Evidence
Elicit Evidence of Learning
Where Am I Now?

A Feedback Loop



Learning Goal

Use multiplication and division to solve problems

Ricardo has 1,135 US stamps. He has 3 times as many foreign stamps as US stamps. How many stamps does he have altogether?

Success Criteria

I can determine when and how to break a problem into simpler parts

I can explain what the problem is asking me to do

I can explain the relationship between multiplication and division

Discussion

How is this teacher eliciting evidence?

What does she find out?

What routinized practices are in place?


Close the Gap
Take Responsive Action
Where To Next?

Deliberate Acts of Teaching

- ✓*Modeling*
- ✓*Telling*
- ✓*Explaining*
- ✓*Questioning*
- ✓*Prompting*
- ✓*Feedback*

Discussion

As you watch the video, what do you notice about the characteristics of this teacher's feedback to her student?

What role is the student playing in this interaction?

Sharon

"Formative assessment has not only changed me as a teacher but I believe it has changed the students as learners."

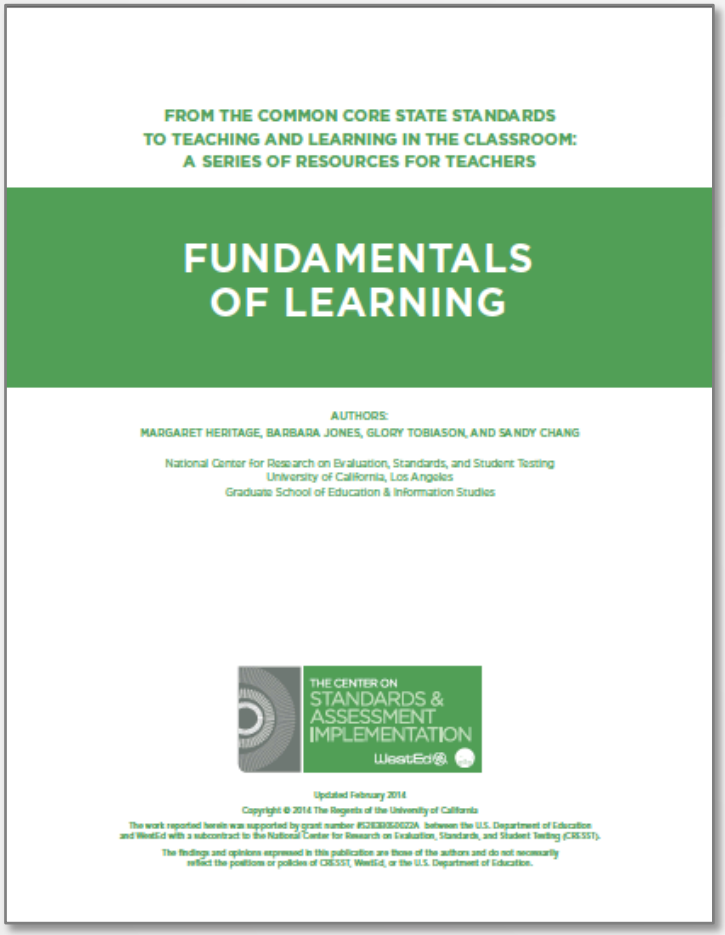
Heritage, 2010, p. 5

Shawn

- *I used to do a lot of explaining, but now I do a lot of questioning.*
- *I used to do a lot of talking, but now I do a lot of listening.*
- *I use to think about teaching the curriculum, but now I think about teaching the student.*

Heritage, 2010, p. 4

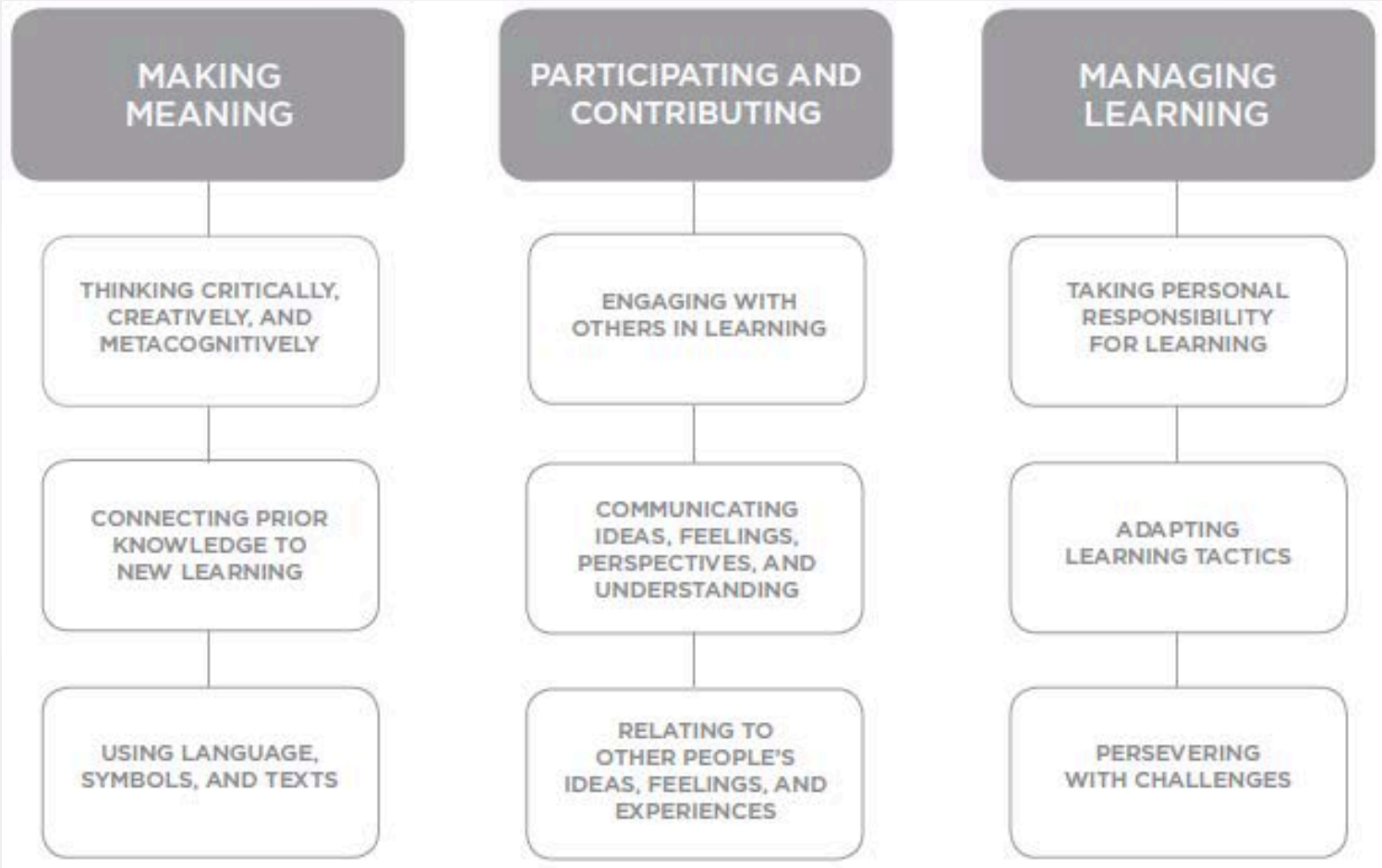
Fundamentals of Learning



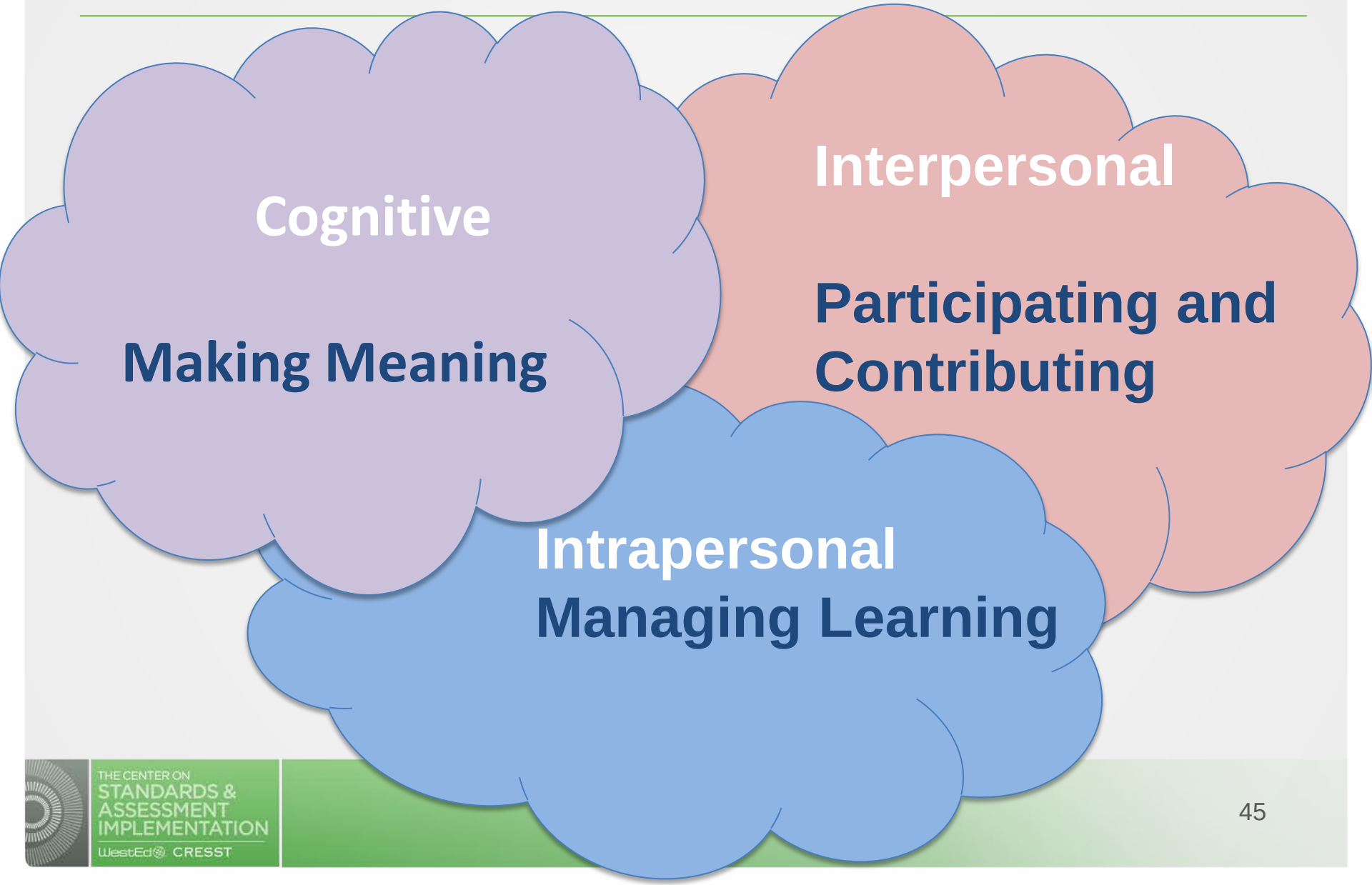
- Provides a framework to assist in transitioning to classroom practices called for in the CCRS
- Developed from leading theory and research
- Grounds formative assessment

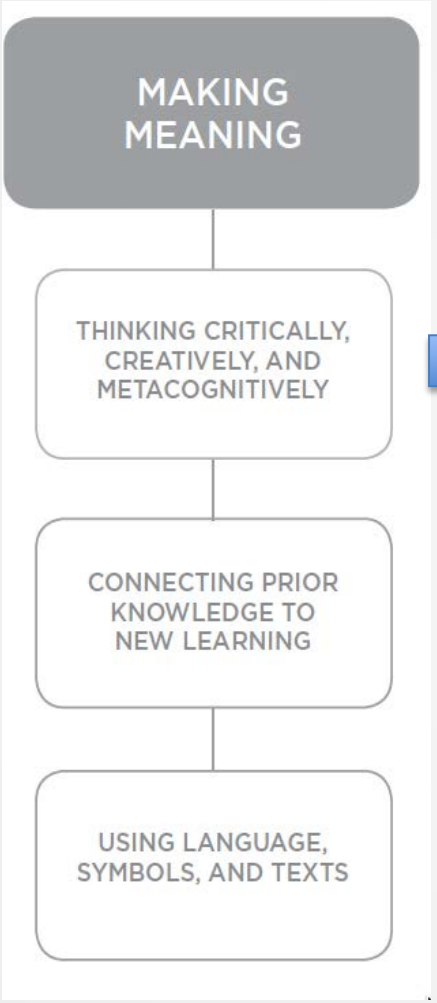
Fundamentals of Learning

Fundamentals of Learning pp. 5-6

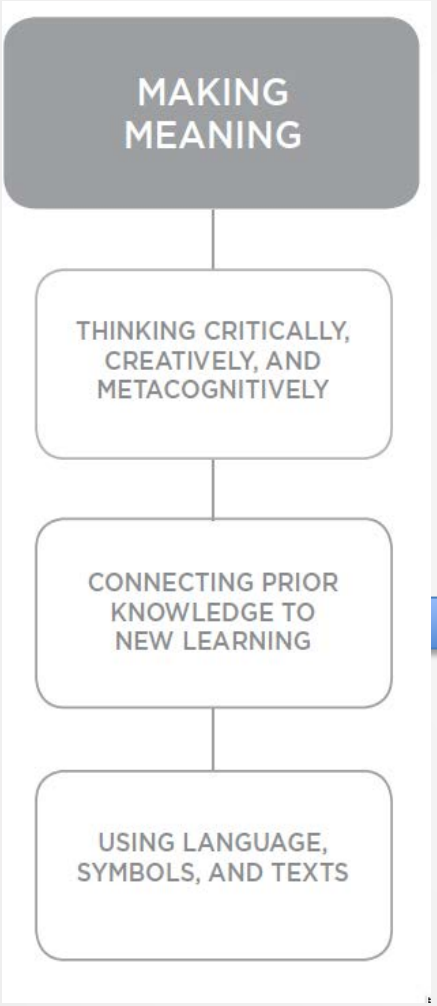


Fundamentals of Learning

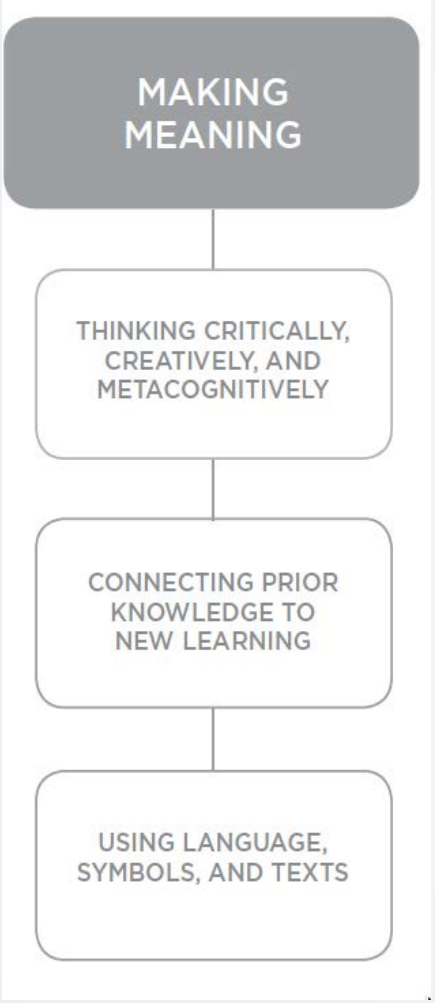




- Evaluate information
- Reason
- Solve problems
- Analyze and construct arguments
- Think about thinking/learning



- What do I already know about this?
- Activating prior knowledge as the basis for constructing new knowledge



- Make meaning of the codes through which knowledge is expressed
- Symbols for representing and communicating information ideas and experiences

- Share and discuss ideas and interpretations
- Build on others' ideas
- Explain, critique
- Obtain feedback

- Extended discourse
- Expressing opinions and understanding
- Actively participating in own and others' learning

- Listening to others, reading what others have written
- Observing others
- Being open to others' viewpoints

- Self-direct
- Take initiative
- Active, capable learners

- Make plans
- Set goals
- Monitor progress
- Adapt learning tactics

Fundamentals of Learning pp. 7-10

IN PRACTICE

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

Fundamentals of Learning pp. 7-10

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

Questions and Review

- Any questions?
- Now take some time to review the FOLs

Discussion

What do you see in this video clip that has to do with formative assessment?

What FOLs do you see enacted?

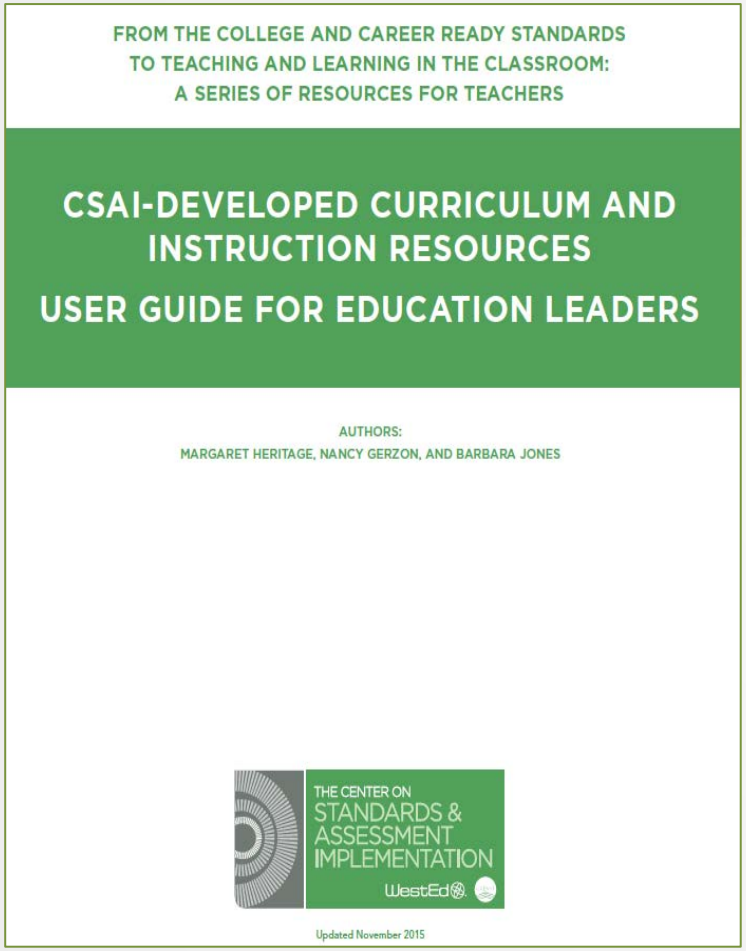
Video & Discussion

Notice how the teacher:

Provides feedback to students based on evidence of their work
Co-constructs success criteria related to the goal with students
Obtains evidence from small group and whole class discussions
Places responsibility on students

Fundamentals of Learning

User Guide



- Selecting the right resources for teachers
- Designing effective professional learning for teachers
- Leading implementation over time

Resource title	Content focus	Use this resource if ...
Fundamentals of Learning	Provides a framework which outlines three essential components of learning that underpin classroom practice for K-12 students' attainment of CCRS. These elements are: (1) Making Meaning (2) Participating and Contributing (3) Managing Learning Detailed illustrations of what the three components look like during teaching and learning are provided. This is a useful resource for reflecting on current practice and considering core instructional practices that address these Fundamentals.	• Educators could benefit from examining key ideas in contemporary learning theory and research and what learning theory and research look like in practice. • It would be useful for teachers to reflect on which of these practices need to be developed or extended in their own classrooms in the context of CCRS. • Teachers could benefit from learning more about the role of students as learners.

Designing Professional Learning

Pre-Implementation Planning (pp. 5-6)

- Align learning outcomes to teachers' current learning needs
- Clarify expectations for use of the materials
- Identify how and when follow-up implementation will occur
- Ensure work is aligned to improvement goals
- Outline structures for ongoing dialogue

Leading Professional Learning

Four-Step Approach (pp. 6-8)

- Introduce materials
- Teachers practice the protocols
- Teachers apply the protocols
- Teachers reflect with colleagues

Leading Implementation Over Time

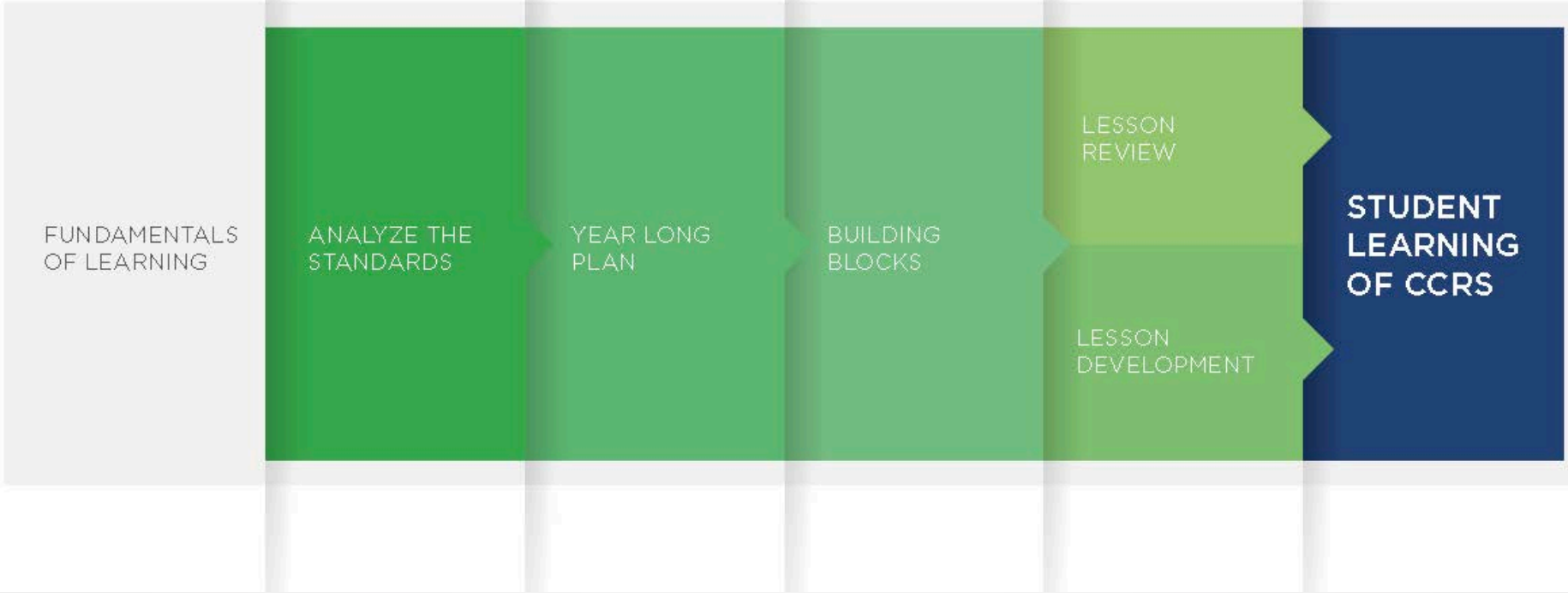
Role of Leaders (p. 8)

- Evaluate
- Document
- Celebrate

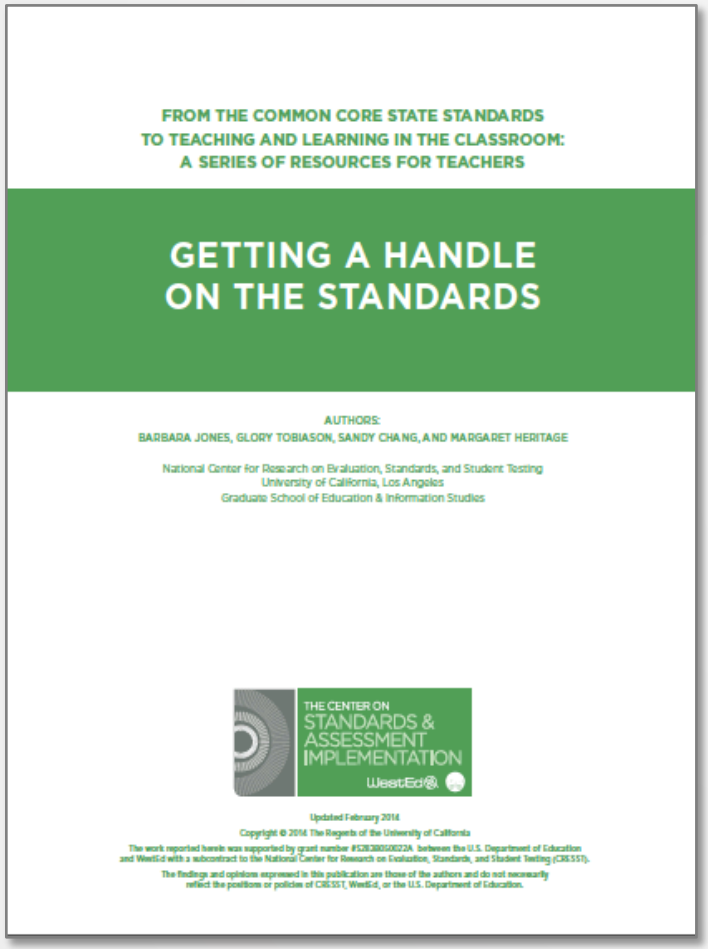
Discussion

What implementation strategies for the *FOLs* might you use from the *User Guide?*

CSAI-Developed Curriculum & Instruction Resources - Overview



Getting a Handle on the Standards



- Provides guidance on the shifts, themes, and architecture of ELA and math CCRS
- Includes processes to:
  - Review own standards
  - Analyze current instructional materials relative to CCRS learning expectations

Process for Studying Math Standards

- Interpreting Practice Standards
- Analyzing Content Standards by type and connection to Practice Standards
  - Conceptual Understanding
  - Procedural Fluency
  - Application

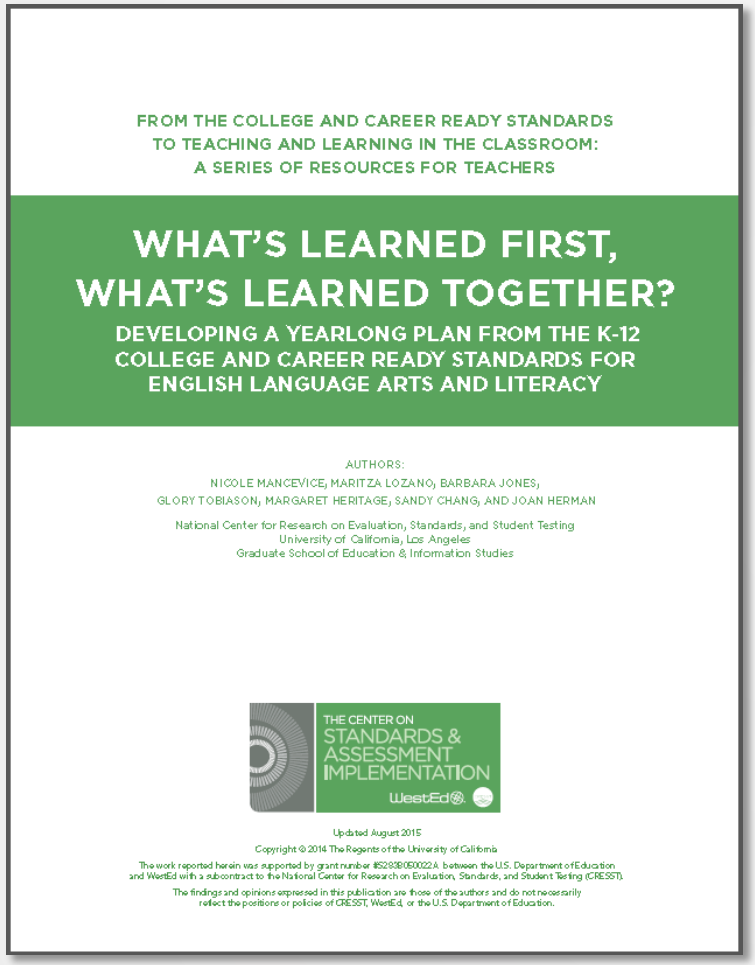
Process for Studying ELA Standards

- Compare old and new standards
  - Same
  - Similar but more rigorous
  - New
  - Removed

Process for Studying Math and ELA Standards

- Learning Progression Analysis
- Review of existing instructional materials and teaching strategies
  - Currently Covered
  - Needs Refinement
  - Needs Development

Yearlong Planning


FROM THE COLLEGE AND CAREER READY STANDARDS
TO TEACHING AND LEARNING IN THE CLASSROOM:
A SERIES OF RESOURCES FOR TEACHERS

WHAT'S LEARNED FIRST, WHAT'S LEARNED TOGETHER?

DEVELOPING A YEARLONG PLAN FROM THE K-12 COLLEGE AND CAREER READY STANDARDS FOR ENGLISH LANGUAGE ARTS AND LITERACY

AUTHORS:
NICOLE MANCEVICE, MARITZA LOZANO, BARBARA JONES,
GLORY TOBIASON, MARGARET HERITAGE, SANDY CHANG, AND JOAN HERMAN

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University of California, Los Angeles
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Updated August 2015

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- Make connections within and across standard domains/strands
- Determine a standards-based yearlong teaching and learning sequence

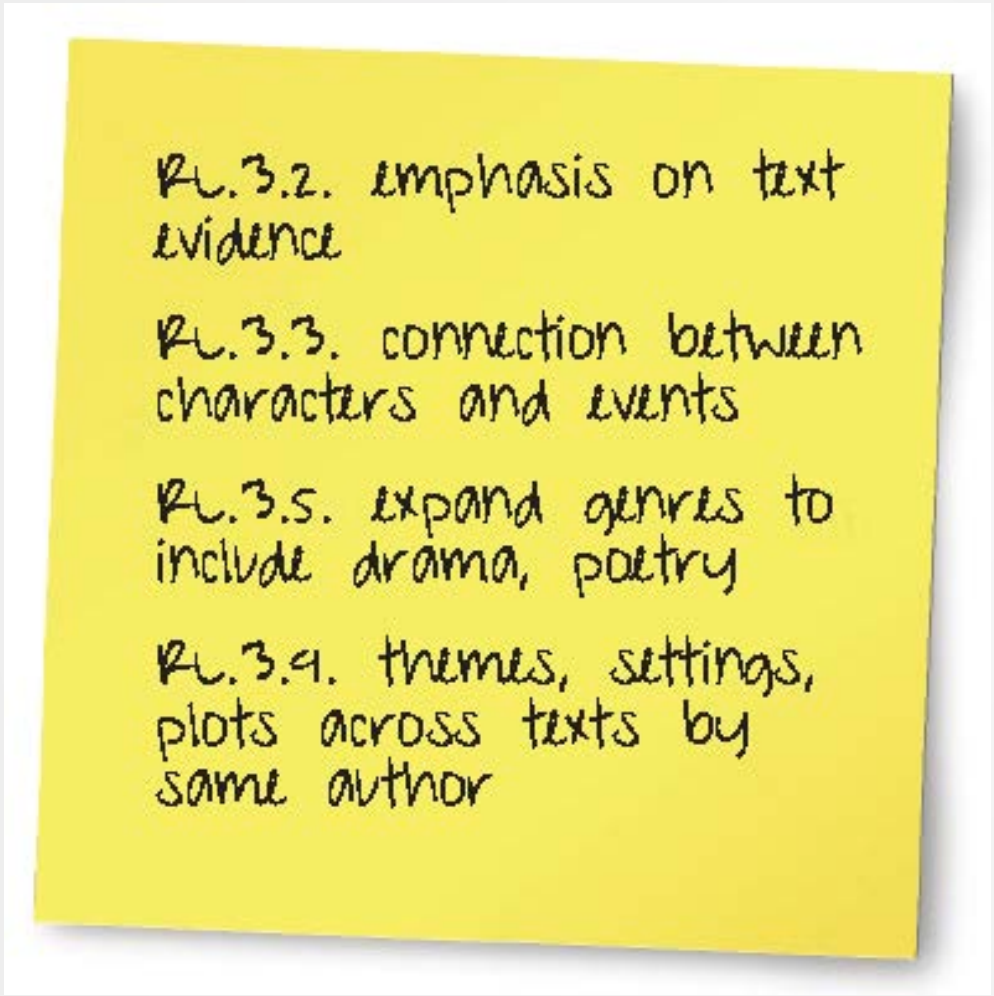
Yearlong Planning Steps

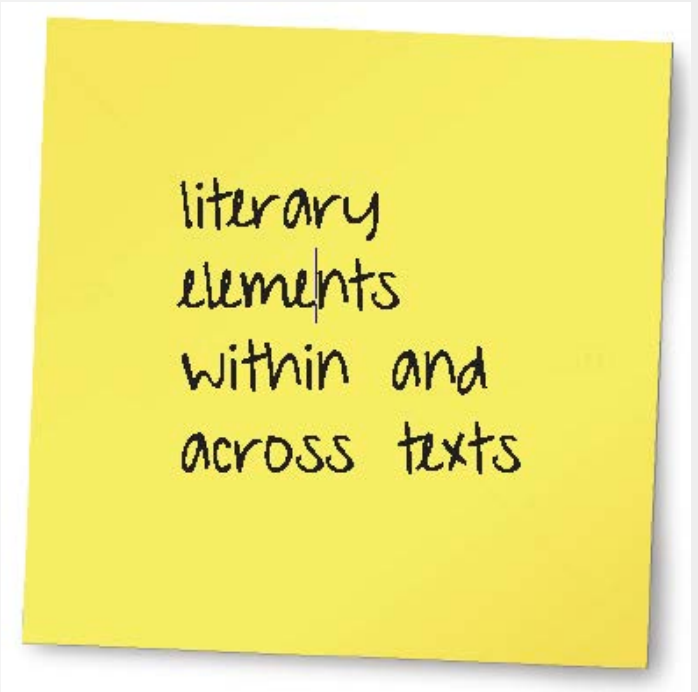
- Study and annotate standards
- Group standards and synthesize themes
- Determine the major work of the grade
- Organize standards into a yearlong sequence of teaching and learning

Study and Annotate Standards

Types of Reflections	Examples
Summary or paraphrasing	• "Okay, this is basically, *toggling between multiplication and division.*" • "This is mainly about using the *number line.*"
Reaction to a standard	• "This standard depends on a lot of others." • "A lot of other standards depend on this one."
Reflection on the standard in relation to students	• "They're going to need a lot of practice with this." • "The vocabulary might be tricky for them here." • "They'll pick this up pretty quickly."
Connection to the previous or next grade	• "Is this the first time they're seeing this?" • "This isn't so different from what they had to do last year." • "This is going to be really important next year."
Connection between standards	• "How does this fit with the other standards in this cluster?" • "Will they be able to do *this* standard without mastering *that* standard?" • "I think *this* standard is an application of *that* standard."

Group Standards and Synthesize Themes





Determine the Major Work of the Grade

Distinguishing point of view

Headline

- Distinguish personal point of view from that of narrator and/or characters (RL.3.6), author (RI.3.6)

Relationship of ideas within a Text

- Use language that relates to time, order, and cause to describe relationship between events or ideas (RI.3.3)

Storyline

- Explain relationship between sentences and paragraphs (W.3.8)

Storyline

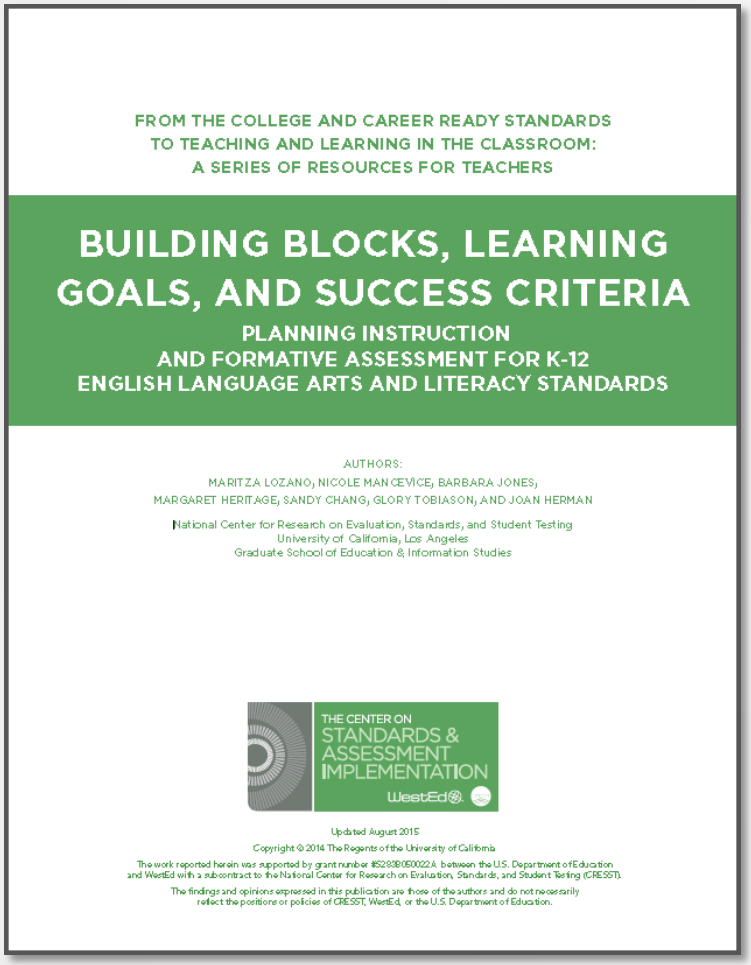
Organize Standards into a Yearlong Sequence of Teaching and Learning

Headline Storyline	CCRS Code	Timeframe	Math Practices	Gossip Page
MULT & DIV – Multiplication as arrays; division as equal groups	2.OA.1, 2, 9	Months	2, 4, 7, 8	G1
TIME & LIQUID VOLUME – Telling time to the nearest minute	2.MD.1	Days		
TIME & LIQUID VOLUME – Measuring liquid volume & mass	2.MD.2	Days		
MULT & DIV – Connection between multiplication & division	2.OA.4-6	Months	7, 8	
SHAPES – Partitioning shapes into equal parts as expressed by fractions	2.G.3	Days	2, 3	G2
GRAPHS & MEASUREMENT – Using rulers to measure in units, ½'s and ¼'s	2.MD.4	Days	5, 6	G3
FRACTIONS – What is a fraction?	2.NF.1	Months	2, 4	G2
GRAPHS & MEASUREMENT – Drawing and using bar graphs to solve 1- & 2-step problems	2.MD.3	Weeks	1, 4, 5	

FRACTIONS – Fractions on a number line	3.NF.2 3, 5	4 weeks	5	G1
PLACE VALUE & ROUNDING – Rounding to the nearest 10 or 100	3.NBT.1	4 weeks	6	
PLACE VALUE & ROUNDING – Multiplying 1-digit numbers by multiples of 10 (range of 10-90)	3.NBT.3	3 days		
FRACTIONS – Equivalent fractions	3.NF.3	4 weeks		G2
AREA – What is area? Unit squares	3.MD.5-6	4 weeks	1, 4	G2, G4
AREA – Relating area to multiplication and addition	3.MD.7	4 weeks	2, 3, 4	G1
PERIMETER – Solving problems with perimeter	3.MD.8	3 days		G4
SHAPES – Categories and attributes of shapes	3.G.1	3 days		

Ticker Tape Standards	CCRS Code	Math Practices
MULT & DIV – Solving 2-step word problems using 4 operations	3.OA.8	4
PLACE VALUE & ROUNDING – Fluently adding and subtracting within 1000	3.NBT.2	5
MULT & DIV – Solve word problems with multiplication and division	3.OA.3	4
MULT & DIV – Fluently multiplying and dividing	3.OA.7	6

Building Blocks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A SERIES OF RESOURCES FOR TEACHERS

BUILDING BLOCKS, LEARNING GOALS, AND SUCCESS CRITERIA

PLANNING INSTRUCTION
AND FORMATIVE ASSESSMENT FOR K-12
ENGLISH LANGUAGE ARTS AND LITERACY STANDARDS

AUTHORS:
MARITZA LOZANO, NICOLE MANCEVICE, BARBARA JONES,
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- Identify the series of changes that occur in student thinking/skills
- Determine lesson-sized Learning Goals and Success Criteria

Math Building Block Example

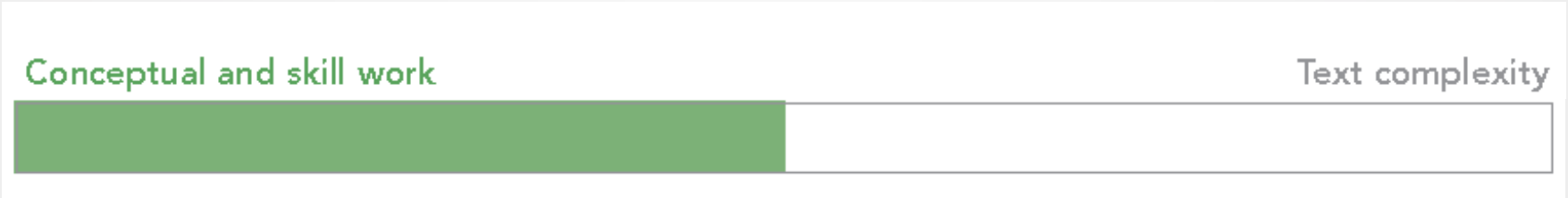
Building Blocks of a Standard	What the Teacher Was Thinking When Creating the Building Block
Block 1 Practice repeated addition of objects arranged in rectangular arrays with progressively more rows and columns (beyond 5 rows and 5 columns). EX 7+7+7+7 and 2+2+2+2+2+2+2+2	The idea is that students need to practice this until it's no longer difficult or interesting. This way, they'll be receptive to the idea of multiplication as a "shortcut to repeated addition."
Block 2 Move between symbolic (2+2+2+2) and concrete (four groups of 2 objects) representations of the same repeated addition number sentence.	Students will need a lot of practice toggling among various representations, and this practice should occur in multiple content areas (science, art, etc.).
Block 3 Describe repeated addition like 2+2+2+2 as "the number 2, added four times," and then, "four times 2."	This shift in language is deeply connected to the concurrent, underlying conceptual shift from addition to multiplication.
Block 4 Extend the learning of Block 3 to include more repeats. EX 2+2+2+2+2+2+2	Students' practice with different representations should include larger numbers and cross-content connections, as appropriate.

Block 5 Extend the learning of Block 3 to include more objects in each group. EX 7+7+7+7	Their practice with different representations should include larger numbers and cross-content connections, as appropriate.
Block 6 Understand multiplication as a shortcut to repeated addition.	As students work with larger numbers, they can begin to use and notice patterns in the 100's square, addition table, and multiplication table.

Learning Goals and Success Criteria

BUILDING BLOCKS OF A LESSON	LEARNING GOALS	SUCCESS CRITERIA
Block 1 - Recognize that characters and narrator can express themselves through different language styles.	Understand that the characters and the narrator have unique language styles.	I can identify and characterize the narrator's and different characters' language styles. I can explain how the narrator's and characters' language styles are different from one another.
Block 2 - Understand that what characters say, their tone, and what they do provide clues as to their points of view.	Understand a character's point of view based on their tone.	I can state a character's point of view based on their tone. I can use evidence from the text to support my explanation of a character's point of view.

Text Complexity



Afternoon Working Session

- Work in same small group to create Building Blocks using selected state and grade level standards
- Use a Building Block to create Learning Goals and Success Criteria

Wrap-up for Day 1

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&

Mark Turner

C3/SC3 Logistics Coordinator

Thank you!

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