Module 5
Participant Guide

Focus on Sustaining Change

Section 3

Connecticut Core Standards for Mathematics

Grades K–5

Systems of Professional Learning

Connecticut Core Standards Systems of Professional Learning

The material in this guide was developed by Public Consulting Group in collaboration with staff from the Connecticut State Department of Education and the RESC Alliance. The development team would like to specifically thank Ellen Cohn, Charlene Tate Nichols, and Jennifer Webb from the Connecticut State Department of Education; Leslie Abbatiello from ACES; and Robb Geier, Elizabeth O'Toole, and Cheryl Liebling from Public Consulting Group.

The Systems of Professional Learning project includes a series of professional learning experiences for Connecticut Core Standards District Coaches in English Language Arts, Mathematics, Humanities, Science, Technology, Engineering, Mathematics (STEM), and Student/Educator Support Staff (SESS).

Participants will have continued support for the implementation of the new standards through virtual networking opportunities and online resources to support the training of educators throughout the state of Connecticut.

Instrumental in the design and development of the Systems of Professional Learning materials from PCG were: Sharon DeCarlo, Debra Berlin, Jennifer McGregor, Judy Buck, Michelle Wade, Nora Kelley, Diane Stump, and Melissa Pierce.

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Section 3

Section 3: Supporting Meaningful Reflection

The Role of the Coach

Instructions: Use the space provided to record notes on the role of the coach in a CCS-Math implementation.

Role of the Coach	Notes
Advocate vs. Evaluator	
Partner or Collaborator vs. Expert	
Advisor vs. Director	

Posing Questions

***Instructions**:* Use the space provided to take notes on tips for posing questions within a coaching conversation.

Think about the wording of these questions:

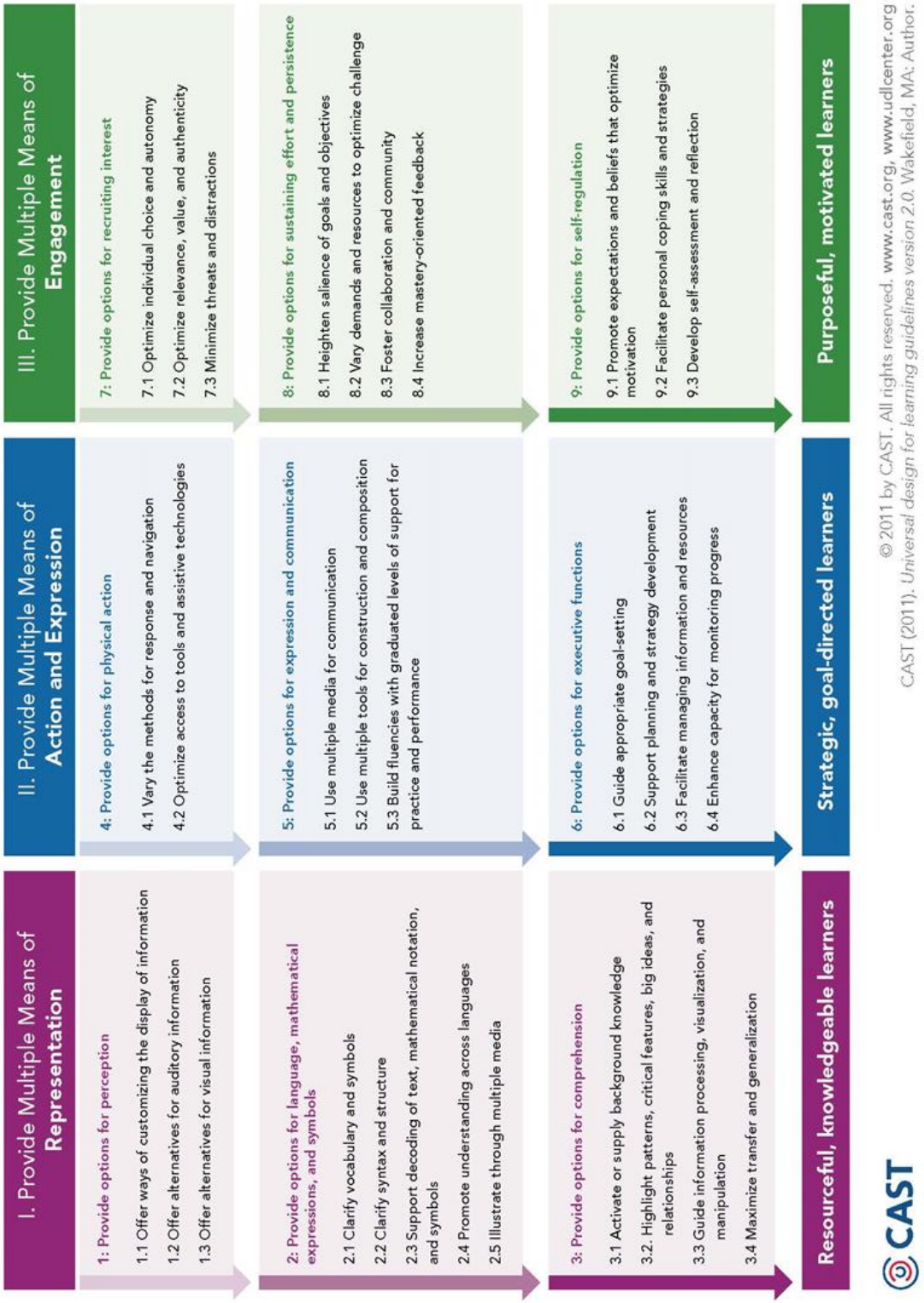
- What are some connections between this learning target and what your students have learned before?
- What formative assessment strategies could you use to see if students are understanding the concept?
- How did the lesson go compared to how you had planned it?

Tips for Posing Questions	Notes
• Use plurals in your questions • Embed tentative language ("might", "some") • Ask open-ended questions • Use verbs to elicit higher-order thinking ("compare," "predict," "evaluate") • Presume positive intentions in your questions • Use an approachable voice to signal inquiry vs. interrogation	

Forming Questions on a Lesson Design

***Instructions**:* Look over the lesson designed by the "coachee," asking questions for clarification as necessary. Record below two questions about the lesson design and/or the intended implementation of the lesson that you will use to move the thinking of the "coachee" forward.

Purposeful Questions


I. Provide Multiple Means of Representation
1: Provide options for perception
1.1 Offer ways of customizing the display of information
1.2 Offer alternatives for auditory information
1.3 Offer alternatives for visual information
2: Provide options for language, mathematical expressions, and symbols
2.1 Clarify vocabulary and symbols
2.2 Clarify syntax and structure
2.3 Support decoding of text, mathematical notation, and symbols
2.4 Promote understanding across languages
2.5 Illustrate through multiple media
3: Provide options for comprehension
3.1 Activate or supply background knowledge
3.2. Highlight patterns, critical features, big ideas, and relationships
3.3 Guide information processing, visualization, and manipulation
3.4 Maximize transfer and generalization
Resourceful, knowledgeable learners
II. Provide Multiple Means of Action and Expression
4: Provide options for physical action
4.1 Vary the methods for response and navigation
4.2 Optimize access to tools and assistive technologies
5: Provide options for expression and communication
5.1 Use multiple media for communication
5.2 Use multiple tools for construction and composition
5.3 Build fluencies with graduated levels of support for practice and performance
6: Provide options for executive functions
6.1 Guide appropriate goal-setting
6.2 Support planning and strategy development
6.3 Facilitate managing information and resources
6.4 Enhance capacity for monitoring progress
Strategic, goal-directed learners
III. Provide Multiple Means of Engagement
7: Provide options for recruiting interest
7.1 Optimize individual choice and autonomy
7.2 Optimize relevance, value, and authenticity
7.3 Minimize threats and distractions
8: Provide options for sustaining effort and persistence
8.1 Heighten salience of goals and objectives
8.2 Vary demands and resources to optimize challenge
8.3 Foster collaboration and community
8.4 Increase mastery-oriented feedback
9: Provide options for self-regulation
9.1 Promote expectations and beliefs that optimize motivation
9.2 Facilitate personal coping skills and strategies
9.3 Develop self-assessment and reflection
Purposeful, motivated learners
CAST
© 2011 by CAST. All rights reserved. www.cast.org, www.udlcenter.org
CAST (2011). Universal design for learning guidelines version 2.0. Wakefield, MA: Author.

Reflecting on the Coaching Conversation

***Instructions**:* Answer the questions below as you reflect on the coaching conversation in which you just engaged.

1. What are some challenges you had in posing questions during the coaching conversation?

2. Would you change the wording of the questions you asked? If so, how?

Lenses for Gathering Data

***Instructions**:* Record possible lenses that could be used by the Core Standards Coach for data collection during a classroom observation, sorting them by category as you go.

Observation Lens Examples	
Content	• Clear directions/explanations • Appropriate use of vocabulary • High level of cognitive demand • Connections to prior knowledge • Formative assessment integrated throughout lesson
Classroom Management	• Smooth transitions • Management of cooperative groups • Involving all students in tasks and discussion • Use of materials
Student Engagement	• Students are engaged in productive struggle • Student access to mathematics • Appropriate challenge for all students • Student engagement in Mathematical Practices • Individuals in groups are participating
Discourse	• Teacher asks a variety of questions, including higher-order questions • Students are given opportunities to explain their thinking • Wait time

Data Gathering Tool

***Instructions**:* Use this tool to record data for your chosen observation lens as you watch the Teaching Channel video *Reasoning About Multiplication & Division:* https://www.teachingchannel.org/videos/multiplication-division-in-the-core.

Data Collection	
TEACHER: **Drew Crandall**	**Grade: 3**
Topic of Lesson: **Reasoning About Multiplication and Division** (Math.3.OA.B.5)	
Observation Lens:	
Observation Notes:	

Classroom Observation Feedback

***Instructions**:* Record possible feedback that can be provided to the teacher during a coaching conversation based on a lesson observation.

Classroom Observations Feedback	
TEACHER: **Drew Crandall**	**Grade: 3**
Topic of Lesson: **Reasoning About Multiplication and Division** (Math.3.OA.B.5)	
Commendation:	
Question to engage teacher in critical reflection about student learning:	
Suggestion to move the teacher's thinking forward:	