



Unit 9 Reflection



“Mathematics in the 21st Century: What Mathematical Knowledge is Needed for Teaching Mathematics”

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1. What has the United States typically done to improve student learning and what should they be doing?
2. Why is increasing the amount of coursework in mathematics not enough?
3. How can the United States produce more effective mathematics teachers?



Focus	4	3	2	1	Total
Components of Number Sense	Lesson focuses on between 5 and 7 of the Components of Number Sense areas. The links to the Components of Number Sense are clear and strong.	Lesson focuses on between 3 and 4 of the Components of Number Sense areas. The link to the Components of Number Sense are clear and strong.	Lesson touches on 1-2 of the Components of Number Sense areas. The links to the Components of Number Sense are hard to identify and unclear.	Lesson does not address the Components of Number Sense.	
Language, Cognition, and Mathematical Structure	Multiple opportunities for two-way and in-depth discussion about the math (not just the procedures) is evident throughout the lesson	Opportunities for two-way discussion about the math (not just the procedures) are evident throughout the lesson.	Few opportunities for discussion about the math are given throughout the lesson.	No opportunities for discussion about the math are given throughout the lesson.	
Connects to Prior Knowledge	Multiple examples to foster in-depth understanding of the math are clearly evident throughout the lesson. The lesson ties into basic concepts and builds on prior knowledge.	Examples to foster understanding of the math are evident within the lesson. The lesson ties into basic concepts and builds on prior knowledge.	Examples to foster understanding of the math are somewhat evident within the lesson. The lesson may fail to tie into basic concepts and build on prior knowledge.	Examples to foster understanding of the math are not evident within the lesson. The lesson fails to tie into basic concepts and build on prior knowledge.	
				Grand Total	



Looking Back

- Revisit your lesson plan.
- Choose one initial lesson plan per table to discuss as a group.
- Using your rubric in your handout section, assess the initial lesson plan with a rubric score. (1st Column)
- Discuss as a group how you can make the initial lesson plan stronger as it relates to the content of this training.

Looking Forward-Lesson Revision

- Look at the language and mathematical structure in your lesson.
- Is there a better way to talk about the connections you are trying to make?
- How can you make this lesson stronger with regard to connecting to prior knowledge and addressing previously learned skills.
- Can we use multiple strategies?
- Remember the Sharon Griffin model. Can we move the student through all areas of the prototype for lesson construction?
- Think about the Components of Number Sense.
- What questions can you ask your students from as many of the components as possible to connect students to the math that they already know?

Lesson Revision (See LT 9 Rubric.)

- As a group, list at least five changes you could make to the lesson to strengthen the instruction for the student.
- Write a brief reflection as it relates to the strengths of the new lesson.
- Calculate a rubric score for the revised lesson.

Submit: (Be sure to include names of the participants in your group.)

- Lesson Plan with revisions
- Rubric with scores for both lessons
- Reflection
