TEACHING THE CORE-EXEMPLAR LESSON PREPARATION GUIDE, MATHEMATICS

Step 1: Complete the below demographic information.

School Name: Spring Brook Elementary	Teacher Name: Courtney Macchiarella
Date: Friday, December 6, 2013	Period/Time: 12:10-12:50
Room Number: 146	Grade Level: Kindergarten
Demographics of the class: 23 students, 2 English Language Learners (.08%), 3 IEP students (1.8%), 13	
boys, 10 girls	

Step 2: Determine the standard(s) to be addressed in this lesson.

a. Note the cluster(s), standard(s) or parts thereof addressed in this lesson

K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality

K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sound, acting out situations, verbal explanations, expressions, or equations

K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem

b. Note the aspects of rigor called for by the standard(s) being addressed in this lesson: Conceptual Understanding, Procedural Skill and Fluency, and/or Application

<u>Conceptual Understanding:</u> Students need to be able to understand the relationship between numbers and quantities in order to represent addition and subtraction appropriately. The students need to be able to understand there are a variety of different ways to represent addition using objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, express, or equations. Students need to be able to explain their thinking on how they represent addition.

<u>Application:</u> Students will be able to represent addition with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations. This will be applied through "real world" situations that students will connect with and apply to their own lives.

Step 3: Plan the Lesson

a. Lesson Plan

Mathematical Goals

Students will be able to understand that quantities can be joined in multiple ways.

Students will be able to represent addition using a variety of ways.

Materials

- Manipulatives (counting cubes, counting bears, snap cubes, etc)
- Wipe board and wipe board markers
- Paper and pencil
- Addition Story Problems

<u>Assessment Task:</u> Represent addition in multiple ways when given a word problem or two numbers.

Lesson time: 40 minutes

- 1. Teacher will review pervious lessons that align with this lesson. Such as; addition symbol, pocket problems, story problems, number stories, using a variety of materials to represent addition
- 2. Teacher will show a simple addition story problem and read it out loud (Sally had 2 stuffed animals and Tommy had 3 stuffed animals, how many animals did they have all together?)
- 3. Teacher will allow students think time and have students share out a variety of different ways to represent the story problem.
- 4. Teacher will prompt student to explain thinking when they are sharing their answers.
- 5. Teacher will partner students up and provide each group with a variety of manipulatives.
- 6. Teacher will read new number story and partner A will solve the problem while explaining thinking to Partner B.
- 7. Teacher will continue to read story problems as students take turns solving and explaining their thinking.
- 8. Teacher will have select students share thinking out loud with the entire class.
- 9. Teacher will rotate to gain informal assessment information based on observation.
- 10. Teacher will bring students back together to review concept and thinking.

b. Core Action Indicators

Core Action 1

Indicator A: This lesson focuses on representing number stories within 10 using a variety of materials which is within the grade-level standards for kindergarten.

Indicator B: Students will make connections from previous lesson in this unit that all align with the same standards that builds on students prior skills and knowledge.

Core Action 2

Indicator A: This lesson allows for teacher instruction that build students learning and allows students to go beyond just being given the answer through a variety of examples and explanations.

Indicator C: Students are given time to work through grade-level problems and exercises through partner work and encouragement.

Indicator D: Students will share answer with their partners but will be given the opportunity to share their thinking with the whole class or listen to a variety of other student solutions to help support their understanding.

Indicator E: The teacher will use informal observation as an ongoing check for understanding throughout the entire lesson. This will help assess progress of all students.

Core Action 3

Indicator A: Students will be given multiple examples, materials, and strategies to help avoid frustration and keep all students persevering through challenging problems.

Indicator B: Students will have the opportunity to share their thinking with their partner which creates a comfortable and safe environment. Students will also be given the opportunity to share their thinking with the entire class.