Week 2 Video Critique

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EDG565/EDU336/EDG515:Methods of Teaching Math

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January 29, 2023

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The Math standards covered in the video are the following: 1.OA.1 which covers addition and subtraction within 20. 1.OA.2 covers word problems that require addition of three whole numbers that add up to 20 or less. 1.OA.3 covers commutative property of addition and associative property of addition. 1.OA.4 has to do with understanding subtraction by using addition to find the difference within 20. 1.OA.6 Addition and subtraction within 10, decomposing a number leading to a 10 and creating equivalent sums to make the problem easier to solve.1.OA.7 , requires understanding the meaning of the equal sign. Lastly 1.OA.8 covers determining unknown whole number in an equation.

Manipulatives and visual representations included diagrams which the instructor used to compare the apples in the word problem. For example, to compare how many apples Julie and Lucy had, he drew the amount of apples given in the word problem to have a visual representation of the problem. This helps the students understand what is being asked in the problem. He also used number lines to show the order of numbers and how to use them to simplify an equation by making a 10 or using known facts that make the equations easier to grasp. For example, in the problem 17-9, by decomposing the 9 into a 7 and 2, the students can easily subtract 7 from the 17 which makes it 10, then subtractive the 2 to that, and you get your answer of 8. The number line visually shows the students how this works. The cube towers or as we call them, number blocks were used to visually show how the commutative property of addition works. In the example he gave, he used number blocks to show that 3+8 is the same as 8+3. He demonstrated this by displaying a tower with 3 purple cubes and 8 yellow cubes. He

then displayed a tower with 8 purple cubes and 3 yellow cubes, both of which added to 11. Lastly number bonds were used to show how to find missing numbers and how the part, part and whole in the number bond relate to each other in terms of addition or subtraction. By using number bonds with the whole number 7 and parts 5 and 2, he showed that 5+2=7, 2+5=7, 7-2=5 and 7-5=2.

Some of the academic language he used was compare, fewer than, more than, number bonds, place values, doubles, associative and commutative. It is important to note that although it is not vital that students know the term commutative, it is more important to have the students discover how the property works and then of course the teacher can tell the students that there is a name for that. The same should go for associative property as well. Once the students make the connection, it it is much easier to explain and identify the properties.

Although I understood the lesson completely as a sort of professional development from a teacher's point of view, I feel that my students, because of the brief nature of the video, might not grasp certain parts such as how to use the number lines, decomposing numbers and making a 10 to use known facts. I feel that my students would be able to grasp using the number blocks and diagrams because of the clarity in the visuals as well as counting on because it is probably, at least in my opinion, the most natural and instinctual way kids count. I just feel that many, if not most of my students would have the most difficulty with decomposing numbers to add or subtract from this lesson. There wasn't much of expended learning or practice activities, again, likely due to time constraints. The decomposing of numbers, even if used in a number like are closely related to number bonds which some of my students are still having a difficult time grasping.