Karen Garraway

Week # 7 Video Assignment

Prof. - Dr. Ruiz

03/02/2023

**Video Title - Dot Image Routine - 3rd Grade**

**Standards - CCSS Math 3.OA. A3, & 3.OA.B.5**

- Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurements quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- Apply properties of operations as strategies to multiply and divide.2 Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)

**Materials**

- Journals, drawings(dot images)

**Language/discourse**

- Multiplications, addition, equation, dot image, decompose, fluency, flexibility

**Teaching steps**

1. The teacher, Mrs. Katz starts the lesson by introducing the topic of “dot image” and explains to the students what they’ll be doing in the lesson.
2. Teacher then puts a drawing of dot images on the board and poses two questions to the students. How many dots do you see? How do you see them?(explain your strategy for getting to that number).
3. After about 30 seconds of processing time, students started raising their hands to answer the questions posed.
4. After it was established that there were 49 dots, students responded with their own strategies of getting to the number 49.
5. Based on the students’ responses, Mrs. Katz then wrote out their strategies on the board, allowing opportunities for feedback and clarification.
6. When the whole group exercise concluded, students were asked to go to their journals, where they would complete a similar dot image task.

**Reflections.**

This video provided me with a great idea for fostering number sense in the classroom. This dot image routine showcased how diverse students are in the way they think and process information. It was amazing to see how these students expressed themselves and their strategies for coming up with the number 49. I liked the way Mrs. Katz reiterated students’ responses, validating what students had done. All students were given the opportunity to participate in this activity. I was amazed by the variety of combinations that students came up with. When I looked at the dot images, the only combination that registered with me was 7 x 7(7 dots in each group x 7 groups). These students forced me to look beyond the obvious. I will definitely use this routine in my math classroom.