Lesson 1: Interpreting and Applying CCSS for Mathematics

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In this assignment, I will be creating a lesson plan for my 6th-grade class. The lesson will be about how to express the relationship between two quantities (6.RP.1) under the cluster "understanding ratio concept and use ratio reasoning to solve problems. Also, I will have some hands-on activities which will promote mathematical thinking about the ratio, interpret Common Core State Standards for Mathematics (CCSSM), and address students' understanding, fluency, and applications. McCartney (2012) stated that "Comparison of CCSSM with the international standards revealed an almost 90% degree of consistency, suggesting that the CCSSM are focused, rigorous, and worthy of being world-class standards."

Lesson Plan

6. RP.1: Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." For every vote candidate A received, candidate C received nearly three votes."
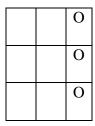
The essential goals are:

- Students can explain a relationship between two quantities.

- Students can explain the ratio between the part to whole and part to part.

- Students can visualize the given ratios.

I will use a package of m&m candies for my students to teach this lesson via a hands-on activity. Each of my students will have a small package of candy from me. They will be asked to put their candies on their desk after open the packages. They will sort them by colors and write

the numbers of each color down their notebook. The students will write three ratios between any

colors of candies and draw them to get a visual explanation.

In this activity, students will figure out the relationship between two different colors.

SMP#1, SMP#2, and SMP#4 are the main standards that related to this activity. There will be a

formative assessment including four questions after this hands-on activity.

1. The box below is Jayla's box of candies. She ate 6 of them. What fraction of the

    candies has Jayla ate?

		O
		O
		O

2. Jackson wants to share some of the 12 candies from the box below. He gave 1 candy

    Joel for every 3 candies he ate. How many candies did he give to Joel?

O	O	O	O
O	O	O	O
O	O	O	O

3. In a packet of mixed m&m candies there are 2 fruit candies for every 3 caramel

    candies. There are 30 candies in the packet. How many fruit candies are there?

4. Juliana makes candies. She mixes 1 cup of cream with 2 cups of chocolate. Overall,

    she uses 9 cups of these two ingredients. How many cups of cream does she use in

    this candy recipe?

The students will be able to demonstrate an understanding of ratios and use strategies to solve mathematical and real-life ratio problems.

Overall, CCSSM are vital for math teachers to have a structure to teach. For making the lesson more understandable, applying SMP for each standard is enriching the experiences. Therefore, students will engage more during the lesson, learn different strategies, and improve their math skills in a better way (Matheas, 2016).

References

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