

## Rational

I have chosen fractions, decimals and percents as my focus for this project because I see it as a foundation that is not recognized for how important it is to help students see the relations within the number systems. Similar to teaching languages at an early age, I feel that fractions, decimals and percentages can be better conceptualized at a younger age. As a math teacher for 19 years children would come to me at a 4th grade level with no understanding of what a fraction really is. The Ohio Academic Content standards states that by the end of the K-2 program the student should be able to "Represent commonly used fractions using words and physical models" and by the end of the 3-4 grades students should be able to: "1. Recognize and generate equivalent representations for whole numbers, fractions and decimals. 2. Represent commonly used fractions and mixed numbers using words and physical models. 3. Use models, points of reference and equivalent forms of commonly used fractions to judge the size of fractions and to compare, describe and order them (Ohio Department of Education, 2011, p. 30)"

To me the 3rd-4th grade standards are very vague and without commitment to what they want as an outcome. This was very apparent when the students would enter my 4th grade class without any understanding of these concepts despite the standards that were to be taught to the k-3 grade students. I believe that if we would follow the k-2 standard of simple recognition with the committed focus to prepare the 3-4th grade with the information they need in this area they will be more successful and this will make them prepared for 5th grade and beyond by making this part of the math curriculum relevant to them so that they are prepared for their future in math. Using contextualized

learning and making this concept a part of lessons across the curriculum will make this material real to the students.

The first subunit of this is dedicated to connecting the concepts as one. Showing and drilling how they connect and the purpose of the various forms of the same items. The use of manipulatives, visuals and the endless items in life that can be broken into equal parts will conceptualize the concept into real life for them.

The second part of this will be for discovery and project based work with the concepts. This will reflect their true understanding of the concepts.

#### References

Ohio Department of Education (2011). *Academic Content Standards for Mathematics*. Columbus, OH: Author.