

Sequencing Rationale

The curriculum design for this math unit on operations follows a logical progression of skills using the Common Core State Standards for Kindergarten Mathematics. The goal of this curriculum is to give students a strong foundation of core mathematical skills before branching out and moving on to other concepts. The main focus of this curriculum is ensuring that students have mastered key skills necessary before moving on to more complex skills.

This curriculum design starts out with students learning how to count and read and write numbers. These skills are being taught first because they are foundational skills that all students must have in order to be successful in mathematics. Because Kindergarten students are coming from different home and preschool experiences, they may have not been exposed to these concepts already. During this time, it will be important to differentiate in order to ensure that all student needs are being met. In addition, the Common Core State Standards say that students should be able to count to 100. This counting skill will be continuous and worked on all throughout this curriculum.

After students are able to count and read and write numbers up to 10, they can move onto the next unit of learning how to decompose numbers within 10. This skill is necessary for students to learn before moving onto addition. Students need to learn how to decompose numbers into pairs before they can understand how the addition process works. This allows students to see that a number can be made up of small sets of numbers and sets the stage for learning the operation of addition.

The next unit to be taught is the operation of addition. Students should already know how to count, read and write numbers, and decompose numbers before beginning an addition

unit. Without these skills, they will not understand this concept. Prior to this, students have learned that numbers can be broken down into smaller sets of numbers. Now students will learn how to combine these sets of numbers to make a larger number. Students must have knowledge of counting and writing numbers to be able to read, write, and solve addition problems. Counting is necessary because students will rely on it heavily at first when using addition strategies that will be taught.

Lastly, this curriculum design includes a unit on subtraction. This skill is placed at the very end of this curriculum design because it is the most complex skill. Students must have a clear understanding of the previously taught units before being ready to learn this skill. To be successful in this unit, students must be able to read, write, and understand the basics of equations. They also need to be able to count and read and write numbers.

As you can see, this structure and sequencing of this curriculum design is necessary. Each unit in this curriculum design builds upon the next. This allows students to first develop the skills necessary for each skill before it is taught. In addition, this sequence allows for the skills to be revisited often and continues to allow students to develop them throughout the entire curriculum design.