

Simplifying Problem Solving in 3rd through 6th Grade Mathematics Classrooms

Students continue to struggle with applying the mathematical concepts they have learned in problem-solving situations. This problem-solving skill is crucial to learning upper-level mathematics. Students often develop mathematics anxiety because of a lack of confidence when presented with word problems. This session will provide a set of best practices to help students attack problem-solving situations with confidence.

Tips to Attack Problems:

I. Replace rational numbers in a problem with whole numbers.

Many students have weaker rational number sense than whole number number sense. When presented with problems they do not understand the meaning of fractions and decimals. When these fractions and decimals (which are adjectives) are replaced in problem-solving situations with whole numbers less than 10, students can better understand the relationships and focus on the operation needed to solve the problem.

II. Determine if parts, equal parts or the total and one of the parts is known.

There are only 21 types of addition/subtraction problems and 15 types of multiplication/division problems. By using simple vocabulary such as parts and whole or parts and total, we can determine which operation is needed to solve problems.

Math Anxiety effects at least 50% of the population (Boaler, 2019). We know that problem-solving situations can produce anxiety in students when they do not feel equipped. These methods will help students learn the virtuous trait, tenacity. Please join us to help share your experiences with helping students overcome their fears and develop into students who not only are capable in mathematics, but seek to learn more in this wonderful subject.