Ed Research Project Stage 3

I’ve researched implementations to help master the concept of adding and subtracting fractions with unlike denominators, and implemented two suggestions in my lessons. Those suggestions include: allowing students to understand the content conceptually before understanding procedurally, and using representations as fractional quantities.

Figure 1 represents the percentage of students who understood the content, based on a pre-assessment given before any instruction.

**Figure 1**

The next day, I gave the students a word problem to solve. They first had to figure out if they were adding or subtracting, then they had to use the fraction tiles to figure out the problem. I didn’t tell them how to do it; I let them work it out on their own. A couple of students were able to do it, so I called two students who solved the problem differently, but received the correct answer to the front to show the class their solution. After giving the class practice with another word problem, they were given their Exit Ticket, which allowed them to apply the skills they just learned to another problem. The results of the Exit Ticket are shown below (Figure 2).

**Figure 2**

Figure 3 represents the percentage of students who understood the content, based on an exit ticket (formative assessment) given after Day 2 of my lesson. In this lesson, I revised one implementation suggested by research, which was explaining the procedures instead of allowing them to understand it conceptually first. Some students were able to understand it conceptually, but the majority of the students needed those procedures, in order to move on.

**Figure 3**