**Lesson Description:**

*In this Third Grade lesson, students solve addition word problems involving 3-digit numbers. The lesson begins with students representing 3-digit numbers using “proof drawings” consisting of circles, sticks, and squares to represent ones, tens, and hundreds. Next, students solve 3-5 word problems, generate proof drawings for each problem, and share their thinking and representations to peers at the board. Students then solve 3-digit addition problems using a variety of methods (e.g., show all totals method, new groups below method, new groups above method), which have been introduced in previous lessons. The lesson concludes with students sharing out and explaining their strategies and methods.*

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| Lesson Objective: |
| Students will be able to add multi-digit numbers using base ten blocks with proof drawings. They will be able to correctly identify the show all method and the new groups below method.  |
| Mathematical Teaching Practice: |
| Use and connect mathematical representations |
| Technology or app to be used: |
| Online base ten manipulatives |
| Device/s required (e.g., teacher tablet, student Chromebooks, etc.): |
| Laptop for teacher; Chromebook for students |
| Describe how using this technology will impact the teaching practice you selected.* Specifically describe when you would integrate this technology during this lesson:
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| I would use the base ten blocks when the students are doing their proof drawings. There, they will interact with the manipulatives to help understand multidigit addition. Students will have the ability to explore this concept while doing the problems in the lesson.I will integrate this technology with the online app for base ten manipulatives and have students access the website from their computers. |
| Will the use of this technology *replace*, *amplify*, or *transform* the teaching and learning of mathematics in this lesson? Explain. |
| I believe that the online manipulatives will amplify or transform the teaching and learning of mathematics in my lesson. It will present concepts to students in an interactive way. They will also allow students to explore and see what exactly they are learning but in a different way. |
| What obstacles or complications do you anticipate, relating to integrating this technology? |
| One obstacle that I might face is technology not cooperating. There have been times in my classroom where the technology wouldn’t work so we had to resort to a “plan b”. However, if it does do that I would always have a backup plan for my lesson-maybe drawings of base ten blocks or the actual manipulatives if they are available. |