

Teaching at a school located five minutes from the border in Southern California can bring unique challenges. Our 2018 CASSP scores increased from the previous year, but they are still on the low side compared to the other schools in the district.

The math instruction needs to take on the feeling of a kinder and gentler approach because too many students have expressed that math is not their favorite subject. The sixth-grade team began the first module with an assessment and then analyzed the assessment for the students' strengths and concerns.

The first module consists of three units: integers, factors/multiples and rational numbers respectfully. For the first lesson, the learning intention was to identify an integer. With such a focused and straightforward goal the students had a feeling of success. They were taught this lesson in small heterogeneous groups while the other students were rotating through four additional activities. The average score on the first unit test was 86%.

The principal asked for whole group instruction; so the next unit was taught to the whole class. Before each lesson, the students glued a small piece of paper stating the success criteria for the standard at the top of the journal page. Each day, we reviewed the learning intent from the day before, then delved into the next standard. The average score on the second unit test was 66%.

For the next unit, the plan will be to return to the small group instruction and to have the students continue gluing the success criteria into their math journals.

Teachers at our school continue to comment that the students do not retain the math standards from year to year. So what the sixth-grade team is trying:

1. implement small group instruction - students have a more personal connection with the teacher and can converse about the standard thus more students ask questions
2. integrating the math standards in real-world lessons
3. teaching students "how to think" - more to come on this topic because I am reviewing and implementing lessons from Joan Boaler's web page
4. integrating the importance of perception - more to come on this topic because I am reading and implementing concepts from Dr. Ron Ritchhart
5. integrating oral language into daily lessons
6. currently reading Visible Learning for Mathematics by John Hattie, Douglas Fisher, and Nancy Frey

Each population of students is different but knowing different strategies allows the teacher to differentiate the lessons for individualized instruction.

In closing, while developing math curriculum sometimes each lesson is not as good as it could be because of limited experience of playing with and understanding numbers. It would be awesome to have a national databank of useful lessons about the math standards that would include different components like the design of the Next Generation Science Standards. To promote the disciplinary core ideas, incorporate a science and engineering practice and then use the cross-cutting concepts.