

Teaching Reflection

INTASC 4: Instructional Variety- Candidate carefully evaluates how to achieve learning goals, choosing alternative teaching strategies and materials to achieve different instructional purposes and to meet student's needs (e.g. developmental stages, prior knowledge, learning styles and interest).

During my Expressions and Equations unit for 8th Grade Algebra, I instructed my lessons in a variety of ways in order to meet each of the students' needs in the classroom. I considered my students learning styles and decided which form of instruction I thought be best for the lesson, for example: lecturing and note taking, activity, worksheets and/or online formative assessments through scorative.com or desmos.com (functional carnival) to prepare them for their quiz and/or unit test. (INTASC 4: Instructional Variety). I switched up the instructional approach each day so the students were engaged and wanted to learn more about properties of fractions. I encouraged the students to share their thoughts about the methods and concepts we were covering. For example, during our scientific notation lesson, I had the students' text me through socrative.com activity by responding to different sentences and using texting lingo to shorthand the sentences. In the closure of the lesson, we had a class discussion on the connection between scientific notation and texting. The students shared their opinions and they began to realize texting is similar to the process of scientific notation since it's easier to communicate. The students shared their interpretations about each initiative and how they related to our concepts. The students enjoyed sharing their perspectives from each Medias and used their mathematical understanding to form connections. Another example was when the students worked in small groups of 2-4 students to match/interpret distance time graphs in a student led activity. The students were only given the materials and they were asked to match equations, tables and graphs with each other with limited help from the teacher. At the end of the activity, the students lead a discussion on how they matched the cards and how they determined which cards made a set. The

students enjoyed working in small groups in the library and problem solving the activity with their peers.

During each lesson, the students had a warm-up which encouraged students to problem solve, critically think, and reason their thoughts and share them with their peers. This helped them to practice their mathematical reasoning and problem solving before the class went over their previous homework assignment. The homework check helped the students' intellectual by assessing on their prior knowledge and this helped me provide various instructional strategies to invite them to demonstrate their understanding. This allowed them to make connections with future concepts with their prior knowledge. The students really enjoyed using the i-pads to review concepts through socrative before their assessments, since the online review was interactive and the students were able to keep their score. When the students experienced the classifying number lesson, they were involved with a real number or unreal number situations. The students had to classify themselves as different numbers. On day two of the lesson, the students plotted real numbers on number line outside and grouped into their classifications. By assigning each student a number, they took the role of the number and were constantly moving in the classroom. At the end of the every lesson, the students were given multiple instructional purposes and met the students' needs in order to promote actively and engaging learning in the classroom.

INTASC 5: Learning Environments- Candidate creates a smooth functioning learning community in which students assume responsibility for themselves and one another.

On Thursday, November 13th, I completed my third observation requirement for student teaching with one of my math content instructors, Jon Hasenbank. To quickly summarize the lesson and observation, the students reviewed their homework on reviewing interpreting graphs

and how to determine a rule, table and/or graph and whether it is a function or not. For the rest of the class period, the students worked in small groups to complete the interpreting distance-time graphs activity to their best ability (with limited help from the teacher.) The students were asked to match/group various graphs, tables and situations from different data representations together that best fit together as a whole. Each small group had to agree upon that the graph, situation and table all describe/model the same thing. The students worked on this until they felt they had successful problem solving and reasoning. Then one student per group was asked to circulate with the other groups to describe how they match the graphs, situations and tables. This gave the students an opportunity to explain their reasoning and interpret the data for the multiple representations. After that exercise, the students went back to their groups to explain what they observed and then they were able to finalize their matches by gluing the graphs, tables and situations on the large construction paper. Lastly, the class had a discussion on the strategies they used to problem solve the activity and what they learned from the activity. I found that this small group activity gave them an opportunity to ask questions on interpreting graphs and encouraged math talk in the small group settings and they learned how to collaborate their reasoning.

This activity allowed the students to be engaged in the activity and take responsibility for their learning since they were competing against other students. The students had to justify how they knew they each set of cards were in correct match and which sets didn't have a representation. At the end of the lesson, the students wanted to continue to find more sets of interpreting distance time graphs, which they got another chance in a similar activity in the following week with linear functions.