

Learning and Professional Growth

Over the semester, I have grown significantly in my ability to attend to and commit to the learning and achievement of all students. This is something I did not consider at the beginning of the term when I thought about teaching mathematics and now is something that is always at the forefront of my mind. I have become more aware of issues of equity in the classroom and now consider ways to combat inequity in my lesson plans.

In the first class assignment (page eight of my notebook), the things I thought important to consider at the beginning of the year included what my students know (prior knowledge), what I am required to teach by the district and state, what concepts I will teach, what teaching method I will use, and what my learning outcomes for students will be. I did not consider how to differentiate my teaching to reach individual students or how to “level the playing field” so that no student holds an advantage over others. I considered math to be the universal language to which every student has equal access.

By the second class assignment (page fourteen of my notebook), I thought it important to consider building a classroom community where students are free to explore ideas and take risks in a respectful and supportive environment. This is an important step in committing to the learning and achievement of all students, as a supportive classroom environment must not favor some students over others. Race, gender, and ability cannot be issues that affect the way others or I treat students and their work. However, I still was unable to consider how the problems I presented to my students might hinder some from learning and achieving. I said the types of problems I present is important to consider at the beginning of the year, but only so far as how they lead students to achieve the learning goals I have set. At this point, I still did not think about how problems and contexts can give some students an advantage over others.

The sixth class assignment (page forty-two of my notebook) shows how I learned to consider differentiating instruction by pairing students of different abilities and using multiple representations when solving a single problem. These practices help all students benefit from instruction, as they are receiving additional help when they need it and are shown multiple ways to solve the same problem. Using multiple representations is a good way to reach a group of students with various learning styles and ways of thinking.

During my mini-problem, I supported participation of all students by calling on a majority of my students and publicly valuing their contributions to the discussion. I used phrases like, “So you agree with Emily,” naming the person who offered the idea we were discussing. I also provided a problem that was not situated in a context with which some students might be unfamiliar. This helped to ensure that all students had access to the mathematics central to our discussion.

The eighth class assignment (page fifty-eight of my notebook) includes my first attempt at analyzing how a supplied lesson plan addresses the learning and achievement of all students. When analyzing the fourth grade Everyday Math lesson about comparing and ordering decimals, I was able to consider how the tasks do or do not support the learning of all students and how the context may affect individual students. I was also able to identify what vocabulary, representations, and skills students are assumed to possess.

The tenth class assignment (page seventy-six of my notebook) shows improvement on my ability to analyze a lesson plan for issues of equity. When analyzing the third grade Everyday Math lesson about equal shares and equal groups, I was able to consider how the learning of all students was affected by the tasks and their progression, the examples used in the

lesson, the context of examples and problems, the representations and tools used, and the language used. My knowledge of how the lesson supported or failed to support all students was more sophisticated and inclusive than the previous lesson analysis. I was able to see how all students might be affected by each of these areas and paid particular attention to how the context of the examples and problems may give a student an advantage over others. In the lesson, pennies offered a general context all students should be familiar with, but some students could have needed help understanding what “band members” were or what an “array” was in a mathematical sense. Leveling the playing field so that all students have equal access to the math is important.

In planning my math lesson, I took my lesson analysis skills a step further and adapted my lesson plan to avoid issues of inequality. In particular, I attended to knowledge students were assumed to have and modified the lesson to include a review of these vocabulary words and concepts. I wanted to ensure that each student was on board with the vocabulary we would use to discuss the new concept before moving forward. I also supported the participation of all students during the discussion. I called on students boy-girl-boy-girl as much as possible to ensure equality between genders and called on students with a wide-range of abilities. This meant I needed to ignore the hands of some of my higher-achieving students at times to hear what others had to say. I supported students’ acquisition of a new vocabulary word (“tessellation”) by connecting it to words they already knew (“tiling,” “congruent,” “no holes,” etc.). As a result, my end-of-class check showed that most students had some understanding of the new term.

Overall, I made significant progress in the area of committing to the learning and achievement of all students. I began the semester without any thoughts about equity and how to ensure equity in my own classroom. As the weeks progressed, though, I started considering practices that would help all of my students learn the material and achieve the learning goals I set. These practices included strategically pairing students with different abilities, using multiple representations in a single problem, and creating a supportive classroom environment. By the second half of the semester, I was able to recognize biased contexts and to support equal participation in my classroom discussions. I was also able to analyze lesson plans for ways they supported or failed to support the learning of all students. I ended the semester with the skills necessary to analyze a lesson plan for strengths and weaknesses related to equity and the ability to adapt the lesson plan to address the learning and achievement of all students. This course has changed the way I look at equity in the classroom and has given me the tools to assess the way lesson plans and my own teaching help all students learn and achieve. This is something I now consider when planning lessons in math and all other subject areas. My classroom will not be a classroom where teaching practices reproduce inequalities but a classroom where the teacher considers the equity of all students in daily decisions.