

Module 2

As I reflected on my current practice, I found that I was only using the curriculum when planning lessons for my class. I planned a lesson and did not use student data to plan the next sequential lesson. While I was able to get through the material I needed to cover, I was not sure how much understanding was happening from lesson to lesson. I was just using unit tests as an assessment of student learning and understanding.

Algebra one is a new course for me this year so I spend more time planning lessons in advance for this class than other classes. Once I plan an overall lesson I need to modify or accommodate my lesson because some of the students in this class require modifications. All my students are all at different ability levels. I have five special education students and two students with 504 plans and ten regular education students. My goal is to develop more coherent and organized lessons to get students fully engaged in math class and make better use of differentiated instruction.

Currently I write my lessons at least a week in advance. By doing this, it allows me to come up with better questions that require high order thinking skills and come up with possible student errors. By finding possible student errors beforehand I can use that in my lesson to teach on how to avoid these mistakes. I try my best to develop lessons that are engaging and informative. I find this sometimes difficult. I realize there are more effective ways to teach math than just by taking notes, but I am having trouble developing lessons that are student centered. My lessons usually consist of me standing in front of the classroom, defining terms, doing examples, and being the main leader of class. Ideally, I would like to change and implement more student-to-student teaching and independent learning so that I engage and re-engage students more effectively. Some of my students are dependent on the teacher while others like to jump ahead and then there are the remaining students who basically sit there not so engaged doing minimal work. The students that are dependent on the teacher are always trying to grab my attention. I want to plan and develop algebra one lessons that get all my students engaged as well as become more independent learners.

The first resource I utilized was asking my peer mentor for advice. I was also able to observe my mentor's math class. During the period I observed, I took notes on classroom management; such as seating arrangements, behavioral issues and how they were addressed. Lesson development which included the structure of the period with a block of time set for the initiation, the learning of new material, class work, and closure. I also took notes on differentiation techniques such as grouping and differentiating the materials used in a lesson. I then sat down with my mentor to discuss key tips of differentiation and to utilize the special education teacher for more help, ways to use technology such as Desmos and Google Apps, and how to get students engaged by developing more coherent and organized lessons that are not all teacher centered but student centered. My mentor suggested to

me to gather student data and use that to help plan with lesson development and in planning differentiation into my lessons.

By having multiple assessments throughout a lesson, I will be able to better gauge student learning and understanding. I have been utilizing my mentor's advice and giving my students multiple assessments in a lesson. For instance, I now use a problem of the day, classwork, and exit slips to assess student learning. From looking over and grading these assessments, I plan my next lesson around this data. If my students show they understand a concept, I will move on with the unit. If a majority of my students struggle on a topic, I will start off the next lesson going over student questions or mistakes and how to correct them.

The second resource I looked to for more development was textbooks. The textbooks I read were "Teach Like A Champion" by Lemov, and "More Good Questions" by Small and Lin. In these textbooks I looked at the structure of effective lessons. The textbooks say students remember best what they learn last, second best at the beginning and students least remember the middle of a lesson. I try to have at least three transitions within the 53 minute block period as a result of reading Lemov. Because of learning this from the reading, I now concentrate on the initiation and closure to make the most of this.

To help gain more teaching strategies I plan to utilize the school's instructional coach. I meet with the coach a few times per month to discuss teaching strategies. By having a "tool belt" of teaching strategies I can use at any moment will help my development as an educator. The more strategies I have the more students I can reach by teaching to multiple intelligences. This will also help with developing more coherent lessons based off of student data. The instructional coach recommended to use a word wall for unit vocabulary and to work on my wait time with questioning.

From meeting with my mentor, instructional coach, reading the textbooks, and my peers I have changed the way I plan my lessons. I now use student data to plan my lessons. I grade assessments more quickly in order to get a baseline for my lessons. From using data it will help make my lessons more effective. This allows me to develop problems of the day that will hit the low data point or a topic that students may struggle on. By doing so, it will hopefully allow students to become stronger in an area of weakness and better learners.

I also try to plan higher order thinking questions and differentiation in my lessons. By having a lesson planned out, I can model/demonstrate for a co worker/mentor/instructional coach to get better feedback. By doing this I am able to get better questions for my lessons and more ways to differentiate. Questions such as: why are lines parallel? Some ways I can differentiate is by grouping my students either homogenous or heterogeneous.

I also plan the structure of my lessons differently. In general, I plan a 5 minute problem of the day, after which I plan a few minutes for clarifying questions on the homework. The next block of time is planned for new learning that is teacher directed for a 15 minute explanation of new material. After I plan 15 minutes of group work in middle block of time and save 5 to 7 minutes at the end of the period for a strong closure.

Another thing I do differently since reading Lemov and Small/Lin was planning multiple assessments throughout a period to assess student learning and understanding. I use a problem of the day and exit slip as assessments to make sure students understand the goal(s) of the lesson. I also ask questions that require students to think.

My hope for my class by implementing more effective and organized lessons that include differentiation is that my class management will improve, student engagement will improve, and student understanding will improve.

A strategy I plan on implementing when planning is random calling. I think this will keep my students focused and paying attention. I believe this will keep students on their toes because they won't know when I will call on them. My goal is to gear away from calling on only students with their hands up. If students know that I will call on students with hands up as well as down, they will be better to answer a question. One goal – albeit unknown to the students is to call on everyone at least once every class or once every other class.

As a result of working with my other colleagues I now plan to use is differentiated group work by pairing my students in homogenous groups. I plan to give students performing at a higher level, based upon the data, more difficult problems and expect them to finish in roughly the same amount of time. My hope and expectation is that students will be intellectually engaged which will keep them focused, motivated, and challenged. Another differentiation technique I plan to implement is using colored paper to help grouping, such that students with the same color work together. The groups in this case will be homogenous and the problems will have different level of difficulty. Assignments such a performance tasks are an example of how I will use heterogeneous grouping with high/medium/low performers. The homework assignments associated with the performance task will also be grouped by level. Students hopefully will find the colors fun and the colors may help them retrieve special assignments from their folders or notebooks as needed.

Overall I have implemented multiple strategies into planning my lessons. This will make planning more efficient and make me a better teacher therefore I can help my students become better learners.