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Teaching Practicum

Melanie Frances Dexter
Worcester Polytechnic Institute

From September to December I completed my teaching practicum at Forest Grove Middle School in Worcester, MA. My teaching mentor was Angela Lamoureux, a middle school science teacher. My time at Forest Grove began with observing Angela's teaching. After several weeks, she would teach all of the classes except the last one which I would teach. Eventually I began teaching all of the classes. This paper will provide evidence that I am proficient in all five professional standards set for teachers.

Plans Curriculum and Instruction

At the end of each week, I would sit down with Angela and we would discuss what our plans were for the week ahead. Initially, she would tell me her plans, but as time went on I would create the next weeks' lesson plans. Each week I would look at what curriculum frameworks I would like the class to accomplish. The majority of my time teaching, we were working on the body, which began with the study of cells. The study of cells began with needing a background knowledge of what every part of the cell is called and what it does. Once the class read the section and did Cornell notes, I read it again to them in class. Reading the section again reiterated the information to students who worked diligently on the homework assignment and moves forward those who did not do the homework. Most of the study of cells is based on memorization, for which repetition is key.

After reading, Cornell notes and re-reading, we did several projects to help the students relate the cell to things in their everyday life, such as a city. While not an exact match to a cell, this helps the students remember and understand what each organelle does. This involved all

students as they were asked to participate individually, in groups and as a class. Each student was able to learn in their most comfortable state. Some students worked best in small groups, while others shined individually, but by allowing for all of these learning environments to take place, each student was able to learn and be comfortable and confident in doing so.

After learning about the cell we moved on to talk about tissues, organs and organ systems within the body. Without the fundamental knowledge about cells, these more advanced topics would be very difficult for the students to grasp. We would have quizzes and tests along the way to measure student's knowledge and understanding of the material covered. If a large number of students did not do well on a specific area, I would push further assignments back a day or two to review what the students did not understand. Constantly measuring their progress, gave them and me a good idea of what they needed to work on and what I needed to explain better.

I planned several lessons, labs and review sessions while I was teaching. My first lab was a review of the engineering design process. The lab began with a worksheet that walked students through the process. The night before the lab, the homework was to find or draw at least two pictures of boats. If the students did the homework, they could use their pictures to help design an actual boat. See appendix for lab worksheet. The students worked in small groups to design a boat, drawings and models included, then as a class we tested the boats. For homework that night students were asked to individually design a new boat based on what they believed went well and what could have been improved on with their original group

design. In class the next day, each team gave a small presentation about their design and future plans for the boats.

This activity provided several different media for students to learn through. There were elements of team planning, problem solving, drawing, building, evaluating and presenting. Each student excels in at least one of these areas, and I formed groups to ensure that each group had at least one student who was good at each of those aspects of the assignments. Each student was able to contribute to the final product of the group and could clearly see their contribution along the way.

In addition to activities, I created assessments for the students. Each class we would have a bell work and an exit slip. Bell work was designed to help transitions students from passing between classes to the current class they are in. Daily I created bell work questions having to do with the day's lesson or the previous night's homework. If the class was rowdy after being asked to settle down and do the bell work, I would go around the room and check each student's answer to the questions asked. Doing this made student's not only quiet down, but also work hard to get an answer for the question. If done on a regular basis, it was not needed all the time as students would just come into the class, sit down and quietly do their bell work. Exit slips I designed to use as an evaluation for myself. I would ask a question about something I taught that class and see if they understood what they had just learned. Having this measurement made it possible to plan future classes. Some lessons the students picked up on right away, while others I could delve further into if they did not know how to answer the exit slip or answered incorrectly.

There were many times when I was looking for something different to do in class. When I was stuck I would consult with friends or other teachers. I could test labs and activities on friends to see if they found them to be interesting and fun. Teachers would help come up with lessons that would involve the students while maintaining a high educational value. I would ask teachers within my cluster or subject if they had any ideas for good labs or a good method for teaching a certain topic. I also branched out to my friends and peers to ask them if they did any particularly memorable lab or class when they were in middle or high school. Every teacher does different types of lessons, labs, reviews or examinations, and learning from others really helped me to pick up different techniques to help me teach my students better.

One of the most useful pieces of technology was the Elmo. I used this several times on loan from another teacher, but would have used it much more if given the opportunity. The Elmo projects live from a video camera. This was very helpful for collecting class data, reviewing or completing a worksheet and for labs that had small pieces, but required demonstration. Students were all able to see and learn as they needed without everyone crowding around or me having to take the time to show each individual. This tool was particularly helpful when doing my "Gingerbread Genetics" lab. I created this lab as a fun experience to help students see how genetically similar or different they are to their friends and teachers. During this lab each student my a gingerbread person that had different colored eyes, hair length widow's peak, buttons and more depending on their own traits. The down side of this lab was that all of the pieces were very small so demonstration was difficult, but thanks to the Elmo I was able to stand at the front of the room and project exactly what I wanted them to do onto the board so all students could clearly see.

There were many students with Individualized Education Programs (IEPs). Many of the hands on lessons helped them learn. Some students needed to be moved to the front or away from certain distracting individuals and the IEPs made me aware of who all of these students were and made it easier to communicate with them and other teachers to find out what they needed to learn their best.

Delivers Effective Instruction

Each of the classes I taught had different academic and disciplinary needs. Classes were chosen based on the academic and disciplinary needs of students. One class, the green section, had many academically struggling students with over 75% of them on ISP. Many of the students in this class were at a lower reading level than other eighth graders, and a great deal of them were ESL students. Working with the other teachers in our cluster, it became apparent that overall this class was having a difficult time academically. While it was important to give these students the same expectations and academic challenges, it was also important to get on their level to teach them the way they needed to be taught. To accommodate these students I worked with them to read sections from the text, practice test questions, and begin homework in class. This class also responded very positively to hands on lessons and labs. To ensure all students were participating and trying to learn the material, I made a point of calling on every student at least once during each class period, if the lesson permitted. Encouraging students to do homework by beginning it in class proved to be academically positive as more students turned in homework as a result of the practice.

The purple class was the highest academically achieving class within my cluster. These students almost always did their homework and scored well on tests, often becoming bored with simpler lessons from the book. The students in this class listened very well, creating a different challenge for me: to bring in new academic challenges related to the material for them to pursue. For group projects I allowed this class to manage their own teams and to choose their own assignments. By keeping this class actively involved in their learning process I was able to capture their attention and teach them in a variety of ways using technology, art, writing, mathematical and research skills.

I began each new unit with a lab or hands on activity to encourage the students' inherent, natural curiosity. This sparked students' interest and caused them to ask questions rather than being force-fed information. For all classes I assigned homework, usually on a daily basis, and reviewed and checked the homework each day. This allowed frequent feedback to the students on their progress as well as allowing me to adjust my lesson plans based on their grasp of the material. Homework format varied from creating their own test questions to creating displays of what a cell looks like to taking notes on a section of the book. These homework's accommodated a large range of learning styles and preferences to ensure all students were able to achieve competence. In addition to beginning each new lesson with a hands on activity I also had students complete a know-want-to-know chart, in which they wrote five things they knew about the new topic and five things they wanted to learn about the topics. This causes students to think about the new topic and allowed me, the teacher, an opportunity to understand what the students already knew and use that as the foundation for furthering their knowledge and experience. For example when we began to study cells, many

students said they knew that everything was made up of cells, but they wanted to know what determined how each cell was different. We spent several lessons talking about types of cells and their reproductive processes because that was what the students wanted to learn. The best way to get students involved in their education was to learn what they wanted to be taught and incorporate that into each lesson.

Manages Classroom Climate and Operation

The classroom was set up such that there were three rows of tables, each table seating two students. All students faced the front where the whiteboard, projector, teachers' desk and TV were all located. Some classes were able to pick their own seats if they could prove they could focus while sitting next to friends. Other classes were not able to pick their own seats as they had a difficult time concentrating even from assigned seats.

Some days the class would be working in groups. For these days I would arrive early or stay late the day before to move the desks. When putting desks into groups, it was important to make sure that all students could see the front of the classroom clearly, but also that there was always a clear path from each seat to either exit in case of emergencies. The arrangement of desks and students set the tone of the class. If the tables were groups together with equipment in the middle, the students knew they were to come in, put everything except a notebook, homework and writing utensil under the desk. If the desks were set up spread out, they knew we would be doing individual or patterned work. Setting the classroom up and assigning seats helped to accommodate for a wide range of learning abilities present in the

classes. Different students excelled at different types of learning and classroom activities, and it was important to me get to know all students and how they learn best to be the best teacher I could be for them.

Setting the tone of the class from the beginning each day helped to calm the students down, especially after a lunch period. If the class was particularly rowdy, I would begin the class by reading them a science related story with pictures. I made it clear from the beginning that I would love to have fun classes, but to do so there needed to be a level of mutual respect and good behavior. If students were simply off task, I would ask them to withdraw from what we were doing and they could just sit and take notes silently. If this happened with individuals they would go to the back of the room or another classroom, but if the whole class was not focusing on a specific activity they would all be asked to silently work on notes. I would never have them work on the homework as that would have been more of a reward. If they had to work individually due to misbehavior I made it clear that their work would then be graded, so as they did not sit there doing nothing or further distracting those around them.

Many students had to have their seat moved as they were not able to focus near certain people or in certain areas of the room. Typically students were moved to the front of the room if they were causing a disturbance. One student was moved to the back of the room several times a week as he was constantly distracting those around him. This individual had no motivation to learn in the environment in which he was placed, so he was asked to stay afterschool to make up worked that was missed during school. The best option was to move him to the back of the room so the student could learn if he chose to, but was not distracting all

of the other students, especially those who were borderline and to hold weekly parent meetings.

Moving or removing students tended to be the best way to manage the classroom without losing a great deal of time on discipline. Changing even one student's seat can change the dynamic of an entire classroom. In addition, you must be aware of which students cannot work together or are fighting at that moment as to not place them near each other for this would be more of a distraction to them and the rest of the class.

Upon grading homework, there were several times I noticed students who had identical assignments turned in. This is a serious academic dishonesty issue and needed to be dealt with even for a minor homework because students should not learn this bad habit. To deal with this I took all of the students whose homeworkers were the same out into the hall and asked the group why they all had the same exact answers, which were not copied directly from the book and were for the most part wrong. Eventually the students admitted to working to together and in some cases they admitted to taking someone else's homework and copying it because they did not have time to do it the night before on their own. I then explained to them what can happen if they are not honest in their academic works and how they were only hurting themselves by not learning the material and doing the work themselves. These practice significantly cut back on cheating and homework duplication in my classes.

Promotes Equity

I was constantly encouraging all students to actively participate, do their work and put the most effort in to achieve knowledge thus good grades. Effort is the key to achievement. I was available afterschool for any student who wanted extra help, but would ask some students to stay to make up work. Some students did not have the resources or proper environment at home conducive to getting their work done or some simply distracted themselves too much at home. I sought out to help these students by creating a positive, productive environment for them either after school or during their enrichment periods. I always tried to make it clear to them that I want them to succeed, but they must put in the effort to do that and I could help them develop the skills to do that.

Some classes we would finish early and I would allow students to begin their homework. This was a reward for working diligently in class and allowed them to have a lighter night. On these assignments, I noticed many more were completed and turned in. This helped those students further understand the material by doing the work associated with it, but also helped students with not ideal home situations to get some of their work done before going home. This also allowed for students to ask questions as they were going over the materials with a teacher present.

Meets Professional Responsibilities

As a teacher, it is important to understand and practice your legal and moral responsibilities. This includes providing the best education to all students regardless of gender, race, age, ethnic background or financial standings. All of my students came from diverse backgrounds and home atmospheres. While many students did come from supportive families

who tried to encourage academic success for their children, not all parents shared this perspective. Some parents did not encourage children to do homework or study at home. Some students participated in many afterschool activities such as sports, clubs and extra work for teachers, as to avoid going home. Legally if teachers notice bruises, change in weight or personality changes they should report these to the school guidance counselor for further investigate and someone to talk to. If the guidance counselors discover an issue they would report this to authorities to properly deal with.

Middle school is a tough age for students because their bodies are changing as well as their interests. Interpersonal relationships present a challenge for teachers to have to deal with. Depression in various forms can be a big problem to the health of students. Cutting, eating disorders and other self-destructive behaviors are common at that age and should be looked for by teachers. The emotional state of most eighth graders is fragile and with relationships and cliques occurring, things many change at any given point. Students have many resources including teachers and guidance counselors within the school to help them deal with any of these issues. If a teacher has reason to suspect any of these issues they are morally and legally obligated to report them for the benefit of the student. Issues will be seen more in some locations over others, but regardless of location it is important to keep an eye out for any symptoms or problems.

I chose middle school science because there are a ton of great activities that involve students. There is also a broad range of topics discussed, at least one of which will interest each student in the classroom. Higher levels of science are very specific and may not be for

everyone, but middle school science has so many possibilities. Every day, despite what was going on in my personal life, I went in with enthusiasm and willingness to teach all students. This is key for teachers to do because they are such influential people on children. Children really do remember what teachers say and how they treat them. Even now I can remember things teacher said to me in middle school, particularly the negative things. Being a positive role model for your students and treating them as equals will gain their respect and really benefit their academics and future relationships.

In class we would discuss current events and controversies relating to our studies at that time. Current events often helped students understand the practicality and importance of what we were working on. When discussing anything controversial I would make sure that the discussion always stayed under control, did not offend anyone and did not express my personal opinion. The most important thing was keeping all students comfortable in the learning environment. However learning about the new developing topics in science is very important as it has the potential to keep students interested and involved in science.

I worked actively with teachers in my cluster for tri-weekly cluster meetings and teachers in the science department bi-weekly for department meetings. This group of teachers worked to improve the curriculum taught to the cluster we were in charge of. We worked together to plan a multidisciplinary trip to Walden Pond. Before this trip students read work by and studied Henry David Thoreau. Then in history they studied the life style, times and journeys of Thoreau. In science class, I taught and discussed with the students about the type of ecosystem, climate and native and invasive living creatures. Shortly before our visit to

Walden Pond, an outbreak of small invasive jellyfish occurred. We looked at possible causes for this non-native species to populate this pond as well as the environmental impacts this could have on the native wildlife. The students enjoyed doing this research and seeing science in the world around them. This trip was very special for the students because many of them had not been outside the city where trees and wild animals are few and far between. This trip had very few behavioral issues because the students were so stimulated by their surroundings.

The cluster leaders also used our weekly time together to discuss academic and behavioral issues occurring in various classes. This was a good time to encourage each other and gives tips about what did and did not work for specific classes and students. For the difficult class, the green class, this was a good time for us to share positive seating arrangements. We were also able to balance homework so as to not all assign large homework assignments on the same nights or projects overlapping. Creating this balance is important to help students build balancing and time management skills. Whenever assigning a project, I would create checkpoints along the way to help students get the work done at a steady pace rather than doing the whole thing at the last minute. The checkpoints could be “an easy A” for students if they made sure do keep on track.

We would schedule parents meetings, particularly when a student was struggling. Some parents came in weekly, some once and some though we requested a visit never came in at all. Geverally meetings with parents were scheduled when a student was having academic or behavioral issues. If a student was being contantly disruptive in class, particularly to the other students, we would ask to have a parent meeting. Many of the parents did not know if their

child was misbehaving or not turning in any assignments because the student would tell them they were doing well in classes. Many of the parents came in shocked or angry to have to have a meeting. Parents meetings were one of the most difficult parts of my student teaching experience because the meetings were often unpredictable. Some parents would get angry and yell at their children in front of us in the middle of the meeting while others did not speak English and relied on a translator or their child to communicate with us. Parent meeting often brought out a different side in students particularly those with classroom behavioral issues, because even these students listened to their parents. The students who I had to move to the back of the classroom, ended up crying when his mother came in because she made it very clear to him how disappointed she was in him. This positive change in behavior did not last very long or translate to the classroom, but it was an interesting experience for me to have. The boy's mother was brought in several times after I left, but I am unaware of the results of these future visits.

I only used the school's internet for classroom needs such as research, posting grades and creating assignments online. Maintaining professionalism even during free periods or planning periods is very important as a teacher. Technology is a wonderful tool in the classroom that should not get abused by teachers or students. "Free" periods are not free time, they are meant to be used to prepare for future classes, grade papers or set up the room for an improved classroom. Students and administration have access to the same computers as well as the Board of Education, all of whom can easily check the history of computer usage. There is no need to abuse the computer or technology given.

Final Reflection

Teaching middle school science in Worcester taught me a great deal about how to be the best teacher in non-ideal conditions. It tested my patience, skills and knowledge, but I truly believe that by the end of the journey I learned a great deal about myself, my students and how to make a difference. I grew up in a very small town in Connecticut and went to a boarding school. Through these experiences as well as being an only child, I learned a great deal about how to interact with adults and develop relationships with them. Many of the students in my classroom had never had much a relationship with teachers other than that of authority. I believe my biggest strength in my teaching was that I was able to connect and reach out to thee students. My age, new-ness and passion created a bond with these children and helped them to create a bond with science. Even the students with behavioral issues and those who did not do any work in class were sad to see me go. Many students wrote me very nice letters telling me they were doing to miss me and wished me the best of luck in the future.

Going from boarding school in Connecticut to engineering college to student teaching in Worcester was a very big change for me. I learned what was and what was not effective in terms of ways to explain difficult topics, create beneficial assignments, project and labs for students as well as how to create an appropriate but strong and positive connection with my students. Gaining their respect and setting boundaries early on was part of the key to my success. Within my first few days at the school several students began calling me inappropriate

names, and I quickly dealt with the situation via the Vice Principle, which set a foundation for the rest of the year.

While I do not plan to go on to teach at a school like the one I did my student teaching at, I truly believe that I learned a great deal about how to be an effective teacher, especially in a tight budgetary area, and how to give students the best education I can. I learned a great deal about my leadership skills and abilities as well as where I need more work. I plan to get a Master's in Education and hope to teach again in the future. I am very grateful to have had this opportunity for I do not believe I would be as successfully academically and personally as I would have been without it.