Review #1 – Video

I video-taped my 6th period for a 25 minute period during which I reviewed the warm-up with the class and started them working on a laboratory where they made silly putty. During the 25 minute period, I varied my position in the classroom, addressed different students and attempted to keep some control over the more chaotic environment that lab time can be. In reflecting upon my decision to video tape that particular day, I do not believe it was the wisest of choices. However, now that I have viewed the taping, I have new insight into that particular lab and have some new ideas regarding modification.

I’d like to start with the strengths that I observed in the video because that is harder for me to see those. I think I exhibit a good rapport with students, feeling comfortable enough to exert my authority, yet at the same time being able to joke with them. I see this in the beginning when I ask the class to be quiet prior to allowing other students to volunteer answers. I think it’s important for students to have respect for one another. I also see evidence of my rapport later on in the film when I make comments about the starch looking like “boogers” in order to elicit the “ew” response from the students and to have a little fun with them.

Another strength I observed is that I vary the students I call on. During the warm-up I observed myself calling on a different student for each question. I also tried to ask for more than one possible answer for the purpose of the lab that day. I think it was a wise choice to emphasize that the lab is being conducted for many reasons, not just one. I see that I often repeat students’ questions, which I think is good. I also see myself
encouraging students to ask deep questions such as “Will all are results be the same?” by saying “good question” and following it up with “who can answer that?”

A weakness I observed is that I see that I mostly call on the left side of the room (from the point of view of the teacher). While I try to sometimes have students answer other students’ questions, I observe an overall weakness in providing the students with too many answers instead of allowing them to come to their own conclusions. I really need to improve on not giving all the answers away, right away. I also need to improve on my consistency in calling on students who have raised their hand. I see that sometimes I insist on students raising their hand before acknowledging them and other times I acknowledge what they say even though they have spoken out of turn. I’ve known for a while that I often struggle with this particular problem and I continue to have issues with this. I must work on a solution to improve my consistency in this matter.

I also see that once the experiment has begun, the students look to me to “fix” the consistency of their silly putty. This is a weakness in the activity that I will try to solve next year by allowing students to work in groups and having materials at their tables. Even though I will probably have more materials wasted, the effort will pay off in student understanding of the effect of each chemical on the silly putty, as they discover the properties of starch and glue. This lab is very much a “cookbook” experiment and can be improved by allowing students to discover the ration of glue to starch in order to make silly putty.

Toward the end of the activity, I see that students look for a lot of confirmation from me and I do not observe any direct evidence of learning. However, in the beginning of the activity I see that students are able to answer some of the fellow students’
questions and thus exhibit understanding of basic experimentation and signs of chemical reactions (such as that adding food coloring is not necessarily a sign of color change due to a chemical reaction). I also observed that students had retained understanding of previous subject matter about acids and bases and were able to apply it to this lab. When asked whether the starch was most likely acid or base, students were able to deduct that it must be a base due to its “slippery” nature. Next year, I will consider putting that question into the conclusion section of the lab as well as the question regarding the effect of glue and starch on the reaction.