This was my round lesson and I think overall it went well. I think this lesson had powerful learning moments and met the goals I was seeking to achieve. My students worked collaboratively to answer a guiding question, following a modified scientific process. I think that this lesson exemplified student led discovery through inquiry and experience, instead of me outlining the concept for the students. Ultimately I think my biggest challenge was classroom management and clarity during each step in the lesson.

I began the round by reviewing what we had previously learned to make sure we all had the same basic understanding. Students showed me they knew what a vibration was and did a good job sharing past knowledge. They were able to use vibration during their explanation, and I tried to use the key word as much as I could as well. Once I was confident that students were clear I moved on to introduce the experiment of the day.

I began by modeling the experiment with another student. I explained and modeled key points (like the string being straight) multiple times so students knew what they needed to do. It was important that students watched and answered questions throughout my demonstration because they needed to do this back at their seats when they began their experiment. I know my explanation was a bit long so I think next time I could have tried to keep it even shorter, just to cut down on antsy behaviors.

After I modeled students went back to their seats to try the experiment. I think students did a nice job choosing what they predicted. In the future I will include a line so students can explain why they picked what they picked. They had great ideas nonetheless. Many students including Gerald and Armando stated that, “air would be louder because there is nothing in the way.” Julianna stated that, “the air will be louder because with the cups you are too far away.” These were great reasons and shows that they were using background knowledge to form reasonable and sensible predictions.

We then began the experiment and I passed out cups to pairs that were ready to begin. As I walked around I noticed students having some wonderful powerful learning experiences. Students had big smiles as they listened to each other through the cups and many realized that this actually made the sound louder. Students were excited to be up and moving around and it was great to see them learning in a meaningful hands on activity.

Management, a concern for my round, was okay. It was certainly a noisy activity and I am sure there was some silliness, but many students were working hard. It was great to see students so engaged. I stopped the round halfway through to revisit expectations and I think this was greatly needed. It was a good way to check in mid-way and think about what they needed to do. I think this also helped students get back on track.

At the end of the round students went back to their worksheets and thought about sound and if it traveled better through a solid or air and why. This was a bit chaotic because not all students finished at the same time, so not everyone finished writing. I wanted this worksheet to act as a bit of a buffer to give everyone a chance to get on the same page, but I also think I could have given more writing time. Many students did find that the cup was louder but did not answer why they thought this. I could have been clearer about what they needed to write. Also, having them explain their thinking in the beginning would have been helpful because they could have referred to that when reflecting.

Students had great predictions so allowing them to write that down and then reflect would be very powerful. I have included copies of student work that demonstrates how many of them did meet the standard. Arthur’s work represents the majority of the class, who originally predicted that sound would travel best through the air, and then later found it to be the opposite. Jasiel, a student who struggles with reading and writing was able to make a prediction and then answer the question well. However I wonder why he predicted solid and would have loved to hear his thinking. Chawanvit explained his thinking at the bottom and I wonder if he was confused about filling out the worksheet, or if this did reflect his thinking after the experiment. Johana and her work represents the few students who still found sound to travel better through the air. I brought her up at the end to clarify what worked well for her, but she was not alone in her thinking.

If I were to teach this lesson again I would try to be a bit clearer about my expectations and what I wanted the students to know. I think that all of the steps just made it hard for the lesson to flow as smoothly as I would have liked. If I did it again I would rethink what I wanted to explain and what I wanted my students to accomplish so I could explain it quickly and clearly. I think that would help students better understand their roles as scientists with the cups and filling out the worksheet. I would also redesign the experiment so students could expand their thinking more.





