**Stacy Reyerse**

Science Lesson (STEM Hypothesis)

September 22, 2014

11:44

Mrs. Coscia started with reminders and directions.

**Opening:** 11:44

Who wants to tell me what a hypothesis is? Does my prediction always have to be right? Students chorally respond no. Why not? Student responds. “I’m doing this research because I want to do research on my question. I might not get the answer I’m looking for, but that’s okay because that’s data from before. Today we are going to take our research and our question and we are going to write a hypothesis. Before we start, we are going to write one on our class STEM project. Does anyone remember what that is? Student response. I’m glad that you remember that, but my nephew… what did he want to do? Student response. But what else? What was the purpose of us building a ramp? Student response. You repeat – He wanted to go fast. If I forgot what my purpose was, where could I look? Student response with log.

**Teacher Model:** 11:47

You place the log on the Elmo. Remember we did some research and we looked in our textbook and we read about force and motion, so now I have to write a hypothesis, so we have to write about what we think might happen. I went home and did a little more research. You read from the research that you did. Is that research? Did I learn something new? Students say yes. I’m going to write my hypothesis. You start talking about everything you know. I want to refer specifically back to my research. The higher up you go, the more energy you have to turn into kinetic energy. I’m going to put my date and then I’m going to write hypothesis. You model how to write in their notebook. Mrs Coscia says, “This is for Mrs. Reyerse notebook. Should we be writing this down?” Students respond no. “So ‘bing’ put those pencils down. Our eyes should be watching.” You model writing the hypothesis on the notebook under the Elmo. Mrs. Coscia adds, “You have just started your LDC. Let’s say that as you are reading and she finds some information she needs. If she hasn’t started investigating yet, can she go back and edit your hypothesis?” Students respond, “Yes.” Should she erase it? Students respond with mixed replies some yes, but most no. One student says that you can cross it out. What about this? What do I do each time I make an entry. Student responds with an idea. Mrs. Coscia, “That’s a good idea, but what else does she have to show us? Is it all going to happen on 9/22/14?” Students respond no. “So just redate it,” Mrs. Coscia adds. 11:54 What’s the first thing you are going to put on your paper? Students write. Mrs. Coscia says, “You have 20 minutes. Before we set it, I have a confession. I’m not proud, but I’m going to tell you. Ramon, are you listening to this because this is huge? As 5th graders, the expectation is that… you have done project each year either by yourself or with someone else since kindergarten. As 5th graders, the expectation is that you work independently. If you are really, really struggling, or someone else has a topic that might interest you, you have the option to work with a partner. If that person is absent a lot and doesn’t hold up their end of the deal, whom will it affect?” Students respond. “I don’t recommend it, but if you really need to, then you may. We are going to be popping around. You have your materials, you know where to find them. We are setting the timer…now!”

**Student Work Time:** 12:00

12:00 All students are at their desks. You are talking with one student in the first row.

12:02 Three students are in the back research center. You are still kneeling in the same spot, but you are talking to all four students in the first row.

12:04 One student is at the computer. Mrs. Coscia is with that student. The rest of the students are at their seats talking among themselves. You are still in the same spot talking with the first three students in the front row.

12:06 Two students are walking around. Two students are at the computer. Two students in the back left table have their hands raised. You are still in the front row working with the third student in the row. The rest of the students in the first row are working.

12:08 One student is at the back left table. The same two students are at the computers. One student has his hand up on the other side of the room. Mrs. Coscia is working with the second group of students. You are working with the back row who had both of their hands up a few minutes ago.

12:10 Two students are walking around. Four students have their hands raised. Three of those four are on the opposite side of the room. One is at the table where you are. One student is in the research center. Two students from the front get up and walk to the research center. Mrs. Coscia is in the research center. You are working at the same back table.

12:12 Three students are at the research center. One student is standing, working with the same girl at the back table. One student has his hand raised (still) on the opposite side of the room. One boy in the front raises his hand, then puts it down. You are working with a girl at the back table who had her hand raised. Mrs. C. is working with the two students at the computer center. One boy raises his hand directly in front of you. You answer his question. The boy in front raises his hand. The next girl in front of you raises her hand. You walk over to address her question as well as the boy who had hand raised from 12:08.

12:14 Two students return to their seats in the front row. Two students (one new, one old) are at the research center. The girl in back whose question you just answered has her hand raised again. Three students are now working at the computer (one new, two old), Mrs. C addresses a student question up front and on the opposite side of the room. The boy at the front table still has his hand raised. You are working with the same group of students (table 2 on the opposite side of the room).

12:16 (I got interrupted by visitors)

12:18 No one is in the research center. Three students are still at the computer (the same three). Two students with their hands raised (one girl in the back middle, one girl at the second table on the left). You are working with the second table on the right. (Same group still). Mrs. C is at the front first table and answered the boy’s question.

12:20 Three students are on the computer and another student is watching over their shoulder. Two students will have their hands raised, a girl in the back and a girl at the second table on the left. Mrs. C. stopped the room from working and asked them to take out their planners. You are at the front of the room erasing the board.

12:22 Mrs. C. is discussing Science Buddies with the students. There are two students on the computer. One boy is scrolling and clicking on the computer. You are writing on the board.

12:24 Three students are on the computer. Mrs. C. asks if there are any questions about the stem project. You are organizing papers at the front of the room. Mrs. C. is asking students to record something in their stem logs.

12:26 Mrs. C. asked students what a hypothesis is. Three students are raising their hands. A boy at the front of the room is reading in the Science book. You are at the back of the room.

12:28 Mrs. C. is writing on the board. You are standing by the calendar. Some students are writing in their planners or on paper.

12:30 Mrs. C. is writing on the board. You walking from group to group asking them to put their things back in their stem folder and get out their math book.