Learning Goals and Strategic Functions:

For our science lesson, my partner and I taught a lesson on observations to our first grade class. The main learning goals in our lesson were making purposeful observations of the natural world using the appropriate senses, generating questions based on observations, constructing simple charts from data and observations, and communicating and presenting findings of observations. We contextualized these learning goals for the students in our class by allowing them to directly interact with the objects they were observing and encouraging them to use all five senses when making their observations. We lead them in a discussion about what they observed and created charts for each object, presenting the observations for each sense. Learning to make, read, interpret, and use charts is key to acquiring a scientific perspective (Rosebery, Teaching Science to ELL, 8). We helped the students engage and explore in the learning goals by allowing them to physically touch, smell, taste, hear, and see the objects they were observing. They could observe the objects on their own allowing them to make their own conclusions about the objects. We then helped them to explain the learning goals by having them contribute their ideas to the chart and give details why they thought that and why it was a good observation. This worked well because the students were able to come up with their own thought about the objects rather than us giving them examples of observations. They came up with ideas about what make a good observation. I also thought this worked well because they had to explain their observations. For example, one student said that the cranberries tasted like cranberries. We asked him why he
thought that and to explain in further detail what a cranberry tastes like, it is sweet, sour, tangy, etc.? He was then able to explain what he meant and made a very descriptive observation. Another student said that the pumpkin seeds were white and smooth, while the outside of the pumpkin was orange and rough. He showed that one observation does not always completely describe sometime and that the more observations you make, the more knowledge you will have about that object.

**Engaging All Learners:**

My partner and I used a variety of engagement strategies in our lesson to connect the students with science. We first started our by having a brief science talk with the students. We brought them over to the rug area, so it was a comfortable and informal environment. We wanted the students to share their stories and experiences with observations and observing. Many of the students gave examples of things they have observed and how they observed those objects. Others talked about using the five senses to make observations, which was a connection we wanted them to recognize. While having our science talk, we asked the students thought provoking questions so they would begin to think to think critically and scientifically. Then, we did a hands-on activity that allowed the students to observe, using all five senses, four different objects. They got to touch, taste, hear, smell, and see the four objects. This really enabled the students to be engaged in the lesson because they were making their own observations on the objects and reporting their finding to the class. All of our engagement strategies worked very well. The students were so excited and interested in the objects that we picked and loved being able to interact with the objects by eating, smelling, feeling, listening, and looking. Not only did they learn what makes a good observation and different ways in which to
observe, they also have tons of fun. Some of the students did not want to go out to recess after our lesson because they were enjoying so much. This really made me smile that we created a lesson that they truly took pleasure in and sparked their interest.

One thing I might have done differently would be to not have all the objects at their tables all ready set up. This distracted some of the students because they were interested in those objects when they were suppose to be observing a different objects. Having all four objects viewable at one time caused the student to be distracted from the one they were currently observing. Many of the students also just wanted to eat the objects, since they were all edible. This caused a problem for some because they ate the object before they used all of their other senses to observe it. I might have given each table only one object at a time while having them concentrate on one sense at a time, having taste be last, rather than just asking them to observe the objects with all five senses. This would guarantee that the students were really using all five senses, while also not having the distraction of the other objects.

**Management:**

The major challenge that my partner and I experienced was time management. We had planned to have the students do the hands on observing then write a poem about their favorite object and draw a picture. However, we did not have time to do the poem and drawing. It took much longer than we had hoped to do the observations. We had the students observe the objects then we talked as a class about what they observed for each sense. My partner and I write their observations in a chart that separated each sense. We called the on the students to give us describing words for each sense, for each object. We planned to have them use these charts as a resource when writing their poems and as a
way to record the data they have collected. We thought it would take about five minutes for object, however they were having so much fun, I did not want to cut the observing short. We really wanted to them to explore the objects then report their thoughts. We realized that five minutes is not enough time to do that which each object. Next time I would definitely devote more time to observing and reporting data. Since this part of the lesson took longer, we were unable to get to the poem activity. If I did this lesson again I would not have the students name off as many observations for each sense, maybe have three or four for each sense. This would cut back on a lot of time. Another way I could revise the lesson is by having the poem and drawing activity as the follow up activity the next day, rather than trying to crunch it all into one fifty minute lesson. As for the management of materials, getting them all set up and transitioning the children we did great job. It went very smoothly.

When Things Don’t Go As Planned:

Not everything went as we planned when we taught out lesson. The main problem was that we ran out of time. We did not plan the lesson very well in terms of timing. We anticipated that the observation of the objects would take about 20 minutes. However, the students really liked this part of the lesson and were so engaged in it that it took longer that expected. We did not want to cut this part of the lesson short so we allowed this part take up more time. In return, we were not able to get to the last activity, which involved the students using the observations they had made to write a poem. We were then going to compile the poems and make a class book. We decided that this would be better as the following up lesson, allowing the observations and charting the results to be less rushed. Even though the lesson did not go as planned, it think it turned
out for the better because they students go to spend more time observing the objects.

They had so much fun. They did not even want to end the lesson for recess! It was also
better to do the poem activity the following day because then they were able to
concentrate on that rather than being distracted by the objects. One other think that did
no go as planned was that the students were so excited to eat the objects, that they did so
before being able to observe with their other senses. If I were to do this lesson again, I
would facilitate the observing better by asking the students to use one sense at a time.
Rather than just saying, “Remember to use all five sense when observing,” I would have
said, “First we are going to look at the pumpkin.” I would have them look at it and tell
me what they see. Then I would move on to another sense, saving taste for last. This
would enable to students to concentrate on one sense and grasp a better understanding of
using that sense to observe. Even thought things may not have gone perfectly, the lesson
still went very well and the students truly enjoyed it. They were still able to learn about
observations and make sense of the lesson.