Classroom Observation
Pre-Observation Interview Protocol
"All Sorts of Leaves"

1. **What do you anticipate doing in your science class on the day that I will be observing?**

   We are going to begin the class by looking at drawings the students made of leaves they collected and discuss words they would use to describe their leaves. The students will then work in small groups to sort and name piles of leaves according to their general characteristics.

2. **What is the purpose of this lesson and how does it relate to the larger goals of this unit?**

   We are now in the middle of a unit on leaves. I want the students to become familiar with the plants around them and develop their skills in observing and drawing what they see. I want to emphasize the importance of detail in making observations, to encourage students to notice the similarities and differences among the leaves and to use descriptive words to talk about those differences. I want them to be able to explain their classification system they create to distinguish their leaves. I’m always trying to do double-duty on what I can accomplish with a lesson, and this is a really good opportunity to focus on some language arts skills, as well. I’d also like to reinforce their ability to work together in groups and share their ideas.

3. **What instruction has this class experienced related to these science concepts prior to the lesson that I will observe?**

   In Kindergarten the students were introduced to the needs of plants, the parts of plants, and the importance of plants to life. We recently reviewed these concepts and then planted grass and alfalfa sprout seeds in order to see how plants grow. Yesterday, they collected leaves from plants growing around the school. The students made drawings and wrote descriptions of one of the leaves they had collected.

   Also, last year in Kindergarten, the students sorted their shoes based on characteristics they identified. Today’s lesson will build on that experience as the students begin to classify leaves.

4. **What did the students understand and not understand about these science concepts as a result of these prior experiences?**

   I think the students are beginning to develop some good observation skills. Their drawings and descriptions of their one leaf yesterday were well done. However, I do think that they have not mastered the idea that descriptions need to be specific enough in order to distinguish different plants from one another. I hope that today’s activity will help them appreciate how important it is to point out the distinguishing characteristics of the leaves.

* Interview summaries were constructed for the purpose of using the Observation Protocol and are not actual interviews.
5. **What instruction will the students experience related to these science concepts after this lesson?**

After this lesson, the students will look at pictures of the trees from which the leaves were originally gathered. They will use descriptive words to describe each, then they will match their leaves to the pictures based on those descriptions. Students will return to the courtyard to match the leaves and pictures with the plants to check them for accuracy.

6. **How do you plan on assessing students' understanding of these concepts during and at the end of this unit?**

I monitor the small group work and discussions during class to see what classification system they are using to sort the leaves. I also use their writings, like the leaf description they did yesterday, to assess their understanding. At the end of this unit, they will make a poster showing what they have learned about the characteristics of plants.

7. **What areas of your instruction would you like me to specifically focus on during my observation?**

I am trying to improve my ability at facilitating students working in small groups. I would appreciate your input on how I do today and any suggestions for improvements in the future.
Classroom Observation
Post-Observation Interview Protocol*
"All Sorts of Leaves"

1. How effective do you think the lesson was in helping students increase their understanding of the science concepts for the unit? What particular areas of the lesson do you feel were most effective?

I was really pleased with the students’ attention to detail and the variety of descriptive words that they generated. The activity worked well as a way to introduce some scientific terms that are used to describe leaves along with just good descriptors, and some creative observations, too. I got a better sense of how students are doing in observing and using details to describe and group the leaves.

2. What changes, if any, would you make to this lesson were you to teach it again? Why?

Next time, I will limit the descriptive word list so that it will help the students sort their leaves into discrete groups.

3. What needs to come next for this class in developing their understanding of the science concepts in this lesson/unit?

In order for my students to begin the process of understanding the concept of classification, they need to be more specific when defining the characteristics of leaves. I noticed that several groups created categories where the same leaf could fit into more than one. For example, when they chose words like, “Delicate,” “Fat,” and “Bumpy” they discovered that some leaves could be placed in more than one of these groups.

Instead of moving ahead, I am going to address these issues in tomorrow’s lesson by engaging the students in a discussion about how similarities and differences among objects used to create classifications. I plan on making a chart with the entire class where we select three leaves and write down how they are similar and different. Then I will facilitate a group discussion to help the students develop mutually exclusive category names so that each leaf will fit into only one category. Next, I will have the students in groups use their new categories to sort the piles of leaves left on the tables. Finally, the students will do the activity I mentioned earlier where they look at pictures of trees and match their gathered leaves to the pictures.

4. Reflecting on this lesson and unit, what do you think would be a logical next step for your own professional growth in science teaching?

I am a member of the teacher “think tank” that meets once a month at the local college to discuss our classes with a focus on student thinking. I feel like I could use some growth in the area of understanding how students begin to classify and how to facilitate that process better. I am planning on bringing some of my students’ work from this unit to my group and asking them for some feedback and professional advice.

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