

Plants Video Episode

Science Unit

- *Plant Growth and Development*, published by Science and Technology for Children (STC)

Time Required for the Sessions

- Science session: 45 to 60 minutes depending on how much modeling the teacher has provided in previous science sessions
- Writing session: 25 to 40 minutes depending on how many times students have written observations of their plants and how much modeling they need
- These sessions were videotaped in one morning. But in a normal situation, the teacher would have taught the science session during her science time one morning and the writing during a literacy time in the afternoon or the next day.
- To help refocus the students' minds on the science investigation they had done earlier in the day, or the day before, the teacher begins the writing session with a class review of the shared reflection discussion they had had during the science session. Students refer to their own data table and the class data table during this shared review.

Time of Year

- This video episode was videotaped in early December, toward the end of the plant unit. This is the students' first inquiry-based science unit of the year. They will study another science unit in winter and a third unit in spring.

Alternative Ways of Modeling

- Normally, the teacher uses a document camera, which projects an image of her notebook page on a screen as she models how to draw scientific illustrations, make notes about the class plant, and plot plant height on the class line plot in her own science notebook. But such images do not work well in videotaping, so she uses another effective means of modeling how to make notebook entries.

Making and Writing About Graphs

- Making graphs, interpreting data, and writing about what the data in graphs tell us are important skills. Note that when students in this video episode make an entry in their data table, they also place a dot in the appropriate place on their graph. Although this episode does not show it, the class periodically discusses the class graph and the teacher models how to talk and write about what the graph shows about the growth of the class plant. Then students write about their interpretation of the data.

Students' Science and Science-Writing Background

- Students in this school (if they have been there since kindergarten) have inquiry-based science experiences to varying degrees from kindergarten through fifth grade. Only some students are exposed to this science-writing approach in one or more of the grades in this school. (Teacher participation in the district's science-writing program is voluntary.)

Teacher and Her Classroom

- This teacher has been teaching third grade for six years, and *Plant Growth and Development* is one of the three inquiry-based science units she teaches each year.
- She teaches all the other subjects to her students as well.

Students in the Class

- This class has 28 third graders, including 3 who are in a self-contained special education program and join this teacher's class only for science. One of these students has an aide, who is shown working with him in this video episode. The teacher's regular classroom also has several other students who receive support from the Special Education Program.

School Demographics

- African American: 9.7%
- Asian: 14.7%
- Latino: 10.4%
- Native American: 2.6%
- White: 62.6%
- Free or reduced-price lunch: 26.1%
- Limited English proficiency: 7.6%