## Portfolio Activity 9.4

## DEVELOPING A PERFORMANCE-BASED ASSESSMENT

## Materials Needed:

- Materials to teach a lesson developed in this investigation
- A. Following are two ideas an elementary or middle grade teacher might want a student to develop in a project-based environment. These require a complex combination of knowledge and skills. Form a team of three. Read each idea and decide what would be the most genuine ways to measure whether students have gained the pertinent knowledge and skills.
  - Each student will be able to observe the differences between two types of soils and determine which one is the best in which to plant a cactus.
  - Each student will be able to read a weather map and determine what the weather will be like tomorrow.

During your decision making, consider the following criteria of good performance-based assessment:

- 1. It reflects important curriculum targets.
- 2. It is consistent with instruction.

- 3. It asks students to collaborate and use resources.
- 4. It encourages active investigation.
- It permits multiple approaches.
- 6. It integrates ideas.
- 7. It requires higher-order thinking.
- 8. It is interesting.
- 9. It is developmentally appropriate.
- B. As a team, develop a lesson to teach one of the two learning performances. Develop two different ways of assessing the performance after you have taught it. Teach the lesson to another team in your class and try the two different methods of assessment.
- C. Ask the team you taught which method of assessment best measured what they learned. How did their beliefs match yours about good techniques for assessing complex combinations of knowledge and skills?
- D. How do these findings fit with your state science proficiency model? Record your lesson, assessment methods, and conclusions in your portfolio.