

## Ways to Assess Student Learning

- Have students make scientific booklets. Before beginning a unit or investigation and after participating in a class discussion, students write in their booklets what they know about a topic or concept and questions they have. After planning in small groups, students describe how they'll explore a question and predict what they think might happen. Later, they record relevant data they gather. Make time to conference with students while they write in their booklets, and periodically review each one. By doing so you learn so much about students' thinking, and can readily see where they need more support (in measuring or graphing, for instance).
- As a culminating event, have students share individual garden portfolios, a class newsletter, and a computer presentation with parents and community members.
- In the spring have classes prepare brochures and a visitors' guide to the school/class garden.
- Capture students engaged as scientists on videotape. Review the videos. It is easy to tell which students were engaged and what types of misconceptions students may have. Have a follow-up discussion with students to determine whether students are actually developing correct concepts.
- Have students view video footage, then discuss and document what standards (for example: collaborating with others) are being met.
- Keep an assessment journal for yourself. When students are engaged in garden activities (measuring a sunflower using hands, for instance), observe them, listen to their conversations, and record comments that reveal how kids are meeting specific standards.
- Take photos of students engaged in garden investigations, and use these along with journals and portfolios that feature a progression of student work, to provide more fuel for assessing and reporting student gains. Use a rubric or checklist linked to certain learning goals to "score" student work.
- Draw from all garden related activities when reporting to parents and school administrators. For instance, explain what the material reveals about students' grasp of standards. Explain that some parents have noticed a difference in their children's enthusiasm and motivation since the garden project began
- By showing parents and administrators the criteria for standards, then linking that to student work and garden observational comments, it is easier to see the value of the garden.

- Upper grade students can write a class book about plants for kindergarten students. In order to create the book, students have to ask themselves what they know about characteristics of living things, and be sure they can verify it. The books can tell the story of how a seed becomes a plant
- Use a fruit and vegetable preference questionnaire and a 24-hour food recall journal to measure students' attitudes and behaviors at the beginning and end of the gardening program. (Research results indicate that student attitudes toward vegetables significantly improve, as do their preferences for fruit and vegetable snacks.)