

### **Assessment to Demonstrate Learning**

There is value in providing students with an opportunity to show what they have learned and in assessing their progress through performances and products.

Teachers and students can form more rich and useful judgments about student progress through performance assessments, tasks through which students demonstrate what they have learned in authentic, realistic ways.

Designing tasks for summative assessments can be challenging. They should "be complex enough to engage students in real thinking and performances, open-ended enough to encourage different approaches, but sufficiently constrained to permit reliable scoring; they will allow for easy collection of records, and they will exemplify 'authentic' work in the disciplines" (ERIC, 1993). For example, a set of multiple-choice questions can test a student's memory of the components of the scientific method, but this will show little about how a student designs and carries out a scientific inquiry. However, a performance assessment would resemble what scientists do in their work lives. It would require students to create a hypothesis, collect and record data, draw conclusions, and so forth.

Assessing higher-order thinking demands that students be engaged in complex activities that require them to select and effectively use appropriate thinking strategies. Costa and Kallick (2000) describe the challenge of assessing thinking.

Although some cognitive operations such as reasoning and problem solving may be assessed using tests...cognitive operations generally require demonstration and performance in real-life problem-solving and decision-making tasks. To make a pattern of intellectual behaviors habitual requires time--time beyond that required for one problem-solving task, one lesson, one unit, one class, or even one school year. Therefore, assessment strategies must be designed to gather data about increasing and spontaneously applying habits of mind over time and in a rich variety of contexts (p. 117-118).

Performance assessments, such as reports, multimedia presentations, models, and dramatic performances, are engaging, authentic, and give students opportunities to show what they know in their particular learning styles. They also give teachers who are looking for it, a wide variety of information about students' content knowledge, thinking skills, and collaboration and research processes.