

“How Will I Know if My Students Learned What They're Supposed to?”— Curriculum Evaluation in the NCLB Era: Problem Handouts



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Problem Statement

The No Child Left Behind Act of 2001 is the latest in a series of reform efforts that have brought the issue of "accountability" to the forefront of education. Part of a movement started in the early 1980s, the idea of "Science for all Americans" promises to give all children access to the science and technology needed in an increasingly high-tech world. The movement has gained widespread acceptance politically and societally, and is firmly entrenched in state and national policies for science education.

These reform efforts encompass all aspects of science teaching. Standards developed over the past two decades show high expectations for student learning, curricula are designed to align with these standards, innovative instructional models such as inquiry, project-based, and problem-centered approaches reflect the latest in thinking about student learning, and assessments at local, state and national levels measure the extent to which students are meeting the standards we set out for them. Ideally, the system works to improve student and teacher performance, and leads to deeper understandings of all of science.

Has this happened? Many critics of the accountability movement claim that the original goals of standards-based reform have been corrupted into a testing frenzy that places too much pressure on teachers and administrators to raise test scores. Popular press images of students stressing out about "high-stakes" testing, parents protesting single measures of their children's ability, teachers with pay tied to their students' performance on tests—critics believe these call into question the idea of a system geared toward promoting the best learning opportunities for students.

On the other hand, reform has raised awareness of the importance of all content areas in all grade levels, particularly in science. Prior to standards, many elementary teachers avoided science instruction in their classrooms or chose certain topics over and over again, ignoring others that were vital to children's understanding of science. These reform efforts require teachers and administrators to take responsibility for the learning of all of their students, and hold them to high standards of performance. Research on the use of performance-based assessments and other alternative assessment practices show that good assessment practices allow for a diverse range of students to "show what they know" and give important feedback to teachers who are constantly improving their instruction. The introduction of curricular "kits" in elementary classrooms has provided much needed materials to teachers who may not have been able to purchase these materials on their own.

As teachers, you will face these issues from the first day you walk into your classroom. What curricula will you teach—or will you have a choice? What standards and expectations will be facing you? How will you ensure all of your students perform well on state assessments? Will you be evaluated on how well the children perform on those assessments? How will you know if



children have learned what the reform efforts, standards documents, your administrators, their parents, and you want them to learn about science? How will you balance demands for science excellence with demands for literacy, mathematics, and social studies excellence? How will you take the models of learner-centered, integrated, inquiry-based science instruction and make them work in your classroom?

During this problem, you will be assigned a curriculum topic that will serve as the focus for your investigation of these issues. Over the course of this investigation, you will use a commercially produced kit as the context for investigating the extent to which curricula fit the needs of classroom instruction and the issues surrounding accountability. You will also teach two lessons from the curriculum to help in your evaluation of the curriculum's overall quality.

