

Chapter 14

Informal Assessment and Evaluation Strategies

To make someone smart, you can't make them know the answers,
but you have to teach them to ask the right questions.
-Author Unknown

Without question, assessment is one of the most vexing and taxing issues associated with teaching. It is also one of the most important, both for students and teachers. Good assessment and evaluation strategies provide students and teachers with information about how well students are learning and about the effectiveness of teachers' instructional practices. Of course, any kind of assessment or evaluation can only examine a snapshot or small percentage of the total possible understandings or abilities that students have. That reality makes it crucial that teachers think carefully about the development of their instructional objectives and the relationship between those objectives and their choice of assessments. Students and teachers cannot benefit from assessments that focus on relatively unimportant aspects of the material presented or demonstrated by students.

With the advent of standards-based education, *performance assessment* has become more widespread. In general, performance assessment focuses on students' authentic or real-world demonstrations of competencies as opposed to more traditional paper and pencil tests. "Performance assessment requires examinees to construct/supply answers, perform, or produce something for evaluation."¹ Performance assessment is actually a much older type of testing than the relatively modern paper and pencil tests. The Chinese civil service examination system and medieval European craft guilds both required potential practitioners to demonstrate real-world "job" skills. It was only in the

nineteenth century with Horace Mann's replacement of oral tests with written exams and, more directly, the development of standardized testing in the twentieth century that paper and pencil "traditional" tests eclipsed performance assessment.² As discussed in chapter fifteen on formal assessment and evaluation strategies, there are many performance assessments that work well in history, social science, and social studies classes.

But these types of performance-based assessments are generally *summative*, or end point, evaluations. This chapter focuses on *formative* assessment and evaluation strategies that allow teachers to gauge how well students are learning so that instruction is more effective and deficiencies or problems in students' understandings or abilities can be corrected. Thomas A. Angelo and K. Patricia Cross describe formative assessment as "almost never graded" and intended to "provide faculty with information on what, how much, and how well students are learning, in order to help them better prepare to succeed—both in subsequent graded evaluations and in the world beyond the classroom." Formative assessment, as opposed to summative types of assessment, is also very often anonymous; teachers attempt to gauge how well all students are doing as a whole. This chapter will highlight three major categories of informal or formative evaluations: assessments in the cognitive domain, assessments in the process and affective domains, and portfolios that document activities in all domains.³

Cognitive Domain

Teacher dialogues and discussions with students are the most basic and essential element of informal assessment. Generally, such conversations emphasize relatively quick checks for knowledge and comprehension. When lecturing, for instance, teachers should try to incorporate questioning techniques into their presentations. This style of

lecturing might be seen as a modified Socratic style in which the teacher directs questions about the material to students, both to check for content understanding as well as higher-order thinking. When most effectively conducted, such lectures actually become more like discussions and opportunities for sharing of teacher and student points of view on the material. By listening to students' responses, a teacher can determine whether it may be necessary to re-teach material or move expeditiously on to the next topic.

Very often what one discovers when asking students questions is that they have faulty understandings based on misconceptions or stereotypes about the issues. Angelo and Cross suggest a "Misconception/Preconception Check" as a useful assessment tool for helping teachers to uncover students' misunderstandings. With this formative assessment exercise, before starting a new unit the teacher asks students to list answers on key questions about the main themes in the unit. For instance, in a United States history class unit on the Great Depression, a teacher could list on the board: 1. What were the causes of the depression? 2. What did the Hoover administration do about the depression? 3. What did the Roosevelt administrations do about the depression? 4. What event was most important in lifting the country out of the depression? After the students write down their answers, the teacher could have the students work in small groups and pool their answers to provide to the rest of the class. Before providing the right or most plausible answers, the teacher would ask the students to reflect on how they formed their judgments about the questions.⁴

Discussion with students can also take the form of written checks for understanding. For instance, teachers can ask students to write for one minute to explain what they learned about a particular topic or issue. Normally, these one-minute writing

exercises should be done near the end of class when a teacher will ask students to respond to variations of the following questions: What was the most important thing you learned during the class? What unanswered questions do you have about the lesson? Teachers can then collect students' answers, read through them, and gain an understanding of where they need to proceed or how they should adjust their instruction. This same idea can be applied to almost any type of direct instruction. For instance, following a video clip, a teacher might ask students to write down the main ideas or themes from the clip. These can then be scanned quickly after class and then used to help direct further discussion of the importance of the segment that students watched. Teachers might also ask students to take a very short quiz at some point during a lesson to see how well they understood key concepts or ideas.

The K-W-L format also provides useful formative assessment information. Students indicate what they *know*, then note what they *want* to learn, followed by some indication of what they have *learned*. This process can be conducted orally or in written form. With each of these types of formative assessments, the emphasis is not on scoring the students' work as it usually is with a summative assessment. Instead, the information gathered helps the teacher focus on how students are either learning or not learning the material. This again helps teachers decide how they might proceed.⁵

Another type of written formative assessment is initialing students' work on projects that have been scaffolded. Any fairly involved research projects in which students test a hypothesis should be structured to help students understand the process involved in examining the document or documents, analyzing their meaning or meanings, and then composing their responses to the hypothesis. These scaffolded assignments

require the individual or groups of students to receive a teacher's check or initials before moving to the next step. As the teacher moves from one student or group of students to the next, they can gauge the students' efforts, talk to them if needed about how they are doing, and then indicate, with their initials, if the students should proceed to the next part of the project. Table 14.1 provides a template for a scaffolded project.⁶

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Pretests can provide useful information for formative evaluation, particularly for judging students' basic knowledge and comprehension. Used in this way, pretests provide diagnostic information that allows teachers to determine what students know before they begin a unit. By identifying students' understanding or gaps in understanding, teachers can then modify their unit design accordingly. Normally, pretests, like most formative assessment tools, should not be graded.

Process and Affective Domains

Although usually more time consuming, there are several more intensive types of formative assessment. Here, instead of relatively quick checks for understanding or comprehension, the teacher engages in more in-depth questioning or written assessments of students' abilities in the process and affective domains. By using "probing" questions during a classroom discussion, for instance, a teacher can gauge students' analytical or evaluative abilities in the process domain. In history and social studies classes, questions that require students to explain how or why, target their higher-order thinking skills. These questions can be asked not only during a class discussion on a topic, but are also ideal for when students are working on research projects, either individually or as part of a group.

Angelo and Cross describe several variations on these sort of higher-order questioning techniques. For instance, students can be asked to explain the “pros” and “cons” of a decision-making process. In a political science class, a teacher might ask students to list the pros and cons of eliminating the electoral college from the presidential election process. In this case, rather than simply checking students’ comprehension of factual issues, the focus is on decisions, judgments, dilemmas, or issues that are central to the unit being taught. These answers can then be collected and assessed to see how balanced students’ perspectives are and where they may have gaps in their analytical skills.⁷

Very often asking higher-order questions during such interviews requires teachers to follow-up with questions that ask students to elaborate on their answers. Here are some possible follow-up statements or questions.

- I am interested in your thinking. Please tell me more.
- Please help me to understand. Suppose you are the teacher and I am the student
- I don’t think this issue is easy to understand. Sometimes I get confused, don’t you?
- Sometimes when I have difficulty with an issue, I break it down into small steps. Let’s do that here.
- Take your time and think about your answer.

Each of these prompts asks students to reflect further on their ideas. Indeed, formative assessment is especially useful for providing students with opportunities to develop their reflective abilities.⁸

Questioning and interviews with individuals or groups of students also allow the teacher to assess students' dispositions in the affective domain. Teachers should frequently ask students to elaborate on their beliefs, values, and attitudes. This type of discussion is useful not only in developing students' beliefs, but is also useful in providing teachers with important information about their students' attitudes, particularly in terms of how such attitudes change over time. In fact, the citizenship education function of so much of history and the social studies demands that teachers engage in informal assessment of students' developing belief structures.

Angelo and Cross outline several types of reflective formative assessments that focus on students' attitudes and values. One is the classroom opinion poll. Teachers can use such polls to help students prepare for a discussion of a controversial issue as well as a pre- or post-assessment device "to determine whether and how students' opinions have changed in response to class discussions and assignments." Opinion polls are ideal in history, social science, and social studies classes. In a United States history class before discussing the debates surrounding the use of the atomic bomb, a teacher could ask students whether or not the United States should have used the bombs to end the war. This question is ideal to use both before and after discussing the use of the bombs.⁹

Although informal interview assessments suggest an oral approach, this type of formative evaluation can also be practiced through a variety of written exercises. Journals are particularly useful for asking students to reflect on their beliefs, values, and attitudes. When used informally, students may actually provide more honest remarks since they know that their attitudes are not being graded. Indeed, in these cases they may be more likely to express their reactions and beliefs in a journal rather than in open

discussion. One type of written exercise focusing on students' values and analytical abilities is the double-entry journal. Many teachers require their students to keep their lecture and reading notes in a journal. The double-entry journal takes this one step further by having students write their reactions to their lessons in a separate column. On the left side of the page, students should take their lecture or reading notes, while on the right side, next to the appropriate issue, they should write their comments. Such responses help teachers to evaluate their students' reading, analytical, and reflective abilities. Requiring students to prepare longer profiles on individuals or issues is a variation on the same type of analytical and reflective journal entry. Here, however, the time required to read students' entries is greater.¹⁰

Another way to use students' written work for formative assessment is by evaluating drafts with qualitative assessments of their idea development. Instead of assigning a score based in part on mechanical and grammatical proficiency, teachers can develop rubrics that provide written feedback about their essay's audience awareness, development, organization, coherence, and unity. Table 14.2 provides a sample rubric for this type of formative writing assessment.¹¹

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Since one of the main purposes of formative assessment is to provide teachers with feedback on how students are learning, teachers should also ask students for their reactions on what they have learned. This can certainly be done orally at the end of the class by asking the question, "What did you learn today?" But it may be more reliable and systematic to ask students to jot down their answers on a piece of paper and turn

them in anonymously at the end of class. With the advent of e-mail and its widespread use, this can also be accomplished electronically. Although not quite as anonymous, its use may save class time since the messages can be sent to the instructor following class. Students can even engage in electronic conversations among themselves through class listservs.¹²

Portfolios

Typically, portfolios, or collections of students' work, are used for summative evaluation. Teachers might ask students to save and organize examples of their efforts on a variety of assignments, classified according to type, over an entire unit, or more likely, an entire semester or year. With a summative portfolio, the emphasis is generally on having students save examples of their best work. Formative portfolios are less often used, but can provide very useful indications of students' progress. Instead of emphasizing students' best work, a formative portfolio includes examples of students' work that emphasize their development over a period of time. For instance, instead of simply saving only final drafts of written work, students could be asked to save early as well as final drafts. Any rubrics used to assess written work should be included as well. The qualitative comments from the papers and rubrics would provide the chief indicators to students about their problem areas as well as ways they have improved. In this way, a formative portfolio provides useful reminders to the teacher and student about their improvement. They are also useful for helping students to reflect on how their skills have improved and also about the ways they might improve their performance or skills in other areas in the future.

Some of the student work samples that lend themselves particularly well to formative portfolio collections include:

- essays, research papers, written projects, and other written exercises;
- cooperative learning group outcomes;
- skill demonstrations (e.g., using reference materials);
- authentic creations (e.g., oral history projects, exhibits, videos, audiotapes, artifacts, photographs, bulletin boards, posters, Web sites);
- rating forms, checklists, and observation forms;
- diaries, journals, and logs;
- experiments; and
- teacher interviews.

Each of these items lends itself to formative assessment particularly because each generally require multiple drafts or need to be accomplished in stages. At the same time, as discussed in the next chapter, each can be useful in summative portfolios as well.¹³

NOTES

¹ George F. Madaus and Laura M. O'Dwyer, "A Short History of Performance Assessment: Lessons Learned," *Phi Delta Kappan* 80 (May 1999), 689.

² *Ibid.*, 690-693.

³ Thomas A. Angelo and K. Patricia Cross, *Classroom Assessment Techniques: A Handbook for College Teachers*, Second Edition (San Francisco: Jossey-Bass, 1993), 5.

⁴ *Ibid.*, 132-137.

⁵ Margaret E. McIntosh, "Formative Assessment in Mathematics," *Clearing House* 71 (November/December 1997), 92-97; D.W. Ogle, "K-W-L: A Teaching Model that Develops Active Reading of Expository Text," *The Reading Teacher* 39 (1986), 564-570; and E. Carr and D.W. Ogle, "K-W-L-Plus: A Strategy for Comprehension and Summarizing," *Journal of Reading* 30 (1987), 626-631.

⁶ David Kobrin, *Beyond the Textbook: Teaching History Using Documents and Primary Sources* (Portsmouth, NH: Heinemann, 1996), 76-78.

⁷ Angelo and Cross, *Classroom Assessment Techniques*, 168-171.

⁸ McIntosh, "Formative Assessment in Mathematics."

⁹ Angelo and Cross, *Classroom Assessment Techniques*, 258-262.

¹⁰ *Ibid.*, 263-270.

¹¹ B.J. Scott and Michael R. Vitale, "Informal Assessment of Idea Development in Written Expression: A Tool for Classroom Use," *Preventing School Failure* 44 (Winter 2000), 67-72.

¹² Angelo and Cross, *Classroom Assessment Techniques*, 322-329

¹³ Peter H. Martorella, *Teaching Social Studies in Middle and Secondary Schools*, Second Edition (Englewood Cliffs, NJ: Prentice-Hall, 1996), 403.