# CHAPTER 8: USING PERFORMANCE-BASED MEASURES

*While tests and surveys remain the most popular assessment instruments, many departments are beginning to recognize the value of assessment that is based on student activities. This chapter explores different types of performance-based assessment activities and discusses the means to maximize their effectiveness.*

## Topics Presented in Chapter 8

◊ Definition of performance-based assessment
◊ Appropriate use of performance-based assessment
◊ Advantages and disadvantages of performance-based assessment
◊ Types of performance-based assessment
◊ Planning performance-based measures
◊ Analyzing performance-based data
◊ Frequently asked questions

## Definition of Performance-Based Assessment

*Performance-based assessment* is the process of **using student activities**, rather than tests or surveys, to assess skills and knowledge. Class assignments, auditions, recitals, and projects, while intended to evaluate the individual student, can be reviewed as a whole (using all or a sample) to evaluate a course, program, or college. These activities are often used in conjunction with tests to provide a complete picture of student skills and abilities. Critics of testing point out that tests, particularly multiple-choice tests, do not provide sufficient opportunity for students to think through what they are doing or to want to do their best.

## Appropriate Use of Performance-Based Assessment

Performance-based measures should be used:

- When activities can be linked directly to the curriculum.
- In academic programs that develop complex, integrated skills.
- When the focus of the academic program is on the creation of products or performances.

Performance-based measures should not be used:

- Where there are limitations of time and/or scope.

- When other assessment techniques such as surveys, focus groups, or tests can better serve the needs of the assessment.

- When statistical analysis is required.

- When there is not widespread faculty and/or administrative support for performance-based assessment.

- When there is not consensus among faculty regarding the objectives, goals, and criteria by which measures will be evaluated.

## Advantages and Disadvantages of Performance-Based Assessment

### Advantages

- Performance-based assessment builds on daily work (assignments, exams, projects) of students and faculty.

- Performance-based assessment enables faculty to determine student skills and abilities and for students to learn more about how to improve their own skills.

- Performance-based assessment can help faculty determine how to link their teaching to desired learning outcomes.

### Disadvantages

- Performance-based measures are labor intensive. A significant amount of time and care must be set aside for planning and using performance assessment.

- It is not clear that performance-based measures can be generalized to the student population. This lowered level of generalization can affect the perceived validity of the measure.

- Assessment activities that are separate from the daily teaching routine of the department can be perceived as intrusions by students and faculty.

## Types of Performance-Based Assessment

**Portfolios** - examples of student work collected over time

The use of student portfolios has a long history in disciplines such as art and architecture and is rapidly gaining popularity in other areas, particularly in the assessment of writing skills. Portfolios can be used to evaluate individual student progress while allowing a department to take a critical look at overall performance of students in the program. Typical portfolio contents are exams (multiple choice and essay), research papers, essays, projects, and audio/video tapes.

**Assessment Center Method** - simulation of real-life situations in which student performance is evaluated by expert judges

This assessment method attempts to create a professional situation in which students participate (performance, audition, recital, or exhibit). The activity evaluates individual student performance and provides feedback to the department on the effectiveness of its program.

## Planning Performance-Based Measures

The following should be considered when planning performance-based assessment measures (Palomba & Banta, 1999, p. 118):

1. What skills are being examined?
2. What tasks can appropriately demonstrate the skills?
3. What are the criteria for evaluating performances or products?
4. What is a reliable process for rating the performances or products?
5. Who is most appropriate to conduct this assessment, and how can they be trained?
6. How will the results be evaluated?

## Analyzing Performance-Based Data

The intended outcomes for the course or program are identified. Then faculty members set standards for evaluating portfolio materials or performance measures. Performance-based assessment is most effective when faculty members agree on the intended outcomes of the course or project, as well as the standards set for the evaluation.

## Frequently Asked Questions

### Should we use the students' best work or choose from a range of grades?

Either is useful, but the department must decide which selection will best suit the department's purpose. Since the students' best will vary, a great deal can be learned about the program from looking at those assignments which earned the highest grades. What differences exist in these work samples? Why are some students' best works better than others? On the other hand, selecting from a wide range of grades will say something as well. What is failing, average, or excellent work in certain courses or programs? Is there commonality among each of these ranges that gives some clue as to who is doing what kind of work and why?

### Who decides which items or projects will be included in portfolios or used for performance assessments?

A decision is made *based on the type of assessment to be done*. In some cases, faculty members will ask their students to select for their portfolios what they (the students) consider to be their best work. At other times, the instructor will provide a list of class assignments or exams to be included. Departments may even choose to create the portfolios themselves. It may be important to advise students of the purpose of the portfolio review and to keep the focus on the program rather than the individual student.