

# Chapter IX

## Assessing Outcomes in a Technical Communication Capstone

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### ABSTRACT

*Outcomes-based assessment provides data for programs to demonstrate student learning as a result of their enrollment in the program and to assess courses and curriculum. This chapter reports on the process used to develop an outcomes assessment initiative for the Multimedia Writing and Technical Communication Program at Arizona State University. The authors discuss details on the development of outcomes, the mapping of outcomes to the curriculum, the use of electronic portfolios to assess student writing using Phase 2 scoring procedures, and how results from the first three semesters of implementation are being used to evaluate and improve the program's curriculum.*

### INTRODUCTION

Higher education is now in the age of assessment. Increasingly, government and external agencies and are demanding accountability of educational programs related to student learning. Writing programs, because they are so closely tied to general education and to the public's perception of literacy, are often among the first academic pro-

grams called upon to demonstrate accountability. Technical communication programs, as applied writing programs, are no less immune from the need to show accountability than composition.

In this chapter, we use the term "assessment" specifically to refer to the appraisal of student learning based on articulated outcomes. Analysis of results from this type of assessment is used to assess student learning and to determine how ef-

fectively or not the curriculum is meeting goals. To do this, we engage in a recursive process of review and evaluation. Such assessments contribute to broader “program review” as one set of data in a more expansive process to determine how well the program is doing.

To be effective, a program assessment strategy must articulate goals and objectives, define outcomes, and gather and evaluate evidence based on established criteria and standards. Articulated goals and outcomes, then, guide decisions about curriculum, individual courses, and teaching and pedagogy. Assessment methods are then selected to validly evaluate student learning based on established outcomes.

This chapter addresses issues related to programmatic assessment of student learning for an undergraduate technical communication degree program. While the initiative described here is focused on a particular program, we focus on a broader process to establish a recursive outcomes assessment strategy which builds on disciplinary theory, research, and practice to integrate outcomes related to writing, information literacy, and technology. We also describe the use of electronic portfolios and Phase 2 scoring as an authentic assessment method.

We conclude with discussion of our use of three semesters of data to demonstrate how assessment results are used to “close the loop” on teaching, learning, and assessment. As an example of recursive assessment, the process used in this initiative may serve as a model for other writing programs as well as programs in other disciplines.

## **BACKGROUND**

Technical communication programs are no less immune from the need to demonstrate accountability than other educational programs. As an applied rhetoric, technical communication shares many disciplinary similarities with other

writing programs. At the same time, technical communication has a distinct history, goals and objectives, and closer ties to industry and the workplace. Further, undergraduate degree-granting technical communication programs (such as the one discussed in this chapter), must address two missions. On the one hand, the program must address learning for program majors. On the other hand, the program must address the learning for students who enroll in “service courses.” These service courses are upper-division applied writing courses in which students from other majors enroll to build on what they learned in first-year composition.

Research from the broader discipline of rhetoric and composition can inform technical communication degree programs so that outcomes and assessment strategies are established within disciplinary context. When divorced from teaching and learning, program assessment can be viewed as an administrative mandate which imposes values and definitions of writing upon teachers that are potentially at odds with pedagogy and teaching philosophies. Assessment, then, can become equated with accountability to external parties rather than as a way to connect and foster teaching and learning. Edward M. White (1995) has argued that no assessment device is inherently good or bad. Further, he lists three qualities of assessment at its best (White, 1994):

- it clearly defines what we do and what we expect our students to do and learn;
- it helps us discover whether students have learned; and
- it changes our teaching so that we prepare better assignments, give more constructive responses, and grade less.

Further, White (1994) claims that a primary mistake made in program assessment is to choose a measure before developing goals, specifications, and uses of an instrument.

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