

## Chapter II

# A Critical Thinking Rubric as the Basis of Assessment and Curriculum

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### ABSTRACT

*In this chapter critical thinking is assessed using two critical thinking learning outcomes that were required for the State University of New York's General Education program. System-wide, an initiative was implemented that took into account national debates about standardized and course embedded evaluation. As part of this process faculty developed a rubric that delineated the criteria for rating critical thinking on a four-point scale. Components of the rubric were integrated into the curriculum of a Psychology of Adulthood and Aging course and used to formulate study questions. Feedback to students and the modification of curriculum and evaluation measures was ongoing. Pre-tests and post-tests scored with the rubric provided data on learning.*

### INTRODUCTION

“Teaching to the test” has often been criticized for narrowing educational objectives. However, in this case study teaching to a rubric expanded the curriculum and pedagogy. The rubric, developed for system-wide use by the State University of New York (SUNY), provided a basis of integrating assessment into the Psychology of Adulthood and Aging a 3000 level general education course at the

College of Old Westbury. In 2000 SUNY adopted new general education requirements that included critical thinking as an infused competency (Office of the Provost System Administration, 2001) defined by the following learning outcomes.

Students will:

1. identify, analyze and evaluate arguments as they occur in their own or others' work;
2. develop well reasoned arguments (p. 6).

In 2004 these learning outcomes were evaluated in the adulthood and aging course as part of SUNY's mandated system-wide assessment of General Education. My participation in this assessment was a significant step in a process of evaluation and modification that has been ongoing. Results indicated that approximately one third of the class was not fully meeting standards. Many of the students came with only a freshman writing and an introductory psychology course as background. I became interested in the challenge of infusing critical thinking into the disciplinary content. In addition, a review of the assessment exam suggested that it was not an adequate measure of both learning outcomes.

As the first three-year cycle of General Education assessment neared completion, SUNY began to consider making standards and tests more uniform. A faculty panel was appointed to develop a State University of New York Critical Thinking Rubric based on the already required learning outcomes that could be used throughout the system. As a panel member, the experience of defining and developing an instrument to measure critical thinking provided a valuable foundation. Over several semesters, I created a series of six lessons organized around study and small group discussion questions that incorporated the elements of critical thinking delineated in the SUNY rubric and encouraged student engagement. In the fall 2007 semester, the Psychology of Adulthood and Aging was once again assessed; by this time, critical thinking had been integrated into the course's curriculum. The SUNY learning outcomes were in the syllabus, and a packet of study/discussion questions explicitly identified the elements of critical thinking covered in each of the collaborative learning units. Pre-test and post-test essays were based on readings discussed in the small groups.

The objective of this chapter is to describe how the SUNY critical thinking learning outcomes and rubric served as a basis of small group discussion units and assessment in the Psychology of

Adulthood and Aging. The process of the rubric's development within SUNY is discussed in the context of national debates about the purposes of assessment. The decision to adopt a course embedded approach at the College at Old Westbury is related to the campus' demographics and mission. Research and theory about critical thinking and collaborative learning provide a foundation for the curriculum, pedagogy and evaluation measures and a framework for understanding the assessment results.

## **BACKGROUND AND LITERATURE REVIEW**

### **Developing a Culture of Assessment and the Course Embedded Approach**

In its recent guidelines, the Middle State Commission on Higher Education (2005) identifies as a major goal the establishment of a culture of assessment that involves a systematic and on-going cycle of evaluation and modification in response to data. This chapter discusses the implementation of such an approach in my adulthood and aging course and describes the linkage of assessment, curriculum and pedagogy as part of a process of reflective teaching. The Association of American Colleges and Universities (AAC&U) concurs that assessment involves not only collecting evidence about student learning but also making use of the findings. In a forward to *A Brief History of Student Learning Assessment* (Shavelson, 2007), Carol Geary Schneider President of the AAC&U and Lee Shulman, President of the Carnegie Foundation for the Advancement of Teaching explain:

*Carnegie's more recent work places much greater emphasis on the role of faculty in exploring what students do--and don't-- learn. The foundation... has helped fuel a movement in which 'regular faculty' ...are treating classrooms and programs as laboratories for student learning and how to*

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