

Developing SLOs (Student Learning Outcomes) for Trevecca's QEP (Undergraduate Research & Creative Endeavors):

Suggestions From Final White Paper #3:

“The following specific student learning outcomes are suggested in the undergraduate research initiative. Upon completion of the undergraduate research initiative, successful students will be able to:

- SLO1 demonstrate awareness of scholarship topics in their discipline and will be able to articulate those topics at the level of undergraduate preparation. (Trevecca institutional goal #9; QEP topics: student research, academic rigor)
- SLO2: acquire and demonstrate skills, including ethical decision-making, related to conducting scholarship in their discipline. (Trevecca institutional goals #8 and #9; QEP topics: student research, critical thinking)
- SLO3: articulate their research findings or scholarship through written and/or oral presentations. (Trevecca institutional goal #5; QEP topics: communication; student research)
- SLO4: engage in self-reflection of their own work, facilitated by their faculty mentor and feedback from oral and/or written presentations of their work. (Trevecca institutional goal #6; QEP topics: critical thinking, academic rigor)
- SLO5: become familiar with the creative and research processes in other disciplines. (Trevecca institutional goal #6 and #8; QEP topics: critical thinking; student research).”

Suggestions from Final White Paper #1:

“The main goal of teaching is to enable as much learning as possible. It has been postulated that learning comes from taking part in a variety of activities specifically designed to allow the engaged student to learn (1). Establishing honors research would allow us to provide a much wider range of experiences to our students and thus greater learning especially in the realm of critical thinking (2, 3).”

“Undergraduate research has been shown to result in critical thinking skills and to increase many aspects of student learning. Students who participate in research are engaged in active learning and tend to develop into deep rather than surface learners.”

“Along the same lines, students who conduct undergraduate research demonstrate enhanced epistemological reflection. . . . In other words, students are better able to evaluate information and apply it appropriately. Undergraduate researchers are better able to frame questions, obtain needed data, attack problems and communicate to others.”

Also from White Paper #1:

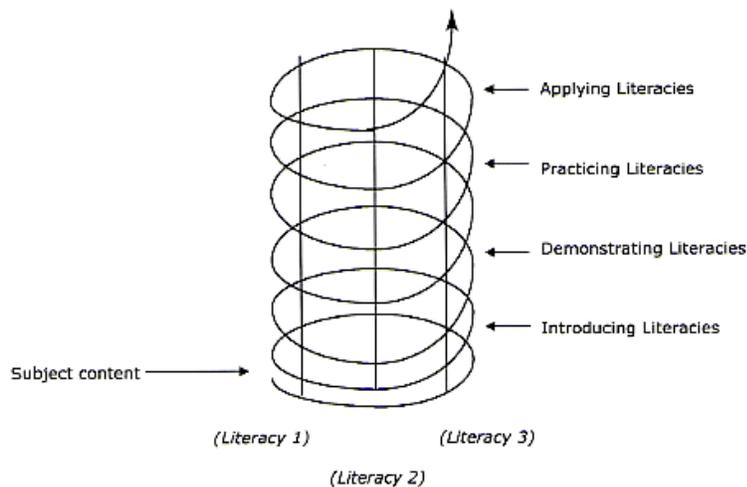


Figure 1. A visual representation of Burner's Spiral Curriculum with 3 core concepts which are systematically reinforced as the students increase in their knowledge of the subject. From the University of Wyoming. (<http://uwacadweb.uwyo.edu/CLAAS/Old%stuff/bigspiral.jpg>).

Suggestions from Final White Paper #2:

“L. Dee Fink, author of *Creating Significant Learning Experiences*, in speaking about the problems of defining “critical thinking” refers to “Robert Sternberg's 'triarchic' view of thinking.” Fink defines Sternberg's approach:

He [Sternberg] sees *thinking* as a general concept and then identifies three distinct subcategories: critical thinking, creative thinking, and practical thinking. My [Fink] own translation of this view makes the following distinction among these three kinds of thinking. *Critical thinking*, the term invoked most widely in higher education, has a specific meaning in Sternberg's triarchic view. Here it refers to the process of analyzing and evaluating something; hence criteria play an especially important role. *Creative thinking* occurs when one imagines and creates a new idea, design, or product; in these instances, novelty and 'fit with the context' play a key role. *Practical thinking* occurs when a person is learning how to use and apply something, as when trying to solve a problem or make a decision. The product of this kind of thinking is a solution to a decision, and the effectiveness of the solution or decision is paramount. The use of case studies in business schools is a good example of promoting practical thinking; students are generally learning how to solve problems and make decisions. (39-40)”

Developing Institutional Goals for Trevecca's QEP (Undergrad Research & Creative Endeavors)

Suggestions from Final White Paper #3:

“The initiative consists of five goals: (1) contribute wide-spread coordination and administrative support to existing and future research endeavors, (2) promote an interest in research at the freshman and sophomore levels, (3) champion grant-writing efforts and corporate support for faculty/student research, (4) advocate recognition and compensation for both students and faculty, and (5) develop additional means for sharing or publishing the student research.”

Suggestions from Final White Paper #1 (Not exactly SLOs but possibly institutional goals?)

“Conducting research can help faculty to stay up to date and provides them with current examples to use in lecture courses (4).

“They (*student researchers*) also exhibit higher levels of self-confidence and independence”

“... studies indicate that students who do not conduct research will still benefit from having these students in the classroom and in peer-tutoring situations such as those provided at the CLCS and during LEAP (*i.e., benefits larger academic climate*)”