

Chapter 4

The Erosion of Critical Thinking Development in Post-Secondary Education: The Need to Return to Liberal Education

Michael Robert Hepner
St. Louis Community College, USA

ABSTRACT

A quick look at virtually any list of college-level learning outcomes will almost certainly uncover the desire to develop critical thinking skills. While prioritizing the development of critical thinking skills on campuses nationwide is a noble cause, issues quickly arise because the definition of critical thinking varies widely amongst the different disciplines, so this chapter provides a history of the idea of critical thinking in higher education, as well as various critical thinking development strategies and assessment instruments. This chapter also outlines the need for the academe to move from simply mentioning the development of critical thinking skills in various institutional documents to prioritizing such skills through the return of liberal education.

INTRODUCTION

The history of critical thinking encompasses many important areas in the history of higher education and post-secondary theory, and, while each area can certainly stand on its own, this chapter presents an amalgamated perspective. Unfortunately, for all of the research into the development of critical thinking skills in post-secondary education, little consensus has been reached amongst the disciplines on what exactly constitutes critical

thinking, much to the detriment of college students, graduate schools and employers. True development of critical thinking skills has slowly eroded from the post-secondary landscape; and while this chapter covers some of the issues involved in the development of such skills, it is in no way an exhaustive list, but instead it highlights some of the most pertinent issues in higher education today and provides a platform from which improvements in the development of critical thinking skills in higher education can be made.

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BACKGROUND

The Slow Erosion of Critical Thinking Skills in American Undergraduate Education

A brief examination of college mission statements almost always reveals the goal of improving undergraduate students' critical thinking skills. In fact, according to former Harvard University President Derek Bok (2006), various "nationwide polls have found that more than 90 percent of faculty members in the United States consider it (critical thinking) the most important purpose of undergraduate education" (pp. 67 – 68). Such a goal is admirable as most employers and highly regarded graduate schools seek evidence of solid critical thinking skills in potential employees and students (Kavanagh & Drennan, 2008; Saavedra & Saavedra, 2011; Yeh, 2001).

Post-secondary education in America was originally patterned after the offerings of the medieval university, a pattern that persisted with great success since its creation around the year 1200 in Paris, Oxford, and Bologna. The medieval university curriculum was bi-level in nature and centered on the *trivium* (grammar, rhetoric, and logic) and *quadrivium* (arithmetic, geometry, astronomy, and music). All students were required to take the same courses to meet graduation requirements. At the medieval university, students explored higher-order skills, known as majors today, only during graduate studies, which were then limited to medicine, theology, and law. In explaining his Idea of a University, which is modeled after the medieval university, Newman (1852) posited that liberal education should not be contrasted with the word 'useful', as is commonly done; instead, he determined that cultivating the intellect is an end distinct and sufficient in itself. Newman posited that a child's business when he or she goes to school is to learn and store up facts and that the child's intellect is little more than a receptacle for storage. However, upon passing

from school to the university, students are moving from storing intellect to cultivating knowledge the development of critical thinking skills, which for Newman is the "indispensable condition of expansion or enlightenment of the mind" (p. 130).

A pivotal point in the history of higher education was when Harvard University instituted the nation's first undergraduate elective system in 1900 after a proposal published by then-president Charles Eliot (1899) in the *Atlantic Monthly*. Dr. Eliot had studied the elective-based system in Europe and pushed for its adoption in the United States. Arum and Roksa (2011) note that the effects of Dr. Eliot's decision to move to an elective-based system are being felt today as expressed by the comments of former Harvard University President Derek Bok (2006) in which he pointed out that "many students graduate college today without being able to write well enough to satisfy their employers, reason clearly or perform competently in analyzing complex, non-technical problems" (p. 3). Dr. Bok's comments are supported by various datasets that have shown a slow erosion of American undergraduate critical thinking skills.

EROSION OF CRITICAL THINKING SKILLS

Granting college degrees to students with minimal critical thinking skills only dilutes the worth of the degree and downgrades the overall need for higher education as illustrated by Halpern (2007). Halpern notes that undergraduate students are able to *earn* (emphasis added) a college degree without making any gains in their critical thinking ability by asking her reader to consider a developmental psychology course that may be found at almost any post-secondary institution in the United States. The professor of such a class could ask the students to list each stage of Piaget's theory of cognitive development, including the age range for each stage and an example of a cognitive task that somebody within that age range should be able

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