Critical thinking can be thought of as applying, analyzing, synthesizing, and/or evaluating information generated by observation or experience in order to guide a decision for action (Snyder & Snyder, 2008). The need to encourage critical thinking among students is an ongoing discussion in higher education. However, there is often debate as to how critical thinking should be taught in the curriculum. Some faculty contend that critical thinking should be taught in a single course. On the other hand, some faculty believe that critical thinking should be taught and reinforced throughout the curriculum.

There is not much debate that critical thinking is a learned skill. However, this is a skill that needs to be learned, practiced and continually integrated throughout the curriculum through student engagement and active learning (Snyder & Snyder, 2008). Faculty should not assume that critical thinking skills taught in a stand-alone course will transfer to every discipline. Critical thinking skills needed for a history course may be very different than those needed for a biology course (Yildirim, Ozkahraman, Karabudak, 2011). Due to the fact that each discipline has its own particular logic, training for one discipline does not always transfer to another (Yildirim, Ozkahraman, Karabudak, 2011). Therefore, it is imperative that faculty within each discipline actively engage students and provide opportunities to transfer what is learned in the classroom to real world settings throughout the course of the college curriculum.

On the other hand, are we not leaving it to chance that students will learn critical thinking skills if we spread out the responsibility to each course? Diffusion of responsibility could lead to each instructor thinking that someone else will cover this and bypass necessary activities or assessment in class to help students learn critical thinking skills.

The advantage of having a course dedicated to developing critical thinking skills is that in structuring such a course the instructor can really focus on addressing crucial modes of thinking rather than fact-based content. In addition, since critical thinking skills are applicable in many courses, their transportability makes the course more valuable – in business, we would talk about higher return on investment. Faculty may now feel that they are constrained by the need to cover massive quantities of fact-based content in order to prepare students for the next course sequence or to convey a basic knowledge of the subject matter. In such a situation, the development of students’ critical thinking skills is likely to be severely compromised.

So, which approach works better? We are not claiming one approach works better than the other. Each has its pros and cons as stated above. Ideally, all courses should tap on students’ critical thinking skills, but if we are not currently achieving our objectives, then we have no choice but to add a specialized course, or each faculty has to rethink how he/she designs and delivers the course so that critical thinking skills will be learned by our students.


Steve Newman’s interest in mathematics changed dramatically in 1997 when he became involved in curriculum alignment issues in mathematics resulting from the gaps between the mathematics learned in high school and the mathematics expected in college. He, along with several of his colleagues, worked with local high school mathematics teachers to identify and correct these gaps, sending the results and recommendations from their meetings to state education officials with the enthusiastic support from the Northern Kentucky Council of Partners, a local P-16 education group. With support from the Council, they began a local early mathematics testing program in 1998 that became the statewide Kentucky Early Mathematics Testing Program (KEMTP) in 2001 as a result of a bill passed unanimously by the 2000 General Assembly.

The purpose of the KEMTP test is to give high school sophomores and juniors a realistic assessment of their mathematical preparation for college early enough so they can take corrective action in high school to insure that they are prepared for college mathematics courses. Steve has served as director of the program since its inception. His involvement with the KEMTP has led to other opportunities to work on curriculum alignment issues in mathematics at the state and the national level.

Steve has made important contributions to the American Diploma Project (ADP) benchmarks in mathematics as a member of the national panel that constructed them, to the Kentucky college readiness standards and placement policy as a member of Mathematics Postsecondary Placement Policy Group convened by the Kentucky Council on Postsecondary Education, and to the Core Content for Assessment in high school mathematics as a member of the Commissioner Task Force convened by the Kentucky Department of Education.

I am currently in my 42nd year of teaching mathematics at Northern Kentucky University. I have enjoyed each and every year and I am thankful to NKU for providing me this opportunity.

The knowledge, skills and credibility developed through years of teaching were essential for the educational outreach activities in which I became involved beginning in 1997.

My concern about the mathematical preparation of in-coming college students led to this involvement. I helped convene groups of high school and college mathematics teachers to discuss curriculum alignment and college readiness issues. I wrote numerous papers on these issues and sent them to education leaders and policy makers. I collaborated with colleagues at the University of Kentucky and the college mathematics community statewide to develop free online mathematics assessments for high school students, first through the Kentucky Early Mathematics Testing Program and later through Kentucky Online Testing (KYOTE).

The KYOTE placement exams in mathematics, reading and writing have become an integral part of Kentucky’s college and career readiness program. High school seniors who do not reach benchmark in their junior year on the ACT math, reading or English exam take a transitional course in their senior year followed by a KYOTE or COMPASS exam to determine college readiness. Students who pass are guaranteed placement into credit bearing courses in that area without need of remediation at any public college or university in Kentucky.

This model was first piloted in 2008 using KYOTE testing in mathematics through an agreement between NKU and Northern Kentucky high schools. It has become an extraordinarily successful statewide program. The college or career readiness rate of Kentucky high school graduates has risen from 34% in 2010 to 54% in 2013 in part because of this model. In 2013, for example, 26% of Kentucky high school graduates became college or career ready by passing at least one KYOTE or COMPASS exam.

I am gratified that so many Kentucky high school graduates have become college ready as a result of this program and that so many more will do so in the future.
TECHNOLOGY TIPS

Simplicity. Beauty. Fun. How many of those apply to the slideshows you create for your classes? For your professional conferences? Your program/department/college meetings? The gang at Haiku Deck (www.haikudeck.com) offers a free app that will help you get your message across in ways, shapes, and forms that will help you connect to your audience more clearly and more effectively. To see the power of a Haiku Deck in action, check out the 10 Tips To Transform Your Presentations slideshow at http://shar.es/DKb6e

TEACHING TIPS

If you teach online, you’ve probably noticed that there are a variety of differences between the online environment and a face-to-face one. One major difference is social presence. While social presence isn’t automatic in the face-to-face classroom, it requires quite a bit more forethought in an online environment. Here are some ways you can increase your social presence in your online class. 1. Let your students see and hear you. Create videos (introduction/welcome videos, lectures) or enhance your class with audio (weekly voice announcements, voice ‘discussion’ boards, audio feedback on assignments). 2. Let your personality show. One professor shares images, motivational quotes, and jokes throughout the semester. Post articles that you think they will find interesting; do something that shows that you are ‘there’ and didn’t just turn the class on auto-pilot.

NKU’s own Megan Downing’s doctoral research was on social presence, and her findings indicated that instructor’s behavior such as feedback, availability, timely communication, course design, personal contact and personal/complimentary communication led students to perceive them as being more authentic, validating and reinforcing. For more on social presence in the online classroom, check out her research: http://gradworks.umi.com/35/12/3512815.html

STUDENT SPOTLIGHT

Human Services Senior, Angelo Wheeler, Reflects on His NKU Experience

“College days swiftly pass imbued with memories fond” –Alpha Phi Alpha Fraternity, Inc.

Hello, my name is Angelo Wheeler, and I am a senior graduating December 14, 2013. College was not a place that I imagined myself to be immediately following high school, but fortunately for me, I seized the opportunity to go and I chose NKU. I grew up in the suburbs of Trotwood, OH just outside of Dayton, OH. I am an Alumni of Trotwood Madison High school Class of 2008. I attended NKU for a Multicultural visit in the spring of 2008, and I fell in love with NKU. As I began my journey as a student at NKU, I immediately connected with people on campus and built my networks through Anointed Voices Gospel Ministries, Student Support Services, NKLI, Leadership Mentors, and Black United Students.

Through my continuous involvement each year, I gained skills and knowledge which has prepared me to serve in executive leadership positions. I have been privileged to be a member and leader of some distinguished organizations on campus, such as Alpha Phi Alpha Fraternity, Inc., the Counseling & Human Services Student Organization where I served as President from 2011 to 2013, and Phi Sigma Pi National Co-ed Honor’s Fraternity where I currently serve as Social Chair. I have enjoyed my experience as a Student Ambassador for the College of Education & Human Services, and the opportunity to sit on the Advisory Board for the Department of Counseling & Human Services was rewarding and educational.

Each year as a student at NKU, I strived to do better than the year before, and I can truly say that hard work pays off. NKU prepares its students to be top professionals and paraprofessionals throughout their different careers and vocational placements. NKU provided me with rigorous curriculum, small class sizes, empathetic professors, involvement opportunities, and a litany of leadership initiatives. I am blessed to be leaving NKU with a solid educational background, a firmly established professional reputation, and a 3.3 cumulative GPA. I feel prepared to take on the world as I progress towards obtaining my Master’s Degree and Licensure in Clinical Mental Health Counseling! GO NORSE!!!