



Why I've Stopped Teaching

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I can't remember when it happened; I just know that it did. I changed vocations in 2003, becoming a full-time academic after being president of a heat treating company in Ohio. I had long dreamed of being a college professor and imagined I'd be joining a collegial community where faculty would help each other improve as teachers. But that didn't happen. Instead, I discovered that professors are just too busy teaching to help one another become better teachers. So I turned to the literature. I've read a treasure trove of articles, books, and websites that deal with "teaching tips" and "faculty development." Some encouraged me; others left me feeling as though I were a mechanic trying to find the right tools to fix my car. And there were so many things to remember! What do I do to encourage discussion in my classroom? How do I get my students to do their assigned readings? Why doesn't group work ever seem to be profitable to the students? The more I read, the more questions I had. I had almost resigned myself to a numbing journey that would only get more tedious and strained as the semesters rolled by. But then something happened.

I think it began when I started requiring each of my students to meet with me every semester for a brief one-on-one meeting. My goal in spending time with students individually was to encourage them and to learn more about how each of them approached learning. I never thought this would lead to much of anything else. But it did.

As I met with my students (some more

than once), I began to love each one of them with something akin to agape love. The Greek word *agape* is often translated as "love" in the New Testament. The essence of agape love is self-sacrifice. Agape does not refer to romantic or sexual love. Nor is it equated with close friendship or brotherly love (the Greek word *philia* does that). This love for each student started affecting my attitudes, beliefs, and behaviors and, in particular, the "sacrifices" I make on behalf of students.

For example, my attitude has changed toward students not performing well in my class. I used to think poorly of them and be irritated by their neglect of learning. Now I want to understand why they are not doing well. What can I do to help? Before this, I focused primarily on the "good" students—the ones who met my standards of performance. I taught for them and rather ignored the rest.

My attitude about being in class has also changed—I look forward to being there. I am actually disappointed when a student is absent. I wonder if my students don't sense this change and feel more motivated to attend class, because attendance in my classes is at an all-time high. I work hard to make each class as enjoyable as it can be. Yes, we have work to do and we do the work. But each student is counting on me to make the learning journey as pleasant as possible. Believe it or not, even my attitude toward grading has improved. I often tell my students, "I teach for free; they pay me to grade." But now I see each paper, each assignment, each project as an opportunity to personally help a student improve. I now approach those stacks of papers with more consideration for the individual stu-

dent than I've ever felt before.

This agape love for each student has diminished some of the biases I used to bring to class with me. Now I work to accept each student right where he or she is at the moment. And those moments change during the semester. Sometimes I think I'm at my best when a student is at his worst. To come alongside that student, to listen, to encourage, to challenge—all with the overarching motivation of loving that student—what a blessing to be present and to see the possibility of teaching during those times.

So here I am in another semester planning for tomorrow's classes as well as for those in the next semester. There's always so much to do. I'm still reading the literature on teaching and learning. But now I see this and all other teaching tasks as a means to a larger and more important end. It's funny though; I'm enjoying these tasks more now that I've stopped teaching and started loving. 🌱

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- Write with the understanding that your audience includes faculty in a wide variety of disciplines and in a number of different institutional settings; i.e., what you describe must be relevant to a significant proportion of our audience.
- Write directly to the audience, remembering that this is a newsLETTER.
- Keep the article short; generally between 2 and 3 double-spaced pages.
- If you'd like some initial feedback on a topic you're considering, you're welcome to share it electronically with the editor.

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Online Homework Makes a Difference

Online homework has great appeal for instructors, especially those teaching large courses. By using online assignments, instructors don't have to collect, grade, and promptly return large quantities of homework assignments. Online programs provide instructors with feedback on student performance that can be used to modify the presentation of material in class. Online homework is also beneficial to students. They get feedback promptly, even more promptly than that provided by very conscientious instructors. Online homework can also be designed so that it allows students to work on areas that frequently cause trouble and/or on areas where the individual student is having difficulty.

Despite these beneficial design features, there is a need to document quantitatively that completion of online homework positively impacts student achievement. Some work in this area has already been done, and somewhat surprisingly, the results to date are mixed. Some studies reported a positive impact. In some studies, the correlations were weak, and in others online homework had no impact on exam scores. "The lack of consensus on the effectiveness of online homework highlights the need for further investigations." (p. 71)

This research team decided to go with an online homework system that had showed better student performance than text-based homework in previous research. "For our study, we examined whether the previously reported learning gains for this online homework system were an isolated instance of success, specific to an instructor, or whether the system had the same efficacy when taught by multiple instructors over multiple years." (p. 72) To answer that question, researchers collected data from 13 sections of the same course, enrolling 3,806 students and taught by five different instructors over a six-year period.

The course was the first term of a year-long chemistry sequence. Each course was taught using the traditional lecture-discussion format. Individual instructors did

make course-related decisions. "We designed the study to examine whether there was a correlation between success and the use of this online homework in different settings in which the instructors were free to make all the teaching decisions." (p. 72) Instructors did have to agree to use the online homework consistently across the course sections.

"The study revealed that the online homework system provided an overall benefit that promoted student learning in large-scale introductory science instruction." (p. 77) Completion of the homework led to higher scores on the finals. Even when the researchers adjusted for students' level of preparation for class, "the online homework substantially influenced exam performance." (p. 70)

Students also noted the value of the homework. In response to a survey question that asked how much each of several aspects of the course helped their learning, they rated the online homework problems in improving their understanding of course material a 3.55 (SD 0.91) out of 5 points possible. In a summary of the student assessments, the researchers write, "Overall, students appreciated online homework most when it was easy to use, carefully planned and integrated seamlessly with course material, and supported by the instructors and teaching assistants." (p. 77) Among a number of recommendations made for implementing online homework across multiple sections with different instructors, they point out the importance of faculty and teaching assistant attitudes toward online homework. "If the instructors and teaching assistants enthusiastically embraced the approach, integrating the assignments with their course materials, their students embraced it too." (p. 76)

Reference: Arasasinghama, R. D., Martorell, I., and McIntire, T. M. (2011). Online homework and student achievement in a large enrollment introductory science course. *Journal of College Science Teaching*, 40 (6), 70-79. 🌱

Humor in the Classroom: 40 Years of Research

You have to admire scholars willing to look at 40 years of research on any topic, and this particular review is useful to faculty interested in understanding the role of humor in education. It starts with definitions, functions, and theories of humor. It identifies a wide range of different types of humor. It reviews empirical findings, including the all-important question of whether using humor helps students learn. And finally, this 30-page review concludes with concrete advice and suggestions for future research. It's one of those articles that belong in even modest instructional libraries—imagine having to track down the better-than-100 references in the bibliography.

Humor in educational settings serves a variety of positive functions beyond simply making people laugh. Humor builds group (as in class) cohesion. People respond more positively to each other when humor is present. It brings them together. Humor can facilitate cohesion by softening criticism. Research also establishes that humor helps individuals cope with stress. It relaxes them. But not all the functions of humor are positive. If humor is used divisively or to disparage others, it weakens group cohesion. Humor has negative impacts when it is used as a means of control. For example, given the power dynamic in the classroom, it is highly inappropriate for instructors to target students by making fun of their ignorance or beliefs.

There are many different types of humor that have been identified and explored in research. Among those listed in a comprehensive table in the article are humor related to class material, funny stories (hopefully related to the content), humorous comments, self-disparaging humor, unplanned humor (spontaneous, unintentional), jokes, riddles, puns, funny props, and visual illustrations. Humor related to course material, funny stories, and humorous comments are almost always appropriate. Other kinds of humor are appropriate depending on the context. And some kinds of humor are never appropriate, such humor that manipu-

lates, denigrates, ridicules, or mocks others and offensive humor that is racially or sexually based.

Research has documented that the use of humor can benefit instructors in a couple of important ways. For example, the review lists five studies reporting positive connections between the use of humor and higher student evaluations. Conversely, overuse of humor and sarcasm has been related to lower evaluations. Nine studies document a positive relationship between the use of humor and an instructor's credibility. The opposite has also been verified. Using too much humor, negative and aggressive humor, and humor disparaging to students damages credibility.

Believe it or not, there has been considerable research (11 studies referenced in this review) on the effect of including some humorous material on exams. Does the presence of humorous material improve exam scores? Very little evidence supports positive effects from humorous material. Humorous material does not have a negative impact on scores; in most of the studies, it had no measurable impact.

But the most important question is whether using humor promotes student learning, and here the research results are quite mixed. The article highlights findings on both sides, and its authors conclude, "The conflicting findings regarding the effects of humorous communication on information acquisition and recall make it difficult to form unequivocal conclusions regarding the relationship between humor and learning." (p. 132) They identify some problems with the research and the difficulty of finding appropriate measures that link humor and learning. And finally, they use examples to illustrate the very disparate methods that have been used in studies addressing the humor-learning question.

As for the advice offered educators based on the review, the researchers begin by suggesting that teachers use humor that fits comfortably with who they are and how they teach. They point out that

humor is not a necessary ingredient of effective instruction and that few things are worse than people trying to be funny when they aren't. Humor used in the classroom should be like humor used elsewhere—if that means telling jokes, then educationally appropriate jokes should be used in class; if the humor is dry, let it be dry in class; if it's self-deprecating, then use that in class. They suggest if an instructor doesn't use humor but would like to accrue its benefits in class, the instructor should use the humor of others—by sharing cartoons, comics, or video clips.

Second, they reiterate the findings that humor is related to positive perceptions of the instructor and the learning environment and advise again against the use of humor that is negative or hostile. "Teachers should utilize humor that laughs *with* students rather than *at* them." (p. 136)

Humor also needs to be age appropriate. References to old TV programs and movies are likely unknown to students, and that makes it difficult to explain the humor they contain. If the older example is a favorite, it's a better bet to show a clip than to try to describe what happened and why it's funny.

Finally, if the goal is to use humor to increase learning and retention of course material, then use the humor to illustrate a concept just taught. This way, the humor helps students remember the material, and material can't be learned unless it is remembered. And one thing about humor and learning is well-supported by the research: Humor positively affects levels of attention and interest. It's a way to keep students engaged and involved with the course material. So if the concept is an important one, consider incorporating some humor.

Reference: Banas, J. A., Dunbar, N., Rodriguez, D., and Liu, S. (2011). A review of humor in education settings: Four decades of research. *Communication Education*, 60 (1), 115-144. 🌿

Assignments That Promote Critical Thinking

Teaching students to think critically has long been a goal of education. Some, like the authors of the article highlighted here, think it's a goal whose importance has increased. When today's students graduate, they "must fend for themselves in an information environment characterized by a fragmented media establishment, blurb-driven news coverage, and an increasingly polarized political system. Given the normative bias, questionable logic, and contorted facts that people face these days, it is essential that students learn to discern and evaluate different types of information." (p. 619)

The authors follow with another important point. Advice on assignments that promote critical thinking is pretty generic. Concrete examples that have been used in the classroom and assessed for their effectiveness are not commonly available. And one goal of this article is to remedy that deficiency.

The article is a bit more discipline-specific than those customarily highlighted in this newsletter, but the assignment suggestions would work in other fields and the article has great value as a model.

If one aspect of critical thinking is questioning the evidence presented in support of a claim, these authors maintain that students need to be able to differentiate between *factual statements* (those that make concrete assertions that can be verified), *normative statements*

(which use value-based ideas, either good or bad), *interpretive statements* (which use textual materials to establish what an author means), and *causal statements* (which make cause-effect arguments). After presenting material on evidence, offering examples, and giving students a chance to practice recognizing different statements, these authors give their students a quiz that contains samples of each of these statements. They usually devote an entire period to going over the quiz, as it generates much discussion. If students effectively argue that a particular statement might belong to another category, they are given some extra credit.

To learn the difference between relevant and irrelevant facts, students come to class with two double-spaced copies of a paper due that day. Before submitting the paper, they are instructed to go through it and identify each statement as one of the four described in the paragraph above. "If the paper assignment is to make and support a causal claim, student submissions should propose causal arguments and use relevant facts and logic to provide supporting evidence." (p. 621) Frequently students find they have made errors. If they identify them, they can earn back some of the points they have lost for making them. The authors note that after this activity, student performance on subsequent papers improves significantly.

To help students understand how interpretive arguments work, teachers

have them complete an assigned reading and then "write two logically distinct but plausible interpretations of a particular quotation that they select from the text." (p. 621) In class they spend time in groups discussing their interpretations, offering each other feedback. Each group then presents the best pair of competing interpretations to the rest of the class for more discussion and feedback.

Other assignments are presented in the article, along with specific recommendations as to the political science content used in them. They are not relevant to those outside the discipline, but the authors make one final point that is extremely relevant. Faculty do not share assignment designs all that frequently, and that is our loss. The various electronic media options expedite this kind of exchange. Assignments carefully designed to accomplish specific goals, like the development of critical-thinking abilities, take time and effort to create. We should be sharing the results with each other. This article illustrates the valuable contribution made by this kind of scholarship.

Reference: Fitzgerald, J. and Baird, V. A. (2011). Taking a step back: Teaching critical thinking by distinguishing appropriate type of evidence. *PS, Political Science and Politics*, (July), 619-624. 🌳

Authentic Assignments: What Are They?

"I've heard several faculty mention the 'I need for authentic assignments ... what are they?' I received that question recently in an email, and it is true that the combination of the two words has come to mean something more than what might be assumed by their association.

One of the best answers to the what-are-they question appears in a classic text—*Understanding by Design*. This is the text that lays out the principles of backward design—meaning you start with

where you want to end and design assignments, activities, courses, and curricula working back from this final destination. Authors Grant Wiggins and Jay McTighe propose that a learning task (be it an assignment or activity) is authentic when it has the following six characteristics:

- It is **realistically contextualized**. Whatever it is you are asking students to do is set in a scenario that replicates or simulates the ways in which students

will be asked for their knowledge or skill in real-world situations.

- **It requires judgment and innovation**. The assignment has students using their knowledge and skills to solve problems that are unstructured. Rather than testing a discrete piece of knowledge, an authentic activity challenges learners to figure out the nature of the problem as well as a possible solution.

Course Management Software and the Learning Environment

The use of course management software (CMS) programs is now widespread in higher education. This technology allows faculty to upload various course materials, including the syllabus, PowerPoint slides, readings, and Web links. Faculty can use the software to post announcements and reminders. Communication can occur one to one or in groups, synchronously or asynchronously via email, discussion boards, or virtual classrooms. Students can manage their own discussions via a variety of mechanisms. Faculty can design online learning activities and use the software for quizzing and other forms of testing. Electronic grade-book features give students access to their grades during the course so that they know how they're doing in the class.

Two marketing faculty wanted to know whether students felt that the inte-

gration of technology into the classroom enhanced learning. To answer that question, they asked 195 upper-division marketing majors how often their teachers used 14 features of the Blackboard CMS program. They also asked whether students liked these tools. Most interestingly they asked students to rate the well-known Seven Principles of Good Practice developed by Chickering and Gamson in terms of their importance and then to rate how well Blackboard accomplished each of those principles. The researchers wanted to direct "attention toward determining whether technology creates a more effective learning environment." (p. 155)

As for which of Blackboard's tools these students saw their teachers using most often, the highest-rated items included announcements, email, and assignments. And students correspond-

ingly reported that these three features were the ones they used the most and liked the best. Among the least used by teachers were the chat feature, media library, and goals (a feature that allows teachers to communicate learning expectations to students). And likewise these were the features students said they used and liked least.

Students rated the importance of all of the Seven Principles of Good Practice above 5.5 on a seven-point scale. They did not rate how well Blackboard accomplished the principles that highly. The "good practice gives prompt feedback" principle was rated highest in terms of importance by students, at 6.50 (SD 0.90). How well Blackboard enhanced that principle they rated at 4.94 (SD 1.38). Blackboard scored highest on the

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AUTHENTIC ASSIGNMENTS

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- **It asks the student to "do" the subject.** In an authentic assignment students are not reciting, restating, or replicating what has been learned but are using their knowledge as a professional in the field would use it.
- **It replicates key challenging situations in which adults are truly "tested" in the workplace, in civic life, and in personal life.** Most professionals face situations that are "messy." The problems are not like those often seen in classrooms, where the lack of "noise" makes the way to the "right" answer easier to figure out.
- **It assesses the student's ability to efficiently and effectively use a repertoire of knowledge and skills to negotiate a complex and multistage task.** Most test questions ask for isolated pieces of information. But when professionals use knowledge and skills, they don't use bits of information or one skill; they summon a collection of both, which they must integrate and use as a coher-

ent whole. An authentic assignment is not like a drill used in practice but is more like playing the game.

- **It allows appropriate opportunities to rehearse, practice, consult resources, and get feedback on and refine performances and products.** The idea here is that of the apprenticeship model in which learning is based on a perform-feedback-revise-perform cycle. An authentic assignment is one students complete in stages. They get feedback along the way and are expected to make changes as their work continues.

Authentic assignments and activities aren't those quick and easy things we might dream up on the way to class or that appear in the instructor's manual that comes with the text. They must be carefully designed, they take time for students to complete, and they require effort to assess. What makes them worthwhile is the kinds of learning experiences they promote. Students quickly figure out that these assignments are difficult, can't be completed without lots of hard work, and require them to use what

they are learning in situations like those they will encounter after college. Usually that motivates their wholehearted participation in these tasks.

Wiggins and McTighe say that the success of authentic assignments and activities rests on the understanding of two important facts. First, you can't design authentic assignments unless you know how adults use the knowledge and skills that are being taught. And second, you must help students understand how various assignments and activities contribute to the learning process. Not every assignment can be an authentic one. It's the same for the athlete or musician who must do some practice routines that aren't fun and may seem pointless. They, too, are part of the preparation for performance.

Reference: Wiggins, G. and McTighe, G. *Understanding by Design*. Expanded 2nd Ed. Alexandria, VA: Association for Supervision and Curriculum Development, 2006.

Writing Better Teaching Philosophy Statements

Teaching philosophy statements are now prepared for a variety of reasons: as part of a job application process; to be included in a promotion and tenure dossier; for a teaching award; or to foster reflection about how and why you teach. Regardless of purpose, the goal ought to be preparation of statements that reveal those beliefs and practices characteristic of an individual teacher. Writing teaching philosophy statements that accurately describe the instructional self isn't easy, given that so many of us begin teaching careers with little training and continue them with episodic professional development. A set of resources can do much to assist the process and an impressive collection appears in the article referenced below.

The article cites evidence that documents the increasingly widespread use of these statements. One study referenced reports that in 2002 10 percent of 1,300 academic job descriptions required teaching philosophy statements. A 2005 survey of 400 search committee chairs in biology, chemistry, English, history, political science, and psychology found that 54 percent of doctoral institutions and 62 percent of institutions offering only bachelor's degrees reported using teaching philosophy statements at some point during the interview process.

Among resources included in the article are summaries of seven websites that contain a range of materials on teaching philosophy statements, including definitions, suggested formats, writing exercises, sample statements, and rubrics that can be used to assess them. It also contains a list of questions that can be answered when writing about learning goals, teaching methods, assessment of student learning, and assessment of teaching.

Several writing exercises are proposed that would not only help candidates prepare statements that might stand out, but that are wonderful ways to deepen individual reflection about teaching and learning. For example, "Think about a moment in your classroom when you and the students were having a great time. Write about that 'great moment' using the fol-

lowing series of questions: What was the topic and activity during which this great moment happened? What was the goal of the activity? How did you structure the activity? What did students do during the activity? How could you demonstrate that the activity resulted in significant student learning? How does this great moment exemplify what you value about your discipline and your personal and instructional style?" (p. 140) This is followed by the suggestion that you write about a not-so-great moment, responding to a similar set of prompts. Or you might start with a "story" that "refers to a pivotal moment, either in your own learning or in your teaching." (p. 140) Finally, there's a prompt that asks you to imagine that you are being interviewed for a magazine article about effective teachers. Here are some of the questions you can expect to be asked: "What is a 'personal best' achievement for you as a teacher during the past year? What of your worst qualities as a teacher would you throw away? If you wrote a book about teaching, what would the title be?" (p. 141)

They also identify four areas where most teaching philosophy statements could be improved. "Many early drafts of teaching philosophy statements **lack concrete evidence of student learning and assessments of teaching.**" (p. 142, bold added) Here writers need to either include or write about those classroom artifacts and evidence that constitute proof of learning and good teaching. For new teachers or teachers without much experience, it can be challenging to write about the **breadth and depth of teaching experience.** But if different courses and different student populations have been taught, those should be described. And whatever the teaching experience, writers can explain how an experience in one instructional setting would inform what they would do in a different setting. The authors also note that early drafts of teaching philosophy statements tend to be rather generic. They read as though they could have been written by any teacher. They contain statements where the teach-

ers indicate that they aspire to develop critical-thinking skills or plan to use active learning. "Careful consideration of vague terms not only motivates writers to remove jargon and buzzwords but also helps them balance **philosophy and methodology** in their teaching philosophy statements." (p. 142) And finally, statements often do not effectively **value teaching and learning.** They make bland or empty statements that readers have heard and read many times before. "I am passionate about students' learning." "To help writers express their enthusiasm for both their discipline and sharing it with others, we ask them about their own pathways as learners and subsequently as teachers." (p. 142)

If you work with those preparing teaching philosophy statements or if deepening and enlarging yours would benefit you and better impress readers of your statement, this article contains a first-rate collection of resources.

Reference: Kearns, K. D. and Sullivan, C. S. (2011). Resources and practices to help graduate students and postdoctoral fellows write statements of teaching philosophy. *Advances in Physiology Education*, 35 (1), 136-145. 🌱

Maryellen Weimer Scholarly Work on Teaching and Learning Award

Magna Publications and *The Teaching Professor* are seeking nominations for the Maryellen Weimer Scholarly Work on Teaching and Learning Award, which recognizes outstanding scholarly contributions with the potential to advance college-level teaching and learning practices. Author(s) of the winning article will be recognized at the 2012 *Teaching Professor* Conference, June 1-3, 2012 in Washington D.C. The award includes a \$1,000 stipend.

See <http://www.teachingprofessor.com/conference/teaching-and-learning-award> for nomination guidelines.

Enhancing Critical Reflection with Educational Networking

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Critical reflection in a service-learning course can take a variety of forms, including individual and group presentations, written assignments, and asynchronous discussions. In the past I had students write individual formal reflection papers, but I was the only one who read about the students' service-learning experiences and connections to course content. What they were learning needed to be shared with others. As a consequence I've started using educational networking to enhance the critical reflection my students are doing about their service-learning experiences in the course.

The importance of critical reflection when using service-learning is widely recognized in the literature. Among the learning goals promoted by service-learning are those related to personal growth, civic learning, and academic enhancement. Learning in these areas is enhanced when students think and write about their service-learning experiences. Additionally, critical reflection helps students gain a clearer understanding of the course material.

To help students begin the reflection process, I have them document their initial service-learning experiences in an educational networking site. Educational networking allows for ongoing reflection about their service-learning experiences. It also provides opportunities for students to share what they are learning and to make emotional connections with classmates. Students use their postings as a starting point for their more formal reflection papers.

Select an educational networking site

I have used Edmodo.com and Ning.com in my courses. Ning (www.ning.com) began as a general purpose development platform. In 2007 it

allowed users to start their own networks. Network users can customize profile pages and widgets. A Ning network is similar to sites such as Facebook and My Space. Ning sites can be private or public. Ning in Education offers instructors resources and support (<http://education.ning.com/>). Free or low-cost alternatives include <http://www.grouply.com/> or <http://www.meetup.com/>.

I recently used Edmodo.com in an online Theories of Communication course. Students completed individual service-learning projects and posted their experiences on the site. They were required to post three times during the semester and to embed resources into their blogs on the site. Students also included links to their community partner's website, Youtube videos, and other relevant websites.

Enhance the reflection component

Instructors should develop critical-reflection assignments that require students to connect course content to their service-learning experiences. For example, students in a Communication and Gender course completed service-learning hours at a children's museum. They posted in Ning about their initial experiences and observations. Renee posted: "When I was sitting at the table and the little girl, Katie, kept coming over and being all goofy, I felt myself engaging her with questions about what she was coloring and what her favorite color was. I was using feminine speech by trying to find out more about her and engage her with questions. I didn't know I was doing it, I just thought I was being nice and hoping she was having a good time in the room. I used all kinds of facial expressions like smiling and wide eyes." (Undergraduate student, used with permission). In this posting, Renee offers her observations, self-reflection, and analysis. Because of the use of Ning in this course, her reflections were available to the other stu-

dents in the class. They could compare their experiences and learning with hers.

Pictures are important

Instructors should provide image waivers to students. Just as with social networking, pictures are an important component of educational networking. Students should be required to post pictures from the service site. Students may think the site is like Facebook or MySpace; teachers need to remind them that it is for use in their class. Even so, I encourage my students to post personal pictures of their children, dogs, significant others, and friends, but the pictures need to be professionally appropriate.

Advice for instructors

Instructors may invite others outside of the class to join the site in order to increase awareness about needs within the community. These can include friends, family members, faculty members, and/or the community partner(s). Inviting individuals outside of the class to the site can also be a requirement of the assignment. These sites include an "invite friends" or "invite others" function.

Finally, if possible, I recommend that instructors complete the service-learning project with their students. Instructors should maintain a social presence on the site by also sharing their experiences. I know how busy most instructors are, but participating as an active user on the site and modeling civic engagement has numerous positive outcomes, especially for the students.



Critical Thinking: Definitions and Assessments

Despite almost universal agreement that critical thinking needs to be taught in college, now perhaps more than ever before, there is much less agreement on definitions and dimensions. “Critical thinking can include the thinker’s dispositions and orientations; a range of specific analytical, evaluative, and problem-solving skills; contextual influences; use of multiple perspectives; awareness of one’s own assumptions; capacities for metacognition; or a specific set of thinking processes or tasks.” (p. 127)

Critical thinking is assessed in a variety of ways by individual teachers, but unlike many other college-level learning skills, it is also regularly assessed via a battery of standardized tests such as ACT’s Collegiate Assessment of Academic Proficiency (CAAP), the Collegiate Learning Assessment (CLA), ETS’ Proficiency Profile (PP), and a set of scoring rubrics known as the Valid Assessment of Learning in Undergraduate Education (VALUE).

Stassen, Herrington, and Henderson report on an interesting activity undertaken to answer several questions regarding critical thinking definitions. They wondered what dimensions of critical thinking were emphasized by these standardized tests and measures and whether those dimensions reflected how faculty at their institution defined critical thinking. “This exploratory analysis was intended to help us understand the relevance (or fit) of each of these tools to our faculty’s priorities for students’ critical thinking development.” (p. 135)

They began by having a group of general education instructors generate an operational definition of critical thinking. The definition grew out of faculty responses to the following question and prompt: “What learning behaviors (skills, values, attitudes) do students exhibit that reflect critical thinking? Students demonstrate critical thinking when they ...” (p. 128) Analysis of the instructors’ responses resulted in 12 dimensions of critical thinking: judgment/argument, synthesizing, problem solving, evidence-based

thinking, drawing inferences, perspective taking, suspend judgment, application, metacognition, questioning/skepticism, knowledge/understanding, and discipline-based thinking.

Next they looked at how the four standardized tests defined critical thinking. “To understand the commonalities between the four external sources and our campus’s own critical thinking definition, we used our internal definition as the anchor definition and coded the external sources in relation to the categories present in that internal definition.” (p. 130) A table in the article presents this comparison.

Their analysis shows that “judgment/argument is the predominant component of critical thinking reflected in all of the external assessment options (accounting for between one-half to over three-quarters of all the descriptors associated with critical thinking).” (p. 133) They found “substantial emphasis” on drawing inferences and evidence-based thinking and lesser emphasis on synthesizing, problem solving, and perspective taking. But some aspects of their definition of critical thinking, such as application, suspending judgment, metacognition, and questioning/skepticism, received no emphasis in the standardized assessments. “The results suggest that all three standardized tests address a narrow set of constructs present in the campus definition, with the primary focus on judgment/argument, evidence-based thinking, and drawing inferences.” (p. 135)

This analysis was not a study of the validity of the items on the standardized assessments, but rather an exploration of how the basic construct of critical thinking was defined by the assessment tool. Furthermore, their campus definition was not assumed to be the “correct” definition. The authors note that it wasn’t systematically vetted or compared with the responses of other groups of faculty on their campus or elsewhere, although the list of dimensions identified by these general education instructors is not notably unusual. Despite these limitations, other

benefits derive from this kind analysis. Most notably it generates rich conversations about critical thinking. It helps individual faculty, collections of faculty teaching related courses (in this case general education), and institutions clarify what they mean when they say they are teaching critical-thinking skills.

Reference: Stassen, M. L., Herrington, A., and Henderson, L. Defining Thinking in Higher Education. In Miller, J. E. and Groccia, J. E., eds. *To Improve the Academy*, 30. San Francisco: Jossey-Bass, 2011. 🌱

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“good practice encourages student-faculty contact” principles and lowest on “good practice communicates high expectations.” Second from the bottom for Blackboard was the principle “good practice encourages cooperation among students,” which students also rated as the least important of the seven principles. The difference between the importance of the principle and the Blackboard score was significant for all seven principles.

The researchers do note that course management tools may not be able to address all aspects of the principles or that they may inherently do better with some than others. But they do point out that “technological tools, such as Blackboard, must not be used without thought to the strategic implications of their inclusion in class.” (p. 156) They also recommend that faculty regularly solicit feedback like this from students—which CMS tools are students using, which they find useful, and whether they think those tools are enhancing their overall learning experience in the course.

Reference: McCabe, D. B. and Meuter, M. L. (2011). A student view of technology in the classroom: Does it enhance the Seven Principles of Good Practice in undergraduate education? *Journal of Marketing Education*, 33 (2), 149-159. 🌱