I have found it significant to visualize teaching and learning not as a duality but as a trinity, a grouping of three processes linked as one. This linking seems to best validate the adage "It hasn't been taught until it's been learned." First, learning to learn leads to self-awareness of learning, described as the essential stage of knowing that guides both teacher and learner in mastering relevant content. Second, teachers learn about teaching so that content can be developed into learnable formats. Third, teachers knowingly combine the first two stages to maximize the opportunity for students to learn and develop as learners. As an analogy, visualize these three stages of the teaching-learning trinity as a three-legged stool. Take away any of the stool’s legs and the stool does not stand.

Learn to Learn

If “learning how to learn is life’s most important skill” (as Buzan observed), then teaching others to learn is a teacher’s most important gift. Learning is both a process and an outcome. Understanding learning as a process can enhance the effectiveness of both teacher and learner. Learners who understand learning can knowingly master content. Teachers who understand learning can intentionally pass along knowledge and measure its transfer. Many educational limitations are removed when all those involved understand the process of learning. Seemingly, our higher educational system does not cultivate this tenet but rather expects understanding learning as a process to be acquired through assimilation.

Learn to Teach

L-earning to teach means learning how to produce learning. In this mode, teacher-centered instructional activities like organization, delivery style, classroom presence and clever techniques cede primary focus to learner-centered teaching. Learner-centered teachers develop an informed teaching style that shifts emphasis from teaching to learning. No one universal best teaching practice accomplishes this goal. Asking which teaching technique is best is analogous to asking which tool is best—a hammer, a screwdriver, a knife, or pliers. In teaching, as in carpentry, the selection of tools depends on the task. Thus if we agree that the primary task of teaching is not to teach but to cause learning, then selection of a learning goal should always precede selection of a practice.

Teach to Learn

How can you teach to learn? This phase represents a natural extension of the concepts from the other two segments of the trinity. Knowing how people learn and being armed with an arsenal of methods to advance learning, your content becomes the delivery vehicle. L-earning integrates new knowledge from your discipline (like information, skills, relations, procedures, etc.) into a student’s existing knowledge base in a manner that makes it accessible when applied to future activities. A four-item checklist might guide your first steps in this direction: 1) establish learning goals; 2) create learning environments that achieve these goals; 3) assess outcomes to verify learning; and 4) modify goals as necessary to promote success.

My teaching philosophy contains elements of inspiration, guidance, and challenge. I visualize teaching as more than simply ordering and transferring terms, concepts, relationships, and processes in my discipline. Although mastering this basal phase of learning must precede further learning, it seldom inspires either the good teacher or the good student. I must work to illuminate the analyses and deductions involved in ways that stimulate interest and whet the curiosity of learners to develop their own understanding. I should facilitate this development by encouraging students to look beyond the product of their learning to an understanding of the teaching-learning process.
The Last Class: A Critical Course Component

By Vianne Timmons and Brian D. Wagner, University of Prince Edward Island
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There has been significant and well-deserved attention paid to the first class. This class is critical in setting the tone and expectations of the course. Unfortunately, the same amount of attention has not been paid to the last day of class. To us, this class is as important as the first. It is the class where the professor has an opportunity to celebrate the learning of the students. Unfortunately, this day is usually saved for final exam review, finishing up projects or dealing with logistical details like date, time, and location of the final or where to pick up graded term papers. The course ends with a whimper instead of a bang.

We want to challenge professors to make better use of what this last day affords. We have some suggestions, but the intent of this article is not to prescribe a structure to the last class but rather to encourage faculty to think about how they might still review, if need be, but also how they might use the day to celebrate and reflect with students. It can be helpful to connect the first and last class together. In our first class we have the students fill out expectation cards for the course. Students write out their own expectations and objectives for the course on index cards. In our first class we have the students fill out expectation cards for the course. Students write out their own expectations and objectives for the course on index cards. In our first class we have the students fill out expectation cards for the course. Students write out their own expectations and objectives for the course on index cards. 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Students write out their own expectations and objectives for the course on index cards.

The last class can be structured in many ways. In addition to the review exercise based on expectation cards, we regularly have the students group to review and discuss the course content based on the syllabus. We may have them discuss practice exam questions we provide, or have them develop potential exam questions. It is an interactive class, with the students taking ownership. A review session structured like this can include a time when students share their most significant learning in the course. What they report learning adds another dimension to the review process.

Having students share what they have learned leads naturally to a celebration of that learning. This can be done in many ways. For example, the professor can provide treats, show an inspirational video, play music, or have a guest speaker—perhaps a student who took the course a number of years ago and who can reflect on important “learnings” then and now.

The last class should be one of the most important classes. It is an opportunity to bring closure to the course in a way students will remember. The class can review the course and celebrate learning. What happens on that last day gives professors a unique opportunity to gauge the success of the course. Students can offer useful feedback for the next time this or a related course is taught.

We want our students to use their learning to contribute something to society. They may not remember course content in 20 years, but maybe they will be more critical in their thinking, challenge social norms, be respectful of difference, and influence others to do the same. Parker Palmer writes in The Courage to Teach, “We have to teach each other to take” unless it connects with the inward, living core of our students’ lives, with our students’ inward teaching. (p. 31) We want our “teaching to take”; used effectively, the last class can help us achieve this.
Teaching Awards: A Look at Selection Criteria

One of the staples for the recognition and reward of teaching excellence is the department or, more often, college-wide teaching award. Generally it comes with a stipend (often quite modest, considering how much work truly excellent teaching requires), some sort of plaque and public recognition. Frequently, nominations or letters of support for receipt of the award are solicited from current and former students. Many faculty find these student affirmations as meaningful as the money and public pat on the back.

Surprisingly, or perhaps understandably, given how much teaching has been valued within the academic community, teaching awards have received very little systematic analysis. For example, before the article cited below, no one had looked at the criteria used to determine recipients, what kind of evidence is collected and how that evidence might be judged. In this analysis by Nancy Van Note Chism, a well-known and widely recognized expert on teaching and learning issues, 144 teaching awards associated with 85 institutions located in 33 states were reviewed.

What she found is troubling indeed. “It is somewhat startling to observe that for a little more than half of the awards in the sample, no criteria or only a global statement associating the award with the term ‘teaching excellence’ is stated.” (p. 592) What this means is many awards are being given without having identified any of the characteristics associated with teaching excellence. A couple of justifications are used. One is that teaching excellence is too “ephemeral”—that it simply defies definition. Standing against this perspective is research accumulated since the 1930s that specifically and with some consistency identifies the ingredients or components of effective instruction. Another justification rests on the assumption that the components of teaching excellence are self-evident. They are obvious to all and need no elaboration. The consistency of the research findings may seem to support this view. However, if you sit down a group of faculty unfamiliar with the research and ask them to describe teaching excellence, this justification is just as easily dismissed.

When teaching award criteria are stated, those most frequently used relate to specific characteristics of teaching performance—things such as how well the teacher communicates; whether the instruction is organized; if the teacher employs high standards and has clear goals; and whether the teacher is enthusiastic, uses active learning and encourages students to think. The next two most common criteria relate to student learning—whether teachers are student-centered and motivate students to pursue knowledge. Following this are criteria that assess whether the teacher provides campus leadership for teaching, like working on curriculum development or mentoring new faculty. Only 4 percent of the sample included a criteria related to appreciation for diversity. “The relative absence of emphasis on teaching activities other than classroom performance pervades the awards programs.” (p. 595)

As for evidence collected in support of the candidates’ teaching excellence, more than 90 percent of the awards programs reviewed solicited letters, most commonly from current or former students but also regularly from colleagues and administrators. In 74 percent of the cases, those writing the letters are not given any specific advice as to what they should address. Student evaluations are also commonly used as evidence—in 61 percent of these programs. About half require some documentation from the candidate. About a third of these ask for a statement of teaching philosophy; about 20 percent ask for copies of syllabi or other course materials; and 4 percent request samples of student work.

Chism concluded by looking at the relationship between stated criteria and solicited evidence. She writes, “In looking at the evidence required by teaching awards programs, the most startling observation is its disconnectedness with the criteria. Only two programs that list explicit criteria for the award specifically match these with evidence that would be considered suitable indicators of the criteria.” (p. 599) The example she gives shows why this is a problem. If a criterion relates to organization—proposes that an instructor have well-organized, well-designed courses with clear goals and objectives, relevant assignments, and current textbooks—but then fails to solicit copies of course syllabi or assignments and does not ask reviewers to address this criterion in letters, on what evidence is a decision about organization being made?

At the study’s conclusion are a number of recommendations for the improvement of teaching awards. What Chism discovered about current awards makes these recommendations well worth considering. Should you be sending this article citation to those who administer the award at your institution? There is an irony not to miss here. If teaching awards do not document the excellence they seek to reward, are they not part of the problem instead of a solution?

Learning: The Times, the Ways, and the Places

By Alice Cassidy, University of British Columbia
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I have fond memories of the start of the academic year, whether it was grade school or university. One such memory is bringing home my brand-new textbooks from the university bookstore. I love the feeling of opening up a new book—such promise, such potential. But the truth of the matter was that I never thought I learned much from books assigned in my university courses. It seemed there was either a total disconnect with what happened in class or lab or it was an exact replica. I felt a lot like Sally, Charlie Brown's little sister in the famous Charles Schultz cartoon strip. She's always asking, “Who cares?” Maybe she wanted her teachers to be more explicit about the book's relevance.

So, books aren't the best learning tool for me, at least required texts in courses. But I know they work well for some other folks. This leads me to think about the times, way and places where learning takes place and how different that is for everyone (including faculty and students).

I know that I learn effectively during field trips where the things I want to learn about are all very real to me. The field trip can be an actual one where I'm identifying mint by its square stems or birds by their songs and habits. Or it can be just a trip, like one that takes me to a new city where the questions I ask about buildings result in fascinating lessons about history and architecture.

I also learn well when there's a “need to know,” like when I'm in the kitchen and wanting to learn how to perfectly soft boil an egg. I use a lot of trial and error methods there. Or maybe I'm in the garage and I'm being encouraged to measure and adjust spark plug gaps so that my car engine will once again run smoothly.

I know for sure that I learn well when I get to plan the study myself, asking the research questions and devising the best experimental technique to answer them, and finally presenting the findings as clearly and meaningfully as I can.

Finally, I learn when I'm called upon to apply what I already know in a new way. I make a delicious Chicken Piccata in my kitchen at home. But I learned a lot more about making it when I was required to do so on a tippy single burner in a less than ideal cooking pan while camping on a lovely small island and trying to impress the love of my life.

And these are just the ways I learn. Each of my colleagues would construct a different list. And in working with students, I know that their lists are just as unique. Sometimes they can't yet construct their lists—they still don't know themselves as learners. I think that as teachers we need to find ways to help them with this. It has been my experience that when we find ways to ask this important question, students' answers to “Who cares?” will shed light on the many different times, ways, and places where learning takes place.

This article originally appeared in the Fall 2006 issue of Tapestry, a newsletter of the Centre for Teaching and Academic Growth at the University of British Columbia. It is reprinted here with permission.

Student Engagement: A Different Perspective

The reasons why students need to be involved and engaged when they attend college are well established. Engagement can be the difference between persisting to degree completion and dropping out. Research has sought to identify what makes student involvement more likely. Factors like student-faculty interaction, active and collaborative learning experiences, involvement in extracurricular activities, and residency on campus have all been shown to make a difference.

Stephen Porter doesn't quarrel with any of these findings, but he points out that research has much less frequently analyzed those institutional structures that affect student engagement. The questions of interest to him are paramount to parents (and other payers of educational costs) and of more than passing interest to faculty: Does the small size with increased potential for faculty contact available at small liberal arts colleges justify the higher tuitions they charge? Does the emphasis on research and graduate education at big research universities “come at the expense of undergraduate education?” (p. 522) What about those highly selective colleges—is their pursuit of the absolutely best students justified?

Porter looked for answers to these questions via a variety of different statistical models. These models are explained in detail in the article. They do represent some alternative ways of thinking about and analyzing the relevant factors. Using these methods, Porter did find that “institutional structures do affect student engagement in predictable and substantively significant ways.” (p. 550) Here are some specific examples.

The theory of peer effects argues that “by attending college with high quality students, a student's behavior and academic performance will be higher than if they attended college with lower quality students.” (p. 525) For example, then, students at a highly selective college will...
Participation Blues from the Student Perspective

By Jon Cieniewicz

Participation is an extremely crucial element for learning. It is a proven fact that students learn better and retain more when they are active participants. Learning is an active process and should involve talking.

I do recognize that motivating college students can prove to be a daunting task. Motivating students to actively participate is a subject unto itself; the words “excruciating,” “agonizing,” and “mentally draining” come to mind. Most students seem to operate assuming that as long as the assigned work is completed on time, test scores are deemed acceptable, and attendance is satisfactory, participation is just not that important.

But when participation does not occur in a class, its absence has a chilling effect on efforts to learn, motivation, and one’s general attitude toward that course. Take one of my classes, for example. During each class, the professor briefly outlines the next assignment’s criteria and then explains it in depth throughout the period. If there was an assignment due from the previous class, the teacher asks everyone to take it out. A typical assignment might have been to read a selection in the book and decide on the author’s main points. After reading this material, the instructor might have us select the main points from a list of points and then defend that choice.

Here’s how participation happens in this class. After completing an exercise like the one I’ve just described, the professor asks for a volunteer to start us off and usually the request is followed by dead silence. After about five seconds, one hand goes up and the professor says, “Yes, you.” (His professor does not use student names, and I think this in part accounts for the limited participation. I do not know any of my classmates’ names. We don’t communicate very much with each other). The student provides a very brief response—sometimes not even a complete sentence. With additional prodding from the professor, the reluctant student adds more to the answer. Then the professor asks for someone else to volunteer for the next question and no one responds. Finally, the same student volunteers again. Eventually, maybe four different students answer questions during a given class period. The proverbial saying “It’s like pulling teeth” to get someone to speak certainly applies to this class. The majority of individuals in this class have never answered or asked a question, offered their thoughts or opinions on class assignments, or spoken up about classroom activities.

At the end of this particular class, we got together in small groups to evaluate an essay assignment that we are working on. We exchanged papers, read them, and suggested corrections we thought the paper needed. We were supposed to explain these proposed corrections and why we felt they were necessary. In our group, talking was very limited. At first we all just looked at each other, not saying anything. It was very awkward. Finally someone spoke up and we each took turns, quietly reading our essays to each other and explaining the reasons. You could tell from the silence throughout the room that our group was typical and that there was very little exchange of information going on.

When we finished this group activity, our professor asked if there were any questions. There were none. Class concluded with the instructor remarking that there seemed to have been very little dialogue going on within the groups. We needed to improve that in future classes.

Although students in lower grades can generally be encouraged to participate by simple reward systems like stickers, more recess or homework passes, college students are a much tougher audience. Incentives have to be extremely tantalizing to make them sit up and notice. To help invigorate the lackluster participation of students in my class, I think the instructor needs to offer a grade-related incentive. Students do care about their grades and will do things to improve them. Those students who do already contribute would more than likely pick up their pace, and those students looking for ways to improve their grades would be more inclined to participate. I think the participation problem in this class is so severe that the instructor needs to think outside the box—maybe certificates redeemable for a cup of coffee or some other goody given to those students who participate four times a period. At this point in the semester it may be too late for incentives, but I know for sure that I really hope I don’t have other classes where student participation is this absent and awkward.

Teaching-Learning Trinity

From Page 1

involved. My gift to them will be multiplied into a lifelong tool of far more benefit than the facts of the moment suggest.

Excerpted from: Thien, Steve J. (2003). A teaching-learning trinity: Foundation to my teaching philosophy. Journal of Natural Resources and Life Sciences Education, 32, 87–92. We appreciate the gracious permission that allows us to reprint this excerpt.
Malpractice Insurance for University Professors?

By Daniel J. Klionsky, University of Michigan
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I have a physician friend who was complaining to me about her malpractice insurance. Her policy has to cover her until her patients turn 21. My friend is a pediatrician, and I guess the thinking is that by the time a person turns 21 it should be clear whether or not my doctor friend’s treatment has had negative effects on a patient’s health. I don’t really see how they could link adverse outcomes specifically to my friend’s advice or care, but that’s not what got me really thinking. I have come to the conclusion that those of us who teach, doctors or otherwise, are darn lucky that we don’t have to worry about malpractice insurance—yet.

Imagine being sued by a student because your course did not do an adequate job of preparing them—for an upper-division course, to make an intelligent decision about their health, or for any number of issues they might encounter in the real world. For instance, I can imagine a case like this: “That’s correct, your honor, I received a ‘B’ in biochemistry because the introductory biology course I took from Dr. Dan did not do a good job of preparing me. Now I will not get into medical school, and I am suing for lost future income potential.”

It soon became clear to me that this sort of case might only be the tip of the iceberg. What about this claim: “As you can see, I am overweight, and that is precisely why I have brought charges against Dr. Dan. His class was so boring that I never paid attention. I completely forgot the part of the course where he covered carbohydrates and lipids, and look what it has done to me. My condition will take years off my life, and I want to be compensated. I deserved a better teacher.”

Science examples come to my mind first because that’s my specialty, but I believe this avalanche of lawsuits could easily spread to other subjects: “Yes, counselor, emotional anguish. The poetry course I took did not include Robert Frost. I am certain my fiancée broke up with me because I had never even heard of her favorite poem. I could not analyze or discuss it with her sensibly. She left me. I remain alone and afraid to initiate relationships with other women. I deserve my tuition refunded plus compensation for my pain and suffering!”

It is a frightening thought—teachers being held accountable for the impact they have on their students’ lives. Upon further reflection, though, I have decided that scenarios like these are highly unlikely. Why, you ask? Because in self-defense we teachers might turn around and expect accountability from our students, actually insisting that they take responsibility for their own education and learn the material that is presented in the course. For example, we might demand that they prepare before coming to class, that they actively participate during class, and then study afterwards. No, not likely to happen—the era of malpractice insurance has not yet come to higher education.

Student Engagement

FROM PAGE 4

spend more time studying because they see how much time fellow students devote to studying. Porter’s findings confirm the validity of this theory. “Student outcomes do differ if a student attends Harvard rather than a school with open admissions, and the difference is due to factors other than differences in resources. Peers exert an effect on college students, and we can see that attending school with high ability students will affect how engaged a student is.” (p. 551)

Interestingly, in previous research, institutional size has been shown not to have much of an effect on student engagement. This finding seems counterintuitive: the more people, the less personal contact and the more difficult for students to get connected. Porter proposes the opposite: that large institutions offer more “settings” where connections between faculty and students can occur. Large schools offer more activities and have more events happening on campus, thereby increasing the chances students have to connect with others. However, in this case the findings were the opposite of what Porter predicted. “More selective, smaller schools with low student-faculty ratios have higher levels of engagement, as well as schools classified as baccalaureate institutions.” (p. 543)

In those universities where faculty do research, it is simply a matter of time. Time spent on research is time not spent connecting with students (particularly under-graduates). Here the finding was predicted, although with an interesting twist. “Doctoral programs have negative effect on student engagement, rather than master’s or first-professional programs…. [This] indicates that it is institutional emphasis on research rather than the presence of graduate students that leads to decreased engagement at the undergraduate level.” (p. 552)