

A Collection of gifts



Issue 10 Fall 2011

Great Ideas For Teaching

10.1 In This Issue...

Denise Stephenson

Competition and preparation are the themes of this volume. As a pacifist, I avoid war and all that comes with it. Yet, as **Steve Vail** spells out how battle can be an engaging force for classroom learning, I realize that benefits can be found in the most unlikely of places if we're open and take advantage of opportunities.

Though battle is never mentioned, **Suzie Bailey** also demonstrates the value of competition. In her explanation of a front-loaded, detailed study-guide, she demonstrates one good way to help students focus on important information while diminishing her workload and increasing their engagement. That's definitely a win-win. I also want to celebrate that Suzie reports how she took a Great Idea For Teaching from colleague Jeff Ihara and made it work in her classes. That's what the Collection of GIFTs is all about.

Finally, I, **Denise Stephenson** share my favorite assignment complete with a description of the preparation that makes it work. Not unlike the study-guide, this assignment soars because there are ample opportunities for students to prepare for it. And though it's not competitive, it requires involvement—a value they hold dear.

Farewell

My association with *A Collection of GIFTs* has been a fruitful one. The very first volume, back in Spring 2006, included a GIFT from me as an associate faculty member. My contribution in volume 2 marked my first semester as a full-time faculty member. Then, in Spring 2009 I came on board as co-editor, helping rustle up articles from my colleagues all across campus.

As I flip through my binder, I'm impressed anew with the teaching talent here at MiraCosta. We have articles from all disciplines, from Art

10.1 In This Issue... *Denise Stephenson*

10.2 We Are Spartans! Let Our Students Do Battle! Learning Strategies Which Invoke Our Students' Competitive Spirit *Steve Vail, Automotive Technology*

10.3 Interactive Study Guides *Suzie Bailey, Biological Sciences*

10.4 This I Believe *Denise Stephenson, Writing Center*

Submissions

Submissions are always welcome. There is rolling on-line publication and print distribution during FLEX week.

Please submit work to M/S 9 or dstephenson@miracosta.edu



Teaching
Academy

Editor
Denise Stephenson

Layout & Design
Brandi Blahnik



www.miracosta.edu/StudentServices/WritingCenter

to Automotive Technology, Biology to Business. What's more, many of the articles are cross-disciplinary in their impact, so that I've improved my teaching with techniques from Nursing, History, Communication... the list goes on.

I'm also reminded, as I look through all these great GIFTs, that our MiraCosta community includes a large pool of talented associate faculty who have shared their expertise with us in the form of creative and useful GIFTs.

Now, after several semesters of wheedling our busy faculty into writing up their great ideas

to share, I'm passing the baton of co-editorship. It's a great opportunity to get to know different disciplines and facilitate the flow of ideas... in fact, we'd love to have the new co-editor come from a non-Arts & Letters department. Great Ideas for Teaching come from all over!

Thank you all for your wonderful contributions, and I hope you will enjoy the pieces in this Fall 2011 edition of GIFTs! 🎁

A Collection of gifts



Issue 10 Fall 2011

Great Ideas For Teaching

10.2 We Are Spartans! Let Our Students Do Battle! Learning Strategies Which Invoke Our Students' Competitive Spirit

Steve Vail, Automotive Technology

By nature human beings are generally competitive. Built into our DNA is an instinctive, predisposed tendency to out-perform our neighbors, friends, and even family!

Competitive sports and academic competitions have been around for years, both at the individual and team levels. It is easy to harness team-level competition and utilize it as a vehicle to instill knowledge and brand theory on each participant's hypothalamus. The basic premise is to divide the classroom into thematic sides or groups (usually works best in halves or quarters). Use the relevant subject matter for the week's lesson, or use the overall subject theme(s) relative to the course of study.

For instance, in one of my recent classes, I divided the class in half. The half to my left was the "Muscle Car group," and the half to my right was the "Tuner Car (import car) group." Students who are into muscle cars of the 60s and 70s are every bit as passionate about them as the European/Asian car aficionados! While a theme is not necessary, the classification helps foster competition.

A history course might use the Confederates against the Yankees; a Biology class might use the anti-bodies against the germs, Psychology might use Freud devotees vs. Jungians, etc.

Then you proceed with a pre-selected series of questions or statements, alternating between groups. If a group correctly answers a question, a point is awarded to that group. If the answer is incorrect, the next group is given a chance to answer. If the second group answers correctly, they are awarded a point and earn another question. (Note: Yes or No questions do not work as well because of this.)

The instructor has the option of imposing a time limit on the answer period. Grade points or small prizes can be awarded for the winning team.

Instructors may use these competitions as an alternative means of delivering lecture material, as tools for examination review, or as oral examination criteria.

In reviewing for an exam, draw a line down the center of the class with the same number of students on each side. Then, looking at a copy of the exam, paraphrase the questions one at a time. After the flip of a coin, one side gets the first opportunity to answer (they can talk amongst themselves, but only one may answer the question). If the answer is correct, that side gets a point and a chance to answer the next question. If the answer is incorrect, the other side gets an opportunity to answer and if their answer is correct, the next question, and so on. Keep alternating sides until the question is answered adequately, or give them the correct answer and pose another question.

I have also used team competitions as a vehicle for introducing a topic that builds on prior subject matter. It makes a great lead into new topics when you ask students to iterate previous relative subject matter; you may even sneak in a couple of questions from the new topic to gauge how well they are comprehending material.

Again, you would split the class into two equal halves. Begin by asking questions relative

to the previous chapter's thesis, leading them into the next chapter by crafting your questions to illustrate the progression of the greater topic. For instance, I might use it when trying to teach the evolution of fuel systems (carburetion to electronic fuel injection): students have previously been introduced to carburetors and have some knowledge of them; the answers to my questions would show the correlation between and evolution from carburetors to computer-controlled electronic fuel injection.

Competition can also be used for group oral examination in which students are evaluated on the accuracy of their answers. It is amazing how well students learn from one another during this type of discourse, especially if there is

vocal competition and reward involved! In this exercise, it is important to ensure each student is required to pose an answer. They may still consult their teammates, but each team member must answer at least once. This allows the instructor to evaluate a student's oral communication skills and lends insight into the depth of individual comprehension. Incidentally, some SLO's could even be evaluated using this approach to group oral examinations.

Students can get really pumped up and spirited as the game progresses. Instructors seize opportune moments to elaborate on the answers and mediate discussions. Lessons are imprinted nicely in students' memories this way. Try it! 🎁

A Collection of gifts



Issue 10 Fall 2011

Great Ideas For Teaching

10.3 Interactive Study Guides

Suzie Bailey, Biological Sciences

As a new(ish) full-timer still tweaking and improving and streamlining my courses, I've benefited so much from helpful advice from other instructors. One such tip from Jeff Ihara made such an improvement to my class, I wanted to pass it along.

Study guides are useful for helping students focus on important concepts and vocabulary in content-heavy courses; I provide one for all my classes. However, the utility of a study guide is somewhat limited by the fact that students don't

get feedback on whether they understand the concepts listed in the guide.

To address this, in the past I've also assigned homework sets designed just to assess comprehension. The upside is feedback for the students on whether they "get it," the downside for me is 30 homework sets coming in from three classes

every week, on top of the essays, lab reports and additional analytical assignments I want to devote more time to grading.

Jeff's suggestion addresses both concerns—set up an interactive, more detailed study guide in the form of graded study questions using the discussion board in Blackboard. I tried this out last semester in one class and it was such a hit, I'll be implementing it in all my classes. Here's how it works.

General study guide concepts are replaced with more specific questions (this part takes some work up front), an example is shown in the box. In my BIO204 class we ended up with 320 questions covering all course material. The list of study questions is posted to Blackboard at the beginning of the semester. Over the course of the term, students are randomly assigned questions they are responsible for posting responses to in the

discussion board. Even though all students must be able to answer all 320 questions, they are given one question at a time and ultimately only need to post six responses to the board for grading. Around twenty questions are answered each week.

The discussion board is organized into separate forums for each week and by the deadline for that week's

questions (for me it's Friday at noon), students must post their answer to the forum. As soon

"Old" Study Guide Format

Describe how the components of the electron transport chain and other mitochondrial proteins carry out energy transformations that result in ATP synthesis.

New and Improved Study Guide Questions

- Where do the electrons that are passed to complex I and complex II of the electron transport chain come from directly? From what molecule did they originate?
- What causes electrons to move from one electron transport chain complex to the next? Where do the electrons finally end up?
- What happens to the energy released by the transport of electrons down the electron transport chain? How is this related to the "proton motive force"? How is that term an accurate description of the result of electron transport chain redox reactions?
- What is the direct source of energy for the synthesis of ATP by ATP Synthase? What is the unique catalytic mechanism employed by this enzymatic complex to synthesize ATP?
- Compare and contrast substrate level phosphorylation, oxidative phosphorylation and photophosphorylation as mechanisms of ATP synthesis.

Modified study guide questions assess students' comprehension.

as the deadline passes, unanswered questions become open for other students to “steal” for extra points. If an answer is incomplete or incorrect, other students may post their own correct response and attempt to earn extra points for a best response post with no penalty to the original poster (so there’s no disincentive to try to improve on someone else’s response). Students can post best responses and “steals” for another two days before I lock the forum, grade the responses, and provide feedback for all answers. Incorrect or incomplete answers are flagged and feedback is provided in the form of additional questions designed to steer the student back on track.

The discussion board study guide allowed me to eliminate some of the homework assignments I had been giving and ease a truly counterproductive grading burden I had generated for myself. More importantly though, it was a far more useful study guide, and it was a huge hit with the students! By having very specific questions to answer regarding the material, it more effectively highlights points of confusion, so students have a better sense of their own gaps in understanding. The ability to earn extra points for best responses also forced students to critically assess what other students had posted, thereby

promoting deeper engagement with the material.

I expected the students would find the discussion board format more useful and effective. But some of the benefits I observed were unexpected. For example, I found that attendance at office hours increased dramatically. Apparently students were far more comfortable showing up to office hours saying “I’m having trouble with questions 126 through 130,” rather than “I don’t understand how the electron transport chain works.” The other unanticipated effect was on the classroom dynamic and interaction between students. Having the common set of questions to work on throughout the semester fostered more discussion in the classroom, more interaction between students and the formation of study groups as students worked through the answers to all those questions together. Finally, I hadn’t anticipated how much fun it would be! The ability to “steal” and post best responses introduced a little bit of friendly competition that the students had a great time with. Together, these collateral effects fostered a more positive, engaged atmosphere and better learning environment within the classroom. Truly a great idea; thanks Jeff! ☺

A Collection of gifts



Issue 10 Fall 2011

Great Ideas For Teaching

10.4 This I Believe

Denise Stephenson, Writing Center

The best assignment I've ever created was one I stole: "This I Believe." I'd heard several short pieces read on NPR for this series which originated as a 1950s radio broadcast. The series, then and now, invites individuals to share the values that guide their daily lives. The authors write about all kinds of belief: in themselves, in community, in service, even in the pizza delivery guy—from the sublime to the absurd.

NPR has a fantastic online site <<http://www.npr.org/series/4538138/this-i-believe>> dedicated to individuals writing and submitting their statements of belief. I used the site extensively when I was taught 20th Century American Studies. I think frequent use of the varied examples was one of the ingredients in this assignment which produced astonishing results. I typically chose examples in which individuals spoke of the values of service, since I was incorporating service-learning into the course and because the main reason for service learning was an examination of values, the same purpose as their "This I Believe" paper. Five or six times during the semester, I started class with one of NPR's "This I Believe" statements. Afterward we'd discuss what the author revealed about their belief and how they made that revelation, thus demonstrating the way to write this assignment well.

In addition to this repetition leading to good results because the students understood the structure of this essay type, I think the fact that students were writing about values they genuinely cared about also lead to this being a stellar assignment. This didn't get dashed off at the last minute with no thought. Oh, I'm not saying some

of my students didn't procrastinate, but I am saying that such procrastination was because they were trying to choose a value with a story that exemplified that value in their lives—that takes reflection, even for the young.

But the magic occurred during our last class when we got into a circle, an uncommon class practice which made it all the more special. Each person read his or her statement of belief. Students knew this was part of the assignment, to share it aloud. It was a class that had discussed much during the semester and which had created a respectful environment to speak freely about the many differences among us—conservative, liberal, radical, religious, outsider. While many of the values were somewhat predictable—love, patience, a healthy lifestyle—others were surprising—addiction, the placenta, avoiding prison. These don't sound like values to you? Perhaps not in the abstract, but the concrete personal stories that accompanied them demonstrated values that connected directly to course content.

For example, the student who wrote about addiction did so in the context of the American Dream. She considered consumerism and self-centeredness, values we'd talked about extensively, as addictions she couldn't easily escape. While she longed to be addicted to life and purpose, she found herself addicted to competition and greed.

The recurring value of love wore some of these faces: 1) grandma's ability to forgive unconditionally; 2) a pair of lesbian moms not allowed to marry; and 3) friends and family who stuck by an incarcerated student. These students dug deeply into what had shaped their lives, allowing them to consider which elements were from an American set of core values.

Another small factor for some was the opportunity for audiences beyond our classroom. Some published their papers on the NPR website. Others submitted their papers to the Reflections journal because they had been able to incorporate their service learning along with their belief in their final paper. Multiple students published in one of these ways which raised the bar for them to develop, edit and proofread their papers well—a gift to any teacher, a joy for the writing center director!

I know that not all curriculum lends itself to this level of soul-searching, nor should it. However, statements for “This I Believe” have

been written about scientific topics, about mathematics, about cars. This assignment could be used in many courses to engage students in considering how the subject matter speaks to them—what difference it makes that they take your course. It could be a good course opener, and it’s clearly a great course closer. One of my beliefs is that if students get enough models of the writing we want, if they get an opportunity to reflect and connect course content to their lives, if they are engaged in learning, then the classroom is an amazing place where life-long lessons take root. 📖