2005-2006 TA Mentors

First row, left to right: Semmy Purewal, Computer Science; Jessica Perkins, History; Iulia Pittman, German & Slavic Languages; Jennifer McCabe, Ecology; Amy Brunell, Psychology; Wesley Venus, English. **Second row**: Mario Giraldo, Geography; Kenneth Widgren, Romance Languages; Anita De Rouen, English; Joe Rusinko, Mathematics; Sheldon Skaggs, Geology. **Third row**: Jess Morrissette, International Affairs; Laura Edmunds, Comparative Literature; Emily DeCresenzo, Microbiology; Stergios Botzakis, Language & Literacy

Preparing future faculty is part of the mission of a research university. The graduate experience provides many opportunities to develop as scholars and educators in the discipline. The 2005-2006 TA Mentors have been recognized with the Outstanding Teaching Assistant Award for their excellent contribution to the teaching mission of UGA. They were selected to participate in The TA Mentor Program sponsored jointly by the Graduate School and the Center for Teaching and Learning to enhance teaching preparation and their understanding of faculty roles. During the academic year they discuss many aspects of teaching, enhance and develop their own teaching portfolio, work on their use of technology to support teaching and learn about the search for an academic position and the types of colleges they might consider. In addition, they often share information from the TA Mentor Program with their departmental peers and encourage peer mentoring and a dialogue on the scholarship of teaching in their departments. All graduate students are encouraged to take advantage of teaching development opportunities such as the GRSC 7770 classes, the Teaching Portfolio Program and the Graduate Certificate in University Teaching.

Teaching Awards	
Deadline	
January 17, 2006	
http://www.isd.uga.edu/teaching_assistant/ta-awards.html	

Graduate School Teaching Portfolio Certification	**GRSC 7770 Teaching Seminar Assistantship**
Deadline:	Deadline
March 22, 2006	March 22, 2006
http://www.gradsch.uga.edu/	http://www.isd.uga.edu/

Testing Strategies

Purpose of Testing

Diagnostic-Evaluate Prior Learning
Formative-Provide Feedback to Students/Reinforce What They Should Know
Summative-Assign Grades/Certify Competence

Planning for Testing

Before The Semester Begins
- Coordinate efforts with others teaching the course.
- List goals for course.
- Consider test types/alternative methods of evaluation or assessment of learning.
- Consider the level of learning you hope to test (look at Bloom's Categories of Cognitive Learning*).
- Identify test/assessment methods that meet goals of course, size of class, level of students.
- Write an explicit test policy covering excused absences during a test (make up test, opportunity to drop a low test grade, a comprehensive final that weighs the missed material double).

Before Each Class
- Prepare five test questions for each class period covering the most important goals for learning of that class.
- Prepare a Classroom Assessment Technique* (ungraded) for each class to diagnose student understanding and to provide formative feedback to students on their learning.

After Each Class
- Review responses on the Classroom Assessment Technique to determine if the goals for that class were met.
- Modify and edit the five test questions to reflect the material actually covered in that class.
- Prepare for the next class in response to student understanding of the previous material.

During The Semester
- Provide practice with the types of test questions you will use.
- Provide review sheets of important points.
- Have students predict test questions and practice responses.
- Provide opportunities for students to form study groups and peer teach.
- Provide low stakes testing early in the semester.
- Provide students opportunities to recover from an early testing failure (opportunity to drop a low grade, provide comprehensive final).
- Compile a test question bank from the five questions prepared for each class and the questions students predicted.

Creating the Test

- Construct a grid with learning goals on one side and content areas along top.
- Select different types of questions from your test bank to cover content and achieve learning goals.
- Construct a test that provides an opportunity to show what students learned.
- Consider time limitations of the test period as you create the test.
- Have an experienced colleague take and proof the test and adjust for level of student learning and time constraints.
- Confirm that the test represents the content, form, and level of learning that students have practiced during the semester.

Organizing The Test
- Provide course name and semester, instructor name, test name or number, space for student name/id.
- Provide academic honesty statement and expectations.
- Plan for multiple versions by rearranging order of questions, putting tests on different colored paper.
- Start out with an easy question to build student confidence.
- Make tests efficient. Write clear, complete directions. Group directions and types of questions together so you don't have to repeat directions.
- Provide enough room to answer questions or have students use their own paper.
- Provide students with a point value of each section so they know where to spend their time.

Planning for the Test Day

- Decide what your strategy will be for students who miss the test. Check for departmental policy.
- Prepare make-up test versions that are equal in difficulty and objectives.
- Have clearly stated mechanisms to drop a test or a comprehensive exam that is weighted on missed material.
- Have test copies ready several days in advance to avoid last minute glitches.
- Enlist several colleagues to help pass out tests and monitor the testing environment if the class is large.
- Discuss your testing strategy to provide a fair testing environment for all students.
- Review with students' responsibility in abiding by the Honor Code.
- Explain that test versions will be randomly assigned.
- Establish a policy on student questions during the test.

Monitoring Test Taking

-Require student IDs if the class is large.
-Have students place all book bags at front of room or come to class with just their pen or pencil.
-Remind them start and stop times will be uniform for all students.
-Remind students of academic honesty obligations.
-Pass out tests once everyone is seated.
-Monitors should move around the room and not plan to do their own work during the test.
-Suspicious behavior should be closely monitored and detailed notes taken about what the instructor observed. Other monitors should be asked to corroborate the behavior.
-Allow all students to finish the exam. Don't publicly accuse anyone of cheating.
-Post time remaining on board periodically.
-At the end of the testing period, all remaining students should stop writing and hand in the test at the same time.
-Any suspicious behavior that can be documented or corroborated should be reported to the departmental supervisor and forwarded to the Academic Honesty review panel in Academic Affairs. You should not grade the material until a decision has been made by the review panel.

Grading the Test

-Plan your time to allow a timely return of the test.
-Try to grade when you are rested.
-Be sure grading criteria reflects your objectives for the course.
-Create a rubric, sample answers at different levels.
-Read exams without student identification.
-Grade sections together to maintain consistency in grading.
-Give constructive feedback on student learning and misunderstandings.
-Analyze the test to see if it met your learning objectives.
-Decide if any of the questions were poorly constructed and need to be dropped. Adjust grading accordingly.
-Make notes about what you would do differently the next time.

Returning Tests

-Consider providing immediate feedback on the web with a correctly answered test.
-Test grades are confidential. You can not post grades in a public place or leave graded papers out for students to look at.
-You can post grades in WebCT where only the student has access to his or her grade.
-Return tests within one week at the end of a class period. Insist they take it home and carefully review it.
- Allow students to write their questions and concerns on note cards or e-mail you within a specific time period.
-Don't take up class time with individual test questions or concerns. Have students make an appointment with you or respond to them by e-mail. Do use class time to clarify general misunderstandings of content.
-For students who did poorly, provide strategies to learn the material and the opportunity to show they have mastered it later in the semester.
-Don't plan to reuse specific tests. Allow students to use them as practice.
-Plan to create new and a variety of testing strategies the next semester.

*Angelo, T.A. & Cross, K.P. (1993) Classroom assessment techniques: A handbook for college teachers, 2nd edition. San Francisco: Jossey-Bass
*Bloom, B.S. (Ed.). (1956). Taxonomy of educational objectives: The classification of educational goals. Handbook 1. Cognitive domain. New York: McKay.

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Using Games to Learn

By
Hugo Collantes
Ecology
TA Mentor 2004-2005

One day I found myself telling my students, "…and instead of studying for the quiz next week I want you to create a game based on what you've learned today." As I uttered these words a very distinct feeling invaded me: Fear! I thought I was violating a sacrosanct rule, that students' knowledge must be evaluated through traditional testing methods. But I had to quickly put this feeling on hold as I realized that my students had a bewildered expression on their faces. So I proceeded to explain: "Today we've seen a variety of organisms belonging to the Kingdom Protista –most of them quite obscure even for the average professional biologist-- and we've reviewed information about their anatomy, physiology, ecology, and even their evolution. Can you use this information to create a game like *Monopoly*, in which market transactions are replaced by ecological interactions, or *Risk*, in which battle strategies are replaced by evolutionary adaptations? Even better, can you create a completely new game of your own original design?" To my surprise they immediately started to exchange ideas within their lab groups, and as I overheard some of these I realized that I had to provide some parameters:

* You can look at existing popular games for inspiration but cannot copy them. More than just substituting terms, you must design your game to reflect the unique characteristics of these organisms and associated biological phenomena.
* Your game must not rely solely on chance (tossing dice) but require a good deal of knowledge and strategy. The latter also implies that your game should not rely solely on memorization.
* The information presented in your game must be accurate, the rules of your game must correspond to real (natural) conditions, and overall your game must cover as many aspects of the biology of these organisms as possible.

I also developed a rubric to help them create their game and to help me with grading. This rubric includes five criteria: accuracy of information, breath of coverage, understanding of the material (evidenced by the complexity of the game), creativity (aimed at rewarding originality over simple adaptations of existing games), and neatness (organization and care at constructing the game's board, pieces, cards). For the latter I emphasized that these elements didn't have to be costly, and encouraged them to be creative in using material that otherwise would be discarded (e.g. cereal boxes, bottle caps).

I was amazed at the quality of the games students were able to produce in just one week (both conceptually and physically) (Figures 1-3). I expressed my excitement by telling them that I was looking forward to grading their work by asking friends and other TAs to join me in playing the games. The students were very excited, each group claiming that I would enjoy their game best. Then, taking advantage of their excitement I asked them to fill out a survey I had prepared to find out what they thought of this type of "test."Ninety three percent said they had enjoyed the assignment while 83% said they would prefer it to a quiz. The reasons given by those who would prefer a quiz can be summarized in one sentence: it took more time to create a game than to study. However, 97% said they felt they had learned more by creating a game than they would have by taking a quiz.

Wow! ninety-seven percent thought they learned more. But did they? Back to that feeling of fear I had placed on hold. You see, I had assigned the game project on an impulse, inspired by an article I read the day before in which two professors at the University of Colorado described the "create-a-game" technique they used to help students study for a midterm exam in a History of Psychology course.[1] I had no valid argument to justify using a game as a testing instrument. So I put together a quiz composed of questions from previous semesters and gave it to my students the following week. I explained that it would have no effect on their grades and was simply aimed at testing the effectiveness of the game technique in fostering learning as well as an attempt to preserve my job. Amazingly, the average grade on this quiz was 15% higher than the average in the last three semesters. This is especially outstanding considering that in previous semesters the quiz was given one week after the class, while in this case it was given after two weeks to students who did not initially know they would be quizzed. These results, I later realized, were an indication that long-term knowledge had been achieved through an active-learning technique. Furthermore, creating a game seems to require and foster all cognitive skills in Bloom's taxonomy of educational objectives (remembering, understanding, applying, analyzing, evaluating, and creating.)[2]

So I kept my job, and later some faculty expressed interest in using the game technique in their courses. It even sparked the idea of conducting a wider study on the effectiveness of this technique that could lead to a publication. And as with many advances in science it all began in a moment of inspiration. The potential of creating a game as an instructional method, however, transcends the sciences; its application can also be expanded to include discussion sessions and lecture review sessions in addition to testing. It even has potential as an outreach tool in service learning-programs. All it takes is to depart from teaching methods passed on by tradition and to dare to take a little risk and have some fun.

[1]Berrenberg, J. L. and A. Prosser. 1991. The create-a-game exam: A method to facilitate student interest and learninig. Teaching of Psychology 18 (3): 167-169
[2]Anderson, L. W. and D. R. Krathwohl (Eds.). 2001. A Taxonomy of Learning, Teaching and Assessment: A revision of Bloom's Taxonomy of Educational Objectives. New York: Longman.

Next time students are playing games in class don't interrupt them!

**Figures 1-3: Games created by:
Hugo Collantes' Biology Lab 1108,
Fall 2004, The University of Georgia**

The Center for Teaching and Learning

The Office of Instructional Support & Development is now The Center for Teaching and Learning (CTL). The CTL is a support unit of the Office of the Vice President for Instruction. It is devoted to the advancement of instruction and faculty development at The University of Georgia. CTL sponsors a range of services and enrichment activities designed to assist faculty and teaching assistants with instructional matters. Upon the retirement of *Dr. William Jackson* on February 1, *Dr. Nelson Hilton* will be the new Director of CTL and *Dr. Jay Harriman* is the Associate Director. *Dr. Kathleen Smith* is TA Program Director and Dr. Paul Quick is TA Program Coordinator.

* **Fall Orientation for GTAs and LAs**
* **GRSC 7770 - teaching seminar for credit**
* **Handbook for TAs**
* **TA Newsletter, semester publication on teaching**
* **Teaching Resource File**
* **Individual Consultation**

* **University Awards for Outstanding Teaching**
* **TA Mentor Program**
* **Instructional Development Laboratory**
* **Teaching Seminars**
* **Web Resources on Teaching (http://www.isd.uga.edu/)**
* **Teaching Portfolio Samples and Consultation**

GTA Newsletter is a publication of the Center for Teaching and Learning. Teaching Assistants are encouraged to submit articles for publication in this newsletter. Submissions should be forwarded to Kathleen Smith, CTL.

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Teaching Assistant