

## EVENTS AT A GLANCE

Please see the TLC Events portion of this newsletter, or the TLC web site, for event descriptions. Events will take place at the Teaching and Learning Center, 330 Z. Smith Reynolds Library, unless otherwise noted. All faculty are invited to be our guests for lunch, breakfast, or light refreshments offered during our programs.

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### COURSE PREPARATION ASSIGNMENTS: A STRATEGY FOR CREATING DISCUSSION-BASED COURSES

**DATE:** Wednesday, January 23

**TIME:** 12:00 P.M.

**LOCATION:** Benson 344 F

Please RSVP on-line at <http://www.wfu.edu/tlc/events.html> no later than Friday, January 18, if you want to reserve a lunch provided by the TLC, and be sure to specify your choice of a beef, chicken, or vegetarian sandwich, or of a fruit plate.

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### ENRICHING STUDIES ABROAD

**DATE:** Tuesday, February 5

**TIME:** 12:00 P.M.

**LOCATION:** Room 204, ZSR Library

Please RSVP on-line at <http://www.wfu.edu/tlc/events.html> no later than Wednesday, January 30, if you want to reserve a lunch provided by the TLC, and be sure to specify your choice of a beef, chicken, or vegetarian sandwich, or of a fruit plate.

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### TEACHING OVERSEAS

**DATE:** Monday, February 11

**TIME:** 12:00 P.M.

**LOCATION:** Autumn Room, Reynolda Hall

Please RSVP on-line at <http://www.wfu.edu/tlc/events.html> no later than Wednesday, February 6, in order to reserve a lunch provided by the TLC, and be sure to indicate your choice of a chicken, vegetarian, or beef sandwich, or of a fruit plate.

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### TEACHING AND LEARNING FAIR

**DATE:** Wednesday, February 27

**TIME:** 2:00-4:00 P.M.

**LOCATION:** Benson 401 A&B

Please RSVP on-line at <http://www.wfu.edu/tlc/events.html> no later than Wednesday, February 20, in order to reserve a hard copy of abstracts submitted by fair presenters.

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### BLOGS AND WIKIS AT ZSR

**DATE:** Wednesday, April 2

**TIME:** 3:00 P.M.

**LOCATION:** Room 204, ZSR Library

Please RSVP on-line at <http://www.wfu.edu/tlc/events.html> no later than Friday, March 28. Light refreshments will be served.

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### END-OF-YEAR BLOWOUT/FACULTY APPRECIATION ICE CREAM SOCIAL

**DATE:** Wednesday, April 9

**TIME:** 2:00-4:00 P.M.

**LOCATION:** Teaching and Learning Center

*RSVP is not required.*

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### WHY NOT AN INTERDISCIPLINARY WRITING MINOR?

**DATE:** Tuesday, April 15

**TIME:** 12:00 P.M.

**LOCATION:** Room 204, ZSR Library

Please RSVP on-line at <http://www.wfu.edu/tlc/events.html> no later than Wednesday, April 9, if you want to reserve a lunch provided by the TLC, and be sure to specify your choice of a beef, chicken, or vegetarian sandwich, or of a fruit plate.

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### INSTRUCTIONAL TOOLBOX: ALL YOU NEED TO KNOW!

**DATE:** Monday, April 21

**TIME:** 12:00 P.M.

**LOCATION:** Room 204, ZSR Library

Please RSVP on-line at <http://www.wfu.edu/tlc/events.html> no later than Wednesday, April 16, if you want to reserve a lunch provided by the TLC, and be sure to specify your choice of a beef, chicken, or vegetarian sandwich, or of a fruit plate.

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### TEACHING AND LEARNING CENTER EXAM WEEK COFFEE-AND-COOKIE BREAK FOR FACULTY

**DATE:** Monday, May 5 - Thursday, May 8

**TIME:** 8:00am-12:00pm

**LOCATION:** Teaching and Learning Center, Room 330, ZSR Library

*No RSVP required!*

## NOTES AND REFLECTIONS FROM AN ACTIVE LEARNING WORKSHOP

*Dee Oseroff-Varnell, Dept. of Communication*

Last semester I facilitated a workshop on Active Learning with an energetic group of WF faculty. In the first part of the workshop we identified our concerns regarding our students, and as the discussion progressed I recognized the similarity of these concerns regardless of department, course, or content. Faculty focused on the challenges of competing with computers and addressing the personalities and learning styles within their classes. They wondered how to best engage students with the material and encourage learning for the sake of learning and not the final grade. As we brainstormed some of the ways in which we might address these concerns, a variety of ideas emerged. The suggestions that follow are those presented by my colleagues, but I have clustered them into three broad categories: A. The environment, B. Expectations, and C. Student involvement. I hope you will find that they trigger some exploration of strategies in your own classes as they have in mine, and I welcome you to share your experiences and ideas with me.

### **A. The environment: Create a supportive emotional and physical environment.**

1. *Know your students.* Even in a large group, you can send out student information sheets to give you an idea of who is in your class and what their interests/hobbies/activities may be. Learn their names by looking at their photos on your "facebook" roster. Seat students alphabetically by first name to help you remember their names and then use their names during class.
2. *Create a supportive atmosphere in the classroom.* This can be done by making ground rules for discussion, asking open-ended questions ("a response" instead of "the answer"), listening to and accepting a variety of viewpoints, and reminding students to address their comments to each other instead of to you.
3. *Be engaging.* Use humor, interesting anecdotes, current events, campus issues, provocative questions/problems, and student input to generate interest. Work to help students appreciate the

relationship between the course content and their lives.

4. *Work with your space.* This can be possible if you are creative, even with a large group. Reconfigure the classroom into a circle, semicircle, or small groups if you don't have fixed seating. Encourage students to move into groups and sit on the floor or steps to create casual environment if chairs are fixed. Move your class outside for discussions.

### **B. Expectations: Reduce students' uncertainty about your expectations.**

1. *Be specific in your expectations.* Students need to know your expectations for their participation in class, oral and written assignments, homework, and any other aspects that factor into your evaluation of them. Apprise students ahead of time of any penalties that may accompany late work, extra credit options, the type of evaluation(s) you will use, and the point structure for the class.
2. *Emphasize competence, not grades.* Discuss the value in being a participant in the classroom process and let students know that their participation as a member of the classroom community is more than the sum of the specific grades that they receive for individual oral and written assignments.
3. *Let students prepare ahead of time.* You can do this by having students journal, write questions down, take time to prepare written or oral responses to questions, discuss in small groups before formulating their responses, and by letting students know ahead of time that you will be calling on them.
4. *Offer different "levels" of questions (from concrete to abstract).* It is helpful to refer to Bloom's taxonomy\* when designing questions, moving from more concrete questions of knowledge and comprehension to questions requiring synthesis and evaluation. Students need to be comfortable with more concrete levels (understanding the content) before they can move to higher levels (evaluating the concepts).

### C. Student Involvement: Let students be active members in the learning process.

1. *Give students some choice.* Let them choose topics and assignments when possible and gear discussion topics to your population. Offer several options for assignment due dates, which staggers incoming assignments (making them less overwhelming for you to grade) and will also help your students implement effective time management skills.
2. *Spread out graded assignments.* Have a variety of skill-building assignments due at intervals throughout the semester, and don't put too much emphasis on one grade. Give students a chance to learn from their previous assignments by providing feedback on what they did well and what they can do to improve.
3. *Ask for student input on their performance.* Allow students to comment on their own work and the work of their classmates. You can do this through self-evaluations, classroom comments, group discussions, and peer evaluations.
4. *Let the students demonstrate their creativity.* Use a variety of classwork and assignments that emphasize different types of skills/strengths so that all students have the opportunity to shine.
5. *Allow the students to be leaders.* Assign portions of the readings for students to summarize or teach. Have students work in groups where leadership is rotated. Provide a forum where students are free to express and debate their ideas. Have loosely defined goals for the class in mind but allow students a variety of ways to achieve those goals.

\* Benjamin S. Bloom, ed. (1956). *Taxonomy of educational objectives; the classification of educational goals, by a committee of college and university examiners*. NY: Longmans Green. (ZSR stacks LB17.T3)

## RESOURCES

The TLC has many resources available to the campus community, including books and journals promoting teaching excellence. The Teaching and Learning Center also maintains a vertical file and notebooks of teaching-related articles. Subjects include, but are not limited to:

- Active learning
- Assessment
- Collaborative learning
- Critical thinking
- Generating discussion
- Interdisciplinary teaching
- Syllabus construction
- Teaching portfolios
- Testing and grading
- Writing across disciplines

We are pleased to offer several excellent articles within the "Course Documents" section of the TLC Blackboard site (<http://blackboard.wfu.edu/>) that may enhance your classroom teaching experience. Contact the Coordinator at [snyderdw@wfu.edu](mailto:snyderdw@wfu.edu) to receive access. Information on WFU grants for faculty is also included on this site.

For information about other TLC services and upcoming events, see the TLC web site. In addition, information about First-Year Seminars and FYS proposals from several faculty members is now available. FYS materials as well as other web-based information are accessible by going to the TLC homepage and clicking on "Teaching Resources."

## TEACHING MATHEMATICS AS A LIBERAL ARTS COURSE

*by J. Parsley*

**A** liberal-arts math course requires a unique teaching effort from a math professor. Unlike more traditional calculus or major-oriented courses, which focus on conveying particular information to a focused audience, a liberal-arts math course allows much more freedom of content and is populated by a diverse, multi-talented array of students. A professor in such a course must be able to step away from the comfortable realm of theorem-proof discourse and connect with students who, quite frankly, may not want to be studying math at all.

Students should emerge from such a course with an ability to think like a mathematician: to search for patterns, even beyond the obvious primary one, to examine why such patterns exist, to reason critically and logically, and to utilize numbers and algebraic symbols in order to speak properly in the language of patterns. These skills are integral in a liberal-arts education and are more valuable than ever for individuals facing the deluge of information available in the 21st century.

Through topics such as infinity, voting methods, number theory, fractals, and geometry & topology, my class searches for patterns in a variety of settings. As a geometer, I strive to increase my students' spatial awareness ... we begin the course by proving the Pythagorean Theorem through arranging puzzle pieces. To properly develop geometric reasoning, my students must be physically and actively involved.

One of my professors in grad school claimed that all good geometers can trace their spatial intuition

back to some experiential learning in their childhood. For me, I obsessively studied maps and tumbled and sledded down hills, the topography of my favorite ones still firmly etched in my mind. As a professor for this course, I seek to develop that spatial experience & history with my students through several hands-on activities. We build Platonic solids; we make a hyperbolic surface by gluing together 7 or more equilateral triangles; we play with balloons to study spheres; we draw ellipses with string.

And in an exciting interdisciplinary setting, we hold a class in the dance studio. My students, alongside their friends from a dance course taught by Christina Soriano, are asked to realize the Platonic solids through motion and form. Through this physical learning, we seek to permanently etch their geometric properties into the students' memories. What does an octahedron look like? And how is it different from a tetrahedron? And why is it dual to a cube? Students who have interpreted these questions through moving and arranging their bodies know this answer not only mentally, but deeper within themselves, in their muscular memory.

The thread tying these all together is experiential learning. By thrusting students into these realms, I push myself as a teacher, to connect better with students, to think outside of my comfortable pedagogical home, to seek and enjoy patterns as they occur. We, both faculty and students, can both gain by broadening our experiences.