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# **Academic Integrity at Waterloo: Take Two**

It was almost four years ago that I wrote an article in the TRACE newsletter about Academic Integrity (AI). In that article<sup>1</sup>, I cited data on cheating and plagiarism and suggested some steps that faculty and administrators could take to discourage student academic misconduct.

### In This Issue

Academic Integrity at Waterloo: Take Two1
CUT Prize Winner2
Funding Available2
RateMyHeuristic.Com3
Comings and Goings at TRACE5
Teaching Physics at Waterloo6
Teaching Award Winners8
Summer Teaching Conferences8
LT3 Spring Events9
Scholarly and Professional Development Activities at TRACE9
Teaching Excellence Council (TEC) Activity10
New at TRACE10
Departmental Teaching Workshops10
Spring Open Classrooms For Faculty Members11
TA Developers12
TRACE Spring Events12

The Enron scandal was the big news then, and since that time many, many more scandals have come to light involving "ethically challenged" people in almost every sphere of human activity: the arts, politics, business, and science. It is time to revisit the topic to bring you up to date on what has been happening with respect to AI on campus and elsewhere, and to give you a preview of UW's plans to bring the issue to the attention of students, staff and faculty over the coming months and years.

Here at UW, the rate of the reported incidents of academic misconduct (cheating on exams, plagiarism, etc.) has recently increased, both for undergraduate and graduate students. For example, based on data reported this year to UW's Senate, 1.6% of undergraduates were involved in some form of academic misconduct in the academic year 2002/2003, whereas the comparable figures for 03/04 and 04/05 are 1.8% and 2.7%, respectively. For graduate students, the comparable data are 0.19% for 02/03, 0.13% for 03/04 and 0.77% for  $04/05^3$ . And there are reasons to believe that these figures are an underestimate of the degree to which our students engage in academically dishonest behaviour. First, self-report survey data reveal rates far in excess of these - more in the range of 25-50%<sup>4</sup>, depending on the infraction, for undergraduates. Furthermore, anecdotal evidence and that from an informal survey undertaken by Dr. Dick Steffy, a retired Professor of Clinical Psychology, and me a couple of years ago suggests that many cases of academic misconduct that are brought to the attention of faculty members are not reported, as they always should be<sup>5</sup>, to the Associate Deans.

Over the past couple of years there have been three sessions at UW of which I am aware that were designed to bring these issues to the attention of our administration, student leaders, and faculty. The Dean of Graduate Studies, Dr. Ranjana Bird, has also begun to talk to groups of graduate students recently concerning AI issues. In January 2004, Dr. Julia Christensen Hughes, Director of Teaching Support Services at the University of Guelph, facilitated a workshop entitled "From Academic Misconduct to Academic Integrity: Five Levers for Change" for UW administrators, faculty, and student leaders; on February 24, 2005, Dr. Rob Gorbet of Electrical and Computer Engineering, and Heather FitzGerald, Director of Student Life, presented a talk about AI at a "Chairs Forum" lunch (a thrice-per-term event in fall and winter for department Chairs organized by the Office of the Associate Provost, Academic and Student Affairs); and April 12 of this year, the Associate Deans, Undergraduate

Continued on page 7

# Certificate In University Teaching (CUT) Prize Winner Uses Creative Writing Assignments in Unconventional Ways



alk to Veronica Austen about her unconventional use of creative writing assignments in English Literature courses and it quickly becomes clear that she is both an innovative and scholarly educator. Not only did Veronica use her interest in creative writing assignments to energize her 20th Century Literature course in Spring 2005, but she has since contributed to the scholarship of teaching by publishing her CUT research paper on the same topic in the International Journal for the Practice and Theory of Creative Writing. In recognition of these achievements, Veronica has been awarded the inaugural Certificate in University Teaching Prize. This \$2000 cash prize, generously provided by an anonymous donor, will be awarded annually to the CUT participant who demonstrates the highest achievement on completion of the program.

Ever since Veronica had an oppor-

tunity to demonstrate her understanding of the structure of fairy tales by writing a fairy tale instead of a final essay for a children's literature course, she has been interested in extending the use of creative writing assignments beyond children's literature courses and creative writing courses. In Spring 2005, she had her opportunity. She instructed an English Literature course on early 20th-century literature and included in the course syllabus two creative writing assignments.

The first assignment, a creative response journal, required the students to select 3 different texts in the course and draft a creative response in some form (examples included a poem, a short story, a drawing or a painting) and a paragraph explaining how the creative response relates to the primary text. The second assignment was optional in that the students could choose to do an essay as a term project or a creative writing project. The creative writing project required that they choose two texts and create a short story or series of poems that combined aspects from both texts. Furthermore, they were to submit a 1.5- to 2-page essay critically assessing their work. In both cases, the additional analytical writing was used to create an explicit connection between the creative work and the critical evaluation that is central to literature courses.

How did the students react? They were excited by the opportunity to "flex their creative muscles" and they very actively engaged in the course by participating a great deal during class and asking for extra feedback on their creative work. Veronica found that the experience of sharing their excitement and becoming involved in their writing process was very rewarding; however, she cautions that the extra workload would be unreasonable for instructors of classes with more than 25 students.

If you wish to read about how creative writing assignments can be used to develop critical readers, you will find a copy of Veronica's research paper in the TRACE library. A number of CUT participants have allowed copies of their research papers to serve as models for others. They have written on a variety of topic areas involving teaching and learning in higher education. I would encourage anyone who teaches on campus to come by and spend a little time reading the papers. Or come to our research project presentations, which are held at least once every term. Perhaps you'll spot next year's Certificate in University Teaching Prize winner!

Kate Hoye

### **Funding Available for Teaching-Related Activity**

Project proposals are being invited for funding through three separate programs. The Learning Initiatives Fund (LIF: \$5,000 - \$15,000) and the Program Initiatives Fund (PIF: up to \$20,000) are both administered through the Office of the AVP-LRI, and the Instructional Development Grants (ID Grants: up to \$1,000) are administered through the TRACE Office. The LIF Grants support the undertaking of projects that enhance undergraduate-student learning. The PIF grants are primarily aimed at departments, schools and Faculties to aid them in undertaking improvements in undergraduate learning related to their academic program reviews. Proposals for these grants are due May 25 and application information is available on the LRI website: http://www.learning.uwaterloo.ca/. The ID Grants are designed to help instructors improve teaching effectiveness. This year's deadline for proposals is May 25. Information and the application form can be obtained from the TRACE website: http://www.trace.uwaterloo.ca/.

# RateMyHeuristic.Com

Everyone loves a heuristic: a handy, tidy, bulleted, getdown-to-brass-tacks distillation of the best practices for navigating your way through a complex system or situation. In higher education, one of the best known heuristics must surely be the "Seven Principles for Good Practice in Undergraduate Education," devised in 1987 by Arthur Chickering and Zelda Gamson. As you probably know, Chickering and Gamson's seven principles encourage things like "student/faculty contact," "prompt feedback," and so on. Other heuristics have also been proposed as alternatives to that of Chickering and Gamson. For example, the National Survey of Student Engagement (NSSE) advocates "Five Benchmarks of Effective Educational Practice," such as "level of academic challenge" and "active and collaborative learning." Likewise, Patrick Terenzini, the author of the award-winning *How College* Affects Students, identifies "Six Characteristics of Learning and Development," including "real world activities" and "unbounded by time or place."

When I first learned of the trio of higher education heuristics mentioned above, I wondered whether they were simply three different ways of conveying the same pedagogical ideas, or whether they were fundamentally and conceptually distinct from one another. Finding out was fairly straightforward: I simply laid out all three heuristics in front of me, and tried to map the principles of one heuristic against the principles of the other heuristics. There was, it turned out, some degree of overlap – for instance, all three heuristics affirm the value of active learning and collaborative learning – but overall I was struck by their lack of correspondence. As

a single example, Chickering and Gamson's "prompt feedback" has no counterpart in either the NSSE or Terenzini heuristics.

All this got me thinking that if these three heuristics couldn't agree, then maybe I should try to invent my own.

I decided that my heuristic would be based upon the attributes that students themselves identify as contributing to effective instruction. To this end, I collected and analyzed a thousand comments from a website known as Rate-MyProfessors.Com. As you may already know, RateMyProfesors .Com is an advertising-supported website that allows students from any university in North America to rate their instructors on a five-point scale. Students also have the option of supplementing their numerical rating with written comments. These ratings and comments are then collated so that a user – let's say a student considering a Biology course offered by Professor Nemo - can check out what other students have said about Professor Nemo. and factor that into his or her decision to take the course.

Let me now elaborate on my method. First of all, rather than randomly choosing a thousand comments from RateMyProfessors .Com, I instead selected ten topranked and ten bottom-ranked instructors at each of five Canadian universities. For each of these instructors, I chose ten cogent student comments. By "cogent," I mean that the comment identified at least one meaningful attribute about the instructor. Thus, a comment such as "She explains difficult concepts really well" is a cogent comment, whereas "He sucks" or "She rocks" is not. I then did a qualitative analysis of the thousand cogent comments, tabulating and catego-

rizing the instructor attributes that students cited. I ended up with thirty categories of attributes, such as "good sense of humour," "passion for teaching," "helpful outside of class," and "fair assessments." I then converted the raw numbers that each category received into percentages of the total: thus, for example, "passion for teaching" represented 4% of all the comments, while "good lectures" represented 9.5% of the total. Finally, I collapsed the thirty categories into broader categories. For example, the categories of "friendly," "good sense of humour," "passion for teaching," and a few others were all subsumed into a broad category that I called "Character" – that is, attributes that pertain to the personality or demeanor of the instructor. Once I had finished collapsing my thirty original categories, I was left with a heuristic comprising four "master" categories, namely, Character, Transmission, Course Design, and Assessment. In other words, those four categories are the ones that students tend to identify as most important to them in effective instruction. Let me say a bit more about each one of these four categories, and also about their importance in relation to one another.

First, the category of Character, as I've already said, pertains to an instructor's personality or demeanor, including whether he or she is friendly, has a good sense of humour, is enthusiastic, and so on. Character represents a whopping 45% of all the comments that I sampled from RateMyProfessors.Com.

Second, Transmission pertains to how an instructor conveys content to the students. I phrase it this way because that, judging from the student comments, is how students

Continued on page 4

### RateMyHeuristic.Com

Continued from page 3

think about their learning, that is, as the transmission of ideas and information from instructor to student. To put it another way, students don't see instructors as facilitators of learning whose job is to devise ways to get students to interact with content. Rather, as far as students are concerned, instructors are transmitters of content, which to them means giving good lectures, making available good lecture notes, responding to student questions clearly, using good examples and demos, and so on. Transmission represents 31% of all the comments.

Third, Course Design pertains to how well prepared and organized an instructor is, whether there is congruence between what is taught in class and what is tested during the exam, whether the pace and workload are reasonable, and so on. Course Design represents 7% of all the comments.

Fourth, Assessment pertains to whether an instructor grades fairly and whether he or she provides timely and useful feedback. Assessment represents 6% of all the comments.

Clearly, there are some striking findings here, not least of which is that what students identify as having the biggest impact on their learning is the character of the instructor. To put it another way, if an instructor wants to do one thing that will help students learn, then it appears that he or she should be friendly and tell the occasional joke. The importance of this to students shouldn't be underestimated: from a percentage point of view, attributes pertaining to Character were mentioned in the student comments almost seven times more frequently than attributes pertaining to Assessment.

Another salient conclusion would seem to be this: that students think

about learning in terms of a transmission model, the "sage on the stage" approach, as opposed to the active learning or "guide on the side" strategies that are currently being propounded by experts in higher education. In other words, the comments from RateMyProfessors.Com indicate that as far as students are concerned, good lectures do make good learning.

In a nutshell, that's what my heuristic-driven analysis of student comments in RateMyProfessors. Com turned up. But of course there's a huge caveat that must be addressed: namely, should we give any credence to these findings? Do students know what they are talking about? Are students credible authorities on what makes effective instruction? When it comes to rating instructors, are they actually able to distinguish what is effective from what they like or what they are used to?

My own response to these question is mixed. I think, first of all, that we can unreservedly accept the students' high valuation of Character. In other words, if students say that they learn better from an instructor who is friendly and has a sense of humour, then I think we really need to take this at face value.

However, with regard to high valuation of a transmission model of education, I think we need to be a bit more cautious. On the one hand, I share this high valuation: I love listening to a good lecture, either in a classroom or on my iPod. But on the other hand, I'm also convinced that learning activities that are more interactive than a lecture are a powerful resource for a instructor to draw upon. I also think that learning activities that are collaborative in nature – which the traditional lecture is not - can contribute greatly to learning outcomes. But university students

don't seem to recognize yet that replacing or supplementing the traditional lecture with more active forms of learning can be a good thing. This is due in part, as I suggested above, to the fact that lectures are what students are used to, and straying from this familiar sine qua non into collaborative work, class presentations, reflective learning, task-based learning, oneminute summaries, and other forms of active learning can feel disorienting and annoying, like being forced to switch from Fahrenheit to Celsius, or from a high-fat diet to a low-fat diet. But I think the reluctance of students to abandon a lecture-centred model of education also results from their tendency to see themselves as consumers, and learning as a product rather than a process. Their attitude toward education is like mine when I hire a plumber: I just want him or her to fix the damned leak under my sink, not to facilitate a collaboration between myself and my spouse in which we reflect on our household water consumption. The difference, of course, is that learning really is a process, a personal and also social construction of meaning, not the acquisition of a commodity or even of a service.

In any event, what seems incluctable is that there is a significant disjunction between student expectations and the active-learning pedagogies that experts in higher education are encouraging instructors to adopt. Students expect course content to be transmitted to them via lectures and lecture notes, and the extent to which this expectation is fulfilled correlates with how they rate their instructors; yet many instructors are attempting to supplement or replace traditional lectures with learning activities that are more interactive and collaborative, and in so doing they end up

# **Comings and Goings at TRACE**



Ye have had a lively turnover of staff here at TRACE over the last few terms, both with the Certificate in University Teaching Program and at administrative levels, and this term is no exception. First of all, we said goodbye to Kate Hoye, who had been our part-time CUT Program Coordinator since the beginning of January this year. Kate will soon defend her PhD dissertation in Systems Design Engineering and has plans to take up a postdoctoral fellowship in Ottawa shortly. Kate, with her intelligence, organizational ability, and good humour was a godsend to our CUT Program when our previous Coordinator left unexpectedly in December to take up full-time teaching duties at WLU. Replacing Kate in that position is Trish Stadnyk (pictured to the left), who has been a TA Developer with us since January. Trish, also an engineering graduate student (Civil Engineering), shares many of Kate's traits and has already shown great leadership skills within TRACE. See page 12 for two more additions to the TRACE CUT staff: Amanda Clark from the Department of Psychology is our new TA Developer who replaces Chris Watson, also in Psychology, whose year as a TA Developer ended April 30; and Dan Olsen is a former TA Developer who has returned to help us out with the increasingly popular CUT Program over the spring term. Dan is a PhD student in the Department of Geog-

The non-CUT aspects of staffing also saw changes starting this term. We have benefited greatly from having had a full-time co-op student with us last term, which was a busy one here at TRACE. Hafsa Qureshi, who is in the Department of Health Studies and Gerontology, resumed her life as a student on May 1. On

the administration front, Tracy Penny Light has been a tremendous asset in TRACE in her position as Acting Associate Director since January of last year, and has returned to her role in the office of Tom Carey, the Associate Vice-President, Learning Resources and Innovation (LRI), where she can be reached at tplight@admmail, or at ext. 3899. Tracy is looking forward to a research term this summer. Tom is scheduled to return in July from his sabbatical leave in California to take over the reins of his LRI post from Gail Cuthbert Brandt, who has very capably managed Tom's job as well as her own as Associate Vice-President, Academic since September of last year. Donna Ellis, who has been on maternity leave since last May, officially returned to her position as Associate Director of TRACE. Last, but certainly not least, Catherine Schryer, who will take over from me as Director of TRACE next term, increased her commitment in the TRACE Office from 20% to 40% of her time as of May 1.

Barbara Bulman-Fleming

### RateMyHeuristic.Com

Continued from page 4

frustrating their students' expectations and potentially sabotaging their own course evaluations. The solution, perhaps, is not to abandon active-learning strategies, but to educate students about their education. That is, instructors who are shifting away from the traditional lecture model need to spend some time explaining to their students the reasons for the shift. They need to show their students the evidence, which abounds, that active and collaborative learning activities result in improved learning outcomes.

And in order to make this case a convincing one, the instructor's explanation needs to be ongoing: not just a fifteen-minute spiel given on the first day of a course, but a recurrent theme that is woven into or around the activities that are built into the course. Changing attitudes and assumptions may be difficult, but it is, after all, what learning is all about.

Further information:

On May 17, from 12:00 to 1:00 pm in the FLEX Lab (LIB 329), Mark will be making a presentation devoted to the topic of this article.

#### References:

Seven Principles for Good Practice in Undergraduate Education: http://www.msu.edu/user/coddejos/seven.htm

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Pascarella, E.T. & Terenzini, P.T. (2005). How college affects students: A third decade of research. San Francisco: Jossey-Bass

Mark Morton, Instructional Program Manager , LT3 Centre

# **Teaching Physics at Waterloo**

n everyday life the word I "Physics" may sound musical and soothing to some, but at the same time it may sound quite irritating and painful to many others. This feeling is no different within the university student body. The Physics majors love it, whereas the others may not share the same passion. However, since Physics is essential to many disciplines within the university, teaching this subject becomes a very challenging endeavour to all the members of the Department of Physics. At present, the Department has a fine mixture of some senior professors and some young talented faculty members who take a great deal of pride in their research and teaching. Over the years this Department has produced many winners of the Distinguished Teacher Award and continues to strive hard to maintain a high standard of teaching.

With the intention of further improving their teaching, the Department along with TRACE organized a teaching retreat on December 14, 2005. Thanks to the organizers Dr. Tracy Penny Light and Dr. Barbara Bulman-Fleming, this event was a great success. The two main speakers at this event were Dr. John Smith who spoke about first-year teaching and Dr. Rob Mann whose talk was on upper-year teaching. This event also gave the members of the Department a time to reflect on their teaching methods and to share their thoughts and also learn from one another. The success of this event was quite evident at a recent Department meeting when it was decided that a retreat of this sort should be held again in the near future. I was able to speak with many members who attended this event; although a few had some negative comments, most of the comments

that were made were very positive.

The teaching of Physics at some institutions has changed from the traditional methods to those focused on a more active learning environment for the students. Technological advances have been incorporated into classroom teaching and some institutions have even changed the architecture of classrooms in which Physics is taught. Another change is that some traditional classroom demonstrations have been replaced by applets, which I personally have found to be very useful. Physics applets or "Physlets" are computer programs that simulate a typical demonstration in Physics. For example, the motion of a pendulum about its equilibrium position or the motion of a baseball can be viewed on a computer monitor.

Harvard University uses a method called "Peer Instruction"<sup>1</sup>, which involves students thinking about a "concept question" provided by the instructor and formulating their own answers and then having small-group discussions about it. Studies have shown that students learn better when they are actively involved. They need the opportunity to communicate with each other as they confront misconceptions and initialize their own understanding of a new idea.

First-year students at Northern Kentucky University are introduced to Physics in "Studio Laboratories". Their website has the following description of the studio approach: "Studio laboratories provide an opportunity for students to actively engage in the learning process. The new Science Center at NKU houses three spacious studio laboratories for introductory physics teaching. Each lab has the capacity to accommodate 24 students and has 8 sta-

tions. Each station has a computer, data acquisition interface, data analysis software and a full array of modern equipment for physics experimentation. The studio labs contain the state of the art audio/video equipment, allowing projection of essentially any audio/visual information."<sup>2</sup>

At MIT, a similar project is underway. "The Technology Enabled Active Learning (TEAL)/Studio Physics Project" is designed for large first-year classes. This system is a combination of lectures and laboratory work. To quote their website: "This format is centered on an active learning approach – that is, a highly collaborative hands-on environment, with extensive use of networked laptops and desktop experiments (Physlets)."

"The objectives of the TEAL/ Studio Physics Project are to:

- Create an engaging and technologically enabled active learning environment;
- Move away from a passive lecture/recitation format;
- Increase students' conceptual understanding of the nature and dynamics of electromagnetic fields and phenomena;
- Foster students' visualization skills."<sup>3</sup>

With many prominent universities adopting this new method, can Waterloo continue with its traditional ways of teaching? Should we also try to change our teaching styles? In my opinion the answer to these questions should be "Not right now." The "Active Learning" format will not be feasible for our first-year students at present. This method is time-consuming for the student; moreover, our classroom architecture is not suited for this type of teaching. Most of our

Continued on page 9

### Academic Integrity...continued

Continued from page 1

Affairs, Sheila Ager (Arts) and Wayne Loucks (Engineering) joined me in a panel discussion aimed at faculty members, entitled: "How to Prevent/Deal with Cheating and Plagiarism". Although these events were all well attended and were probably successful in at least some sense, I have had the feeling that we have been preaching to the converted and that much more needs to be done in this regard. Other universities, for example, have participated in a web-based survey on AI administered by the Center for Academic Integrity (CAI: a non-profit organization to which UW has an institutional membership and for which the goal is to promote the five fundamental values of AI<sup>6</sup> in institutes of higher learning). Some have hired Academic Integrity officers.

We are now, I believe, moving more quickly in the right direction with our efforts. In September 2005, Dr. Bruce Mitchell (Associate Provost, Academic and Student Affairs) and I put together an ad hoc Academic Integrity Working Group comprising faculty-member, administration, undergraduate- and graduate-student, staff, and Faculty-Association representation. Bruce chairs this group, which has met monthly since that time. We have the official blessing of the Deans Council, every member of whom believes that AI-related issues need to be addressed more seriously and that more needs to be done in the way of educating faculty, staff and students. Although we have no official status, we are developing a plan to engage the students and faculty members of the University in the CAI's web-based survey, possibly as early as this fall, and are discussing ways to address such issues as education of students, staff, and faculty members about AI, and detection of dishonest behaviour.

There are many models for how best to educate students about why academic integrity is fundamental to what we do at the university. Some examples are: web-based AI tutorials (compulsory or not); activities during orientation week such as skits or contests to analyse and suggest solutions to moral dilemmas: web sites about how to avoid plagiarism in essay-writing; booklets about proper citation practise, etc. We will no doubt be discussing various alternatives and strategies in upcoming meetings. I believe that the three most important things we can do as faculty members are to: DISCUSS academic integrity with our students at

the beginning of the year, and provide information about proper citation practise (the library and UW-Ace can help a great deal here); CON-NECT<sup>7</sup> with them as a person

so they will be more likely to come to us if they are experiencing problems rather than to consider cheating; CLARIFY our expectations regarding collaboration on assignments and keep those clear messages coming: and FOLLOW THROUGH with REPORTING to the Associate Dean of our Faculty any violation of academic integrity we or our TAs come across. If we do not follow through, we run the risk of transmitting to our students the idea that doing honest work is not important.

As far as detection of plagiarism in written work is concerned, there are commercial plagiarism services such as Turnitin<sup>8</sup> for essays and

Moss<sup>9</sup> (Measure Of Software Similarity), a (free) detection service for computer programs. I know of some faculty members who would like very much for the University to adopt Turnitin, but I understand that the Deans do not favour this approach. The controversial issues surrounding Turnitin relate to student copyright and the idea that the system promotes an atmosphere of, at least initial, mistrust of the student because all work is submitted to the plagiarism-detection company to be checked for plagiarism against their vast database. By the way, Dr. Ming Li, a Canada Research Chair in Bioinformatics in the David R. Cheriton School of Computer Science here at UW, has developed SID (Shared Information Distance or Software Integrity Detection),

> which is (free) computerprogram detection software that appears to be superior to MOSS.

In summary, there

is lots to be done here to improve our culture of academic integrity, but I believe we're moving in the right direction and at a pace that has significantly picked up over the past few years. I believe it's vital that we continue to increase the momentum, otherwise we will be left behind and it won't be long before our good reputation will be at significant risk.

Barbara Bulman-Fleming

ALL academic offences should be

reported to the relevant Associate

Dean. Some cases, if appropriate,

whereas others need to be referred

to the Associate Dean for settlement.

can be handled informally at the

instructor/departmental level

<sup>1</sup> "Academic Integrity", in *Teaching Matters* (10), Fall 2002 http://www.adm.uwaterloo.ca/infotrac/t mSeptember02.html <sup>2</sup>Wayne Loucks' term to describe students who commit acts of dishonesty -Continued on page 11

# **Teaching Award Winners**

RACE congratulates this year's winners of the Distinguished Teacher Award! Coming from departments across our entire campus, these teachers are superb representatives of the breadth of teaching expertise available on our campus. Pictured from left to right are: James Barnett, Accountancy; George Davidson, Mechanical Engineering; Owen Ward, Biology; and Erik Woody, Psychology.









Please note that all Faculties have liaisons for the DTA awards who can act as resources for students wishing to nominate their professors for an award. Nominations for the DTA for 2007 are being accepted now. For information about awards, please visit: http://www.trace.uwaterloo.ca/awardshp.html.



L to R: Dan Olsen, Julie Gauley, Jason Tsang Absent: Spencer Rand

We would also like to congratulate the recipients of the Distinguished Teaching by a Registered Student Award: Julie Gauley, Biology; Daniel Olsen, Geography, Spencer Rand, Architecture; and undergraduate Jason Tsang, Planning. Congratulations to all!

The name change of the Distinguished Teaching by a Registered Student Award to the Exceptional Teaching by a Student Award was approved at Senate in April. Further award details can be found online at: http://www.trace.uwaterloo.ca/awardshp.html. Please note that students who won the DTRSA cannot win the ETS Award.

# **Summer Teaching Conferences**

wo teaching conferences are being held close to UW this summer. First, the University of Guelph is hosting a one-day teaching and learning innovations conference entitled "Pedagogies That Challenge." The event is being held

May 16. Registration and session information is available at: www.tss.uoguelph.ca/tli/.

This year, the University of Toronto is hosting the 26th annual Society for Teaching and Learning in Higher Education (STLHE)

conference. The theme this year is "Knowledge and its Communities." The conference runs from June 14 to 17 at Victoria College. Registration and program information is at: www.utoronto.ca/ota/stlhe\_sapes06. UW is an STLHE institutional member.

# Scholarly and Professional Development Activities at TRACE

onna Ellis, Associate Director of TRACE, will give an invited keynote address, "Understanding Ourselves as Teachers: Metaphors, Models, and Meaning", at Salem State College's annual retreat for faculty members called "Pearls and Perils of Teaching" on May 19. While there, she will also facilitate a workshop entitled "Understanding Ourselves as Teachers: Finding Your Own Meaning." In June, both Donna and Tracy Penny Light, TRACE's former Acting Associate Director, will facilitate a workshop entitled "Creating Community in the Innovative Classroom" at the annual meeting of the Society for Teaching and Learning in Higher Education in Toronto.

Tracy had a busy winter term off-

campus. She attended the Educause Learning Initiative meeting in California where she co-presented a preconference workshop on ePortfolios, and the American Association of Colleges and Universities Learning and Technology meeting where she presented a paper on "Disciplinary Approaches to Using ePortfolios to Advance Reflective Thinking and Integrative Learning," with two US colleagues, as well as co-facilitated a roundtable discussion on "Establishing and Maintaining Collaborations for Teaching and Learning". In addition, she attended The History Education Network (THEN) at UBC where she presented her recent research, "Facilitating Deep Learning in History with ePortfolios."

March was a busy month for

TRACE's Catherine Schryer. At the Association for Teachers of Technical Writing in Chicago she gave a paper called "Crossing Borders: Sites of Discursive Negotiation in Healthcare Practice" and she presented an invited address for the Faculty of Education at McGill in Montreal entitled "Teaching Strategies and Case Presentations: Implications for Professional Training Programs." In addition, her research group had a paper published that month: Spafford, M., Schryer, C.F., Mian, M. & Lingard, L. (2006). Look who's talking: Teaching and learning using the genre of medical case presentations. Journal of Business and Technical Communication, 20 (2): 121-158.

Barbara Bulman-Fleming

### **Teaching Physics...**

Continued from page 6 science and engineering students take many courses in their first year and time becomes a major factor to them. Hence traditional lectures, in my opinion, are better suited for our students. But, we could change our tutorials to have the students more actively involved and I would like to see this method being imple-

mented for our first-year Physics tutorials. On the other hand, the "Active Learning" format might work for some upper-year Physics courses. In my opinion, probably a combination of the traditional and active-learning teaching methods would be the best for our students, depending on their level.

Rohan Jayasundera

1http://mazur-

www.harvard.edu/education/education menu.php

<sup>2</sup>http://physics.nku.edu/new/studiophysics.htm

<sup>3</sup>http://www.brevard.edu/fyc/ruproject/mit/teal.htm

### LT3 Spring 2006 Events

(Centre for Learning and Teaching Through Technology)

"Even your pillow will need a pillow": the extent to which student comments from ratemyprofessors.com map against the best practices proposed by experts in higher education. A presentation by Dr. Mark Morton, Instructional Program Manager, LT3 Centre.

Wednesday, May 17, 12:00 - 1:00 pm, FLEX Lab, LIB 329.

Please visit the LT3 web site, for a complete list of upcoming Spring 2006 events:

http://lt3.uwaterloo.ca/events

# **Teaching Excellence Council (TEC) Activity**

eaching Excellence Academy (TEA): The second UW TEA took place April 26, 27, 28 and May 1. It was facilitated by Tracy Penny Light and Donna Ellis, as well as Bob Sproule (School of Accountancy) and Mardy Frazer (Kinesiology) who were participants in UW's first TEA held last August. This year, there were 11 participants. More information concerning this year's session will appear in the fall newsletter. What occurred during these four days was described by Tracy in an article in September 2005's Teaching Matters concerning last August's session: "The workshop provided an opportunity to reflect on individual teaching philosophies and to identify ways to develop personal excellence as a teacher; to learn and apply course design principles to design or redesign a course; and to share instructional and assessment methods."1

Barbara Bulman-Fleming

### **TEC Working Groups**

### Open Classrooms:

The Open Classroom Working Group offered a series of three open-classroom sessions in the winter term, following a successful pilot program in the fall. Three excellent instructors teaching large classes (Jean Andrey, Andrew Hunt, and Lyndon Jones) opened their classrooms to faculty colleagues for one class. Each class was preceded by a discussion by the observers with the instructor on what the observers could expect. Another discussion session was held after the class to debrief. Feedback on all of the sessions was very positive. The working group has decided to continue the program and will offer two sessions in the spring term, both in Engineering (more details on page 11) and more next fall. The group decided to forego the pre-class discussion sessions, opting instead for contact by email, but the post-class discussions will be retained. No matter what the level of experience of the faculty observers, there is much to be learned from participation in these sessions. *Stan Laiken, Chair* 

### **Discipline Engagement:**

The Discipline Engagement Working Group (aka "Getting Students to Study What Interests Them") is investigating ways in which to help our students understand that inherent interest in their disciplines is an important part of academic achievement and a fulfilling career. The group believes that the more students are engaged in their program of studies, the more they come to love learning for its own sake and are able to become highly productive members of society. Cooperative Education and Career Services have offered the group their active support and assistance. Larry Smith, Chair

<sup>1</sup>http://www.trace.uwaterloo.ca/tmSepte mber05.pdf

# **New at TRACE**

Students who would like to book an observation towards GS 903 of the Certificate Program, can now do so by sending an email request directly to:

#### tracecut@admmail.uwaterloo.ca

Please remember to include:

Last Name: First Name: Department:

Home Phone Number: Campus Phone Number:

Email:

Information about the course you would like observed:

Course Name: Course Number:

Time: Date:

Location:

The SUBJECT line in your email should indicate that this is a RE-OUEST FOR OBSERVATION.

### Departmental Teaching Workshops

A number of departments have held teaching-based workshops, coordinated through TRACE, since the inception of this program last year. Known as "Teaching Spa Days" or "Teaching Retreats", these events have been instrumental in energizing department participants and providing a forum to discuss teaching and learning.

If your department is interested in holding such an event, please contact Donna Ellis at ext. 5713.

# **Spring Open Classrooms For Faculty Members**

Two award-winning instructors from the Department of Mechanical Engineering will open their classrooms this term. Please register through the Teaching Council Excellence website: http://www.teaching.uwaterloo.ca/groups.html.



ME 459 - Energy Conversion

Instructor: Roydon Fraser Date: Tuesday, May 9 Time: 10:30 - 11:20 a.m. Location: CPH 3374 Post-observation Discussion: 11:20 a.m. - noon Location: CPH 3374 Enrolment: 50



### ME 566 - Computational Fluid Dynamics for Engineering Design

Instructor: Gordon Stubley Possible Dates: Monday, June 5, 1:30 - 3:30 p.m. or Monday, June 12, 1:30 - 3:30 p.m. (to be confirmed a week prior

to event)

Location: CPH 3374

Post-observation Discussion:

3:30 - 4:30

Location: E2 2318 Enrolment: 25

### **Academic Integrity...**

Continued from page 7

used in TRACE workshop "How to Prevent/Deal with Plagiarism and Cheating", April 12, 2006.

<sup>3</sup>The data from which these rates were calculated were taken from the Report to Senate, Feb. 27<sup>th</sup>, 2006 by the University Committee on Student Appeals (UCSA), which is available as a pdf file on the web.

<sup>4</sup>McCabe, D.L. (2005) Cheating among college and university students: A North American perspective. *International Journal for Educational Integrity*, 1 (1).

http://www.ojs.unisa.edu.au/journals/index.php/IJEI

<sup>5</sup>Athough all cases need not be <u>referred</u> to the Associate Dean for action (that is, when the criteria for an informal resolution are met), all must be <u>reported</u>.

<sup>6</sup>http://www.academicintegrity.org/pdf/

<sup>6</sup>http://www.academicintegrity.org/pdf/ FVProject.pdf

<sup>7</sup>See Mark Morton's excellent article in this issue: "RateMyHeuristic.Com", p. 3

<sup>8</sup>http://www.turnitin.com/static/home.ht

<sup>9</sup>http://www.cs.berkeley.edu/~aiken/moss.html

### "Why report to the Associate Dean?

- to determine whether or not the student is a first offender, and to establish a record if he/she is (and is found guilty)
- to determine or confirm jurisdiction
- to obtain separate, and extra-departmental, confirmation on the question of the adequacy of the evidence in the case
- to obtain confirmation of procedural details
- to gain information on appropriate disciplinary action and equity of penalties

### What happens if an instructor does not report?

- Repeat offenders are not identified.
- Record is not established for a first offender.
- Inequities of penalty take place (too lax or too harsh).
- Student's rights may not be respected

Rights should and must be respected for their own sake.

Secondarily, not respecting a student's right to be heard and to receive an equitable penalty is an automatic route to a <u>successful</u> appeal.

- Students get the wrong idea about the academic integrity culture at UW (that faculty don't care, that there are no consequences, *etc.*).
- The University as an institution gets the wrong idea about the extent of the problem."

Notes are taken from Sheila Ager's presentation at TRACE's panel discussion April 12, 2006: "How to Prevent/Deal with Cheating and Plagiarism."

### **New TA Developer**



Amanda Clark is an eager and motivated new addition to the TRACE team. She is currently pursuing a PhD in Behavioural Neuroscience through the Department of Psychology and is excited to get involved in a variety of challenging teaching experiences while working with TRACE. Amanda has held several TA positions both at UW and throughout her undergraduate program at St. Thomas University. She is looking forward to applying the knowledge she has acquired in creating tutorials and labs and is ex-

cited to share these experiences with other students to develop their teaching skills. Amanda also has one-on-one teaching experience as a tutor with New Brunswick's Department of Education. Some of Amanda's favourite activities outside the classroom include cooking, creating scrapbooks, and minor home renovations. Amanda can be reached at: aclark@watarts.

### **Returning TA Developer**



Dan Olsen is returning to TRACE for a second time. Dan is a PhD student in the Department of Geography, focusing on tourism and the geography of religion. He has taught a number of courses on campus, and recently won the Distinguished Teaching by a Registered Student Award. He looks forward to working with CUT participants this summer. He can be reached at: dh2olsen@fes.

### dh2olsen@fes.

## **Announcing Spring 2006 TRACE Events**

TRACE will be offering many workshops this term, which are open to all UW faculty members, staff instructors, and graduate students.

From Presenting to Lecturing	May 9	12 - 1:30 p.m.
OR	May 12	12 - 1:30 p.m.
So You Want To Be a Faculty Member	May 25	12 - 2:00 p.m.
Teaching Dossiers	June 21	9:30 - 11:30 a.m.
OR	July 26	9:30 - 11:30 a.m.
Freeing Your Voice	July 18	12 - 2:00 p.m.
OR	July 19	12 - 2:00 p.m.
Becoming a Critically Reflective Teacher	August 10	12:30 - 3:30 p.m.

For more specific details, watch for notices in your department and via the Workshop and Certificate listservs. To join either listserv, email trace@admmail.

Certificate in University Teaching (CUT) participants, please note that all of these workshops partially fulfill CUT requirements for GS 901 and 902. The teaching dossier workshop is required for the CUT and will be offered every term.

To register for workshops, go to: http://www.trace.uwaterloo.ca/workhp.html

# T RACE eaching Matters

#### May 2006 Issue No. 21

Teaching Matters is published by the Teaching Resources (TRACE) Office. At TRACE, we support yet challenge instructors in developing and reflecting on their teaching practices, goals, and beliefs.

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