

Teaching Matters

great teaching . . . by design

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Register for CTE Events online at:
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Reforming to Transforming – Is the Ground Shifting?

Indergraduate education needs to change. This statement has become a common theme in various recent higher education publications and events. For example, Zundel & Deane's article in *University Affairs* late last year was entitled: "It's Time to Transform Undergraduate Education". This same message carried over to an Association of University and Colleges of Canada workshop on transforming Canadian undergraduate education held this past March for senior university administrators. Maryellen Weimer, one of the keynote speakers at this year's Opportunities and New Directions conference, led a workshop entitled: "Taking Risks in Teaching: Successfully Implementing Change".

The push appears to be on for making the educational experience different. Zundel & Deane (2010) asked 5 key questions about shifting our focus from teaching to learning:

- What do students need to be able to do by the end of their course or program?
- What pedagogical and curricular opportunities can we design to help them learn to do it?
- What resources can we consider as we design these learning opportunities?
- What can we do as institutions or educators to bring those resources to bear on student learning?
- How will we know whether we are successful? (para. 7)

At Ontario universities, the implementation of the degree level expectations and the creation of learning outcome statements at the program level help us to answer the first question posed, but we can see that many more questions follow.

The statement of learning outcomes naturally raises questions about how we can assess the learning and how we teach so that students can do the assessments. This focus on alignment links back to basic course design processes and principles, which are scalable to the curricular level. And it's at this curricular level where it appears to me that change is really occurring, at least at Waterloo.

We are seeing significant conversations happening within departments across campus that may well lead to some interesting transformations in how students will learn in courses and programs. The department level

 $continued\ on\ page\ 5$

Dinushan Nesan, CUT Award Winner



2011 CUT Award Winner

We are pleased to announce that Dinu Nesan of the Department of Biology has been selected as this year's Certificate in University Teaching (CUT) Award recipient. This award, funded by an anonymous donor, is given annually to an outstanding CUT participant who has completed the program within the past three terms. Dinu was selected for his commitment to developing his teaching skills, thoughtful ways of adapting teaching techniques learned through the CUT to his own courses and educational leadership in his department.

Dinu's interest in university teaching became apparent during his third year of undergraduate studies at Waterloo when he was hired as an undergraduate TA for a first-year biology course. When asked about that experience, Dinu largely credits his passion for sharing knowledge with others and his background in speech performance for helping him to teach the material effectively. When Dinu returned to Waterloo to pursue a PhD in biology, he continued to take on various TA assignments in lab and tutorial settings that ranged from introductory to upper-year biology courses. In 2009, his department recognized his outstanding teaching performance and named him one of the two recipients of the annual Graduate TA Award of Excellence. Over the last year Dinu took on various leadership and mentorship roles in his department: he facilitated teaching sessions for new TAs and served on a departmental committee to review the responsibilities of graduate student TAs.

During the second year of his PhD, Dinu enrolled in the Certificate in University Teaching (CUT) program which helped him become more self-aware and reflective as an instructor. Although Dinu's class-room presence and delivery skills were already strong, his awareness of his teaching goals and approaches greatly increased: "I feel so much more conscious of my preparation before a lecture or lab session. I think I am much more mentally present during my lectures, actively evaluating and correcting myself." He believes that with the help of the CUT, he is now better able to put himself into the students' shoes and to see the material through the eyes of his learners. Dinu's teaching portfolio, which he prepared as part of the CUT, has plenty of evidence to show his success in the classroom: positive verbal feedback from students, rounds of applause in recent guest lectures in a large class and consistently high student evaluations.

One of Dinu's goals in teaching is to challenge students' view of biology as a dry and difficult-to-understand subject. He strives to explain difficult concepts in fresh and accessible ways: "The process of finding the right analogy or the right series of explanatory steps to help a student grasp a difficult concept is immensely rewarding to me. And the moment at which a student understands the idea, or is able to solve the problem they struggled with previously, is always a small moment of joy and victory for both of us." When preparing for a class, Dinu focuses on real-life examples and useful analogies, connecting the subject matter to current scientific discoveries and cutting-edge research to illustrate a concept he plans to teach. He also prepares challenging questions which focus on thinking processes and explanations.

When asked about his future teaching plans, Dinu responds: "The rewards that I get through interactions with students are what draw me to teaching. I would be hard-pressed to follow a career that didn't let me experience that feeling at least some of the time."

In recognition of receiving the CUT Award, Dinu's name will be added to the CUT plaque displayed in the CTE's Library location. He will also receive his own plaque and a cash award. Congratulations, Dinu!

Teaching Award Recipients

The Centre for Teaching Excellence is pleased to announce the recipients of the **Distinguished Teacher Award** for 2011:



Steven Bednarski History, St. Jerome's University Recipient of the 2011 Distinguished Teacher Award

Dr. Steven Bednarski has gained an immense amount of respect and admiration since joining the University in 2006 as an assistant professor. He has continued this position while taking on the role as Co-director of Medieval Studies at St. Jerome's University. Students have noted that though his courses are academically demanding, he gives a lot in return. After a long day of teaching, Dr. Bednarski is never too busy to help his students find and use material while enthusiastically answering their questions. He captivates his students by creating a dynamic learning environment that is intellectually stimulating. His students are grateful for his eagerness to provide them with opportunities to share the stage with him at conferences in order to

"enhance their learning and help them mature as scholars". When asked by a colleague what he was most proud of in his teaching career, Dr. Bednarski responded, "the students" modestly adding, "point them in the right direction, they run with it".

Vivian Dayeh Biology

Recipient of the 2011 Distinguished Teacher Awards

Dr. Vivian Dayeh has been described by her students and colleagues as a "gifted, creative, approachable and a source of inspiration". Since joining the University as a continuing lecturer in 2005, Dr. Dayeh continues to teach with a high aptitude in a broad range of high-enrolment courses. One colleague humorously recalls a time when, as a graduate student, Dr. Dayeh did such a great job covering his course during a sabbatical leave that he never taught the course again! Her talent for explaining difficult concepts through stimulating analogies with relatable concepts is reputable among her students. She brings enthusiasm to the class, always managing to spark curiosity in students no matter how large the size of the class. Dr. Dayeh's colleagues and students also recognize her as



an outstanding citizen of the University community as they can always count on her to attend events and share her passion and knowledge.



Ted McGee English Language & Literature, St. Jerome's University Recipient of the 2011 Distinguished Teacher Award

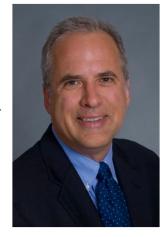
Since the beginning of his teaching career as an assistant professor in 1978, Dr. Ted McGee has gained a reputation for his "undiminished energy for improving as a pedagogue". He is always open to, and in search of, new methods of teaching and attends teaching workshops regularly as both a presenter and learner. As an English Language & Literature professor at St. Jerome's University, he has a "special gift for recognizing significant and interesting details in order to highlight the richness of the text". In turn, he constantly encourages students to make their own discoveries and share them freely. His students are grateful for his support, genuine interest, and commitment to their growth in learning. Dr. McGee is recognized for his passion and dedication towards teaching that goes well beyond the classroom walls.

Teaching Award Recipients...con't.

Mark Seasons Planning

Recipient of the 2011 Distinguished Teacher Award

For over ten years, Dr. Mark Seasons has been regarded as a "tremendous asset to the School of Planning, the Faculty of Environment, and the University". Currently, Dr. Seasons is the interim dean for the Faculty of Environment and an associate professor with the School of Planning. He is described as possessing a "unique combination of intelligence, humour, and compassion that he persistently applies to the enrichment of students and faculty as a whole". Welcoming students with his trademark, "hello colleagues", he has the ability to connect with students at a personal level and help them overcome their academic obstacles. He is well-respected and admired by his students and colleagues who appreciate his positive influence and guidance. Inside and outside of the classroom, he encourages his stu-



dents to not only understand the material, but to be engaged and voice their opinions. As a teacher, mentor, and 'colleague', Dr. Seasons continues to inspire personal growth and a passion for planning.

The Centre for Teaching Excellence is pleased to announce the recipients of the Amit & Meena Chakma Award for Exceptional Teaching by a Student for 2011:



John Champaign Computer Science Recipient of the 2011 Amit & Meena Chakma Award for Exceptional Teaching by a Student

John Champaign, a graduate student in computer science, has been a teaching assistant and instructor for various computer science courses for several years. His explanations of topics and concepts are highly regarded by his students. They also remarked on his genuine concern for their understanding and progress, and on his readiness to create a comfortable learning environment. John has "built up a reputation as a very capable and approachable instructor" according to a colleague. It is evident as his office is often filled with numerous

students seeking assistance with course material and advice for future plans, even well beyond office hours. In addition to his approachable and encouraging nature, John is recognized as a recipient for his contagious enthusiasm and continuous self-improvement.

Justin Eichel Systems Design Engineering Recipient of the 2011 Amit & Meena Chakma Award for Exceptional Teaching by a Student

Justin Eichel, a graduate student in systems design engineering, has been described as an "outstanding engineer, teacher, scholar and academic —a 'one in a million' person". His students from various systems design courses share their high regards in his ability to "explain concepts thoroughly and clearly while maintaining an engaging and enjoyable classroom". His professors and students noted his contributions to course development such as locating alternative textbooks and supplemental material. Justin makes an effort to accommodate his students' various levels of



learning by seeking advice from professors on how to improve his teaching. His students are grateful for his support and recognize his confidence in the classroom as a motivator to their learning.

Teaching Award Recipients...con't.



Adam Neale Electrical & Computer Engineering Recipient of the 2011 Amit & Meena Chakma Award for Exceptional Teaching by a Student

Adam Neale, an electrical and computer engineering graduate student, has been a teaching assistant and instructor for numerous electrical and computer engineering courses over the past several years. He is seen as an "invaluable resource for undergraduate learning" by colleagues, and admired for his encouragement and support of his students. His innate ability to filter through course material and focus on important concepts are highly regarded and appreciated by his students. His "gifted ability to bring theoretical concepts to life through examples and practical experiences" was also noted. Adam is recognized for his dedication to enhance student learning through his teaching and readiness to update course material.

Mehrdad Pirnia Electrical & Computer Engineering

Recipient of the 2011 Amit & Meena Chakma Award for Exceptional Teaching by a Student

Mehrdad Pirnia, an electrical and computer engineering graduate student, has been described as an "excellent communicator with a very open and positive attitude towards the whole teaching process". In the classroom, he creates a dynamic and friendly learning environment while motivating his students to challenge themselves academically. His well-prepared lectures, filled with real life examples and analogies, are highly regarded by his students who recognize the positive impact he has made on their learning. Based on his ability to communicate course material, along with his efforts to improve his teaching strategies, his professors



note that Mehrdad is a "great teacher who is well on his way to establishing a successful academic teaching career".

All citations written by Cathy Duong. Special Projects Assistant, Centre for Teaching Excellence

Reforming to Transforming – Is the Ground Shifting?

Continued from page 1

seems to make sense as a unit of change – it's not as large as a whole Faculty and yet it has the potential for more impact than changes made by an individual instructor. Lee, Hyman & Luginbuhl (2007) provide a relevant framework to consider when working on change at the departmental level. It stems from the concept of readiness and serves as a good reminder that nothing will change if certain conditions are not in place, including a shared departmental vision about how learning could happen, enhanced collegiality to allow candid discussions, and the support of key faculty members.

Calls for educational reform have been in the literature for decades now. Maybe this decade will be the one where the ground really does shift for more than the early adopters and the bleeding edge innovators. Let us know if you'd like to explore new ideas about teaching and learning in your department. We're here to help.

References:

Lee, V.S., Hyman, M.R. & Luginbuhl, G. (2007). The concept of readiness in the academic department: A case study of undergraduate education reform. *Innovative Higher Education*, 32 (3), 3-18.

Zundel, P. & Deane, P. (Dec. 2010). It's time to transform undergraduate education. *University Affairs*. Downloaded April 6, 2011, from:

http://www.universityaffairs.ca/its-time-to-transform-undergraduate-education.aspx.

 $Donna\ Ellis$

Still Growing: Opportunities and New Directions (OND) Conference in its Third Year

Tore than 100 members of the research community involved in the Scholarship of Teaching and Learning, or SoTL as it is commonly called, converged at the University of Waterloo on April 27 & 28 for our third annual *Opportunities and New Directions: A Research Conference on Teaching and Learning.* Run by a sub-committee of the Teaching-Based Research Group (TBRG), the Teaching Excellence Council, and the Centre for Teaching Excellence, the event was supported by Geoff McBoyle, Vice-President Academic & Provost.

OND opened with the Presidents' Colloquium, "Can Scholarly Work on Teaching and Learning Actually Improve my Teaching?" given by Dr. Maryellen Weimer, the editor of the popular blog <u>The Teaching Professor</u>. Dr. Julia Christensen Hughes gave the closing keynote, "The SoTL Imperative: Towards Greater Dissemination and Evidence-Based Practice" and Nicola Simmons gave a plenary on "Telling SoTL Tales: Sharing Research Results in all the Right Places."

Concurrent presentations and workshops were delivered by researchers from Waterloo and across North America and included topics such as digital story-telling, virtual language laboratories, using "economic incentives" to motivate students, and the effects of parental leaves on graduate students' completion times. A combination of 20-minute papers, 50-minute and 90-minute workshops as well as poster discussions were used to engage conference attendees over the two day event.

The conference also included a wine and cheese reception that served not only as the poster session, but also as the book launch for *Opportunities and New Directions: Canadian Research about Teaching and Learning, Volume 2* that arose from last year's conference.

If you were unable to attend, you may still view the program <u>online</u> and if you're interested in the Scholarship of Teaching and Learning, you may also want to join the Teaching-Based Research Group. For more information, please contact Nicola Simmons at <u>nsimmons@uwaterloo.ca</u> or ext. 32940.

Nicola Simmons

LIF PIF Grant Workshops

(for hands-on support getting the grant proposal written) Tuesday, May 3, 12:30 – 3:30 pm FLEX Lab (LIB 329) Tuesday, May 10, 12:30 – 3:30 pm FLEX Lab (LIB 329)

We have learned from past applicants who have gone through the application process that attending one of our workshops saves time (and we realize how busy you are!) and helps applicants avoid potential frustration. We therefore strongly encourage you to attend one of our sessions. The workshops are designed to guide you through the application process. The LIF PIF deadline is Monday, May 30, 2011. Past applicants have commented that an early start in writing the application is important.

Please contact Nicola Simmons at <u>nsimmons@uwaterloo.ca</u> or Shirley Hall at <u>s8hall@uwaterloo.ca</u> to sign up for a workshop.

Programming for uWaterloo Postdoctoral Fellows



Several participants of the postdoc series receive their certificates.

Left to Right: Md. Safiuddin, Lei Zhang, Tatyana Romantsov, Reza Dorrigiv and Yongming Tai.

I n March 2011, we had an opportunity to work with 22 postdoctoral fellows (nearly 10% of postdocs on campus) who registered for the first offering of our new Postdoctoral Teaching Development Seminar Series. The series was structured as six interactive, discussion-based seminars. The goals of the program are to introduce postdocs to key topics in university teaching and learning, help them to articulate their teaching philosophies and apply course design principles to their future courses. Most of the work was done in class but some seminars included pre-class

assignments, such as completing a <u>Teaching Perspectives Inventory</u> and creating a concept map of a "dream course."

The feedback that we received from the first cohort was enthusiastic. Many postdocs valued the opportunity to meet their peers from other departments and to have a forum for discussing teaching and learning issues. As one of the participants wrote in the program feedback, "These seminars were a very good initiative for postdocs to give them means in starting to build their own courses, as future professors for the young generations."

We plan to offer the postdoc teaching development series every term. Enrolment is limited to 25 participants. For more information about future offerings, visit the CTE <u>website</u>.

Svitlana Taraban-Gordon

Coop Students-Experience at CTE

Cathy Duong (Health Studies): I have learned about numerous resources and support CTE provides to instructors at various points in their career that instils meaningful learning and effective teaching. I also learned tips on improving my communication skills and creativity during my time at CTE through various projects and events.

Michelle Yien (Arts/Psychology): So far this term, I've learned a lot of new skills that I didn't expect to learn. For example, working with Nicola Simmons (Research and Evaluation Consultant) has broadened my qualitative research skills and I've learned how to produce a GANTT chart. Working with Veronica Brown (Instructional Developer, Curriculum and Programming) has allowed me to experiment with new programs such as VUE. Overall, working in CTE has increased my knowledge about the university and showed me the "behind the scene" action. After working in CTE I realized that each lecture takes a lot of preparation and that professors truly care about their students and the quality of education uWaterloo provides.

Elizabeth Zhu (IT Management): Although I do not envision myself to have a career in academics in the future, I benefitted greatly from the workshops since they emphasize universal skills that would be helpful in any profession. From the great ideas explored in the workshops, I realized that all disciplines could be changed to be more dynamic and interactive, even very dry subjects like math.

Welcome to Shirley Hall



Shirley joined us earlier in the Winter 2011 term. As Research Associate at CTE, Shirley supports research about teaching and learning with a focus on the Scholarship of Teaching and Learning (SoTL).

During the course of her graduate studies, Shirley attended conferences and workshops themed around enhancing teaching through scholarly activities. While working as a TA and sessional instructor, her interest in teaching and learning in higher education grew. These experiences served as the catalyst for greater understanding and interest in teaching and learning research. In 2009 she began a research assistantship with Professor Frederick Evers, (past director of Teaching Support Services at the University of Guelph), on a two part study funded by the Higher Education Quality Council of Ontario, entitled "Faculty Engagement in Teaching Development Activities".

Following a comprehensive literature review (Phase One of the study); Phase Two of the study included focus groups and a survey to investigate faculty engagement in teaching development activities across six Ontario Universities. Shirley welcomes the opportunity to push the parameters of teaching and learning and is excited to bring her experience as a student, TA, research assistant and sessional instructor to CTE. Shirley received both her Bachelor's and Master's of Landscape Architecture from the University of Guelph, where she also teaches part-time in the School of Environmental Design and Rural Development.

New Graduate Instructional Developer



Instructional Developer with the Centre for Teaching Excellence, Marty Smith is involved in evaluating teaching events, facilitating workshops and providing feedback to fellow graduate students on their teaching. Having received his BSc with honours in biochemistry at the University of Waterloo, Marty has gone on to pursue a PhD in chemistry, also at the University of Waterloo, focusing on the biochemistry of protein folding. Marty's passion for teaching has developed over his graduate career through his role as a teaching assistant and guest lecturer in several undergraduate courses. He also serves as a graduate student mentor for undergraduate students as they complete their senior undergraduate projects. Through his own positive experiences with the CUT program, Marty always looks forward to collaborating with others to improve the quality of university teaching.

Marty has taken on this position formally held by Arash Shahi who has been with us for 16 months, and in the last 4 months, assisted with the new Fundamentals Program. Thank you Arash!

Moving On

It is with both anticipation and some sadness that Nicola Simmons will be leaving CTE at the end of June to spend more time with her first two loves: teaching and educational research. Nicola chaired this year's Opportunities and New Directions conference (held April 27 & 28) and will shepherd through this year's LIF PIF teaching research grants process (the deadline for LIFs and PIFs is May 30; winners will be announced on June 30.) We thank Nicola for all of her contributions to CTE and the University of Waterloo, and we wish her all the best in her future endeavours!

Course Internationalization Grant Profile: STAT331

White the help of a course internationalization grant, a repository of online real-world data sets, illustrating regression methodology discussed in STAT331/361 -Applied Linear Models was developed. The collected data covers a wide range of applications, eg. from life expectancy in Argentina, Bangladesh, Ukraine and Italy to Trinidad and Tobago currency exchange rates and surface temperature in Eastern Tennessee, USA. The data sets are widely employed for homework, case studies and student team projects, with an overall goal to illustrate how the same real world problem can be approached with different statistical methodology. This allows us not only to enhance the student learning experience and to facilitate teaching outcomes of regression courses, but to emphasize that no "perfect recipe" in statistical modeling exists. Instead, one is to tackle the problem from different angles and in a context of the whole surrounding world.

The repository is hosted on UW-ACE and is a part of the collection of the key teaching-assisting tools available to all instructors in Statistics and Actuarial Science. Such sustainability is of particular importance since STAT331 is offered every term, has consistently high enrolment rates (more than 120 students) and is taught by different instructors.



Yulia R. Gel, Department of Statistics and Actuarial Science

In each newsletter, we will profile a course internationalization grant project completed by a University of Waterloo instructor who was awarded a Course Internationalization Grant during the previous academic year. Yulia Gel, Statistics and Actuarial Science, reports (above) on how she internationalized her STAT331- Applied Linear Models course.

Course Internationalization Grants

Waterloo International and the Centre for Teaching Excellence are pleased to announce that <u>Course Internationalization Grants</u>, at \$1500 each, are open to full-time faculty members at the University of Waterloo. For more information, contact <u>staraban@uwaterloo.ca</u>.

NOTE: Grant applications will be accepted on a rolling basis, subject to availability of funds.

Congratulations to CTE Grads!

The following 7 students completed the <u>Certificate in University Teaching</u> program: Suzanne Ainley (AHS), Jafar Al Bin Mousa (ENG), Meyyappan Narayanan (ENG), Dinushan Nesan (SCI), Ali Emamian (ENG), Jeffrey Squire (ENV) and Morgan Tunzelmann (ARTS).

In addition to CUT graduates, 24 participants completed the Fundamentals of University Teaching.

CTE Is On the Move!

Later this summer, we've got plans to move and set up a new office space on campus. With the addition to the Environment buildings, we have been given the opportunity to bring our Math & Computer and Dana Porter Library offices together in one space in Environment 1. You'll find us on the third floor of EV1 where the School of Planning faculty and staff currently sit. Our Faculty Liaisons will continue to have their offices out in their respective Faculties. We will also continue to hold our events in the FLEX Lab in Dana Porter, but eventually we will be opening a new workshop space in EV1. Stay tuned as we firm up our moving plans. We'll look forward to having you visit our new space!



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Centre for Teaching Excellence

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