Savouring Failure

In last winter’s newsletter, I wrote an article about teaching risk-taking. While I still agree with the ideas that I put forward then, I can see that I wasn’t yet at the root of the issue. Setting an environment that encourages students to take risks in their learning is very important to promote and support deep learning, but it’s not the whole story. What I’d like to spend a few words exploring in this article is a key obstacle to real learning: the possibility of failure.

Trying to avoid failure can be a huge motivator for us all. Students are no different. Failing a test, assignment, or exam can be a big wake-up call to buckle down and work harder; it can also paralyze some of our students and be very demoralizing. Failing when it counts can cost students a course credit or even a year of study. Conversely, failing at a low-stakes activity can be valuable to push students to pursue needed assistance and persevere – it can encourage them to, well, learn!

In his November 2013 presentation to Senate, Engineering’s Associate Dean, Teaching – Gord Stubley – shared with us a variety of reasons why deep learning will always be challenging. In his talk, he focused on the limitations of prior knowledge, which can sometimes lead students to make faulty assumptions about or even dismiss new ideas because they don’t fit their existing knowledge. As they are exposed to increasingly more complex concepts, they can over-apply existing understandings, which limits them from challenging their current understandings and expanding or revising them. I think as educators we need to recognize that as we push students to challenge and change their prior knowledge, we are increasing their odds of failing. We are pushing them from comfort to discomfort.

One strategy that Stubley recommended to help encourage students to move out of their comfort zones and grapple with new concepts involves fostering their confidence in their abilities to learn (or their self-efficacy). Confidence can be nurtured in various ways, but overall students build confidence through repeated practice with feedback. This practice with feedback may start as early as a diagnostic test or assignment in which students can identify what they already understand and what they need to learn. Repeated testing (which can be via assignments as well) on the same concepts can also help. What may be most powerful, though, is to enable students to revise their work to demonstrate improved understanding and mastery. This pattern may be achieved through online testing that allows students multiple attempts or by accepting resubmissions of revised work such as essays. Additionally, previously earned, lower marks could be dropped so students’ end grades would reflect the outcomes of their learning versus the process along the way. What these types of assessment patterns help to promote is the reframing of failure into what it is: part of the process of learning.

Other authors, such as those highlighted in a recent University Affairs article (see MacDonald, 2013), suggest that failure has actual value in learning situations, indicating that it can help to strengthen perseverance if students are taught to cope with it, re-frame it as parts of the learning process, and use it to adjust their performance. The key seems to be the last part of the previous statement: using failure to change outcomes. In essence, we want students to do something productive with their mistakes. But this requires us to be very clear about what we expect students to learn so that our feedback is meaningful and helps with their learning.
My inspiration to write about this topic was a slogan on a student’s t-shirt that read: “Tomorrow I’ll make better mistakes”. Isn’t that part of what we’re striving for in the quest to foster our students’ education: to bring what they learn from mistakes to new learning situations so they can continue to make progress? Failure is a part of learning. Perhaps the more we can savour this idea, the more we can help our students perceive it as something to expect and use it as feedback in their quest to learn more deeply.

References:

Donna Ellis

Annual Teaching and Learning Conference: OND
Please plan to join us for the University of Waterloo’s annual Teaching and Learning Conference: Opportunities and New Directions (OND)!

Date: Thursday, May 1, 2014
Proposals due: Friday, January 31, 2014
Theme: “Rethinking and Reframing the Assessment of Learning”

Questions we’ll explore
- How assessment data can be used to inform instructional practices
- Approaches to assessment that challenge norms in your discipline
- Relationships between assessment and (deep) learning
- Similarities and differences that exist in assessing common skills or concepts across disciplines
- Strategies for doing assessment with limited resources
- Assessment as a bottleneck or threshold concept in teaching
- Preparing students for assessment

The Call for Proposals may be found at the OND Conference website. Proposal Submission form

Conference Highlights
- Break-out sessions, including presentations, panels, workshops, and roundtables to share practice and research
- “Igniting Our Practice”: Showcase of teaching by exemplary uWaterloo Professors
- Keynote speaker, Dr. John Bean
- Lunch at the University Club

Registration will open later in January.
For questions regarding the Conference, please contact Julie Timmermans (julie.timmermans@uwaterloo.ca). We hope to see you in May!

Julie Timmermans
Rohan Jayasundera: Great Expectations

In 1987, Arthur Chickering and Zelda Gamson, with the assistance of other experts in higher education, identified what they called “Seven Principles for Good Practice in Undergraduate Education.” There’s little doubt that all seven of these principles are enacted by Rohan Jayasundera – a recipient of Waterloo’s Distinguished Teacher Award – but one principle in particular stands out: namely, high expectations. “I don’t believe in making life easy for students,” says Jayasundera. “I don’t think that giving easy midterms or assignments is the way to motivate them. They come to university to study something. They are here because they want to be here. They need to be challenged.”

Perhaps because he is a physicist, Jayasundera is also keenly aware that for every action there is an equal and opposite reaction: he knows that if he is going to have high expectations of his students, then he in turn needs to be there to support them. “To challenge them,” he says, “I have to demand hard work from them, and if I demand that then I have to be available to them. So, my door is open for students anytime.”

Jayasundera means what he says. On weekdays he meets with students in his office until evening, and again on Saturdays for half a day.

Students recognize – and appreciate – both Jayasundera’s high expectations of them and his corresponding dedication to them. “He's tough,” says one student “but he goes out of his way to make sure each and every one of his students succeeds.” Another student comments that “All the extra time he spends with the students is incredible. He’s a very devoted teacher, and always willing to help you understand everything he teaches.” A third student sums up Jayasundera’s instructional approach this way: “He doesn’t have office hours – because his office is never closed!”

After 31 years of teaching at Waterloo, how does Jayasundera maintain this level of dedication to his students? The answer perhaps lies in what he identifies as his teaching philosophy: “If you enjoy what you do, you’ll do a good job; if you do a good job, your students benefit; if your students benefit, they are happy; if they are happy, they love you; if they love you, then it helps you enjoy what you do – and back to square one!” The word “love” might seem surprising in an academic context, but Jayasundera uses it very intentionally: he emphasizes that “if you don’t love your students and love what you are doing, then you don’t succeed.” His ardor for his students and his discipline is infectious. “He makes his students fall in love with physics,” says one of them. “He loves to teach and loves to help,” says another. “I’m going to miss him,” says a third, as the course draws to an end.

Jayasundera’s high expectations – of his students and of himself – are at the heart of his teaching practice, and are also what made him a natural choice for the position of Senior Teaching Fellow in the Faculty of Science. In that role, he recognizes that there is no single template for good teaching. “Every instructor,” he says, “has to find a teaching style that suits his or her personality.” Still, if one is looking for a role model, Rohan Jayasundera is hard to beat.

Rohan Jayasundera was interviewed by co-op student Sophie Twardus, Special Projects (Teaching Stories), CTE.

Note: The Centre for Teaching Excellence is developing a series of teaching stories to honour excellent teaching and to inspire others. Visit the Teaching Stories section on the Centre for Teaching Excellence’s website to see stories such as: “Jonathan Witt: Communicating with Care”, “Jason Grove: Guiding the Learner”, “Christine McWebb: Fostering Creativity”, and “Laura Johnson: Planning for the Real World”. Keep watching as the Centre plans to unveil six stories each term.

If you would like to recommend that a specific Waterloo instructor be highlighted in a teaching story, please email the Centre for Teaching Excellence at cte@uwaterloo.ca with the instructor’s name and department.
**LITE Grants**
The purpose of the LITE Grants is to provide support for experimenting with and investigating innovative approaches to enhancing teaching that aim to foster deep student learning at the University of Waterloo.

Two kinds of grants are available: LITE Seed Grants for projects up to $5,000, and LITE FULL Grants for projects up to $30,000. Both grant formats emphasize the contribution of the project to the University of Waterloo learning community.

There are two annual LITE Seed Grant application deadlines: February 1 and June 1. The one annual deadline for LITE Full Grants is October 1.

For more information about the grants, please visit the [LITE Grant website](#).

If you and/or your colleagues are considering applying for a grant and would like to discuss your project, please contact Dr. Julie Timmermans at the Centre for Teaching Excellence: julie.timmermans@uwaterloo.ca or Extension 32940.

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**Teaching Awards**
Do you know an excellent instructor and/or teaching assistant? Recognize him/her with a teaching award! Tips on writing a persuasive nomination letter can be found in Trevor Holmes’ blog entry ‘How to Write an Effective Nomination Letter’.

**Distinguished Teacher Awards** are given in recognition of a continued record of excellence in teaching at the University of Waterloo. The nomination deadline is Friday, February 7, 2014.

**Amit & Meena Chakma Awards for Exceptional Teaching by a Student** are given in recognition of excellence in teaching by students registered at the University of Waterloo. The nomination deadline is Friday, February 14, 2014.

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**CTE Staff Research and Service**
During 2013, staff at the Centre for Teaching Excellence engaged in various research and service activities. In the [Centre’s Staff Research and Service](#) activity list, staff members gave invited presentations/workshops in addition to publishing in peer-reviewed journals (such as the International Journal for Academic Development) and presenting at teaching and learning conferences. Of special note are the workshops given by Dr. Mark Morton at the 2013 Teaching Symposium at King Saud University, Riyadh, Saudi Arabia.

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**Documenting Your Teaching for Tenure and Promotion**
CTE908 (Documenting Your Teaching for Tenure and Promotion) being held on Tuesday, March 25, 2014 is open to all tenure-track faculty members at Waterloo. Mario Coniglio, Associate Vice President Academic, will moderate the panel discussion at this Lunch and Learn session held in Needles Hall 3001 from 11:45 am to 1:15 pm. Register through myHRinfo.

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*Julie Timmermans*

*Verna Keller*
Welcoming Monika as CTE's new Program Coordinator for Graduate and Postdoctoral Programs

As Program Coordinator, Monika Soczewinski works with the Graduate and Postdoctoral Programs at the Centre for Teaching Excellence. She is involved in coordinating the events and programs of the Fundamentals of University Teaching certificate, Certificate in University Teaching, Certificate in University Language Teaching, and the Teaching Development Seminar Series for Postdoctoral Fellows. She has prior experience working with graduate students and professional graduate programs at the School of Public Health and Health Systems, where she was the Professional Graduate Programs Assistant. Monika received her BA in Honours Psychology from the University of Waterloo, has a certificate in Career Development, and is currently enrolled in a MEd program at the University of Calgary, focusing on eLearning and Assessments.

Monika Soczewinski

Welcoming Brett as CTE’s new AHS Liaison

As a CTE Faculty Liaison, Brett Beston helps instructors in the Faculty of Applied Health Sciences integrate technology into their teaching through innovative learning activities in our learning management system (LEARN). Brett will also be facilitating the uptake of teaching and learning initiatives established by the CTE in the Faculty of Applied Health Sciences, emphasizing blended learning, learning technologies and course design. He also serves as guide for instructors to access other CTE resources.

Prior to joining the Centre for Teaching Excellence in November, Brett worked at McMaster University as a teaching faculty member (Assistant Professor) for the Department of Psychology, Neuroscience, and Behaviour. He conducted research on the impact of early visual deprivation on cortical development using a model of amblyopia (monocular deprivation) and on evaluating methods of promoting optimal visual recovery after deprivation. Brett has also conducted pedagogical research in the area student engagement and the use of slideware in lectures. Brett earned his BSc and PhD from McMaster University.

Brett Beston
Welcoming Angela as CTE’s new Graduate Instructional Developer

Angela Nyhout is a PhD student in the Department of Psychology’s Developmental Program. Prior to beginning her PhD at Waterloo in 2009, Angela completed her BSc at the University of Western Ontario. Her research is focused on understanding the development of children’s narrative (story) comprehension and processing abilities. For her dissertation, Angela is investigating young readers’ ability to represent (i.e., visualize, imagine, and understand) settings and spaces in narrative worlds and the relationship between this ability and other academic abilities. In her time at Waterloo, Angela has been fortunate to have opportunities to develop and improve her teaching through teaching assistantships in Psychology, guest lectures and lectures to non-academic audiences, and through CTE’s Fundamentals of University Teaching and Certificate in University Teaching Programs. Angela worked at the CTE in single-term positions in Spring and Fall 2013 as a Graduate Instructional Developer and TA Workshop Facilitator. In Fall 2013, Angela taught her first university course as an adjunct instructor for an undergraduate research methods course.

As a Graduate Instructional Developer, Angela looks forward to getting more involved in the University of Waterloo’s teaching community. She hopes to help equip fellow graduate students with the skills necessary to be effective teaching assistants and instructors, while also continuing to develop her own teaching skills.

Angela Nyhout

Welcoming Prateek as CTE’s new TA Workshop Facilitator

Prateek Goel completed his Masters in Chemistry at the University of Waterloo in the summer of 2012, and is pursuing his PhD studies. During his Graduate Studies, Prateek has been a TA in various courses for different subjects, class sizes, and styles (labs as well as theory). Prateek has taught tutorials to the first-year general chemistry class of approximately 200 students. His enthusiasm and positive energy in the classroom play a key role in the success of his teaching. He has been involved with Let's Talk Science, a Canadian National Charitable organization for Science Outreach as a volunteer and facilitator. In 2012, a prestigious Science Education school in India, Homi Bhabha Centre for Science Education, invited him to give a talk on Chemistry Education.

Prateek’s research interests lie in the field of Theoretical Spectroscopy and Electronic Structure Theory. Outside of school, he enjoys indulging in cooking, films, and nature.

Prateek Goel
Welcoming Faith-Anne as CTE’s new TA Workshop Facilitator

Faith-Anne is a TA Workshop Facilitator who is looking forward to facilitating workshops for graduate students in the Centre for Teaching Excellence’s Fundamentals of University Teaching program. She is also looking forward to collaborating with the Faculty of Applied Health Sciences in areas of teaching assistant support and training. Faith-Anne has completed the Fundamentals of University Teaching certificate and is currently working towards completing the Certificate of University Teaching.

Faith-Anne’s passion for teaching is rooted in a love of delivering presentations and guest lectures, and a desire to provide high-quality teaching support for course instructors. Faith-Anne has held a total of five teaching assistantships in the Department of Recreation and Leisure Studies in the areas of recreation and leisure, leisure and well-being, facilitation techniques, and therapeutic recreation.

Faith-Anne began pursuing her PhD in the Department of Recreation and Leisure Studies at the University of Waterloo in September of 2013. Prior to that, Faith-Anne graduated with an Honours BA in Recreation and Leisure Studies, with a major in Therapeutic Recreation, in 2011 and an MA in Recreation and Leisure Studies in 2013. Her research interests are in the area of gender and leisure, women’s experiences of leisure, and use of leisure as resistance.

Faith-Anne Wagler

Congratulations to CTE Fall 2013 Grads!
The following seven students completed the Certificate in University Teaching program in Fall 2013: Adam Bradley (ARTS), David Hofmann (ARTS), Daniel Rasmussen (MATH), Mehrdad Pirnia (ENG), Jozsef Vass (MATH), Susan Yates (AHS) and Seyedeh Maryam Vasefi (SCI).

The following two students in Germanic and Slavic Studies have completed the Certificate in University Language Teaching program in Fall 2013: Daniela Roth and Sara Ghaffarian.

In addition to CUT graduates, 29 graduate students completed the Fundamentals of University Teaching program in Fall 2013. The numbers by faculty are: Applied Health Sciences 5, Arts 4, Engineering 8, Environment 3, Mathematics 4 and Science 5.

Congratulations also to the 23 Postdoctoral Fellows, and 4 visiting faculty from China, who completed our Teaching Development Seminar Series this term.

Monika Soczewinski

CTE Open House – Official opening of EV1 241 and 242
Please drop by EV1 241 and EV1 242 any time between 10 am and 2 pm to see our new workshop rooms. With accessibility and flexibility in mind, we renovated in 2013 and began to use the rooms at the end of Fall Term. Coffee, tea, and snacks will be available throughout the Open House, and CTE staff will be on hand to talk about the space and our plans for the upcoming year of workshops and events.

Trevor Holmes
On Leaving Spaces and Making New Ones

Many years ago, long before I worked at Waterloo, I found myself envying a special space designed and built for teaching experimentation and flexible workshops. It was, of course, the FLEX Lab at then-named LT3. Envisioned as a collaboratory, the people who used it included workshop facilitators, of course, but also innovative teachers who ran their classes there in order to be able to change the typical way a lecture or seminar might run. There were multiple whiteboards and bulletin boards for rapid display of project work by small groups. There were two projectors, back and front, so that the very notion of back and front was called into question and one could easily project two different presentations or objects simultaneously or serially.

When the Centre for Teaching Excellence was formed, we continued to make use of the FLEX Lab (in fact, well past our planned exit). We didn’t realize at the time that our workshop offerings for graduate students, postdoctoral fellows, and faculty/staff would quickly cause scheduling problems with the single room, so we were thrilled to be offered our own dedicated workshop space as part of our consolidating move to EV1.

Enter the renovation journey.

Anyone who has been involved in renovations will recognize the ups and downs, the expectations and disappointments, and the joy of the finished project. Ours is now finished after a good many months of work and a long wait to start. Although we moved house in 2011, we only just began using the new CTE workshop rooms (EV1 241 and 242) in October 2013. We’ve ironed out the bugs, for the most part, and we’ll be hosting an Open House on Monday, January 20 between 10 am and 2 pm. We invite you to drop in and share coffee and cookies with CTE Faculty Liaisons, Instructional Developers, Program Coordinators, and Administrative staff. I’ll make a few remarks at noon, but the time is really yours to explore the new technologies and the space for a few moments out of your day.

A few features that make the new rooms as flexible as – we hope in some ways even more than – the old FLEX Lab:

EV1 241 has:

- a podium that raises/lowers at the touch of a button, accommodating 5th to 95th percentile for height
- extensive whiteboards with dedicated lighting along the longest wall
- two projectors for presenting on the narrow wall or the long wall
- two orientations (configurable for 12-28 people in workshop, boardroom, or lecture style)

Both rooms have:

- Crestron controllers at the wall with hdmi and vga connections
- tables with extra lightweight tops for ease of rearranging
- variety of chairs with and without arms; raising and lowering in 242 for smaller, long workshops
Teaching Matters is published by the Centre for Teaching Excellence at the University of Waterloo. At the Centre, we foster teaching and learning of the highest quality at Waterloo.

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