Rethinking Assessments of Student Learning

As I write this article, a number of you will have just finished marking your final exams. Did your students learn what you wanted them to learn? Did your exam and your other course assessments enable them to demonstrate and perhaps even further extend their learning?

Assessments of student learning are a critical part of courses. Overall, they are the major driver of what students choose to do and focus on in a course. But do our assessments require students to learn? In his recent talk at UWaterloo, Eric Mazur from Harvard University would suggest that the answer is often no. In his talk, “Assessment: The Silent Killer of Learning”, he outlined various problems with our current approaches to assessment and some suggestions about how to make improvements.

He began by asking the audience to discuss the purposes of assessment. We were to turn to a partner; mine was an undergraduate student. Her initial response to his question was: to pass our courses, get a degree, and get a job. Upon further reflection, she also added: “to parrot back what the teacher says”. Are any of these responses clearly about learning? No, and that is one of the biggest problems from my perspective. Conceiving of assessments as “obstacles along the road” to get to a desired end goal makes it hard to recognize that they can and should be part of the journey of learning. Traditional, regurgitation-based tests do not tend to contribute to this journey. However, many other types of assessments do contribute, such as assignments that enable students to practice skills learned in class with new applications, or group exams that require students to explain and defend their answers to their peers, or final projects that focus on analysis, synthesis, and evaluation. How can we reinforce the role of assessments in the learning process? How do we make them “assessments as learning”?

One way that Mazur outlined is to use authentic assessments. He indicated that a lack of authenticity is a major problem in physics education. He explained that when a physicist has a problem, they typically know the desired outcome but not the process needed to reach a solution. However, in textbooks, the problem and the process are made apparent, with the outcome being the unknown. This situation results in the students being given information that they would not automatically have in a real-world setting as well as miss many critical learning opportunities. The call for authentic assessments also came from our 2014 Opportunities and New Directions (OND) conference speaker, John Bean, who connected this approach to writing assignments (see my May 2014 newsletter article for more details). When we make our assessments more authentic, we make it more difficult for students to believe they can just parrot back what we said in class. We also push them to continue learning.

Authenticity, though, can come with a price for students. Such tasks are often less predictable and can sometimes lead to failure. But whether or not something is a “failure” depends on what is being assessed, which ties back to the intended learning outcomes connected to the assessment. For example, if your goal is to have students learn about team processes, then the assessment scheme would give credit for the development of those process skills at least as much as the actual end product.

If rethinking assessments of student learning is on your 2015 “to do” list, I have 3 concrete suggestions:

1. Watch Mazur’s talk for more ideas (see URL below).
2. Submit a proposal and attend our annual OND teaching and learning conference on April 30. This year’s theme is “Making Teaching and Learning Visible”, and assessments of learning play a large role in providing such clarity.

3. Participate in this year’s Teaching Excellence Academy (TEA). This intensive course redesign event occurs April 22, 23, 24, and 27, and supports you in rethinking all elements of a course design, including the assessments of student learning. Contact your department chair or director for more information or let me know if you have questions; the call for nominations will go out in early February.

And, as always, let us know how we can help!

Reference:

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Invitation to University of Waterloo’s Teaching and Learning Conference 2015

You are invited to join us for the University of Waterloo’s seventh annual Teaching and Learning Conference, Opportunities and New Directions, on Thursday, April 30, 2015.

The theme of the upcoming Conference is “Making Teaching and Learning Visible”. How do we know what students already know, what they don’t know, and what they have learned? How can we make the thinking underlying our instructional decisions more explicit for ourselves, our students, and our colleagues? During the Conference, we’ll explore these questions and others. Faculty, staff members, and graduate students are invited to submit a proposal capturing research or practice related to the Conference theme.

We’re fortunate, once again, to have wonderful speakers at the Conference. The Keynote session will be facilitated by Dr. Linda Nilson, founding Director of Clemson University’s Office of Teaching Effectiveness and Innovation. Dr. Nilson has spoken and published widely on practical strategies that may be used by instructors to enhance student learning. Another highlight of the Conference is the “Igniting Our Practice” session – a session during which Faculty members from different disciplines draw us into the learning spaces they create for their students by teaching us something from their courses. The Igniting our Practice speakers for the 2015 Conference will be Drs. Greta Kroeker (History), Troy Vasiga (Computer Science), and Jonathan Witt (Biology).

The Conference offers an opportunity for connecting with colleagues, pausing to reflect on one’s teaching, and gaining new strategies that can be applied in our teaching. We hope that you will join us. For more information about the Conference, please visit the Conference website.

Donna Ellis

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Julie Timmermans
Shannon Dea: By All Means, Teach!

Shannon Dea was interviewed by co-op student Fahd Munir, Special Projects (Teaching Stories), CTE.

For Dr. Shannon Dea, the essence of good teaching is giving students space to learn. In her philosophy courses, such as “Philosophy 202: Gender Issues,” Dea facilitates class discussions, believing that many aspects of philosophy can be learned through vigorous debate. Dea also hopes to design philosophy classes so that students whose first language is not English do not feel at a disadvantage. She elaborates, “Teachers should recognize the diversity of learners and design the course around it.” Dea uses transformative teaching moments to support student learning.

One of those transformative moments was her recent trip to Nanjing, China to teach Western philosophy to international students. In China, Dea rediscovered how effective in-class group work is, especially since most of her students found it difficult to find a time to discuss topics outside of class. Group work provided international students with an opportunity to openly debate topics within the discipline, while at the same time allowing them to speak in their first language. One of Dea’s former students, Ananya Chattoraj, affirmed this approach, saying, “She includes group activities to bring together a collaborative community of philosophers.”

Learning, according to Dea, is a form of labour and should feel to some extent like a struggle. In order to facilitate this struggle with her students in China, Dea assigned fewer and shorter readings, and designated class time to converse about short passages from the assigned readings. In her Gender Issues course she has incorporated an “à la carte” assessment method, where students determine the method of earning their grades and then work individually or in groups to complete creative tasks such as blogs, sculptures, and plays. Dea believes that this assessment method allows students to develop intellectual autonomy and study strategies.

Dea aims to reduce student stress about grades, and explains that the process of earning participation marks should be transparent to students. This is especially true when a language barrier is present, so Dea has incorporated participation grades in the form of “Phil Bucks.” The Phil Bucks are awarded to students for every constructive comment that they make in class. Students can earn one Phil Buck per class with a total of 10 Phil Bucks needed to achieve full participation credit in class. Fostering class participation via Phil Bucks, in conjunction with having students use name tags, has also helped the students get to know one another, which leverages social learning.

Traditionally, the concept of teaching philosophy has emphasized reading or writing, but Dea argues that philosophy extends to thinking critically and challenging social norms by asking good questions. Reading and writing are simply one of numerous ways to achieve the learning outcomes; there is no need to give international students arbitrary challenges that may be historical accidents of our Western educational systems.

In order to help achieve the learning outcomes, students are encouraged to share their personal experiences in dealing with different cultures. Students can then complete follow-up assignments to solidify their understanding, such as comparing Western and Eastern philosophers. For Ananya Chattoraj this approach “has encouraged me to take creative risks with topics that I would have otherwise felt uncomfortable with.”

Dea advises any instructor hoping to teach internationally to be well prepared. She emphasizes that “International teaching provides us with a real incentive and opportunity to focus on our intended learning outcomes, to make sure they are the appropriate learning outcomes for that course, and then to plan our courses around those learning outcomes.”

Graduate student Nathan Haydon believes that Dea’s international experiences allow her to foster a unique learning atmosphere, stating, “Shannon clearly wants students to succeed and makes a point to give students
the freedom and responsibility necessary to develop the skills to do so: structuring courses so that students can pursue their own interests and research goals, even sometimes giving them a say in selecting the readings.” In short, Dea believes that teaching international students should take a teleological approach; that is; it should be focused on achieving learning outcomes, not on the traditional means of achieving those learning outcomes.

Fahd Munir

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 6, 2015.

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 13, 2015.

Verna Keller

CTE Staff Research and Service
During 2014, 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.

Verna Keller

CTE Fast Facts
- 176 workshops offered in 2013, with 2205 participants.
- More than 5,000 consultations with 1,100 instructors in 2013
- 330 graduate students have completed our Certificate in University Teaching program.
- Over 400 graduate students have completed our Fundamentals of University Teaching program.
- More than 60 postdoctoral fellows completed our Teaching Development Seminar Series.
- In 2013, our staff members delivered more than 15 peer-reviewed conference sessions and 15 invited talks in 2013, and they received 2 research grants and 1 research award
- 2 university-level teaching award programs administered annually – the Distinguished Teacher Award for faculty members and the Amit and Meena Chakma Awards for Exceptional Teaching by a Student
- 2 types of grants administered – Learning Innovation and Teaching Enhancement seed grants and full grants
- 29 departments involving 234 faculty members have worked with us at 101 curriculum events in 2013
- 830,000 website visits annually from 433,000 unique visitors from more than 200 nations
- More than 16,000 visits over the past year to our blog
- More than 100 CTE Teaching Tip sheets online, many of which have been translated into other languages
- More than 1,500 books and 1,000 periodicals in our teaching and learning library

Mark Morton
A Message from the CTE Graduate Student Team

The Centre for Teaching Excellence welcomes three new members to the graduate student team. Donata Gierczycka, from the department of philosophy, and Sara Scharoun, from the department of Kinesiology, will be joining the TA Workshop Facilitator team. Kristin Brown, from the School of Public Health and Health Systems will be joining the Graduate Instructional Developer team, replacing Faith-Anne Wagler and Shahin Karimidorabati, who finished their TA workshop facilitator positions with the CTE in Fall 2014. We would like to thank Faith-Anne Wagler, Shahin Karimidorabati and Angela Nyhout for all of their hard work during their time at the CTE, and with them good luck in their future endeavours.

(From left to right) Dylon McChesney (Philosophy), Donata Gierczycka (Mechanical and Mechatronics Engineering), Daniel McRoberts (Geography), Sara Scharoun (Kinesiology), and Dave Guyadeen (Planning).

*Absent: Marcie Chaudet (Biology)

The workshop facilitators are doctoral students who successfully completed CTE’s Fundamentals of University Teaching program. They were hired based on their interest in university teaching, strong communication skills, and interest in supporting teaching development of graduate students.

Eric Van Halteren

Congratulations to CTE Fall 2014 grads!

The following fourteen students completed the Certificate in University Teaching program in Fall 2014: Usman Ali (ENG), Hassan Ali (ENG), Georgios Balomenos (ENG), Baoling Chen (ENG), Aikaterini Genikomsou (ENG), Amy Lynne Hackney (AHS), Jennifer Dawn Howcroft (ENG), Shahin Kamali (MATH), Mehdi Karimi (MATH), Shahin Karimidorabati (ENG), Navid Mohammad Sadegi Jahed (ENG), Nicole O’Brien (ENG), Mohammad Feisal Rahman (ENG), and Sara Marie Scharoun (AHS).

The following student completed the Certificate in University language Teaching program in Fall 2014: Friederike Schlein (ARTS).

In addition to CUT graduates, 52 graduate students completed the Fundamentals of University Teaching program in Fall 2014. The numbers by faculty are as follows: Applied Health Sciences 7, Arts 3, Engineering 18, Environment 11, Mathematics 3, and Science 10.

Congratulations also to the 9 Postdoctoral fellows who complete our Teaching Development Seminar Series this term.

Eric Van Halteren
Welcoming Kristin as Graduate Instructional Developer

Kristin is excited to return to CTE as a Graduate Instructional Developer. She previously worked as a TA Workshop Facilitator, delivering workshops in the Fundamentals of University Teaching program. The workshops covered a range of topics including classroom management, facilitating discussions, grading student papers, TA-student and TA-instructor rapport, and effective lesson plans. In her new role, Kristin looks forward to helping graduate students develop their teaching skills by facilitating the microteaching sessions.

During her Masters and PhD at the University of Waterloo, Kristin has guest lectured and taught tutorials through teaching assistantships. She completed the Centre for Extended Learning’s Online Preceptor/TA Training course, in which she learned how to create an effective learning environment in online courses, and is currently completing the Certificate in University Teaching program. Additionally, she worked as a swimming instructor for five years, teaching both children and adults.

Kristin began her doctoral studies in the School of Public Health and Health Systems in Fall 2013. Her research interests lie in evaluating school-based physical activity policies and programs using mixed methods and qualitative methodologies.

Kristin Brown

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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