

Building Capacity for Case-Based Learning at uWaterloo

LITE Full Grant Proposal

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1. Project Goals

Case-Based Learning (CBL) allows students to develop a collaborative approach to their education; fosters integrated learning; and promotes self-assessment, reflection and life-long learning (Williams 2005). The overarching goal of this project is to build capacity for instructors at the University of Waterloo who are interested in using CBL in their undergraduate and graduate teaching and build a community of practice to share knowledge and experience about writing and teaching with cases.

We plan to do this by offering customized workshops on writing case studies and teaching using cases and have participants share their learning with each other and the wider uWaterloo community. We see strong potential for encouraging collaboration within a program (e.g. cases in different courses within a program) and collaboration across faculties and departments (e.g. instructors sharing best practices and challenges about writing and teaching cases) collaborators on this proposal represent 4 Faculties. We will also gather evidence describing the impact CBL has on students, from their perspective and refine our teaching methods accordingly.

2. Anticipated Outcomes

- i. Offer a five day intensive workshop for a group of 15 faculty members, instructors, graduate students and staff on Case Writing & Teaching facilitated by the Richard Ivey School of Business (ISB), University of Western Ontario
- ii. Track the number of cases developed, the number of courses affected and number of students involved in CBL
- iii. Convene workshops with participants from the training along with other uWaterloo instructors experienced in CBL to identify best practices at uWaterloo. Disseminate insights gained from the workshop and training by participants to the uWaterloo Teaching & Learning Community
- iv. Develop a workshop for uWaterloo instructors for effectively incorporating CBL in course design
- v. Develop a workshop for uWaterloo graduate students on teaching using CBL
- vi. Survey students about their learning in one or more courses that integrate case studies after the instructor has participated in the ISB workshop and possibly conduct follow-up interviews or focus-groups

3. Project Rationale

There is a growing interest among uWaterloo instructors in using cases as “real world” examples to show students how to apply their knowledge and skills. In the summer 2012, the Centre for Teaching Excellence (CTE) organized a meeting to gauge interest in CBL on campus. There was broad interest and it was clear that there are a diversity of approaches and applications in using cases in teaching and learning. An online community was created in LEARN to facilitate the group’s interest in information sharing. There are currently 48 faculty members, instructors, graduate students and staff representing 5 of the 6 Faculties on campus as well as two academic support units (WatPD and CTE).

Over the last few months, this group has benefited from the ability to enter into discussion to exchange ideas on pertinent issues surrounding the use of CBL in higher education, learn from existing groups on campus who are applying the teaching method (e.g. Waterloo Cases in Design Engineering - WCDE), as well as share resources. However, a next step in building capacity for using CBL is to seek professional training from established experts in writing and teaching cases and establish some formal resources to support both instructors and graduate students on campus.

The Association for Case Teaching defines case-based instruction as “a means of participatory and dialogical teaching and learning by group discussion and of actual events” (Association for Case Teaching; Online). This definition encompasses a vast number of approaches to how cases can be implemented, which supports the notion that there is no single, best, method for integrating this approach in higher education. Most variations of CBL have many of the same objectives: (i) foster improved student engagement, (ii) develop students’ ability to work with others and (iii) reinforce students’ ability to think critically and articulate their ideas (Dunne & Brooks, 2004). Moreover, CBL allows course content to be structured in ways that can easily be applied in practical settings, and facilitate the integration of knowledge and skills from multiple domains of learning.

CBL is a useful complement to traditional teaching methods and has proven to be an effective training model to develop a deeper “working” knowledge of course content, while promoting increased student motivation and participation throughout the learning process (Dunne & Brooks, 2004). CBL is a more student-centered approach and is supported by adult learning theory, constructivist theory as well as the theories of reflective practice and self-direction (Kaufmann, 2003).

Using case studies in teaching and learning is congruent with the recommendations of The Task Force on Innovative Teaching Practices to Promote Deep Learning at the University of Waterloo which discusses the importance of developing an environment “where students learn by confronting intriguing problems and authentic tasks; grappling with their own ideas and assumptions; working with others” (Ellis et al., 2011). Enhancing the existing CBL community will contribute to discussions and culture change which is also recommended in the report (Ellis et al., 2011).

4. Plan for Project Completion and Assessment

The Richard Ivey School of Business (ISB) is a recognized authority on Case Writing & Teaching. Professor Steve Lambert from Engineering indicated that he and other WCDE staff have taken the ISB training and found it useful (Lambert, 2012). We aim to offer a 5 day workshop (3 for case writing and 2 for teaching) in the spring of 2013. Participants would be asked to share their experience from the workshop and implementation of cases in their course(s) with others via future presentations or workshops. We would solicit baseline information from participants about their courses that use cases, the number of cases currently used and a timeline for when the cases written from the workshop will be used. After the ISB training we would convene two workshops for participants and others with CBL experience to share best practices and build the CBL community. A graduate research assistant will be hired to review standardized assessment approaches for CBL (Biggs et al., 2001; Ramsden, 1991), design a survey and follow-up interviews or focus groups of student perspectives, analyze the results and assist in the design of workshops for faculty and graduate students.

5. Timeline

Date	Task
January - April 2013	Organize Case Writing & Teaching Workshop facilitated by Richard Ivey School of Business (ISB) (15 workshop participants)
May 2013	Five day ISB Case Writing and Teaching workshop
June 2013	Hire Graduate Research Assistant (part-time – use one term of funding stretched over 7 months)
June - August 2013	Development of online resources for LEARN community
June - August 2013	Prepare student survey and interview questions for Office of Research Ethics
June - August 2013	2 Workshops for experienced case writers/teachers to identify best practices for CBL at uWaterloo
September 2012 - April 2014	Development and delivery of CTE workshop on CBL for uWaterloo Instructors
December 2013 and April 2014	Survey and interview Students about CBL in their Fall and Winter term courses
January - June 2014	Development and delivery of CTE workshop on CBL for Ph.D. Candidates in CUT Program
January - April 2014	Workshop for uWaterloo Instructors
February or June 2014	EDC or STLHE Conference
April 2014	OND Conference
June - September 2014	Prepare Final Report

6. Broader Impact to uWaterloo Teaching & Learning Community

The typical offering for separate ISB workshops is 4.5 days for Case Writing and 3 days for Case Teaching. Bringing ISB facilitators here is a significant saving in time for participants (2.5 days), in addition to travelling time and expense. The cost for both workshops would typically exceed \$x per person when considering travel and accommodation. For the cost of sending 3 people to the regular ISB workshops, we will be able to train 15 people at uWaterloo -- a substantial increase in capacity. In exchange, participants will be asked to contribute to developing the CBL network and community of practice on campus. We envision the following benefits:

- share experience and best practice for CBL within/between departments and within/between Faculties formally and informally
- learn to write/design cases so that they could be used in multiple courses (e.g. across years and courses)

- examine the Engineering model where they write cases based on co-op work term reports (if used in other disciplines, this could provide another benefit from work term reports)
- potential to learn from and apply AHS experience of online approaches to teaching cases (potentially adapt online courses or use a blended approach where there's an online component and face-to-face component)

7. Plan for Dissemination

- i. Develop and facilitate a workshop at the CTE for uWaterloo instructors
- ii. Develop and facilitate a workshop at the CTE for Ph.D. Candidates enrolled in the Certificate in University Teaching Program
- iii. Collect and develop resources to be shared with the CBL community on LEARN
- iv. Present our experience and findings from student surveys at the Opportunities and New Directions conference in 2014
- v. Present our experience and findings at other relevant conferences such as the Society for Teaching and Learning in Higher Education or Educational Developers Caucus in 2014

8. Budget

To cover the projected shortfall in the cost of the ISB workshops and the Year 1 funding, we would ask participants to pay a nominal fee.

We would like to hire a Research Assistant in the first year to maintain momentum and develop resources in a timely way. We have proposed using one term of RA funding to be stretched over the remainder of 2013 (7 months instead of 4 months). The fee proposed of \$x for workshop participants would liberate about \$x from Year 1 funding contribute to hiring an RA. We are willing to be creative and devise other alternatives to address the timing of funding.

Description	Quantity	Unit Price	Cost
Year 1			
\$x per day (for 1 facilitator)			
Handouts for each workshop (writing, teaching)-			
Case Writing & Teaching Books (\$x per participant)			
Shipping for 45 Books (3 per participant)			
HST for workshop, handouts, books (13%)			
Travel for facilitator from London to Waterloo (train)			
Taxi (to/from train, to/from hotel/university)			
Accommodation for facilitator (\$x/night - incl HST)			
Breakfast (16 people x 5d x \$x/person)			
Lunch (16 people x 5d x \$x/person)			
Coffee (5d x 30 cup)			
HST for food and coffee (13%)			
Dinner for facilitator (UW per diem rate x 5d)			
Charge for participants to attend workshop (revenue for project)			
Graduate Research Assistant (1 term)			
Year 1 Subtotal			
Year 2			
Graduate Research Assistant Funding (1 term)			
Coffee for workshops (5 workshops)			
Lunch for workshops (20 people x 5 x \$x/person)			
HST for food & coffee (13%)			
Printing for surveys			
OND conference registration fee (for all collaborators)			
STLHE or EDC conference fee (estimate from 2012 STLHE fee)			
Travel to STLHE (amount reaches conference/travel max of \$2,000)			
Year 2 Subtotal			
Total			

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