

Small TLEF Project – Final Report

Report Completion Date: (2017/07/06)

1. PROJECT OVERVIEW

1.1. General Information

Project Title:	Blending the foundations: Pilot testing a blended environment for Foundations of Conservation (CONS 200) through two new modules		
Principal Investigator:	Shannon M Hagerman		
Report Submitted By:	Shannon M Hagerman		
Project Initiation Date:	April 2015	Project Completion Date:	June 2017

1.2. Project Summary

This proposed project was designed to enhance the learning experiences of the ~250 students who take CONS 200 each year. The activities were informed by student feedback derived from two (pre-project) surveys (detailed in the initial proposal). The project met three objectives: 1) Develop materials for two new content modules designed for a blended learning environment (each module spans 6-8 lectures) 2) Pilot test a blend of flipped, active, experiential and flexible teaching and learning approaches and novel forms of assessment through these two newly created content modules and 3) Develop and implement a set of indicators for outcome-based evaluation of the project to inform the potential expansion of a blended environment for future offerings of the course, and provide insight into student attitudes towards blended approaches. Undergraduate and graduate students were involved at every stage of the project.

We adopted a collaborative, team-based approach with a high level of student involvement and leadership to achieve our objectives. The project team included the course instructor (principal investigator), 2 Graduate Research Assistants (GRA) for the development phase, 1 GRA during the pilot implementation and a Student Advisory Committee (CONS 200 SAC) comprised of 5 undergraduate students. We also collaborated with CTLT evaluation support specialist and the office of VP students on specific components of the project. The PI provided ongoing support and feedback to all members of the team throughout the project. Graduate and undergraduate students alike took on leadership roles for key project activities (e.g. the development of case studies). Collaboration among the team members included activities such as peer-review of case development, and oral and written feedback from the instructor, the GRAs and the SAC.

The primary responsibility of the two GRAs was to develop materials for the enhanced case studies. The role of the SAC was to provide feedback on the enhanced materials, blended approaches and criteria for project assessment. We received 23 expressions of interest from students interested in participating in the SAC. Seven full applications were received with confirmed availability, and 5 applicants were selected representing diversity across home faculty, required course/elective, gender, and international/domestic status. The CONS 200 SAC met 6 times for approximately two hours each time throughout the project. The committee also met informally outside of the scheduled meetings to work on the development of the international case study.



1.3. Team Members – (Please fill in the following table and include **students**, undergraduate or graduate, who participated in your project).

Name	Title/Affiliation	Responsibilities/Roles
Ricardo Pelai	Undergraduate Research Assistant Chair of Undergraduate Advisory Committee / UBC	Provided leadership for the undergraduate student advisory committee. Provided regular and detailed feedback on the development of enhanced case-study materials over the course of the project. Project assistant over the course of the project (helped with preparing reports, posters, engaging with students and outreach)
Curtis Chance	Graduate Research Assistant / UBC Graduate Teaching Assistant / UBC	Led the development of content and materials for the enhanced case studies; assisted in the implementation of the case studies and provided TA support to students and the PI
Andrew Plowright	Graduate Research Assistant / UBC	Led the development of content and materials for the enhanced case studies
Margot Kimmel	Member - Undergraduate Advisory Committee / UBC	Provided regular and detailed feedback on the development of enhanced case-study materials over the course of the project
Thomas Ikeda	Member - Undergraduate Advisory Committee / UBC	Provided regular and detailed feedback on the development of enhanced case-study materials over the course of the project
Michelle Tran	Member - Undergraduate Advisory Committee / UBC	Provided regular and detailed feedback on the development of enhanced case-study materials over the course of the project
Alice Miao	Member - Undergraduate Advisory Committee / UBC	Provided regular and detailed feedback on the development of enhanced case-study materials over the course of the project



1.4. Student Impact – Please fill in the following table with **past, current, and future** courses and sections (e.g. HIST 101, 002, 2017/2018, Sep) that have been/will be impacted by your project, including any courses not included in your original proposal (you may adapt this section to the context of your project as necessary).

Course	Section	Academic Year	Term (Summer/Fall/Winter)
CONS 200	001	2015-16	Fall 2015
CONS 200	001	2016-17	Fall 2016
CONS 200	001	(future academic years will use the cases developed through this project)	

2. PROJECT EVALUATION

2.1. Project Outcomes – Please list the intended outcomes or benefits of the project for students, TAs and/or instructors.

Direct benefits to currently enrolled CONS 200 students: Over 250 students take CONS 200 each year and these numbers are projected to increase. Students enrolled in the course will benefit from engagement with the enhanced teaching and learning materials that were produced through this project. Students will also benefit from exposure to and engagement with a blend of novel and flexible teaching and learning approaches through these two newly created content modules. These course enhancements are expected to increase the frequency and quality of engagement with key course concepts and thus increase success towards reaching the course learning objectives. This project also seeks to foster student reflection and awareness about how they learn which will help deepen their understanding of different modes of teaching and learning in their future courses.

Sustainable benefits to future CONS students: The new and enhanced teaching materials (including new forms of assessment) developed through this project will be reusable and will benefit future cohorts of CONS 200 students. Further, insights gleaned from pilot testing the blended teaching methods as detailed above will inform the course design and future course offerings (and thus future CONS students).

Direct and sustainable benefits to Graduate Research Assistants: Graduate students hired on this project will gain valuable experience developing course materials and working with blended forms of course delivery, engagement and assessment. These experiences will offer the opportunity to reflect on their own teaching and learning experiences. These experiences and reflections are expected to inform their own individual work as TAs as well as in their own learning.

Direct and sustainable benefits to Undergraduates: Undergraduates participating in the student advisory committee will benefit from this project in the following ways: i) from a sense of ownership in their own program as enabled through committee opportunities to shape the development of this project; ii) from increased exposure to the rationales for novel and blended teaching methods, iii) from increased contact with faculty and graduate teaching assistants and iv) through opportunities to reflect on their own learning experiences with different forms of course engagement. Combined, these experiences and opportunities are expected to inform their own their own learning well beyond CONS 200.



2.2. Findings – *Briefly describe the methods and findings of your project evaluation effort: to what extent were intended project outcomes achieved or not achieved?*

The third and final project objective was to develop and implement a set of indicators for outcome-based evaluation of the project to inform the potential for expanded applications of a blended environment for future course offerings, and provide insight into student attitudes and preferences about blended approaches. These instruments included quantitative and qualitative outcome-based criteria.

Summary of project evaluation:

Evaluation was done through a pre- and post- CONS 200 student survey. These surveys were developed in collaboration with the UBC CTLT as well as the UBC VP Students Office. Feedback on the surveys during the development stage was provided by the GRAs and the SAC. We also developed a specific debate-feedback questionnaire also completed by CONS 200 students. Further, we sought to evaluate the project from the perspective of the CONS 200 SAC using a post-project reflective questionnaire. Results from these instruments are described below.

CONS 200 students

Pre-Course/Entry survey

At the beginning of the academic term (September, 2015), an entry survey was sent to CONS 200 students to ask them about their views on different teaching and learning approaches, and their hopes for the course. 168 students completed the survey. In terms of students' preference, 45% of students "strongly preferred" or "moderately preferred" out-of-class activity-based teaching approach. Similarly, 64% of students said that opportunities for activity-based learning were "very important" or "important" when it comes to their hopes for CONS 200. 75% of students also mentioned that exposure to diverse perspectives about conservation was "very important" or "important" when it comes to their hopes for the course: "I am hoping to further understand different perspectives on conservation". This was achieved through the case studies which indeed provide different perspectives about conservation.

Exit survey

At the end of the academic term (November, 2015), an exit survey was sent to CONS 200 students to ask them about their overall learning experience in the course. The purpose of this survey was to foster reflection about their personal learning in CONS 200, as well as to provide feedback to the instructor and TAs for further enhancing course offerings in the future. 139 people completed the survey. In terms of students' preference, 73% of students "strongly preferred" or "moderately preferred" out-of-class activity-based teaching approach (28% more than the entry survey). 59% of students found out-of-class, activity-based learning "extremely effective" or "very effective", and 51% of students found reflective writing opportunities such as blog posts "extremely effective" or "very effective". Similarly, 81% of students said that opportunities for flexible and activity-based learning had an "extremely positive" or "positive" impact on their degree of engagement with CONS 200. Finally, 68% of students said the two case-based learning modules were "extremely effective" or "very effective" for helping them learn new concepts about conservation.

When asked "in what ways has your thinking about conservation changed over the term?" CONS 200 students highlighted the exposure to diverse perspectives about conservation: "I now see conservation as a multi-perspective discipline, rather than one in which all perspectives are in agreement. Going into the



course, I saw conservation as a topic that was objectively about the preservation of nature, without any consideration for human interaction. Throughout the course, I have grown understand that conservation is in fact largely about human interactions with nature, and encompasses multiple perspectives.” Furthermore, when asked “What do you anticipate that you will still remember 5 years from now that you learned in this course?”, many students mentioned the cases and associated activities: “The two case studies, especially the South Okanagan one because the debate was really helpful.”

Debate Feedback

Feedback on the debate was particularly important because this activity required significant effort and resources in the development, coordination and planning phase. Since the debate took place on two different days, feedback from the first day was immediately taken into account for the second day. Overall, 91% of students “strongly agreed” or “agreed” with the statement: “this debate improved my understanding of the range of different perspectives and key trade-offs relating to the South Okanagan National Park proposal.” (N = 154). Some of the suggestions for future debates include better room layouts and more polarized arguments for the stakeholder groups.

Team – SAC Reflections

In addition to regular team meetings ongoing informal discussions throughout the project, members of the SAC produced a final summary report of their involvement including reflection on the blended environment as it developed. All members of the SAC were overall very pleased with the opportunity to participate in this process and would participate in similar projects in the future given the opportunity. All SAC members found their involvement in the development of the case studies enjoyable and interesting. Working on the international case study was particularly engaging as it was a more active part of the process. Another enjoyable type of involvement was the interaction with peers as well as graduate students throughout the process. Finally, for those SAC members who had the opportunity to facilitate debates, this was also a highly enjoyable and fun experience.

One of the most impactful components of this experience for the SAC was the increased appreciation of the work and thought that goes into developing class material and activities, a feeling shared by all the members of the SAC. Also, the unique opportunity to become involved in the development of case studies for a class, and the feeling of being listened to was incredibly empowering. As one of the SAC members put it: “Being able to participate in the development of course material doesn’t happen very often. I felt incredibly empowered by the process as I feel it could really make a difference.” Finally, SAC members mentioned that working alongside the instructor, GRAs, and peers was a very memorable experience.

Project outcomes in terms of sustainable benefits to students

As a result of this project, **five** comprehensive case studies for CONS 200 were created (**three more cases than planned in the original proposal**). The new and enhanced teaching materials (including new forms of assessment) that were developed through this project will be reusable and will benefit future cohorts of CONS 200 students. Further, insights gleaned from pilot testing the blended teaching methods as detailed above will inform the course design and future course offerings (and thus future CONS students). Overall, this project enabled the creation of a core network of engaged students very much willing to come back and contribute to future CONS 200 cohorts.

Graduate students hired on this project gained valuable experience developing course materials and working with blended forms of course delivery, engagement and assessment. These experiences offered



opportunities to reflect on their own teaching and learning experiences. These experiences and reflections are expected to inform their own individual work as Teaching Assistants as well as in their own learning. Undergraduates participating in the SAC benefited from this project in the following ways: i) from a sense of ownership in their own program as enabled through committee opportunities to shape the development of this project; ii) from increased exposure to the rationales for novel and blended teaching methods, iii) from increased contact with faculty and graduate teaching assistants and iv) through opportunities to reflect on their own learning experiences with different forms of course engagement. Combined, these experiences and opportunities are expected to inform their own their own learning well beyond CONS 200.

2.3. Dissemination – *Please provide a list of scholarly activities (e.g. publications, presentations, invited talks, etc.) in which you or anyone from your team have or intend to disseminate the outcomes of this project.*

Hagerman, S.; Chance, C.; Plowright, A.; Pelai, R.; Ikeda, T.; Kimmel, M.; Miao, A. and Tran M. 2016. Blending the foundations: Pilot testing a blended environment for Foundations of Conservation (CONS 200). Poster presented at the TLEF Showcase, UBC Celebrate Learning Week

Hagerman, S.; Chance, C.; Plowright, A.; Pelai, R.; Ikeda, T.; Kimmel, M.; Miao, A. and Tran M. 2017. Blending the foundations: Pilot testing a blended environment for Foundations of Conservation (CONS 200). Poster presented at the TLEF Showcase, UBC Celebrate Learning Week.

3. TEACHING PRACTICES – *Please indicate if **your** teaching practices or those of **others** have changed as a result of your project. If so, in what ways?*

Yes, my teaching practices have changed in the following ways as a direct result of the project trial and evaluation of the activities made possible through this project: (1) regular use of case-based in my teaching (2) expanded use of reflective writing assignments to provide multiple pathways for written expression (beyond a reliance on essays as per previous course organization) (3) expanded use of in, and out of class active learning techniques (e.g. debates in class; out of class, self-guided field trip).

4. PROJECT SUSTAINMENT – *Please describe the sustainment strategy for the project components. How will your work be sustained and/or potentially expanded (e.g. over the next five years)?*

This (sustainment) is probably the most challenging aspect of continuing to teach in the ways described above. This is because of the additional resources (in terms of time and TAs) required to implement complex activities (such as debates) and evaluate multiple and diverse forms of assessment (such as reflective blogs). Through this project, we developed some efficiencies and sustained materials, but there is a cost to increased engagement, and the use of novel activities in terms of the need for additional resources (specifically additional TA support). I've discussed this with my Department. Additionally, I will experiment in the future with increased opportunities for peer-peer assessment.