



Small TLEF Project – Final Report

Report Completion Date: (YYYY/MM/DD)

1. PROJECT OVERVIEW

1.1. General Information

Project Title:	Expanding the Living Laboratory: Enhancing experiential learning in sustainability using UBC food system assets		
Principal Investigator:	Dr. Hannah Wittman		
Report Submitted By:	Dr. Veronik Campbell, Project Manager		
Project Initiation Date:	2016/04/01	Project Completion Date:	2018/03/31

1.2. Project Summary

Expanding the Living Laboratory optimizes teaching and learning resources for sustainability and food systems education and makes them more accessible across the university. The project created flexible learning tools utilizing UBC's food system assets across the food chain (e.g. plant tour, rooftop gardens, dining halls) to contribute to experiential learning opportunities related to sustainability. The project first conducted a thematic analysis of the learning objectives of 60 courses from 12 faculties that utilized UBC Farm for class visits and experiential learning activities. This analysis informed the creation of four flexible, self-guided, food systems case studies related to sustainability and food systems, which enhance capacity by supporting common thematic learning outcomes related to sustainability theory and practice identified by stakeholders from the Arts, Applied Sciences, Land and Food Systems, Education, and Sauder Business.

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
Dr. William Valley	Instructor & Academic Director of the Land, Food, and Community Series, Applied Biology, Faculty of Land and Food Systems	Supervision of case study creation
Dr. Tara Ivanochko	Senior Instructor, Department of Earth, Ocean, and Atmospheric Sciences, Faculty of Science	Evaluation of case study functionality
Dr. Michael Griffin	Assistant Professor, Dept of Philosophy, Faculty of Arts	Evaluation of case study functionality
Dr. Kerry Greer	Instructor, Department of Sociology, Faculty of Arts	Evaluation of case study functionality; supervision of thematic syllabus analysis and interviews
Susan Grossman	Director, Centre for Engaged Community	Evaluation of case study



	Learning	functionality
Kyle Nelson	Officer, Community-Based Experiential Learning, Centre for Community Engaged Learning	Evaluation of case study functionality
Veronik Campbell	Academic Programs Manager, Centre for Sustainable Food Systems at UBC Farm	Project management year 2
Paulina Semenech	PhD Student, Education	Project management year 1; Thematic syllabus analysis and interviews
Susanna Klassen	MA Student, Integrated Studies in Land and Food Systems, Course Coordinator, Land Food and Community (LFS 250)	Evaluation of case study functionality
Wilson Mendes	PhD Student, Integrated Studies in Land and Food Systems.	Video production for Open Kitchen case study.
Melinda Yogendran	4th year Environmental Sciences student; WorkLearn Academic Assistant, Centre for Sustainable Food Systems at UBC Farm	Development of case studies
Derrick Pawlowski	4th year Applied Biology student; 2015 Graduate from UBC Farm Practicum in Sustainable Agriculture Program	Development of case studies
Jaylin Melnichuk	4th year Linguistics student; WorkLearn Academic Assistant, Centre for Sustainable Food Systems at UBC Farm	Development of case studies
Meryn Corkery	3rd year Global Resources Systems student; WorkLearn Academic Assistant, Centre for Sustainable Food Systems at UBC Farm	Dissemination of case studies
Brianne Lee	2nd year Geography student; WorkLearn Academic Assistant, Centre for Sustainable Food Systems at UBC Farm	Development of case studies
Sophie Draper	3rd year Global Resources Systems student; WorkLearn Academic Assistant, Centre for Sustainable Food Systems at UBC Farm	Dissemination of case studies

1.4. Courses Reached – 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 reached by your project, including 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)
LFS 100	001	2018/2019	Fall
LFS 250	001/099	2018/2019	Fall
LFS 450	001	2018/2019	Fall
ANTH 478	001	2018/2019	Fall
LAW 305	001	2018/2019	Fall
MIDW 102	001	2018/2019	Fall
BIOL 343	001	2017/2018	Summer
ENVR 200	001	2018/2019	Fall/Winter



2. OUTPUTS AND/OR PRODUCTS

2.1. Please **list** project outputs and/or products (e.g. resources, infrastructure, new courses/programs). Indicate the current location of such products and provide a URL if applicable.

Product(s)/Achievement(s):	Location:
Four open sourced, flexible, experiential learning tools, i.e., food systems case studies, that can be independently utilized by UBC course instructors to engage with UBC campus food system assets to meet the needs of stakeholder identified learning outcomes.	http://ubcfarm.ubc.ca/case-studies/ Also soon available on UBC’s cIRcle, BC Open Textbooks (BC in a Global Context; Sustainability: a Comprehensive Foundation)
Report of food system syllabi analysis and learning themed to explore on campus.	http://ubcfarm.ubc.ca/additional-resources/
Training of at six highly qualified personnel, two graduate and four undergraduate students, with expertise needed to assess, develop, implement, and evaluate food system sustainability enhanced educational activities.	UBC Centre for Sustainable Food Systems and UBC campus food system locations
Three “faculty profiles” developed as result of discussions with faculty about communicating innovative pedagogical practices in food system education. Now available on the CSFS website to inspire and equip other faculty and instructors to optimize teaching and learning resources for sustainability and food systems education across campus.	http://ubcfarm.ubc.ca/instructional-resources/
A database of North American food sustainability centers' online resources for learning activities / courses / projects / resources, completed by the work learn student and GRA.	Coming soon on UBC Farm Instructional Resources website
At least 12 UBC instructor/professor/ and 12 students engaged in food system sustainability education contribute to project development through baseline interviews to identify most common themes of interest around food sustainability.	Results of the interviews - http://ubcfarm.ubc.ca/additional-resources/
The development of a community-of-practice for experiential learning related to food system sustainability composed of instructors, professors, staff, and student leaders	The CSFS Teaching & Learning Committee meets quarterly to provide leadership, guidance and support for UBC teaching and learning on topics related to sustainable food systems. Committee membership is open.
Presentation of food systems case studies at the 2018 Festival of Learning	Vancouver, BC May 2018 (presentation by undergraduate Meryn Corkery)
Overhaul of CSFS Instructional Resources and For Students webpages	http://ubcfarm.ubc.ca/instructional-resources/ http://ubcfarm.ubc.ca/students/



2.2. Item(s) Not Met – Please list intended project outputs and/or products that were not attained and the reason(s) for this.

Item(s) Not Met:	Reason:
NA	NA

3. PROJECT IMPACT

3.1. What were you hoping to change or where were you hoping to see an impact with this project? – Please list the intended benefits of the project for students, TAs, instructors and/or community members.

- Through the development of the four food systems case studies and three on-line faculty profiles, instructors will have access to more diverse learning strategies for reaching their course learning outcomes, beyond the Farm tour.
- By participating in the drafting of the food systems case studies, students will have opportunities to connect course-based learning to their daily interactions at UBC, expanding the notion of the campus as a living laboratory and making the food system sustainability subject matter more relevant, tangible and meaningful.
- The flexible and self-directed design of the case studies will be making those accessible across campus through the CSFS’ website and will not require additional resources from the CSFS.
- More enhanced educational experiences offered to UBC students, through the regular curriculum of a range of courses from across UBC’s faculties, thereby enhancing student opportunities to explore and exemplify new globally significant paradigms for the design and function of sustainable food systems.
- The project will provide at least one graduate and five undergraduate students with the information and practice to assess, develop, implement, and evaluate food system sustainability enhanced educational activities. Because they will have learned about project stewardship and responsibility, these highly trained personnel will contribute to UBC’s advancement as an educational leader and share their experience at the global stage.
- The UBC educational food asset and UBC Farm courses and learning outcome database will be available to the wider on- and off-campus community to inspire and equip other educational leaders to develop food-centered experiential learning opportunities as well as inform students of the resources available to learn about food sustainability.
- The learning outcome gathering and stakeholder engagement phases will increase UBC community’s knowledge of food system sustainability, its educational power, and its potential for innovation and growth.
- The project will build a community-of-practice composed of the core project team and stakeholders engaged during the thematic syllabus analysis and interviews. This group of instructors, professors, staff, and student leaders represent a valuable resource to advance food sustainability education through networking and exchanging of ideas on and off-campus, at the local and global level, and in the short- and long-term.



3.2. Were these changes/impacts achieved? How do you know they occurred? – *To what extent were intended benefits achieved or not achieved? What evaluation strategies were used? How was data collected and analyzed? You are encouraged to include copies of data collection tools (e.g. surveys and interview protocols) as well as graphical representations of data and/or scenarios or quotes to represent and illustrate key themes.*

- There are now four food systems case studies and three on-line faculty profiles available on the CSFS website. Instructors have access to more diverse learning strategies for reaching their course learning outcomes, beyond the Farm tour.
- By participating in the drafting of the food systems case studies, four undergraduate students had the opportunities to connect course-based learning to their daily interactions at UBC, expanding the notion of the campus as a living laboratory and making the food system sustainability subject matter more relevant, tangible and meaningful.
- The flexible and self-directed design of the case studies make those accessible across campus through the CSFS' website.
- The project hired one graduate and five undergraduate students. Those students now have the information and practice to assess, develop, implement, and evaluate food system sustainability enhanced educational activities.
- The food systems case studies are available to the wider on- and off-campus community (e.g., via Open Textbooks) to inspire and equip other educational leaders to develop food-centered experiential learning opportunities as well as inform students of the resources available to learn about food sustainability.
- The project has built a community-of-practice composed of the core project team and stakeholders engaged during the thematic syllabus analysis and interviews. This group of instructors, professors, staff, and student leaders meets quarterly to provide leadership, guidance and support for UBC teaching and learning on topics related to sustainable food systems.

3.3. Dissemination – *Please provide a list of **past** and **upcoming** scholarly activities (e.g. publications, presentations, invited talks, etc.) in which you or anyone from your team have shared information regarding this project.*

- Valley and Wittman published a review stemming from TLEF related discussions as Valley, W., Wittman, H., Ahmed, S., Jordan, N., Galt, R., 2017. An emerging signature pedagogy for sustainable food systems education. *Renewable Agriculture and Food Systems* 1–14. doi:10.1017/S1742170517000199&domain=pdf
- The food systems case studies have been available online at <http://ubcfarm.ubc.ca/case-studies/> since October 2017. We expect them to be made available via the open textbooks by August 2018.
- The thematic syllabus analysis and case studies will be presented at the 2018 Festival of Learning.
- We are working with the UBC Centre for Teaching and Learning Technology to host a case study workshop session at the UBC Farm during CTLT's conference week in May 2018.
- In April 2018, we will launch a promotional campaign to increase visibility of the case studies. Target audience is instructors, TAs, and professors at UBC. Draft campaign items currently include: Mailchimp email invite, printed postcard, social media blurbs and short stories.



- In class presentations of case studies and CSFS instructional resources (Jan 2017, Sept 2018, Jan 2019).

4. 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? Do you see these changes as sustainable over time? Why or why not?*

We have heard from many instructors – and it is our own experience – that students benefit from having access to ‘real places’ to go to connect practical learning with theory. Our intent was to use existing UBC food systems components – the land, our infrastructure, and our human resources – as places to go that are accessible and easily assimilated into teaching timelines, with corresponding materials adaptable to a wide range of teaching and learning outcomes. Because these materials are open access, adaptable, and flexible we see this as sustainable as compared to closed/textbook type curriculum development.

5. PROJECT SUSTAINMENT – *Please describe the sustainment strategy for the project components. How will this be sustained and potentially expanded (e.g. over the next five years). What challenges do you foresee for achieving the expected long-term impacts listed above?*

At the CSFS we currently rely on project funding to continue to support a Communications Coordinator and Community Engaged and Experiential Learning Manager, who are the primary responsible actors for advancing our instructional resources platform in collaboration with Faculty members affiliated with our Teaching and Learning Hub. This program support has been essential, and to expand our instructional capacity in sustainable food systems across the UBC Faculty (i.e. not limited to Land and Food Systems) we need to revise our funding model for instructional program support.