Large TLEF Project – Final Report

Report Completion Date: (YYYY/MM/DD)

PROJECT OVERVIEW

General Information

Project Title:	Scaffolding and Scaling up Integrated Experiential Learning Experiences in the Core Series, Land and Food Systems	
Principal Investigator:	Andrew Riseman	
Report Submitted By:		
Project Initiation Date:	July 1 2014	**Project Completion Date:** April 1 2018

Project Summary

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

Name	Title/Affiliation	Responsibilities/Roles
Will Valley	Instructor, Academic Director, Land, Food and Community Series Faculty of Land and Food Systems	Lead and coordinator of the project, especially on curricular and pedagogical innovations and research in the core series courses
Veronika Bylicki	Undergraduate student, Faculty of Land and Food Systems	Provided insights and suggestions to community-based projects and TLEF proposal writing
Alice Cassidy	First Year Seminar Coordinator, Faculty of Land and Food Systems	Coordinated curricular and pedagogical innovations and research in LFS 150 as well as alignment across the series
Guopeng Fu	Teaching and Learning Fellow, Faculty of Land and Food Systems	Supported, developed, and disseminated research and evaluation around the project.
Eduardo Jovel	Associate Professor, Director, Indigenous Research Partnerships, Faculty of Land and Food Systems	Supported website development, curricular and pedagogical innovations, and research dissemination in LFS 350
Adrienne Levay	Ph.D Candidate & TA, Faculty of Land and Food Systems	Supported curricular and pedagogical innovations in LFS 250 and LFS 350
Cyprien Lomas	Assistant Dean, Learning	Implemented and coordinated

	Technologies, Faculty of Land and Food Systems	learning technologies to support curricular and pedagogical innovations, research and dissemination of flexible learning activities
Katherine Miller	Librarian, UBC Library	Developed and coordinated the information literacy and library modules for the core series courses
Kyle Nelson	Officer, Community-Based Experiential Learning, UBC Centre for Community Engaged Learning	Supported the development and assessment of community-based learning activities Supported the curriculum design and alignment process Supported the evaluation and dissemination of learning outcomes
Andrew Riseman	Associate Professor, Faculty of Land and Food Systems	Coordinated the project and supported the curricular and pedagogical innovations and research in LFS 450

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)
LFS 100	001, 002	2014 and on	Fall
LFS 150	001, 002, 005, 006	2014 and on	Summer, Fall, and Winter
LFS 250	001	2014 and on	Fall and Winter
LFS 350	001, 002	2014 and on	Fall and Winter
LFS 450	001	2014 and on	Winter

PRODUCTS & ACHIEVEMENTS

Products and Achievements – *Please __update__ project products and achievements as necessary. Indicate the current location of such products and provide an URL if applicable.*

Product(s)/Achievement(s):	Location:
6 LFC series course websites, including a portal site and 5 individual course websites	http://lfs-core.sites.olt.ubc.ca/ http://lfs-100.sites.olt.ubc.ca/ http://lfs-150.sites.olt.ubc.ca http://lfs250.landfood.ubc.ca/ http://lfs350.landfood.ubc.ca/ http://lfs-450.sites.olt.ubc.ca/
313 community projects in the LFC core series courses from 2014-	LFS 250 – **168** food literacy workshops in VSB classrooms http://lfs250.landfood.ubc.ca/community-projects/vsb-school-

2016	workshops/
	LFS 350 – **121** community food security projects
	http://lfs350.landfood.ubc.ca/community-projects/
	LFS 450 – **24** UBC Campus Food System SEEDS projects
	http://lfs-450.sites.olt.ubc.ca/campus-food-system-projects/
Library tutorial modules for both LFS students (approx. 1500) and Biology students (approx. 2000)	http://guides.library.ubc.ca/tutorial-lfs
	Feedback forms: http://guides.library.ubc.ca/tutorial-lfs/feedback
Reported and disseminated project outcomes through academic articles, book chapters, conference presentations, and communications	http://lfs-core.sites.olt.ubc.ca/dissemination/
Created a course-based TA development program	https://drive.google.com/open?id=0B6Cwjzte0hm6U2U1akVCQ2hpRXM

Item(s) Not Met – *Please list intended project products and achievements that were not attained and the reason(s) for this.*

Item(s) Not Met:	Reason:
The websites for LFS 100 and LFS 450 are still under development	The website infrastructure is still under development due to changes of the teaching teams for these three courses. There might be further changes of the website contents.
FL implementation framework based on evaluation results	We are still in the process of refining our data collection and evaluation processes. We have received additional funding to partner with two other institutions with similar programs to develop a more in-depth framework for sustainable food system education programs.

PROJECT EVALUATION

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

In year three's (2016-17) TLEF proposal, we stated the following intended outcomes: 1. full implementation of Flexible Learning (FL) strategies in the LFC core series courses; 2. enhanced coherence and cohesion among LFC series courses; 3. more access to learning resources for students; 4, increased comfort level for instructors teaching in evidence-based, technology-enabled settings; 5. a practice-oriented GTAs professional development model; 6. enhanced relationships between university and community partners; 7. evaluation results for implementing FL in the core series courses; 8. a FL implementation framework based on evaluation results; 9. An online portal for LFC series courses; and 10. disseminate results via faculty meetings, course websites, journal articles, book chapters, conference presentations, workshops, and invited talks.

Findings – *Please describe the findings of your project evaluation effort: to what extent were intended project outcomes achieved or not achieved? You are encouraged to include both graphical representations of data as well as scenarios or quotes to represent key themes.*

The intended project outcomes can be categorized into four aspects: impacts on students, on GTAs, on instructors, and on community partners.

Impacts on students

The intended outcomes 1, 2, and 3 are impacts on student learning. The team has fully implemented FL strategies and put most of the learning resources on the course websites. Each course in the core series has its own website and the core series has a portal website. The websites have a unified appearance, which enhances the coherence and cohesion among LFC series courses.

Since 2014-15 academic year, the team started to systematically evaluate how the teaching strategies used in the core series impact student learning. The evaluations include quantitative and qualitative feedback from students (mid-course feedback, term-end survey, reflections, and focus group interviews), GTAs (interviews), and community partners (surveys and interviews) as well as rubric-based assessments of student achievement of learning objectives. The evaluation was implemented in LFS 250 and 350. In the first-round of evaluation (2014-15), we experienced a low response rate (57/200=29% for LFS 350 term 1) due to the length of the survey (took approximately 20 mins to complete), distributing time (during exam period), and lack of incentives.

In the second-round of evaluation (2015-16), the team re-designed the survey, distributed the survey on November 23rd with two reminders on December 2nd and 7th via the VP Student's Office, and incentivized students with 1% bonus mark for completion. The response rates were significantly improved (110/139=79% for LFS 350 term 1, 88/105=84% for LFS 350 term 2, and 219/289=77% for LFS 250). We also collected student reflections after their community projects both in LFS 250 and LFS 350. The qualitative data helped us understand how Community-Based Experiential Learning (CBEL) approaches influence student learning.

In the third round of evaluation (2016-17), we shifted the focus to students' changes in epistemic learning beliefs, systems thinking, experiential learning, trans-disciplinary, case inquiry, collective action, and critical reflection through the core series courses. The surveys were sent to both LFS 250 and 350 students at the beginning, in the middle, and at the end of the term. Meanwhile, we also collected student reflections on their community projects.

In this section, we highlight LFS 350 students' overall experience in the course followed by a snapshot of how specific teaching approaches contribute to student learning. We then highlight LFS 250 students' CBEL experience with evidence from student reflections (2015-16 evaluation). LFS 250 and LFS 350 students' changes in experiential and trans-disciplinary learning (2016-17 evaluation) are presented in this report as well.

Students in LFS 350 (total student number = 139) overall satisfaction was captured in the mid-course survey with, 66% students indicating that they were satisfied with the overall course experience and 60% of students reporting that their learning was supported in the course. More than 82% students considered that the course provided an inclusive and respectful environment. At the end of the term, 118 students completed the feedback survey and 68% students were satisfied with the overall course experience. Over 80% students perceived that the course provided a supportive learning environment and 94.1% of the respondents considered the course provided an inclusive and respectful environment. There were significant changes ($p<0.05$) between students' mid-term feedback and end of term feedback in all three aspects.
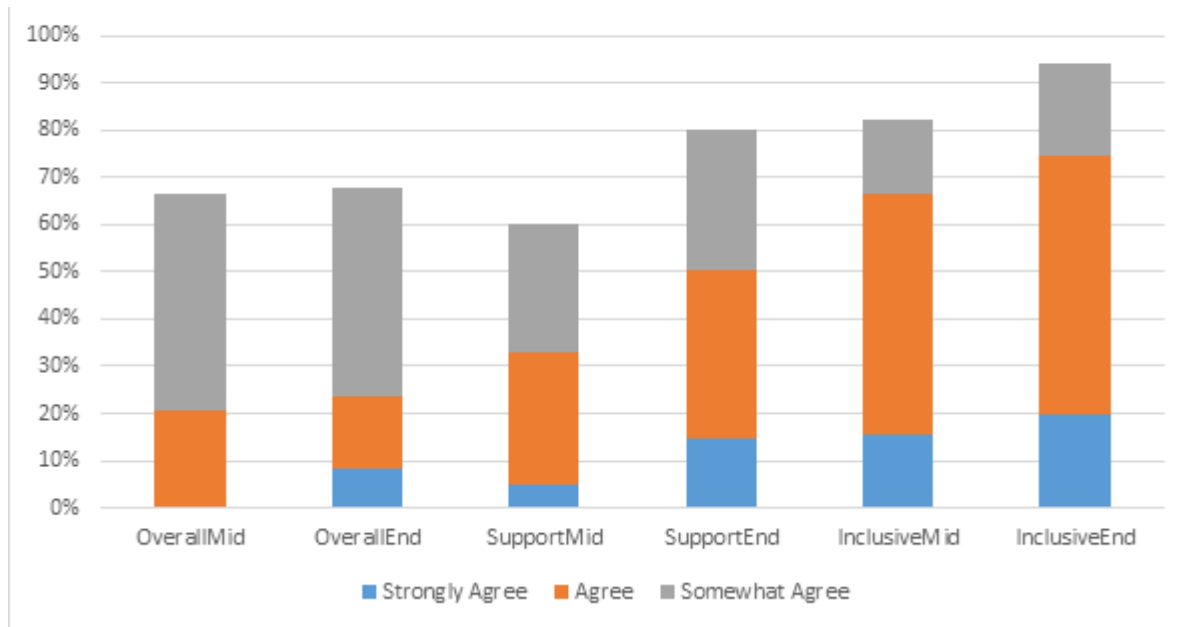
Figure 1. LFS 350 students' perception of overall satisfaction, learning support, and learning environment at mid-term and term end from 2015

In addition, the end of term feedback survey also inquired how specific teaching approaches enhance or support student learning. All teaching strategies received more than 50% positive rate from students. Community-based experiential learning and student collaborative work were rated as the most effective approaches to enhance student learning (see Figure 2), receiving ratings of 80.4% and 77.9%, respectively.
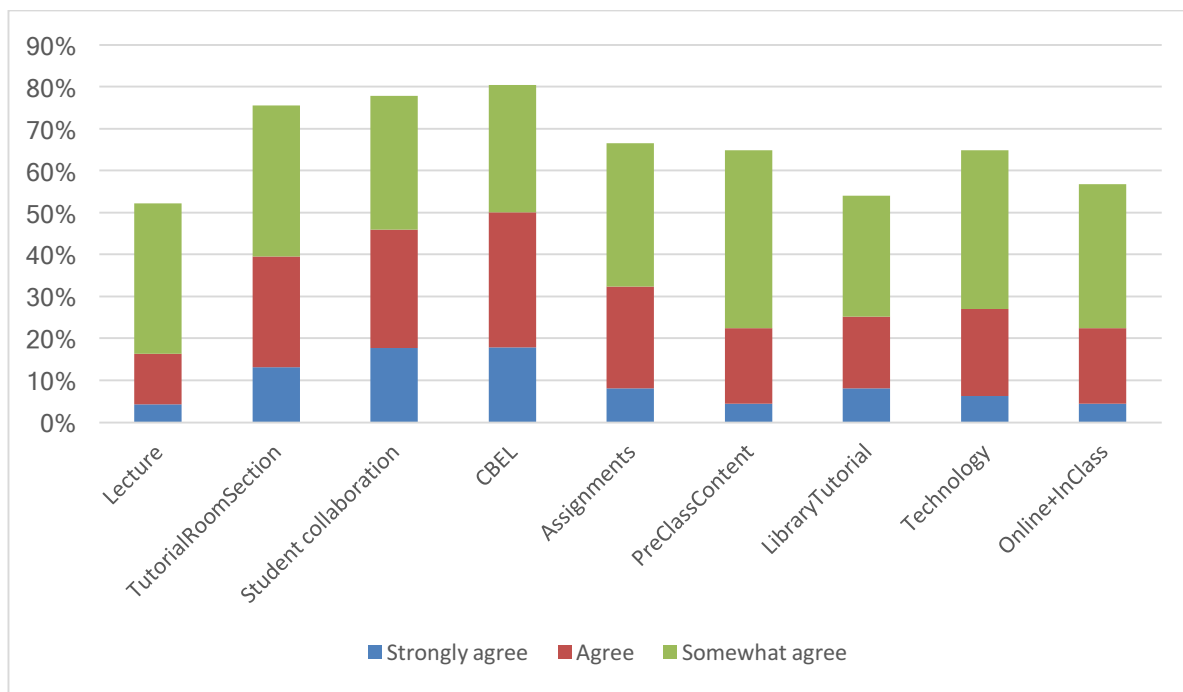

Figure 2. LFS 350 students' ratings of teaching approach effectiveness in 2015

Working with fellow students in a community setting is the highlight of the LFC series according to student feedback. Sixty-two percent of students in LFS 250 (n= 265) reflected on work in a community setting and reported

the experience as positive or meaningful. Students considered that 1) the workshop conducted in K-12 schools enhanced their food literacy knowledge, skills, and awareness; 2) the group work built their professional competencies such as leadership, critical thinking, and coordinating skills; 3) working in a community integrated uncertainty and complexity in the process which prepared students for their future careers.

For example, one student's awareness of how food can break down cultural barriers:

> *By using food as a catalyst for cross-cultural collaboration, we can facilitate stronger bonds between ethnic groups and promote mutually beneficial exchange of ideas. I try to be as open minded as possible about different culinary cultures and organizing this bread making workshop has only strengthened my belief about the power that cuisine holds over cultural identity. (Student reflection 211)*

Student comment on how the workshop in lecture helped their group work:

> *Before the actual school visiting, we had several meetings to work out the outline of the activity. All the girls were willing to contribute and every one shared her opinion freely. However, this did arise some conflicts. When this happened, we followed what we learnt from the first class, for example vote for different ideas, to solve the conflicts. Thankfully all the girls respected each other's opinion and the selected solution could then be carried out very well. (Student reflection 212)*

Student comment on uncertainty in the process:

> *This experience was relevant because it provided us with a preview of how experiences occur outside the classroom. There are many unpredictable events that occur in the "real world" and we are normally expected to adjust to these events. (Student reflection 33)*

In addition to the positive and meaningful learning experience in the community settings, the students reported developing an appreciation for teaching and learning. Students shifted their role from learners to teachers in conducting the food literacy workshop for K-12 students. Such change invoked them to think about learning from teachers' perspective and developed 1) an appreciation for the teaching teams' efforts in implementing various flexible learning strategies in the course, 2) an understanding of pedagogy and classroom management, and 3) metacognitive capacities on their own learning process. Although these outcomes are indirectly related to the course objectives, they are valuable for students' learning in general and may have sustained impact on their future learning.

The third round survey evaluated student changes in epistemic learning beliefs, system thinking, experiential and trans-disciplinary learning, case inquiry & collective action, and critical reflection. Here we only present the changes in experiential and trans-disciplinary learning as an example:
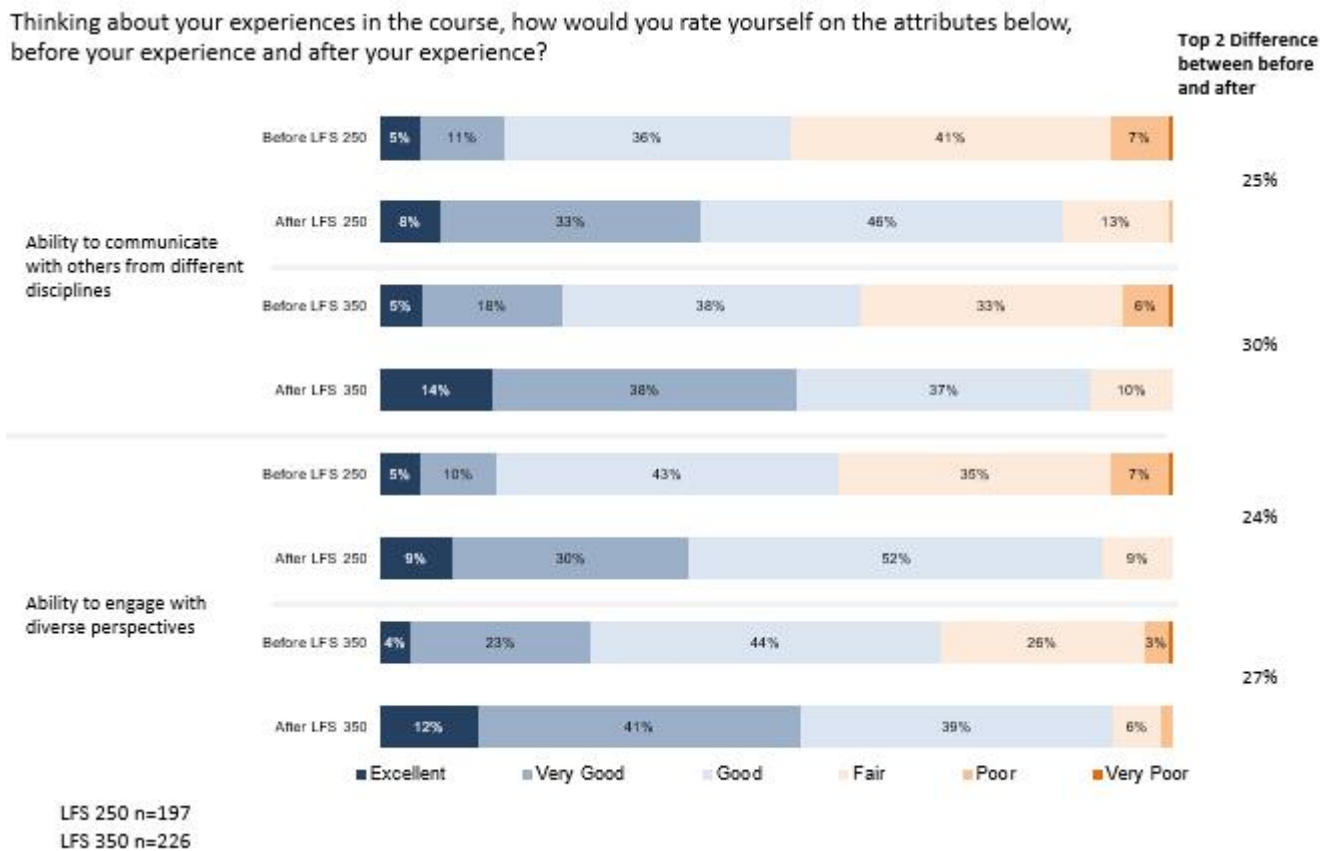
Thinking about your experiences in the course, how would you rate yourself on the attributes below, before your experience and after your experience?

Top 2 Difference between before and after

Ability to communicate with others from different disciplines

	Excellent	Very Good	Good	Fair	Poor	Diff
Before LFS 250	5%	11%	36%	41%	7%	25%
After LFS 250	8%	33%	46%	13%		
Before LFS 350	5%	18%	38%	33%	6%	30%
After LFS 350	14%	38%	37%	10%		

Ability to engage with diverse perspectives

	Excellent	Very Good	Good	Fair	Poor	Diff
Before LFS 250	5%	10%	43%	35%	7%	24%
After LFS 250	9%	30%	52%	9%		
Before LFS 350	4%	23%	44%	26%	3%	27%
After LFS 350	12%	41%	39%	6%		

■ Excellent ■ Very Good ■ Good ■ Fair ■ Poor ■ Very Poor

LFS 250 n=197
LFS 350 n=226

Figure 3. LFS 250 and LFS 350 students' pre- and post- test results on experiential inter-disciplinary.

As shown in Figure 3, both LFS 250 and LFS 350 students' capacity in inter- and trans-disciplinarity has been significantly improved through the courses. In addition, students in 3rd year have a higher overall attributes in inter- and trans-disciplinarity compared to students in LFS 250. Similar patterns were also seen in other attributes such as epistemic learning beliefs and critical reflections. These findings may indicate that the core series courses, together as a whole, provide scaffoldings for students to develop essential skills such as inter-disciplinary collaboration, system thinking, critical reflection, and collective action.

Sub-project highlights
In addition to the evaluation findings, we would like to highlight three sub-projects under this large TLEF project.

1. Library Tutorial Modules: we worked collaboratively with the Faculty of land and Food Systems librarian, Katherine Miller, on creating and revising a library tutorial module to enhance students' information literacy. More than 1,500 LFS students have completed this online tutorial. Also, the tutorial has also been used by more than 2,000 Biology students. The following graph (Figure 4) indicates students' grades in their information literacy assignment from year one to year three. The tutorial is open-access, available here:
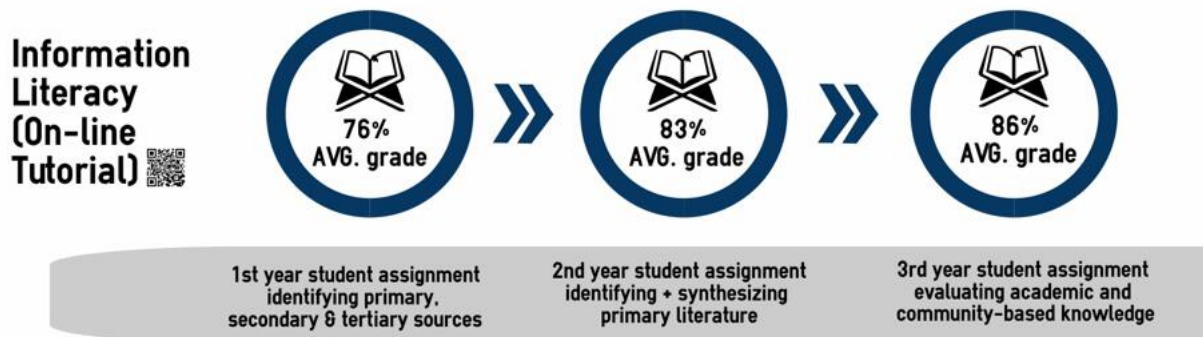http://guides.library.ubc.ca/tutorial-lfs

Figure 4. Students' average grades in information literacy assignments from 1st year to 3rd year.

2. Food Literacy Workshop Instructional Videos in LFS 250: with the extension of TLEF, the team has created five instructional videos for LFS 250 students. These videos provide detailed instruction for their community projects including: vermin-composting, eggshell seedlings, baking bread, tea from the garden, healthy salad, and bento box. The videos are going to support students' implementation of the Vancouver School Board Food Literacy Workshops. The videos are embedded in LFS 250 course website, http://lfs250.landfood.ubc.ca/community-projects/vsb-school-workshops/, and are open-access, with the intent to support VSB teachers food literacy knowledge and skills.

3. Community Projects and Infographics Presentations in LFS 350: Since the fall of 2017, LFS 350 students have been using infographics to share and disseminate community project findings to the public. The infographic presentations are promoted within LFS and hosted at UBC Nest. Community partners, faculty and staff members (who are not part of LFS 350 teaching team), students, the LFS 350 teaching team, and the general public participated in the presentation and interacted with students. Students have the opportunity to extend their project impact beyond LFS 350 classroom walls. In addition, other project and related materials (e.g. project descriptions, infographics, and student blogs) are archived on the LFS 350 website and can be viewed by the general public. These projects may help students' potential employers, students' potential supervisors in graduate schools, alumni, prospective students, community partners, and other stakeholders learn more about what students have accomplished in LFS 350. The project descriptions, infographics and blogs are available here: http://lfs350.landfood.ubc.ca/community-projects/

Impacts on Graduate Teaching Assistants (GTA)

The intended project outcome 5 is pertaining to GTA development. The team has developed a professional development program for the GTAs in the core series. The program drew on a theory/practice integrated framework in an attempt to provide GTAs with discipline-relevant, hands-on, and sustained professional development and create a collaborative learning culture among GTAs and course instructors. The GTA professional

development program was integrated into LFS 250 and LFS 350 schedules in order to minimize the additional GTAs' time commitment while sustaining an on-going program for educational training. The key components of the courses—plenary sessions, teaching team meetings, and tutorial sessions—became the platform for the GTA professional development program. Additional program components include a pre-term meeting, GTA handbook, and undergraduate student mid-course feedback assessment (see Figure 5).
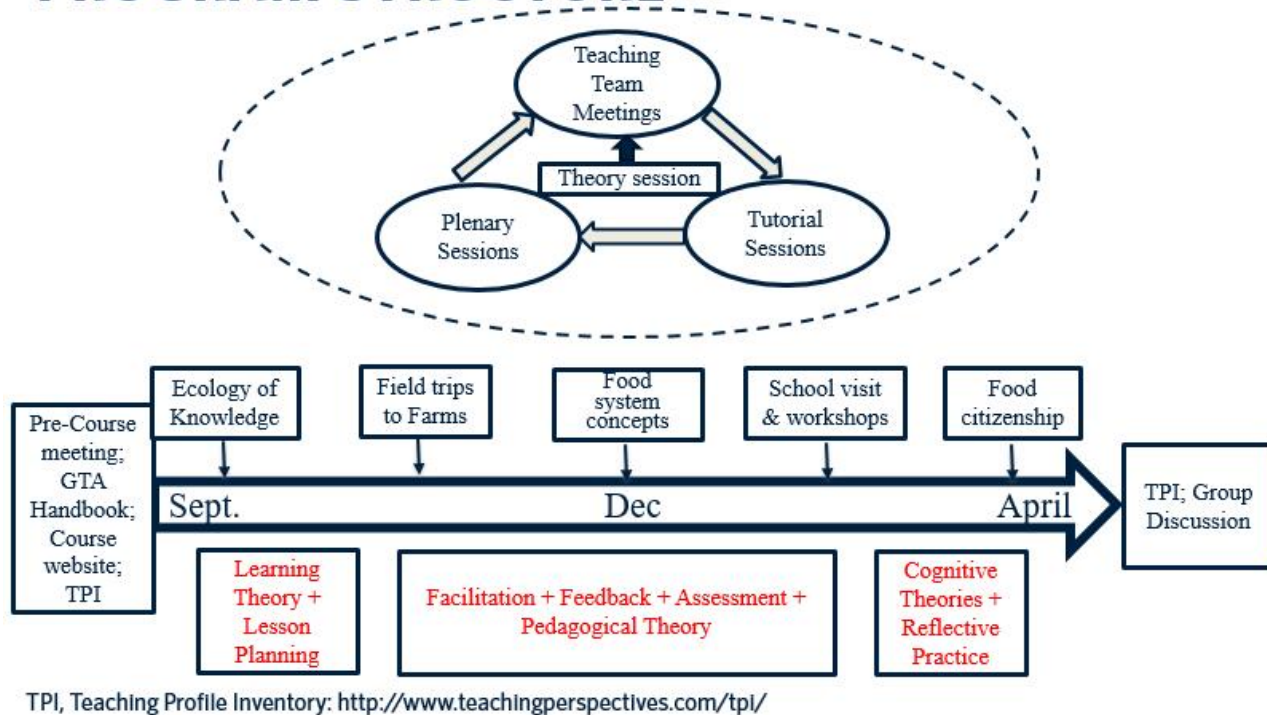

Figure 5. GTA professional development program structure.

We interviewed most of the GTAs (13 out of 15 GTAs in 2015-16; 9 out of 10 GTAs in 2016-17) at the end of this program and asked about their experience. In general, nearly all of the GTAs (20 out of 22) stated they developed their teaching skills significantly as a result of being involved in the professional development program. Seven of the twelve GTAs that had prior teaching experience reported that they learned more from working with the two courses than from any other professional development that they had previously had as GTAs. For example:

> *LFS 350 [the third year course] was a positive experience professionally because we were given responsibility for our breakout rooms and quite a bit of leeway in terms of what we are actually doing in the breakout rooms. That provides different opportunities to practice our teaching technics and organization. (interview excerpt, GTA Kevin, page 1)*

GTAs identified specific elements of their practice that they have developed through the program such as increased communication skills, in-situ problem-solving strategies, confidence in public speaking, group facilitation skills, and sense of ownership for their own teaching. The analysis revealed three key elements of the program that the GTAs valued most in relation to developing their teaching: (1) their higher level of engagement with the students in the

weekly tutorial sessions, (2) the open and supportive conversations with peers and instructors during the team meetings, and (3) the mid-course feedback from students. For the program syllabus and materials of the GTA professional development program, please see the following
https://drive.google.com/open?id=0B6Cwjzte0hm6U2U1akVCQ2hpRXM.

Impacts on Community Partners

The LFC core series courses have collaborated with a number of community partners including the Vancouver School Board (VSB), the City of Vancouver, Vancouver Coastal Health, Breakfast Club of Canada, Gordon Neighbourhood House, and the UBC SEEDS program. We sustained over 27 collaborations with community partners in the past few years. 313 community projects were implemented and have had a wide impact on food literacy education and have contributed to community food security initiatives across Metro Vancouver.

In this section, we highlight VSB teachers' experience working with LFS 250 students in 2016-2017. After LFS 250 students conducted their food literacy workshop in K-12 schools, all 54 teachers were sent a survey to collect comments on students' professional etiquette and conduct, group work performance, food system knowledge and skills, and preparedness for the workshop. Forty-one teachers completed the survey. The majority of teachers reported that students demonstrated excellent professional etiquette and conduct (85.4%), efficient group work (82.9%), sound food system knowledge and skills (77.5%), and well prepared for the workshop (90%) (see Figure 6).
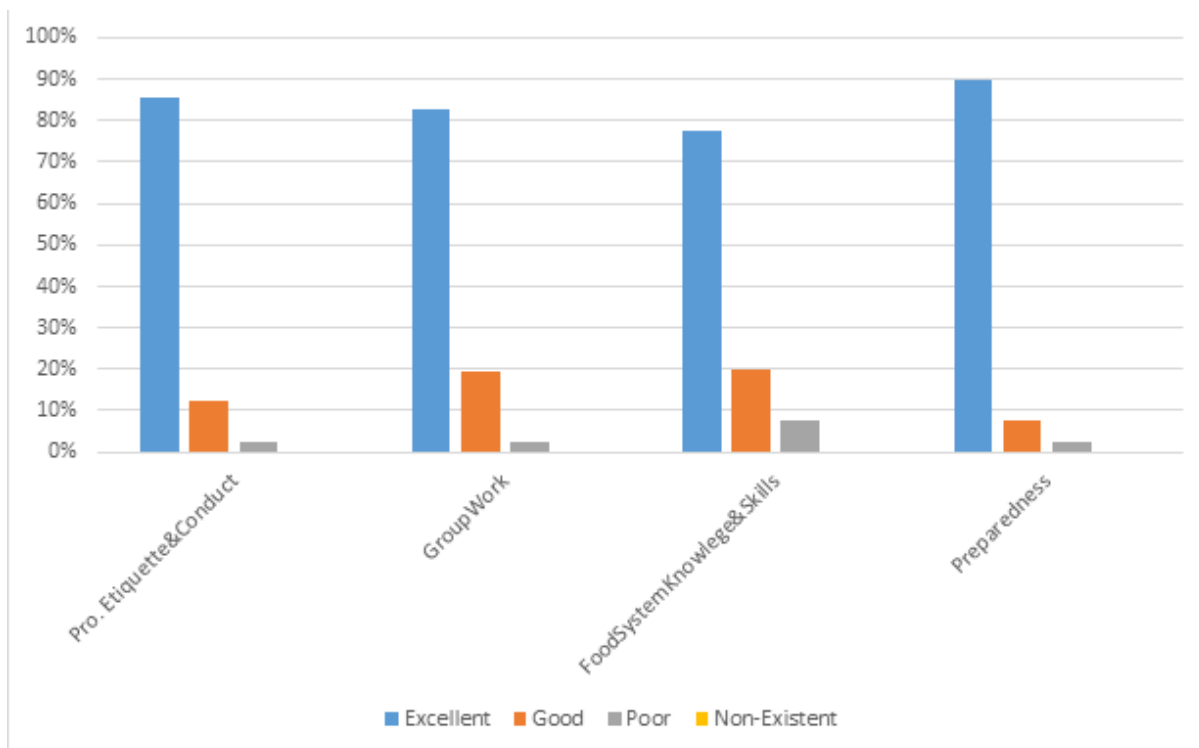

Figure 6. LFS 250 students' professional etiquette, group work, knowledge & skills, and preparedness assessed by K-12 teachers in Vancouver School Board.

Overall, the VSB teachers give positive feedback to LFS 250 students. Such feedback is likely an indicator of these teachers' positive experience in the community projects. Students in the core series courses report that they

consider CBEL and group work as the most effective approaches to enhance their learning. Community partners also report that students in the LFC series show professionalism, preparedness, food system knowledge and skills, and group work skills. Student reflections and teachers' feedback demonstrate that the LFC series help students and community partners build a reciprocal relation.

The team also interviewed community partners in LFS 350. Community partners from Skipper Otto's Community Supported Fishery, Hasting Sunrise Community Food Network, Gordon Neighbourhood House, and Gambier Island participated in the interview. The community partners provide valuable feedback for improving the collaboration mechanism with the core series course. For example, community partners suggested reducing the number of technology platforms (such as Wikipages and Google Drive) in working with community partners because these technologies may be new to the partners and take valuable time to learn. The team took such suggestions into consideration and use only the course website (and email) as a platform in communicating with community partners. The community partners also indicated their willingness to develop long term relationship with the teaching team because they see teaching team as resource to advance mutual goals.

Impacts on Instructors

* The impacts on instructors will be addressed in section 4. Teaching Practices.

Data Collection and Evaluation Methods – *Please describe the data collection strategies used, how the data was analyzed, and perceived limitations.* **Note: Please attach copies of data collection tools (e.g. surveys and interview protocols) and any additional data or other relevant items - <u>SEE APPENDIX B.</u>**

We have listed the data collection and evaluation methods by years.
2014-15: To evaluate student learning, we designed a survey to investigate students' perception on the learning strategies (including flexible learning strategies) in the core series courses. The survey piloted in LFS 350 and had a low response rate (less than 30%). We also conducted focus-group interviews with eight students with the intention to further explore students' perspectives. The team learned from this experience and redesigned the survey. The team also developed rubrics for the core series courses in order to provide objective indicators (as oppose to students' subjective perception) of the effectiveness of FL strategies.

2015-16: To evaluate student learning, we implemented the redesigned survey to students in both LFS 250 and LFS 350. The response rates were significantly improved (110/139=79% for LFS 350 term 1, 88/105=84% for LFS 350 term 2, and 219/289=77% for LFS 250). We also collected 256 student reflections on their community projects. We work with VP student office to investigate students' transformative learning in LFS 250 through two rounds of focus group interviews. In addition, the student work rubrics were applied in the core series courses. The instructors and GTAs started to use the rubrics to evaluate student works.

To evaluate impacts on GTAs, we designed and implemented a GTA professional development program for GTAs in LFS 250, LFS 350, and LFS 450. Semi-structured interview was employed to explore GTAs' experience in the program. Thirteen GTAs participated in the interview.

To evaluate impacts on community partners, we invited 54 VSB teachers to participate in an online survey that inquires about students' performance in K-12 schools in Vancouver. We also interviewed LFS 350 community partners from four organizations: Skipper Otto's Community Supported Fishery, Hasting Sunrise Community Food Network, Gordon Neighbourhood House, and Gambier Island. The interviews investigated student preparation, communication, roles and responsibilities, and the goals of the course from community partners' perspectives.

With the help from the VP Student's Office, we use descriptive statistics and simple graphic analysis to present the quantitative data collected via survey. We employed naturalistic inquiry to analyze the interview transcripts and content analysis to analyze student reflections. Atlas Ti. and NVivo are used as the data analysis software helping with the coding process.

2016-17: To evaluate student learning, we developed and administered a set of comprehensive surveys examining LFS 250 and LFS 350 students' change in epistemic learning beliefs, system thinking, experiential trans-disciplinary, case inquiry & collective action, and critical reflection. The data collection process is shown in Figure 7:

Course	Survey	Dates	Invited	Completed	Partially Completed	Total
LFS 350_001	Start of Term	Sep 9-23, 2016	143	111	0	111
	Mid Term	Nov 2-9, 2016	142	119	0	119
	End of term	Dec 5-12, 2016	142	119	0	119
LFS 350_002	Start of Term	Jan 17-Feb 6, 2017	142	103	0	103
	Mid Term	Feb 27-Mar14, 2017	143	103	0	103
	End of term	Apr 10-18, 2017	143	107	1	108
LFS 250	Start of Term	Sep 9-25, 2016	268	209	2	211
	Mid Term	Nov 29-Dec12, 2016	275	218	0	218
	End of term	Apr 10-18, 2017	275	197	1	198

Figure 7. Data collection process of the comprehensive surveys in LFS 250 and LFS 350.

We continue to collect student reflections on community projects and use rubrics to evaluate student works.

To evaluate impacts on GTAs: the team revised the GTA professional development program based on the 2015-16 year's feedback. The team explicitly integrated educational theories into the program and use Teaching Perspective Inventory (TPI) to understand GTAs' perspectives on teaching. We invited GTAs to complete TPI before and after the professional development. All GTAs (n=10) participated in a focus group interview to discuss how their perspectives on teaching have changed. We also interviewed GTAs individually to inquire their experience in the program. Nine GTAs participated the one-on-one interview.

Similar to 2015-16, we used descriptive statistics to present the survey data. The interview transcripts and student reflections have not been analyzed yet as we just completed the year three data collection in May, 2017. Student reflections will be analyzed through content analysis and the interview transcripts will be analyzed through a constant comparative method.

Dissemination – *Please provide a list of __past__ and __future__ 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.*

The team members have been engaging in a variety of scholarly activities including journal articles, a book chapter conference presentations (35), workshops (3), and invited talks (5). For the full list of scholarly activities associated with the LFC core series, please see here:

http://lfs-core.sites.olt.ubc.ca/dissemination/

We are preparing four manuscripts for publication (one on students' food literacy in the core series courses, two on GTA professional development, and one on community engagement and service learning).

Scholarship and resources as results of this project:

Scholarly Articles (2)

2017

1. *Valley, W., Wittman, H., Jordan, N., Ahmed, S., & Galt, R. (2017). An emerging signature pedagogy for sustainable food systems education. Renewable Agriculture and Food Systems, 1-14. doi:10.1017/S1742170517000199*

2016

2. *Cassidy, A., Fu, G., Valley, W., Lomas, C., Jovel, E., & Riseman, A. (2016). Flexible Learning Strategies in 1st Through 4th Year Courses. Collected Essays on Learning and Teaching (CELT), Society for Teaching and Learning in Higher Education (STLHE). Vol 9.*

Book Chapters

2017

1. *Valley, W., Fu, G., & Jovel, E. (2017) Preparing students for complexity, uncertainty, and accelerating change: Flexible learning strategies for developing future environmental professionals. In Corcoran, P. B., Weakland, J., & Wals, A.E.J. (Eds.) Envisioning future for environmental and sustainability education. Wageningen Academic Publishers. http://www.wageningenacademic.com/doi/abs/10.3920/978-90-8686-846-9_15*

Conference Presentations (23)

2017

1. *Izumi, B., Byker-Shanks, C. & Valley, W. (2017). "Integrating Community-based Learning in Nutrition and Food Systems Courses". Teaching About Food Systems: Community of Practice II. Columbia University Institute of Human Nutrition, New York, New York, USA. June 09, 2017.*

2. *Raisinghani, L, Gomez-Lopez, F., Dring, C., James, C., & Valley, W. (2017). "Learning to Teach/Teaching to Learn in Contexts of Uncertainty". Investigating Our Practices. Faculty of Education, University of British Columbia, Vancouver, BC. May 06, 2017.*

3. *Valley, W., Eyster, T., Clegg, D., & Fu, G. (2017). Development of a Course-Level Graduate Teaching Assistant Program. Center for Teaching, Learning and Technology (CTLT) Spring Institute. University of British Columbia, Vancouver, Canada.*

2016

4. *Valley, W. & Wittman, H. (2016). "An Emerging Signature Pedagogy for Sustainable Food Systems Education". American Anthropological Association Annual Meeting. Minneapolis, Minnesota. November 16-20, 2016.*

5. *Fu, G., & Valley, W. (2016). Connecting Environmental Education between University and K-12 Schools: A Flexible Learning Approach. The Fourth International STEM (Science Technology Engineering & Mathematics) in Education Conference. Beijing, China. October 26-28, 2016*

6. *Valley, W., Cassidy, A., Miller, K., Nelson, K., Lomas, C., & Fu, G. (2016). "Preparing students for complexity and uncertainty: Flexible Learning in the Land, Food & Community Series". The Fourth International STEM (Science Technology Engineering & Mathematics) in Education Conference. Beijing, China. October 26-28, 2016.*

7. *Valley, W. & Wittman, H. (2016). "An Emerging Signature Pedagogy for Sustainable Food Systems Education". Sustainable Agriculture Education Association Conference: The Ecology of Food. University California, Santa Cruz. July 29-31, 2016.*

8. *Valley, W. (2016). "Threshold Process for Understanding and Applying Systems Principles". Teaching About Food Systems: Community of Practice I. Columbia University Institute of Human Nutrition, New York, New York, USA. July 27, 2017.*

9. *Valley, W. & Ahmed, S. (2016). "An Emerging Signature Pedagogy for Sustainable Food Systems Education". Invited talk at Teaching About Food Systems: Community of Practice I, Columbia University Institute of Human Nutrition. New York, New York, USA. July 27, 2016.*

10. *Valley, W., Corbett, J., Stockdale, M., & MacKinnon, J. "Food Systems Change through Partnerships between Communities and Academia. BC Food Systems Network Annual Gathering: Reconciling Cultures and Re-Connecting Foodscapes. Enowkin Centre, Penticton, BC. July 14-16, 2016.*

11. *Valley, W., Edwards, M., Douglas, C, Eccott, L., & Zehr, D. "What Does It Mean to Engage in a Learning Exchange? Part 2". New Perspectives on Learning in the Downtown Eastside: A Community-University Conference. University of British Columbia, Vancouver, BC. May 3-4, 2016.*

2015

12. *Valley, W. (2015). "Community-Engaged Scholarship in the Land, Food and Community Series" for the UBC Community-Engaged Scholarship Working Group. Vancouver, BC. June 22, 2015.*

13. *Valley, W. & Jovel, E. (2015). "An Introduction to the Teaching Philosophy and Practices in Land, Food and Community II (LFS 350)" for regional food security community organizations. Vancouver, BC. June 3, 2015.*

14. *Valley, W. (2015). "Threshold Process for Understanding and Applying Systems Principles" at the Canadian Society for Teaching and Learning in Higher Education Annual Conference. University of British Columbia and Simon Fraser University, Vancouver, BC. June 16-19, 2015.*

15. *Valley, W. & Fu, G. (2015). Evaluating LFS core series course: Flexible Learning, learning outcomes, and community collaboration. Canadian Society for the Study of Education Annual Conference 2015, Ottawa, Canada.*

16. *Valley, W., Fu, G., Eduardo, J., Riseman, A. & Nelson, K. (2015) "Tipping Points: Integrating Community-Identified Issues with Student Learning Using Flexible Approaches" at the UBC Centre for Teaching and Learning Technology Winter Institute. Vancouver, BC. December 10, 2015.*

17. *Valley, W., Leuty, R., & Nelson, K. (2015) "Supporting Collaboration, Reflection and Community Engagement in Diverse Learning Environments" at the Centre for Teaching, Learning and Technology Spring Institute. University of British Columbia, Vancouver, BC. May 27, 2015.*

18. *Valley, W., Lomas, C., & Fu, G. (2015) "Evaluating Flexible Learning strategies in undergraduate courses: Technology and Community-Based Experiential Learning" at the 12th Annual Conference of the International Society for the Scholarship of Teaching and Learning. Melbourne, Australia. October 27-30, 2015.*

19. *Valley, W., Lomas, C., & Fu, G. (2015) "Graduate Teaching Assistant Development in a Practice-and-Theory Framework" at the 12th Annual Conference of the International Society for the Scholarship of Teaching and Learning. Melbourne, Australia. October 27-30, 2015.*

20. *Fu, G., Cassidy, A., Riseman, A., Lomas, C., Jovel, E., & Valley, W. (2015). "Flexible Learning strategies in Land, Food and Community series courses: Sharing our experiences" at the Canadian Society for Teaching*

and Learning in Higher Education Annual Conference. University of British Columbia and Simon Fraser University, Vancouver, BC. June 16-19, 2015.

21. *Fu, G. and Valley, W. (2015). Flexible Learning: Conception, trends, and application at the University of British Columbia. Invited talk on September 28th at Shangqiu Normal University, Shangqiu China.*

22. *Fu, G. and Valley, W. (2015). Flexible Learning in higher education: A case study at the University of British Columbia. Invited talk on September 30th at SIAS International University. Zhengzhou, China.*

23. *Naylor, C., Valley, W., Leuty, R., & Nelson, K. (2015) "Developing Students Into Complex Thinkers, Reflective Collaborators and Community Leaders. How One UBC Faculty Is Doing It All" at the Canadian Association of College and University Student Services Annual Conference. Vancouver, BC. May 25, 2015.*

Media

2017

LFS core series builds community engagement

Through working on community projects, students in the Land, Food and Community series are gaining hands-on learning experience and creating a lasting impact in their community.

2016

Designing good learning environments

The objective of the LFC series is to create learning opportunities that encourage students to become citizens, professionals, and leaders who understand the opportunities and obstacles to creating regional, national and global food systems that are healthy, just, and sustainable.

2015

Supporting Collaboration, Reflection, and Community Engagement in Diverse Learning Environments

At the recent 2015 CTLT Spring Institute, Robyn Leuty, Will Valley, and Kyle Nelson shared community-based experiential learning and team-based learning approaches used in the Faculty of Land and Food Systems (LFS).

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?*

For the members of the team who are involved in teaching, there have been significant changes to our teaching practices. These areas of change impact how we support students in courses that have a degree of uncertainty associated with flexible learning strategies, how we communicate and share our work with other stakeholders, and an on-going willingness to be open to adapt our teaching practices to new ideas and processes.

Over the duration of the project, we have developed and assessed new ways to support students in our courses that rely heavily on flexible learning (FL) strategies. A key finding[1] of our analysis of student reflections on FL is that students often experience apprehension when asked to participate in FL activities, followed by frustration when an unforeseen change occurs in the process, and appreciation for the process at the end of the activity, when given the opportunity to reflect back on the entire experience. With this arc of uncertainty in mind, we believe there are key components of the TLEF project that have helped us better support students in preparing, conducting, and

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[1] Valley, W., Fu, G., & Jovel, E. (2017). Preparing students for complexity and uncertainty: Flexible Learning strategies for developing environmental professionals. In *Envisioning futures for environmental and sustainability education* (Eds. Corcoran, P.B., Weakland, J.P., & Wals, A.E.J.). Wageningen Academic Publishers. pp. 217–228. Access: http://www.wageningenacademic.com/doi/abs/10.3920/978-90-8686-846-9_15

reflecting upon FL activities. For example, our wiki/wordpress course websites act as an expanded syllabus with course notes, learning resources, and access to prior student work. Students are presented with the entire structure of the course and are encouraged to jump back to earlier content or resources and move forward to future content at their own pace, allowing for a non-linear approach to their learning and access to key information "just-in-time", when it matters most to them. Our Student Evaluations of Teaching over the past three years have fewer comments indicating that the intentions of the courses are unclear, which we believe is a result of having the on-line infrastructure that was developed through the TLEF grant. Another example of support developed through the TLEF is the on-line Information Literacy Tutorial. In the past, we conducted these activities in lecture and expected students to refer to their notes while completing their assignments. Having the tutorial available outside of face-to-face course time means that students can engage with the material while they are conducting their research, and refer back to specific sections when needed. Our course websites allow us to archive and create easy access to past student work, which we direct students to at the beginning of their process in FL activities so that they can get a sense of the journey ahead, the nature of the work they will be asked to produce, and how other students approached similar tasks. We believe this open access to the collective memory of the course is a key strategy for alleviating the apprehension felt at the beginning of the FL process as well as a way to decrease the sense of failure or frustration when something inevitably changes during the flexible learning process.

Clear, consistent and frequent communication is a fundamental necessity when integrating FL learning strategies into a course. Our TLEF project has allowed us to better communicate with our students, GTAs, community partners, faculty members in LFS and across UBC, as well as colleagues at Universities across the world. In the prior paragraph, we mentioned how the websites provide support for student learning in the FL context. The websites are equally useful for preparing new GTAs for participating in our courses. GTAs experience a similar arc of uncertainty when engaging with FL strategies as they have often not participated in similar activities in their education. Further, community partners who work with our courses have helped us design better communication strategies (e.g. food literacy workshop communication and resources in LFS 250, blogs in LFS 350, and archiving past projects in LFS 450) that support their collaboration with the students and promote student communication competency development. When members of our TLEF team have had the opportunity to present at conferences, we are able to easily share all components of our courses in a manner that does not require emailing documents or granting permission to password-protected websites. This ability aligns well with our open-source philosophy to educational development and helps us promote and share our learnings freely.

Lastly, among the members who teach, we have recognized how participating in the FL TLEF project has allowed us to become more open to integrating new FL activities and approaches into our courses. For example, while participating in a food systems education teaching and learning community of practice hosted by Columbia University in 2016, Dr. Valley was introduced to the idea of using infographics as a way for students to demonstrate learning and disseminate knowledge through social media. Having been embedded in the FL TLEF project, he was able to able to easily integrate infographics into LFS 350 as a means to enhance student digital and design-based communication competencies as well as integrate the infographics into the final presentation format of the course, bring the latter out of the lecture hall and into a public space (AMS Nest) that was more conducive to sharing findings with a broad audience. The infographics that students produce are easily shared with community partners through social media and are archived on the course website as an artifact of learning, alongside project descriptions and group blogs. Being part of the FL TLEF over the past three years has lowered the barrier to engaging with and incorporating new FL approaches, which we believe is one of the most important legacy pieces of the project – an increased willingness to adapt our own teaching practices to improve student experiences in our courses.

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?*

From first to fourth year, the LFC core series courses provide scaffolding for students to become leaders and professionals in disciplines and topics related to land and food systems. The portal website and websites for individual courses provide platforms for the sustainment of the project components. Currently, students, GTAs, instructors and community partners are actively using the course websites (most LFS 250 and LFS 350) as a resource centre and communication hub. The resources include weekly course schedule, learning objectives, teaching team information, session notes for each week, assignments requirements and samples, information about community projects, and tips for collaboration, writing, presentation, and group work. Through our interviews, students and GTAs have reported that the websites serve as an information hub that they can constantly refer to anytime and anywhere. In the future, it is very likely that the instructors, GTAs, students, and community partners continue to use the websites as a teaching tool, as an online resource centre, and as a flexible learning platform.

The course websites collectively present the LFC core series courses as a whole and are available to the general public. Potentially, prospective students who are interested in finding out more about the faculty, these courses and programs in LFS, community partners who would like to work with the LFC core series courses, graduate students who are considering being a TA for the courses, and other interested groups can learn about the courses through the websites. The websites may also help LFS graduates showcase their community engagement experience to their potential employers and colleagues. The websites help the LFC core series courses reach a wider audience and thus expand the influence of the courses.

The team has developed a syllabus for the GTA professional development program. The syllabus includes a weekly schedule, themes, and reading materials. In addition, the team has developed course specific GTA handbooks that orient GTAs to the courses. The current LFC core series teaching teams (instructors and GTAs) are very supportive of the GTA professional development program. The core series courses hire twenty-four GTAs every year. In the future, the GTA professional development will continue to benefit GTAs in the core series. The team is and will be promoting the GTA professional development program through scholarly articles and within the Faculty via faculty meetings and GTA workshops. Hopefully such efforts will sustain the GTA professional development.

The core series courses have developed reciprocal partnerships with UBC units, community partners, and other institutions in higher education. The partnerships have become an essential component of the core series. Many of the learning activities and learning objectives rely on the collaboration with partners and thus will be sustained in the next few years. In addition, the team strives to sustain the partnership through building reciprocal relationships. For example, the courses collaborate with Vancouver School Board and conduct food literacy workshops for K-12 students. Our students develop understanding of food literacy and food citizenship through working with children and youth; the K-12 students develop food literacy knowledge and skills such as nutrition facts and baking bread from university students. Such partnerships are likely to be sustained in future years as they benefit both parties.

The key instructors in the core series courses are very supportive, proactive, and open-minded towards achieving the project's intended outcomes including implementing FL strategies, constructing and utilizing the course websites, implementing GTA professional development, and collaborating with community partners. Thus, we consider having a team of faculty members who believe in FL as key for achieving the long-term outcomes of the

project. The core series also receives support from LFS senior administration. Such support is another key for the sustainment of the long-term impact.

APPENDIX A: Data collection tools (e.g. surveys and interview protocols)

2014-15 Surveys

(Please note: surveys for LFS 250 and LFS 450 are very similar in structure and thus are not included here)

Students Feedback Form (LFS 350)

Instructions

The purpose of this survey is to learn more about your experience in LFS 350. Your feedback is very valuable and will help us improve the teaching quality and student experience in the courses. Your answers are fully confidential. This survey will take you about 10 minutes to complete.

Please note this is NOT a test. Your participation is voluntary. If the questionnaire is completed, it will be assumed that consent has been given. Your response will NOT affect your course grades.

Thank you very much for your time, your response is highly appreciated!

1). Please choose the answer that best fits your experience in this course. NA=Not Applicable

a. There was sufficient time in the term to execute my community project.

❗ Mostly yes ❗Mostly no   Comments (if any)

b. Community project tasks and/or expectations were clear.

❗Mostly yes   ❗Mostly no   Comments (if any)

c. The amount of time taken for the course was realistic for the credits I earned.

❗Mostly yes   ❗Mostly no   Comments (if any)

d. The course content was integrated into community project.

❗Mostly yes   ❗Mostly no   Comments (if any)

e. Generally, I felt supported in my community experience by university faculty/staff.

❗Mostly yes   ❗Mostly no ❗NA   Comments (if any)

f. Interactions with community partners and community members were generally positive. ❗Mostly yes   ❗Mostly no   ❗NA
Comments (if any)

g. My community activities were useful to my community partners.

❗Mostly yes ❗Mostly no ❗I don't know.   Comments (if any)

h. I had some directions over the community project in which I was involved throughout the term.

❗Mostly yes ❗Mostly no   ❗NA Comments (if any)

i. Overall, my community experience in this course was positive.

❗Mostly yes ❗Mixed ❗Mostly no. Comments (if any)

2). Community project outcomes

	My participation in the community project:	Not at all	Minimally	Moderately	Extensively
a	Strengthened my analytical skills				
b	Improved my academic writing skills				
c	Improved my research skills				
d	Enhanced my understanding of academic content				
e	Enhanced my understanding of local issues				
f	Enhanced my understanding of social issues				
g	Increased my interest in my major				
h	Improved my skills with conflict resolution				
i	Improved my ability to run meetings				
j	Improved my ability to delegate				
k	Improved my ability to listen to others				
l	Improved my ability to work as part of a team				
m	Improved my ability to consider others' perspectives				
n	Deepened my understanding of myself				
o	Helped me to see how the subject matter I learned can be used in everyday life				
p	Helped me to better understand the lectures and readings in this course				
q	Helped me learn how to plan and complete a project				
r	Enhanced my ability to communicate my ideas in a real world context				
s	I can make a difference in my community				

Please indicate your level of agreement with each statement

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
t	I feel I would have learned more from this course if more time was spent in the classroom instead of doing community work.					
u	The idea of combining work in the community with university coursework should be practiced in more classes at this university.					
v	I was responsible for the quantity and the quality of knowledge that I obtained from this course.					

Please select the teaching strategies that help you achieve the expected learning outcomes. If the teaching strategy is not listed in the table, please write down the teaching strategy in the comment box:

1) Propose, implement and evaluate a community-based food systems project with an interdisciplinary team.
In the table below, which of the following strategies helped you…(click all that apply)

justify how local actions can contribute to regional food security objectives? **Comment box:**
create a research proposal in collaboration with a community partner? **Comment box:**
identify methodologies and choose methods to address issues in my project? **Comment box:**
carry out a project to address a collaboratively identified food security issue? **Comment box:**
evaluate project outcomes? **Comment box:**

Teaching strategies:	CBEL (community-based experiential learning) activities:	Assignments:
Breakout room: **Presentations** (proposal & final report presentations).	Working in an interdisciplinary group of students.	Academic & experiential review
Breakout room: **Participation in discussions**.	Collaborating with your community partner(s).	Team charter & proposal
Breakout room: **Free write activities**.	Conducting your CBEL project.	E-lectures
Instructors' lectures.	Completing your community-service hours with your community partners	UBC Wiki (as a platform for communication & class report)
Guest lectures		Quizzes
Discussing topics with your neighbors (in lecture hall).		Final report

Large group discussions (in lecture hall).		Course readings
Systems diagram lecture.		Creating system diagram
Individual discussions with your professors		Community service learning written reflection
Individual discussions with your TAs.		None of the above

2) Critically analyze connections between food, health and the environment within food security discourse

In the table below, which of the following strategies helped you… (click all that apply)

evaluate the contributions of different food-related academic disciplines (such as nutrition, soil science, animal welfare) to addressing food security issues? **Comment box:**
integrate disciplinary and systems approaches to addressing food security issues? **Comment box:**
explore personal and societal capacities to address food security issues? **Comment box:**
examine the role of culture in regard to food security issues? **Comment box:**

Teaching strategies:	CBEL (community-based experiential learning) activities:	Assignments:
Breakout room: **Presentations** (proposal & final report presentations).	Working in an interdisciplinary group of students.	Academic & experiential review
Breakout room: **Participation in discussions**.	Collaborating with your community partner(s).	Team charter & proposal
Breakout room: **Free write activities**.	Conducting your CBEL project.	E-lectures
Instructors' lectures.	Completing your community-service hours with your community partners	UBC Wiki (as a platform for communication & class report)
Guest lectures		Quizzes
Discussing topics with your neighbors (in lecture hall).		Final report
Large group discussions (in lecture hall).		Course readings
Systems diagram lecture.		Creating system diagram

Individual discussions with your professors		Community service learning written reflection
Individual discussions with your TAs.		None of the above

3) Apply strong communication, critical thinking and research skills

In the table below, which of the following strategies helped you… (click all that apply)

identify the roles and value of community partners' expertise? **Comment box:**
develop and disseminate knowledge that is useful to key stakeholders? **Comment box:**
become a more effective team member? **Comment box:**
interact professionally with project team members and members of the public? **Comment box:**
reflect on personal experience gained through participating in a CBEL project? **Comment box:**

Teaching strategies:	CBEL (community-based experiential learning) activities:	Assignments:
Breakout room: **Presentations** (proposal & final report presentations).	Working in an interdisciplinary group of students.	Academic & experiential review
Breakout room: **Participation in discussions**.	Collaborating with your community partner(s).	Team charter & proposal
Breakout room: **Free write activities**.	Conducting your CBEL project.	E-lectures
Instructors' lectures.	Completing your community-service hours with your community partners	UBC Wiki (as a platform for communication & class report)
Guest lectures		Quizzes
Discussing topics with your neighbors (in lecture hall).		Final report
Large group discussions (in lecture hall).		Course readings
Systems diagram lecture.		Creating system diagram
Individual discussions with your professors		Community service learning written reflection
Individual discussions with your TAs.		None of the above

Thank you very much for completing the survey!

Rubrics: (use of LFS 250 rubrics as an example, the rubrics in other core series courses are very similar in structure)

LFS 250 Rubrics:
Presentation

	Absent (2)	Beginning (4)	Novice (6)	Competent (8)	Proficient (10)	Score
Presentation themes (20%)	Lack main themes Or themes not from required readings	Vague summary of whole reading instead of presenting themes	Themes vague and lack supporting arguments; Significantly exceed 5 mins introducing themes	Themes presented and supporting arguments used; exceeds 5 mins introducing themes	Themes clearly presented and supporting arguments articulated. Spent no longer than 5 mins introducing themes	
Group work and multi – perspectives (20%)	Does not present debate within group; does not present different perspectives on me(s)	Present multi-perspectives and/or controversies of themes but does not present supporting evidence	Present but does not assess perspectives, supporting evidence and value systems behind perspectives	Present multi-perspectives and supporting evidence; **briefly** assessed supporting evidence and value systems behind perspectives.	Present multi-perspectives and supporting evidences; **critically** assess supporting evidence and value systems behind perspectives	
Relevance (20%)	Make no connection to students' disciplines or past experiences	Make general or vague connection to students' disciplines and/or past experiences	Make a few connections to students' disciplines and/or past experiences	Clearly refer to course readings and make specific connection to students' disciplines and/or past experiences	Clearly refer to course readings and make specific connection to students' disciplines and/or past experiences. Connections critically examined and articulated	
Facilitation (20%)	No facilitation occurred	Use yes/no questions to generate discussion; minimal and awkward interactions with audience	Use questions and/or activities to engage audience but not related to themes; some interaction with audience	Use theme-related questions and/or activities and consistently facilitated discussion	Use theme-related and thought provoking questions and/or activities constantly facilitate discussion	
Delivery (20%)	No eye contact, read entire presentation from notes; No movement (body language); No enthusiasm; Random organization. Most audience cannot hear presenter's voice. Misspelling and	Minimal eye contact, mostly read from notes; Minimal engaging body language; Little interest in topic; Poor organization Presenter mumbles, frequently mispronounce terms; Many misspelling and grammatical errors	Some eye contact, read from notes half of time; Some engaging body language; Occasionally show interest in topic; Audience can follow topic; Presenter's voice low and difficult to hear; sometimes mispronounce terms;	Consistent use of eye contact, sometimes return to notes; Use body language to enhance presentation delivery; Show positive feelings about topic; Logical organization; Clear voice, audience can hear presentation, rare mispronunciation;	Hold attention of audience with eye contact, rarely read from notes; Body language is natural and help audience to visualize material; Enthusiastic about topic; Logical organization; Clear voice, precise and correct pronunciation, No misspelling and grammatical errors	

			Some misspelling and grammatical errors	Minor misspelling and grammatical errors		
grammatical errors significantly distracting						
					TOTAL	

Critical Reflection Essays Entries:

	Absent (0)	Beginning (1)	Novice (2)	Competent (3)	Proficient (4)	Score
Structure (20%)	Does not follow what, so what, now what structure	Generally follow what, so what, now what structure; but does not describe learning relevant to reflection category	Generally follow what, so what, now what structure; describe learning but not specific	Clearly follow what, so what, now what structure; describe learning relevant to reflection and articulate learning	Clearly follow what, so what, now what structure; describe learning relevant to reflection in details and articulate learning with evidence	
Integration of course material (lectures, reading, activities and/or discussion) (20%)	No evidence of connection to course materials	Connection to course materials vague and does not specifically identify source	Draw on course materials and identify source, does not support statement with evidence, does not use proper reference format	Draw on course materials, identify source, and reflect upon connections; support statement with evidence, use proper reference format	Draw on and synthesize course materials, identify source, and reflect upon connections; statements accurate, supported with evidence, properly referenced.	
Relevance (20%)	Make no connection to students' disciplines, assumptions, or past experiences	Make general or vague connection to students' disciplines, assumptions, and/or past experiences	Make a few connections to students' disciplines, assumptions, and/or past experiences	Clearly refer to course readings and make specific connection to students' disciplines, assumptions, and/or past experiences	Clearly refer to course readings and make specific connection to students' disciplines, assumptions, and/or past experiences. Connections critically examined and articulated	
Application or extension of concepts (20%)	No application or extension of concepts learned to: Broader food system issues; Future school/work/life experiences; or Personal learning goals	General or Vague application or extension of concepts learned to: Broader food system issues; Future school/work/life experiences; or Personal learning goals	A few applications or extension of concepts learned to: Broader food system issues; Future school/work/life experiences; or Personal learning goals	Clear application or extension of concepts learned to: Broader food system issues; Future school/work/life experiences; Personal learning goals	Clear application or extension of concepts learned to: Broader food system issues; Future school/work/life experiences; Personal learning goals. Applications and extensions critically examined and articulated	
Quality of writing	Does not use first	Rarely use first person	Sometimes use first	Generally use first	Use first person	

(20%)	person Write entry in informal language Misspelling and grammatical errors significantly distracting	Few integration of vocabulary aids. Write entry mostly in informal language Many misspelling and grammatical errors	person Occasional integration of vocabulary aids. Sometimes informal language in writing. Some misspelling and grammatical errors	person Some integration of vocabulary aids. Write entry mostly in formal language Minor and grammatical errors	Well integration of vocabulary aids. Write entry in formal language No misspelling and grammatical errors	
					TOTAL	

Diary Report Diagram

	Absent (0)	Beginning (1)	Novice (2)	Competent (3)	Proficient (4)	Score
Goal/Definition (10%)	Goal missing	Goal not match components and interactions of diagram	Goal confusing and has weak connections and interactions to rest of diagram	Goal stated clearly but not using What, How, and Why format	Goal clearly stated using What, How, and Why format	
Boundaries and nested levels (10%)	Boundaries and nested levels not clearly identified.	Boundaries and nested levels not appropriate nor consistent	Boundaries and nested levels somewhat appropriate or consistent	Boundaries and nested levels generally appropriate and consistent	Boundaries and nested levels appropriate and consistent	
Components (20%)	Over simplified diagram	Major components not present; unnecessary components included	Major components partially present; still see unnecessary components	Major components largely present; Rarely see unnecessary components	Major components present; unnecessary components absent	
Inputs and outputs (20%)	Lack inputs and outputs	Major inputs and outputs not present; unnecessary inputs and outputs included	Major inputs and outputs partially present; still see unnecessary inputs and outputs	Major inputs and outputs largely present; Rarely see unnecessary inputs and outputs	Major inputs and outputs present; unnecessary inputs and outputs absent	
Interactions and relationships (20%)	Random structure	Interactions and relationships logical, accurate, significant	Interactions and relationships somewhat logical, accurate, significant	Interactions and relationships generally logical, accurate, significant	Interactions and relationships logical, accurate, significant	
Clarity (20%)	Diagram confusing and disorganized	Diagram misses significant information; plenty of spurious details; visually confusing; challenging to identify patterns	Diagram somewhat informative; some spurious details; visually comprehensible but not clear; unintelligible patterns	Diagram informative at a general level; few spurious details; visually comprehensible; meaningful patterns	Diagram informative at a general level; spurious details absent; visually comprehensible; coherent, meaningful patterns	
					TOTAL	

Diary Written Report

	Absent (2)	Beginning (4)	Novice (6)	Competent (8)	Proficient (10)	Score
Holism	Discuss only one component of dairy system	Discuss few components of dairy system but miss most major components	Discuss multiple components but miss one or two major components	Discuss multiple components including all major components	Discuss multiple components including all major components. And synthesize connections among components	
Pluralism	Explore only one perspective in report	Present two perspectives but does not evaluate each perspective	Present multiple perspectives but does not evaluate each perspective	Present multiple perspectives and evaluate each perspective	Present multiple perspectives, evaluate each perspective, and justify your own position	
Justification for own position	Own position absent	Own position not clearly stated and lack supporting evidence and justification	Own position stated but evidence/justification provided does not support position	Own position clearly stated, provide evidence/justification to support position	Own position clearly stated, use appropriate evidence/justification to support position; come to conclusion in a natural flow	
Reliability of evidence	No discussion regarding reliability of evidence	Identify sources of evidence but not discuss reliability of sources	Identify sources of evidence and provide brief evaluation of reliability	Evaluate reliability of each evidence	Thoroughly evaluate reliability of evidence in report and use evaluation results to support own position	
Quality of writing	Very limited range of vocabulary. Lack clarity in text Misspelling and grammatical errors significantly distracting	Use inadequate range of vocabulary. Most of text not logical nor clear Many misspelling and grammatical errors	Use adequate range of vocabulary. Text somewhat logical and clear. Some misspelling and grammatical errors	Use sufficient range of vocabulary allows flexibility and precision. Text mostly logical and clear Minor misspelling and grammatical errors	Use a wide range of vocabulary which is natural and sophisticated. Text logical, accurate, and clear. No misspelling and grammatical errors	
					TOTAL	

School Food System Diagram (Same as Dairy Report Diagram)

	Absent (0)	Beginning (1)	Novice (2)	Competent (3)	Proficient (4)	Score
Goal/Definition	Goal missing	Goal does not match components and interactions of diagram	Goal confusing and has weak connections and interactions to rest of diagram	Goal stated clearly but not using What, How, and Why format	Goal clearly stated using What, How, and Why format	
Boundaries and nested levels	Boundaries and nested levels not clearly identified	Boundaries and nested levels not appropriate or consistent	Boundaries and nested levels somewhat appropriate or consistent	Boundaries and nested levels generally appropriate and consistent	Boundaries and nested levels appropriate and consistent	
Components	Over simplified diagram	Major components not present; unnecessary components included	Major components partially present; still see unnecessary components	Major components largely present; rarely see unnecessary components	Major components present; unnecessary components absent	
Inputs and outputs	Lack inputs and outputs	Major inputs and outputs not present; unnecessary inputs and outputs included	Major inputs and outputs partially present; still see unnecessary inputs and outputs	Major inputs and outputs largely present; rarely see unnecessary inputs and outputs	Major inputs and outputs present; unnecessary inputs and outputs absent	
Interactions and relationships	Random structure	Interactions and relationships logical, accurate, significant	Interactions and relationships somewhat logical, accurate, significant	Interactions and relationships generally logical, accurate, significant	Interactions and relationships logical, accurate, significant	
Clarity	Diagram confusing and disorganized.	Diagram misses significant information; plenty of spurious details; visually confusing; challenging to identify patterns	Diagram somewhat informative; some spurious details; visually comprehensible but not clear; unintelligible patterns	Diagram informative at a general level; few spurious details; visually comprehensible; meaningful patterns	Diagram informative at a general level; spurious details absent; visually comprehensible; coherent, meaningful patterns	
					TOTAL	

School Food System Group Written Report

	Absent (2)	Beginning (4)	Novice (6)	Competent (8)	Proficient (10)	Score
Reality as experienced	No description of group's past	Describe group's past experience with one or	Lay out group's past experience with details,	Describe group's past experience, compare	Describe group's past experience and highlight	

	experience	two sentences.	but no comparisons amongst group members	amongst group members, but no discussion of insights gained from comparison.	significant insights from similarities and differences in experiences amongst group members.
Reality as "it could be"	No description of group's utopian vision	Over-simplified descriptions of group's utopian vision	Describe group's utopian vision with some details	Describe group's utopian vision in details, but does not explain significance of key elements	Describe group's utopian vision in details and explain significance of key elements
Your school's food system model	No comparison of school's food system model and group's past experience and utopian vision	Make peripheral comparison of school's food system model and group's past experience and utopian vision	Make in-depth comparison with reference to interactions and relationships between components of system within model	Make in-depth comparison and discuss insights gained from comparison	Make in-depth comparison and draw conclusion or future action in light of insights gained from comparison
Quality of writing	Very limited range of vocabulary. Use very limited sentence structure Information and ideas not arranged coherently. Misspelling and grammatical errors significantly distracting	Use inadequate range of vocabulary. Attempt to use different sentence structures but often inaccurate Present information and ideas with some organization. Many misspelling and grammatical errors	Use adequate range of vocabulary. Use a mix of simple and complex sentences An overall clear progression of information and ideas. Some misspelling and grammatical errors	Use sufficient range of vocabulary allows flexibility and precision. Use variety of sentence structure. Logically organize information and ideas with a clear progression Minor misspelling and grammatical errors	Use a wide range of vocabulary which is natural and sophisticated. Use a wide range of sentence structure with accuracy Text logical, accurate, and clear. No misspelling and grammatical errors
					TOTAL

Critical Review Assignment Rubric

	Absent (2)	Beginning (4)	Novice (6)	Competent (8)	Proficient (10)	Score
Introduction & statement of purpose (10%)	Over-simplified introduction; goal statement and road map missing	General introduction to subject matter; Goal vaguely stated; Layout of paper not clear	General introduction to subject matter; Goal stated; Layout of paper presented	Introduction to subject matter clear and concise; Goal clearly stated; Layout of paper clear	Introduction to subject matter clear, concise and interesting; Goal clearly articulated; Layout of paper clear, logical, and easy to follow	
Summary, synthesis	Main arguments	Summarize 1-2 main	Summarize 3-4 main	Summarize 6 main	Summarize and evaluate 6	

and evaluation of literature (30%)	missing	arguments; Main arguments supported by evidence; Paper organization not logical	arguments; Main arguments supported by evidence citied from recognized sources; Paper organized by themes	arguments; Main arguments supported by evidence citied from journal articles; Paper organized by themes in literature	main arguments; Main arguments supported by evidence citied from different journal articles; Paper organized by themes identified in literature	
Development of a position and supporting evidence (20%)	No personal position identified	Personal position not clearly stated	Personal position stated and has vague connection with evidence from literature	Personal position clearly stated and has connection with evidence from literature	Personal position clearly stated and logically supported by evidence from literature	
Research methods, sources, and citations (20%)	Research methods missing; no in-text citation nor references	Research methods documented in an appendix; In-text citations and references follow APA style but with many errors	Research methods documented in an appendix; Research methods not properly chosen or employed; In-text citations and references follow APA style but with some errors	Research methods documented in an appendix with details; Research methods properly chosen and employed; In-text citations and references follow APA style but with occasional errors	Research methods documented in an appendix with detailed description and justification; In-text citations and references follow APA style with few or no errors	
Quality of writing (20%)	Very limited range of vocabulary. Use very limited sentence structure Information and ideas not arranged coherently. Misspelling and grammatical errors significantly distracting. Does not follow requirements of length font and style	Use inadequate range of vocabulary. Attempt to use different sentence structures but often inaccurate Present information and ideas with some organization. Many misspelling and grammatical errors. Follow requirements of length font and style but with many errors; lacks major components (intro, conclusion, etc.)	Use adequate range of vocabulary. Use a mix of simple and complex sentences An overall clear progression of information and ideas. Some misspelling and grammatical errors. Follow requirements of length font and style with some errors; lacks some components (intro, conclusion, etc.)	Use sufficient range of vocabulary allows flexibility and precision. Use variety of sentence structure. Logically organize information and ideas with a clear progression Minor misspelling and grammatical errors. Follow requirements of length font and style with a few errors; lacks one components (intro, conclusion, etc.)	Use a wide range of vocabulary which is natural and sophisticated. Use a wide range of sentence structure with accuracy Text logical, accurate, and clear. No misspelling and grammatical errors Follow requirements of length font and style with few or no errors; contains all components (intro, conclusion, etc.)	
					TOTAL	

Interview protocols:

Interview questions with student

Describe your project in 1 min, who you work with and what are your expectations?

Have your expectations been meet?

What help you meet your expectations to your community project?

What are the teaching strategies that help you meet your expectation? How, was it the interface, the content/materials (too old, not interesting, not relevant, too hard/easy), the way it was delivered (video, presentation, clicker, reading, lecturing)? Please be specific.

What is your general experience with the online teaching strategies, such as e-lectures, discussions, group work, presentations, Connect, Wiki, library tutorial etc? (further explore, if not, how does the process of getting familiar with the tool affect your learning? Now you are familiar, would you like to see more of these tools used in future courses?)

What does it mean of applying the knowledge and skills to analyze the challenges existing in local communities?

In this course, did you do this? Why/Why not? What experience in this course help/hinder you to gain such confidence? How can we modify the course to improve your confidence applying the knowledge and skills to analyze the challenges?

Can you identify, evaluate and integrate inter-disciplinary evidence relating to food systems issues? What experience in this course help/hinder you to identify/evaluate/integrate inter-disciplinary evidence relating to food system issues? How can we improve?

What were your experience of planning/implementing/evaluating actions to address challenges in food systems with the considerations of community perspectives?

What teacher strategies that help/hinder you to do so? How can we improve?

What your experience were of communicate and collaborate as a member of interdisciplinary team with a variety of stakeholders? What teaching strategies in this course help/hinder you to communicate and collaborate as a member of interdisciplinary team with a variety of stakeholders? And Why?

What were your experience of reflect on your personal growth and learning as professionals addressing land, food and community issues, including the significance of ethical frameworks and lifelong learning.

What experience in this course help/hinder you to communicate and collaborate as a member of interdisciplinary team with a variety of stakeholders?

What do you think is this course trying to achieve?

In general, where can we change to improve your experience?

In general, where worked well in this course?

Interview questions with Community Partners:

1. Could you please briefly describe the project(s) that you worked with students?

2. Thinking about logistics, how would you describe your experience with partnering with the course?

What was a highlight?
What was particularly challenging?
What was a missed opportunity?

3. How would you describe your experiences with the students?

Were they prepared?
Did they communicate well?
Were students able to interact with you in a professional manner?
Were they sensitive to your community context?
Did students have the expected knowledge and skill sets to work on the projects?
4. What changes would you like to see in your relationship with LFS 350 moving forward?

Instructors
Students

2015-2016

Surveys with students (LFS 350 as an example, student surveys for other courses are very similar in structure)

Student Learning Survey
This survey asks about your learning experience in Land, Food and Community II (LFS 350).

Your survey results will be kept confidential. Results of the survey will be reported in statistically aggregated form only, without identifying individual students. No part of your responses to this survey will become part of your UBC student record. For statistical purposes, information you provide in this survey will be augmented with other information already on file at UBC.

If you have any questions or concerns about this survey, please contact Natasha Moore (natasha.moore@ubc.ca) in the Vice President Students Office.

OVERALL_EXPERIENCE [SINGLECHOICE GRID]
Throughout the survey, you will be asked about the extent to which you agree or disagree with statements about various aspects of LFS 350.

Thinking about LFS 350, to what extent do you agree or disagree with the following statements?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with my overall experience in the course
The course provided me with opportunities to interact with other students
I was able to develop new skills and knowledge from other students
I had engaging interactions with instructors
I was deeply engaged with the course material because of the way that it was presented to me
The feedback I received on my work was valuable
My learning was effectively supported

OVERALL_EXPERIENCE [SINGLECHOICE GRID]
Again thinking about LFS 350, to what extent do you agree or disagree with the following statements?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

The course provided a supportive learning environment
The course provided an inclusive, respectful environment
I developed effective learning strategies as a result of the way the course was taught
I am able to balance my academic time (in class, study time, etc.) and non-academic time (work, exercise, socializing, care for dependents, etc.)
Overall, the course was innovative in its approach to supporting student learning
Overall, the course was effective at supporting student learning

A25_COMMENT_OVERALL [OPTIONAL]
Please enter any additional comments you would like to include about your overall experience in LFS 350:

PREFERRED_APPROACH
Please rate each of the following approaches to learning where 5 is most preferred and 1 is least preferred. You can have more than one approach in each category.

Interacting with other students in lecture and tutorial rooms
Interacting with other students online
Working by myself
Collaborating on group projects
Working in a community setting (e.g. conducting community projects)
Interacting with Teaching Assistants (TAs)

5 Most preferred
4
3
2
1 Least preferred

Lecture [SINGLECHOICEGRID]
Thinking about the lecture component in LFS 350 (i.e. instructor presenting content with minimal class discussion or interaction)

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with my classroom experience
I felt part of a respectful learning community as a result of the lectures
I had engaging interactions with my classmates as a result of how the lectures were presented
I had engaging interactions with my instructor as a result of how the lectures were presented

Lecture2 [SINGLECHOICEGRID]
Thinking about the lecture component in LFS 350 (i.e. instructor presenting content with minimal class discussion or interaction)

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

The lectures got me to engage deeply in the course material
The lectures enhanced my learning
The lectures were effective in supporting my learning

In-class Discussions and Activities

InClassDiscussion [SINGLECHOICEGRID]
Thinking about the in-lecture discussions and activities in LFS 350 (i.e., in which you contributed to class discussions, worked in pairs or small groups, or had activity-based learning approaches) …

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with the lecture discussions and activities in the course
The lecture discussions and activities provided me with opportunities to interact with other students in the course
I was able to develop new skills and knowledge from other students as a result of the lecture discussions and activities in the course
I felt part of a respectful learning community as a result of the lecture discussions and activities in the course

InClassDiscussion2 [SINGLECHOICEGRID]
Thinking about the in-lecture discussions and activities in LFS 350 (i.e., in which you contributed to class discussions, worked in pairs or small groups, or had activity-based learning approaches) …

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

The lecture discussions and activities led me to have engaging interactions with the instructors
The lecture discussions and activities got me to engage deeply the course material
The lecture discussions and activities enhanced my learning
The lecture discussions and activities were effective in supporting my learning

TutorialRoomSection[SINGLECHOICEGRID]
Thinking about tutorial room sections facilitated by your Teaching Assistant in LFS 350…

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with my experience in tutorial room section.
I was able to develop new skills and knowledge from tutorial room section.
I felt part of a respectful learning community as a result of participating in tutorial room section.

TutorialRoomSection2 [SINGLECHOICEGRID]
Thinking about tutorial room section facilitated by your Teaching Assistant in LFS 350…

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

The tutorial room section got me to engage deeply with the course material
The tutorial room section enhanced my learning
The tutorial room section was effective in supporting my learning

StudentCollaboration[SINGLECHOICEGRID]
Thinking about collaborating with other students on assignments and projects in LFS 350 (i.e. you worked with other students both in-class and outside of class time to complete requirements for the course) …

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with my experience collaborating with other students on assignments and projects in the course
I was able to develop new skills and knowledge from other students as a result of collaborating with other students in the course
I felt part of a respectful learning community as a result of collaborating with other students

StudentCollaboration2 [SINGLECHOICEGRID]
Thinking about collaborating with other students on assignments and projects in LFS 350 (i.e. you worked with other students both in-class and outside of class time to complete requirements for the course) …

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

Collaborating with other students got me to engage deeply with the course material
Collaborating with other students enhanced my learning
Collaborating with other students was effective in supporting my learning

Community-Based Experiential Learning (CBEL) [SINGLECHOICEGRID]
Thinking about Community-Based Experiential Learning (CBEL) in LFS 350 (i.e., working on your community project), to what extent do you agree or disagree with the following statements about the course(s)?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with how CBEL was used in the course
The use of CBEL got me to engage deeply with the course material
The use of CBEL enhanced my learning
The use of CBEL was effective in supporting my learning
I was satisfied with how the CBEL worked as a learning strategy in my course

Assignments [SINGLECHOICEGRID]

Thinking about the assignments in LFS 350 (e.g. Academic & experiential review papers, Group blogs, Presentation),

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with the assignments in the course
I received frequent feedback on my assignments in the course
The feedback I received on my assignments was valuable

Comments

Assignments2 [SINGLECHOICEGRID]
Thinking about the assignments in LFS 350 (e.g. Academic & experiential review papers, Group blogs, Presentation),

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

The assignments got me to engage deeply with the course material
The assignments enhanced my learning
The assignments were effective in supporting my learning

Comments

Pre-Class Content (i.e. on-line session notes and resources)

PreClass Content [SINGLECHOICEGRID]
Thinking about the pre-class content in LFS 350 (i.e., the on-line session notes and resources for a class prior to attending the class)

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with the pre-class content in the course
The pre-class content got me to engage deeply with the course material
The pre-class content enhanced my learning
The pre-class content were effective in supporting my learning
I was satisfied with how the pre-class content worked as a technology in the course

Library Tutorial Section

LibraryTutorialSection [SINGLECHOICEGRID]
Thinking about the library tutorial section in LFS 350

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with the library tutorial section in the course
The library tutorial section got me to engage deeply with the course material
The library tutorial section enhanced my learning
The library tutorial section were effective in supporting my learning
I was satisfied with how the library tutorial section worked as a learning strategy in the course

InClassANDOnline [SINGLECHOICEGRID]
Thinking about both online activities (e.g. course website, on-line session notes and resources, assignments, forums and discussions) and in-class discussions and activities in LFS 350 …

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

The in-class activities prepared me effectively to engage in online activities
The online activities prepared me effectively to engage in in-class activities
The combination of in-class and online activities was something I enjoyed
The combination of in-class and online activities led me to have engaging interactions with the instructor
The combination of in-class and online activities got me to engage deeply with the course material
The combination of in-class and online activities enhanced my learning
The combination of in-class and online activities were effective in supporting my learning

Technology_Overall

Tech_Overall [SINGLECHOICEGRID]

Thinking about technology used as part of the teaching approach in LFS 350 (i.e., course website, blogs, online session notes and resources)

to what extent do you agree or disagree with the following statements about the course?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree
Don't know

I was satisfied with how such technology worked in the course (i.e. the technology worked)
I felt part of a respectful learning community as a result of using such technology for engaging with the course material
If given the choice, I prefer to interact with other students through online platforms than in person
I developed effective learning strategies as a result of using such technology in the course
The technology enhanced my learning experience
I enjoyed the way technology was used in the course
The use of such technology was effective in supporting my learning more so than courses with no use of such technology
The technology got me to engage deeply with the course material

IV. Workload

WORKLOAD_MORE_LESS [SINGLECHOICEGRID]
Please compare LFS 350 to your average course workload in relation to the teaching approaches below.

Did you spend less, about the same or more time on these activities in LFS 350 than your average course workload?

In-class discussions and activities
Collaborating with other students on assignments and projects in the course
Community-Based Experiential Learning (working on your community project)
Pre-class content
Lecture (instructor presenting content with minimal class discussion or interaction)
Tutorial room section
Assignments
Online forums and discussions

Less than average
About average
More than average
Much more than average
Don't know / Hard to say

T01_T8_RECOMMENDATIONS [SINGLECHOICEGRID]
To what extent do you agree or disagree with the following statements about LFS 350?

LFS 350 should include more in-class discussions and activities
LFS 350 should include more opportunities for collaborating with other students
LFS 350 should use more Community-Based Experiential Learning activities
LFS 350 should include more tutorial room sections
LFS 350 should include more lectures
LFS 350 should include more assignments
LFS 350 should include more pre-class content
LFS 350 should include more combinations of in-class activities and online activities (e.g. course website, on-line session notes and resources, assignments, forums and discussions)
LFS 350 should provide students with a choice for how they achieve the requirements for the course
LFS 350 should provide students with more choices for completing the course online or in-class

A30_COMMENT_BEST_THING [OPENEND] [OPTIONAL]
The best thing about the way LFS 350 was taught was ….

A31_COMMENT_CHANGE [OPENEND] [OPTIONAL]
If I could have changed anything about the way LFS 350 was taught, it would be ….

Survey with Community Partners (LFS 250 school teachers)

LFS 250 Food Literacy Workshop Feedback Survey

Over the past few months, you have been working with an LFS 250 student-team, and we are interested to learn a little bit more about your experience. This feedback will be used to help next year's teaching team understand how to better prepare students for this type of work in the community. Thanks in advance for your honest feedback.

The students were asked to visit your school on 2 occasions.

Were the students prepared for their first introductory visit on January 27th?

1) Please reflect back to your experiences with the UBC student-team on their first visit to your school on January 27th and select your level of agreement to the following statements.

The goals of first visit for student were arrive on time and as a group, meet with their VSB stakeholder, collect data on school food system assets, and gather information about students in the classroom to prepare for their food literacy workshop.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	I don't know/No opinion
My student-team showed up on-time	☡	☡	☡	☡	☡
My student-team all group members were present together.	☡	☡	☡	☡	☡
My student-team seemed confused as to was supposed to be doing what.	☡	☡	☡	☡	☡
My student-team asked clear questions about	☡	☡	☡	☡	☡
My student-team seemed unprepared for their first visit.	☡	☡	☡	☡	☡
My student team's conduct on the first visit was unprofessional.	☡	☡	☡	☡	☡

2) Please reflect back to your experiences with the UBC student-team on the day of their food literacy workshop (March 3rd or March 24th) and select your level of agreement to the following statements.

Add questions about workshop delivery/facilitation.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree		I don't know/No opinion
My student-team possessed the necessary food system knowledge to conduct their		☡	☡	☡	☡	☡

workshop					
My student-team displayed a sufficuent level of pedagogical skills and competencies needed to conduct their workshop.	⍾	⍾	⍾	⍾	⍾
My student-team seemed unprepared for their workshop.	⍾	⍾	⍾	⍾	⍾
My student-team often seemed confused as to who was supposed to be doing what.	⍾	⍾	⍾	⍾	⍾
I had to help my student-team figure out how to work together.	⍾	⍾	⍾	⍾	⍾

5) Could you please provide us with a few comments about the kinds of things the student-team seemed unprepared for?

_____
_____
_____

6) Could you tell us a bit about what your student-team did that helped make this a successful project?

_____
_____
_____

7) Please select the rank below that best matches your perception of the student-team's skills in each category.

	Excellent	Average	Poor	Non-existent	I don't know/No opinion
Overall level of professional etiquette and conduct (e.g. responsiveness to questions and e-mails, respectful interactions with you, your students or other school staff, being punctual, etc)	⍾	⍾	⍾	⍾	⍾

Interview protocols with GTAs

LFS 250 Professional development program for GTAs

Interview questions:

GTAs' demographic information and past experience:

Please tell me what grad program you are in, Master or PhD.

Please tell me your past teaching/TA experience.

Have you participated in any GTA trainings before this course? How was the training help you/not help you and why?

Are there any people or events in the past that influence the way you see teaching? (your school teachers, coaches, family members, a specific course or class). How do they influence your teaching?

Before TAing for the course, how much do you know about 250, content-wise, pedagogical-wise, in relation to other courses?

What motivate you to become a TA for this course?

GTAs' experience in 250

Could you please tell me your overall teaching experience in 250, the good, the bad, suggestions for improvement? How is this course affect your teaching similar to/different from other courses that you have taught?

Does the course experience encourage you to think more about teaching?

We see the similarities and differences of your TPI results, could you please tell me more about your teaching perspectives, and how they change/stay the same over time and why?

How does this course affect your teachings in terms of content knowledge, teaching skills such as communication, facilitation, giving feedback, and education theories?

Are there any specific moments or events in this course that have some impact on your teaching?

Could you please tell me how each component in the course affects your teaching, if any? (Pre-term meeting, GTA handbook, lectures, teaching team meeting, theory sessions, tutorial room practice, feedback from the instructor, engagement with technology). Suggestions for improvement of each component?

Context and future application

Are you aware of the resources on campus to support TAs?

Are you aware of that UBC sets teaching and student learning experience as one of the strategic priorities?

To what extend do you think the teaching experience, knowledge, and skills can be applied in other courses or in your future teaching? Why/why not?

What is your career goal? Would the TA experience help with your career goals?

2016-2017

Survey:

LFS 350 Core Program - End Term Survey

Page 1

(LFS350_EndGrid1)

How strongly do you agree or disagree with the following:

As a result of my experiences in LFS 350 …

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
I've gained skills that help me see the connections between my academic course content and every-day life	☐	☐	☐	☐	☐	☐
I've gained skills that help me see the connections between my academic course content and wider societal issues	☐	☐	☐	☐	☐	☐
I've gained a deeper understanding of my area of study	☐	☐	☐	☐	☐	☐
I have a deeper understanding about how my area of study is connected to wider societal issues	☐	☐	☐	☐	☐	☐
I've gained skills that help me engage more effectively with diverse perspectives	☐	☐	☐	☐	☐	☐

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
I've gained skills that have improved how I communicate	☐	☐	☐	☐	☐	☐
I've gained skills that enable me to listen effectively to others	☐	☐	☐	☐	☐	☐
I'm more confident in my capacity to act in a leadership role	☐	☐	☐	☐	☐	☐
I gained 'real world' work experience and skills	☐	☐	☐	☐	☐	☐

(LFS350_EndGrid2)

How strongly do you agree or disagree with the following:

As a result of my experiences in LFS 350, I am prepared to …

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Seek out opportunities to interact with diverse perspectives	○	○	○	○	○	○
Consider different perspectives when thinking about a problem	○	○	○	○	○	○
Seek out opportunities that require me to lead	○	○	○	○	○	○
Act on community or social issues	○	○	○	○	○	○
Work towards making a positive impact in the world	○	○	○	○	○	○

(LFS350_EndGrid3)

How strongly do you agree or disagree with the following:

As a result of my experiences in LFS 350, I am prepared to …

	Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree
Take action to improve a team experience	○	○	○	○	○	○
Be more reflective in situations that challenge my values and beliefs	○	○	○	○	○	○
Reflect on and adjust my approach when communicating with different people	○	○	○	○	○	○
Listen and contribute more effectively	○	○	○	○	○	○
Actively seek different perspectives when bringing people together to work on a project	○	○	○	○	○	○

(LFS350_PrePost)

Thinking about your experiences in the course, how would you rate yourself on the attributes below, before your experience and after your experience?

Ability to engage with diverse perspectives

Ability to address complex issues

Ability to communicate with community practitioners

Ability to work within complex situations

Ability to work with others to act on community or social issues.

Awareness of my strengths and weaknesses

Ability to work within complex environments