



Large TLEF Project Completion Report

Report Completion Date: (YYYY/MM/DD)

1. PROJECT OVERVIEW

1.1. General Information

Project Title:	2013FL1_LFS_FNH_Rideout		
Principal Investigator:	Candice Rideout		
Project Initiation:	2013/07/01	Project Completion:	2015/12/31

1.2. Project Summary - This project was a systematic revision of FNH 473 using a flexible learning approach: providing students with choice in their learning and assessments, using technology to support learning, and employing elements of the “flipped classroom” to encourage students to complete some ‘content acquisition’ through learning activities prior to class time so that class time can be used for dynamic discussion, application and synthesis.

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

Name	Title/Affiliation	Responsibilities/Roles
Candice Rideout	Instructor, LFS	Project Lead
Kaitlin Berris	Undergraduate student, LFS	Worked as a Student RA
Gordon Ly	Alumni, LFS	Provided input during focus group with student alumni of the course
Heather Woodward	Alumni, LFS	Provided input during focus group with student alumni of the course
Ruijia Niu	Alumni, LFS	Provided input during focus group with student alumni of the course

1.4. Student Impact - Please fill in the following table with past, current and future courses that have been or will be impacted by your project, including any courses not included in your original proposal. [Note: Adapt this section to the context of your project as necessary].

Course	Section	Enrolment	Term
FNH 473	001	~70-72 each year	Winter term 2



2. PRODUCTS AND ACHIEVEMENTS

2.1. 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:
Video vignettes	Available at http://fnh473.landfood.ubc.ca/ and on YouTube and Connect
Incorporating elements of the “flipped classroom” into face-to-face class time	Class sessions in McML 160
Mentoring for CBEL and other practical or field-based work	Class sessions in McML 160 and other breakout rooms in McML

2.2. 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:

3. PROJECT EVALUATION

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

This systematic redesign of FNH 473 adapted a flexible learning approach to make this course an outstanding learning opportunity for students. Flexible learning strategies included: the design and development of web-based materials and online quizzes for self-paced learning and assessment in a learning management system, and 5 video vignettes (each approximately 12 minutes long) for the flipped class portion of the course. Technology was used to support learning and apply elements of a “flipped classroom” by enabling students to complete some ‘content acquisition’ through learning activities completed prior to class time so that class time could be used for dynamic discussion, application, and synthesis.

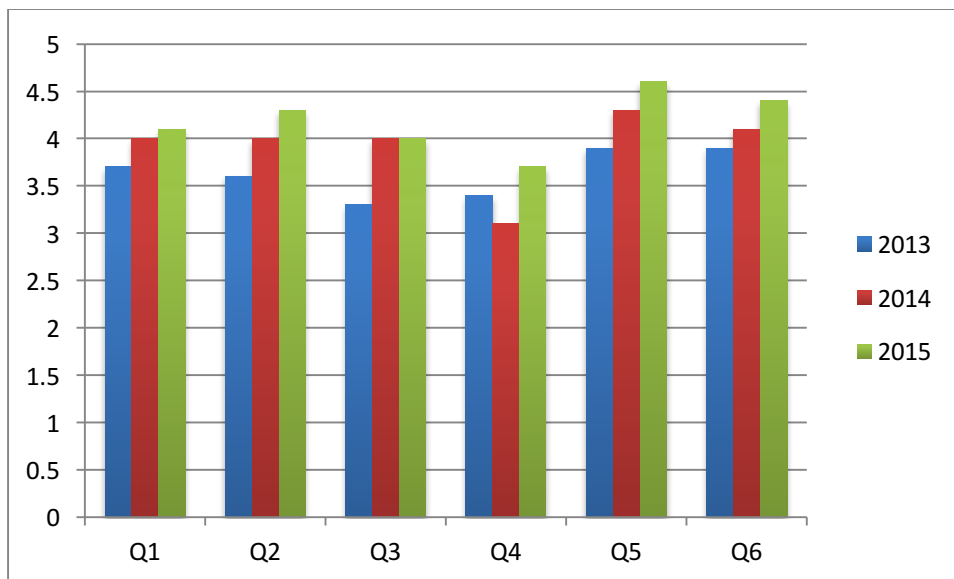
The redesign of FNH 473 incorporated flexible learning strategies and effectively integrated technology to (1) develop students’ knowledge and skills in the practice of public health nutrition, (2) improve lifelong learning skills, and (3) inspire action in nutrition education that will impact the nutrition-related learning experiences of many people. Using videos and readings to support students’ knowledge acquisition before class sessions enabled the effective use of a flipped classroom model in which students were active in the critical application of knowledge and skills gained throughout the course. Providing students with the choice of working on a community-based experiential learning (CBEL) project with a community partner, a problem-based learning (PBL) case, or the creation of a video documentary allowed students to personalize their learning experience in the course.



3.2. 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.

A key aim of this redesign was to improve the learning experience for students. One strategy to evaluate the impact of the changes was to examine the Students Evaluation of Teaching (SEoT) results for three sections of the course: 2013 (prior to the redesign), 2014 (when a substantial portion of the redesign had been implemented, but some supporting elements – notably the video vignettes – were not yet available) and 2015 (when the redesign was largely complete, the videos were used).

The pattern in students’ evaluations of the course showed progressive improvement, as illustrated in the figure below:



- Note: Q1 = The instructor made it clear what students were expected to learn.
 Q2 = The instructor communicated the subject matter effectively.
 Q3 = The instructor helped inspire interest in learning the subject matter.
 Q4 = Overall, the evaluation of student learning (through exams, essays, presentations, etc.) was fair.
 Q5 = The instructor showed concern for student learning.
 Q6 = Overall, the instructor was an effective teacher.

The average score on question #6 is often used as a general indicator of the effectiveness of an instructor/course, and the score on this question improved from 3.9 in 2013 to 4.4 in 2015.

Students comments on the redesigned course also indicate that their learning experience was effective. Examples of student comments from the SEoT survey include: [What I appreciated most about this course and/or how I benefited from it was...]

- *The weekly quizzes. I never would have fully read all of the readings (due to time constraints), but the quizzes forced me to and I really benefitted from them!*
- *The group work was valuable to the learning process. I appreciated how the evaluation was set up (weekly quizzes being worth up to 40%).*



- *Taking the quizzes prior to the lecture helped me prepare for the material that would be presented in class. Videos associated with the readings have a great overview of what to take away from the readings.*

With respect to the effectiveness of the videos in particular, students commented: [What I appreciated most about this course and/or how I benefited from it was...]

- *The videos provided for the quizzes. The videos provided a more clear understanding of the explanations and descriptions of terms and subjects present in the readings.*
- *The weekly quizzes, videos, and modules. I really really learned the most from the pre class readings and videos. They were on point for the topic that week and I also found myself referring to them throughout the course.*
- *Course videos made readings simpler, and helped with understanding.*
- *The course videos were very effective in helping me learning the course material because they were interesting and succinct summaries.*

3.3. 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), any additional data or other relevant items.*

The evaluation of the impact of the project was primarily based on the UBC Student Evaluation of Teaching surveys, as indicated above. The data from successive years was analyzed to determine trends over the period of the redesign and comments from students were examined for specific reference to elements introduced as a result of the redesign of the course. The limitations of this approach to evaluation include: i) responses were not obtained from every student, ii) particular questions about the specific materials were not asked, and iii) there is limited depth to the observations offered (a more detailed evaluation – e.g., through interviews and/or focus groups would have been helpful)

3.4. 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.*

Past activities:

- i) Saeed Dyanatkar presented regarding the media development for FNH 473 at a Flexible Learning and Instructional designer Meeting. June 22, 2015.
- ii) Chris Spencer and Farnaz Badiee. Video production and Lightboard demo for UBC courses, CTLT Institute. August 25, 2015
- iii) Rideout CA, Mah J, Yelland M. *How can we use flexible learning strategies to increase student engagement and learning?* 45-minute interactive session presented to ~20 UBC faculty members, educational developers, sessional instructors, and postdoctoral fellows as part of the 2016 CTLT Spring Institute. I prepared and presented this session with two students from my FNH 473 class, to share both student and instructor perspectives on best practices for using flexible learning strategies effectively. May 3, 2016.



Future activities:

i) I still hope to submit two manuscripts based on the redesign of FNH 473: one a brief report (“GEM”) for the Journal of Nutrition Education and Behaviour to describe and share the videos, and a paper describing the overall redesign for the Canadian Journal of the Scholarship of Teaching and Learning. Each of these two manuscripts are currently ~10% done. The target submission date is by May 30 for the GEM and by August 30 for the paper.

4. TEACHING PRACTICES – *Please indicate if **your** teaching practices or those of **others** have changed as a result of your project. If so, in what ways? Do you see these changes as sustainable over time? Why or why not?*

My teaching practices have changed: I have refined my approach to providing quizzes based on readings; I have become more adept at integrating technology into teaching and providing courses using a “blended” approach (a combination of face-to-face and online learning activities); I applied an evidence-based approach to course redesign, which included key stakeholder input.

The feedback received from our presentation at the CTLT Spring Institute was very positive and suggests that sharing this experience has had some impact on others’ teaching practices as well. Notably, several colleagues were very interested in the approach of including students in the reflection on the impact of the redesign and expressed interest in having students’ views better represented in their own work in the future.

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

The materials that I have developed over the years I have taught this course were provided to the new instructor for the course, Gail Hammond. It is my understanding that she retained the structure of the course I had developed and used all of the materials I had created in the most recent offering of the course (2016 W2; the first year she taught the course).

The videos will remain available on YouTube. I hope that the short report (GEM) for the Journal of Nutrition Education and Behaviour will be accepted and could lead to broader use of the videos as well.

The main challenge associated with achieving the long-term impacts of the redesign are due to the fact that I am no longer the instructor for this course and will no longer be working on this project. However, the design and materials are very robust and I believe they have been readily adapted by the new instructor.