TLEF Project – Final Report

Report Completion Date: (YYYY/MM/DD)

1. PROJECT OVERVIEW

1.1. General Information

Project Title:	Bringing a Virtual Biology Specimen and Image Repository to Classes and Mobile Devices		
Principal Investigator:	Edmund Seow		
Report Submitted By:	Edmund Seow		
Project Initiation Date:	Apr 01, 2015	**Project Completion Date:**	Aug 31, 2017
Project Type:	☐ Large Transformation ☒ Small Innovation ☐ Flexible Learning ☐ Other: [please specify]		

1.2. Project Focus Areas – *Please select all the areas that describe your project.*

☒ Resource development (e.g. learning materials, media)

☐ Infrastructure development (e.g. management tools, repositories, learning spaces)

☒ Pedagogies for student learning and/or engagement (e.g. active learning)

☐ Innovative assessments (e.g. two-stage exams, student peer-assessment)

☐ Teaching roles and training (e.g. teaching practice development, TA roles)

☐ Curriculum (e.g. program development/implementation, learning communities)

☐ Student experience outside the classroom (e.g. wellbeing, social inclusion)

☐ Experiential and work-integrated learning (e.g. co-op, community service learning)

☐ Indigenous-focused curricula and ways of knowing

☐ Diversity and inclusion in teaching and learning contexts

☐ Open educational resources

☐ Other: [please specify]

1.3. Project Summary

To create an online image repository and information database (i.e., plants, weeds, tissue and cell cultures, insects images, course videos, other learning materials) to foster a learner-centred teaching approach used in LFS APBI/BIOL courses. The diversity of media and visual material can be used to complement content, delivery mode, and increase the flexibility of learning environments. (i.e., anytime, anywhere). Classroom modifications (addition of a projector and digital microscopy) will allow for the ready creation of repository content as well as enhanced group learning opportunities by team exercises based on live projections (i.e., tissue and cell culture assays, specimen dissections, anatomical and morphological observations). The repository will allow students to contribute materials that can be reused for teaching and learning by current and future students and instructors and provide a forum for collective discussion in the classroom.

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

Name	Title/Affiliation	Responsibilities/Roles
Edmund Seow	The Learning Centre, Faculty of Land and Food Systems	PI
Andrew Riseman	Applied Biology, Faculty of Land and Food Systems	Content matter expert
Eduardo Jovel	Applied Biology, Faculty of Land and Food Systems	Content matter expert
Mahesh Upadhyaya	Applied Biology, Faculty of Land and Food Systems	Content matter expert
Yasmin Akhtar	Applied Biology, Faculty of Land and Food Systems	Content matter expert
Cyprien Lomas	The Learning Centre, Faculty of Land and Food Systems	Director of Learning Centre
Justin Lee	The Learning Centre, Faculty of Land and Food Systems	Programmer
Victor Wu	Student	Programmer – part time
Patrick Lin	Student	Programmer – part time
Olivia Sung	Student	Programmer – part time
Ilana Marder-Eppstein	Student	Digital asset collector
Claudia Paez	Student	Digital asset collector
Jennifer Grenz	Student	Digital asset collector
Marra Alvarillo	Student	Digital asset collector
Minnie Teng	Student	Digital asset collector

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

Course	Section	Academic Year	Term (Summer/Fall/Winter)
APBI 318	001	2017	W
APBI 327	001	2017	W
APBI 328	001	2017	W
APBI 417	001	2017	W

2. OUTPUTS AND/OR PRODUCTS

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

Product(s)/Achievement(s):	Location:
Image library for each course	In possession of faculty member, some on Flickr
Flickr image display tool	https://github.com/UBC-LFS/lfs-tlef-flickr
Occular microscope camera	Housed in the MCM building

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

Item(s) Not Met:	Reason:
Website for each course with Flickr tool	Flickr API changed, faculty members started using Canvas instead.
APBI 326	Course wasn't developed and is not offered at the time of this report.

3. PROJECT IMPACT

3.1. Project Impact Areas – *Please select all the areas where your project made an impact.*

☐ Student learning and knowledge

☐ Student engagement and attitudes

☐ Instructional team teaching practice and satisfaction

☐ Student wellbeing, social inclusion

☐ Awareness and capacity around strategic areas (indigenous, equity and diversity)

☐ Unit operations and processes

☐ Other: [please specify]

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

Make digital resources available to students and allow current cohorts to add to the collection. Allow instructors to use digital cameras with microscopes for demonstration in class.

3.3. Were these changes/impacts achieved? How do you know they occurred? – *What evaluation strategies were used? How was data collected and analyzed? You are encouraged to include copies of data collection tools (e.g. surveys and interview protocols) as well as graphical representations of data and/or scenarios or quotes to represent and illustrate key themes.*

No evaluation was done.

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

None.

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?*

No change.

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 Flickr API changed around 2017, which made the Flickr tool that was created not function as well as it was originally designed.

Faculty members involved have taken to Canvas for the posting of the digital resources that was made during this time instead of using CMS sites.

With exception of the ocular microscope camera and the digital collection, all other parts are not in use anymore.