



TLEF Project – Final Report

Report Completion Date: (2020/04/30)

1. PROJECT OVERVIEW

1.1. General Information

Project Title:	Developing pharmacy student’s clinical documentation skills using online modules		
Principal Investigator:	Jillian Reardon		
Report Submitted By:	Jillian Reardon		
Project Initiation Date:	April 1, 2018	Project Completion Date:	April 1, 2020
Project Type:	<input type="checkbox"/> Large Transformation <input checked="" type="checkbox"/> Small Innovation <input type="checkbox"/> Flexible Learning <input type="checkbox"/> 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

As a requirement of practice, pharmacists must demonstrate the ability to coherently summarize a patient’s condition and medication treatment plan in a patient’s medical record. Clinical documentation is both an art and a science requiring practice to become efficient, effective and confident. Although students in the Entry-to-Practice Doctor of Pharmacy (E2P PharmD) Program are introduced to basic concepts in clinical writing, opportunities to further develop these skills beyond an introductory level prior to practicums are limited. Based on our first-hand observations and feedback the Faculty has received from practice educators, students on practicums struggle with completing written documentation when faced with real life patient scenarios and timelines. The objective of this project was to develop and implement online modules using real patient scenarios to teach pharmacy students standardized approaches to documenting clinical assessments and plans.

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
Anita Kapanen	Research Coordinator, Faculty of Pharmaceutical Sciences	Support evaluation plan
Barbara Gobis	Director, Pharmacists Clinic, Faculty of Pharmaceutical Sciences	Endorse project, provide feedback and input into proposals and deployment of project
Jason Min	Lecturer, Faculty of Pharmaceutical Sciences	Input into content development
Larry Leung	Lecturer, Faculty of Pharmaceutical Sciences	Input into content development
Fong Chan	Lecturer, Pharmacy Practice, Faculty of Pharmaceutical Sciences	Consult on learning activities, integration into academic program
Janice Yeung	Director, Office of Experiential Education, Faculty of Pharmaceutical Sciences,	Consult re. uptake/utilization of modules within experiential education program
Jennifer Brown	PhD Student, Faculty of Pharmaceutical Sciences	Consult on learning activities, flow and layout of materials
Nicole Yang	Former UBC Pharmacy Student	Content development
Jon-Paul Marchand	Director, Office of Educational Technology and Learning Designs, Faculty of Pharmaceutical Sciences	Ed-tech: Creation/support of online course
Joe Zerdin	Instructional Technology Support Analyst, Office of Educational Technology and Learning Designs, Faculty of Pharmaceutical Sciences	Ed-tech: Creation/support of online course
Morgin Garvin	Manager, Systems Administration and Support, Office of Educational Technology and Learning Designs, Faculty of Pharmaceutical Sciences	Ed-tech: Creation/support of online course



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)
PHRM 473	All	2020/2021	Fall/Winter/Summer
PHRM 471	All	2020/2021	Fall/Winter/Summer
PHRM450S	All	2020/2021	Fall (note: new course)
PHRM 211	All	TBD	TBD – await evalatuion results to determine best place for modules to ‘live’ in course

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:
Online Modules (3): -Introduction to clinical documentation -Pharmacist chart notes -Pharmacist consultation notes and written communication with healthcare team	UBC Canvas Catalog Course: https://ubccpe.instructure.com/courses/70

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:
Broader integration of modules into academic curriculum	Content and breadth of modules expanded beyond original plan based on feedback from team members which required more time and resources devoted to development. For example original plan for 2 modules was extended to 3 after identifying need to include enhanced content on written communication with other members of the healthcare team. Technical aspects of module development more complex/time-intensive than originally anticipated thus delaying timeline. Ongoing plan for module deployment and broader academic integration in 2020/2021.



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.

The hope was to increase pharmacy student exposure to and opportunities for clinical documentation via development of online, asynchronous modules. Through completion of modules, preparedness for practicums and future roles as health care providers would be enhanced including ability to practice and communicate effectively in writing while in team-based, collaborative healthcare settings. The intended benefit for pharmacy faculty and pharmacist practice educators was to provide an accessible, online resource to refer students to as a means to support and strengthen clinical documentation skills in a safe space where patient care is not impacted.

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.

Given delay in module development we are unable to determine what changes/impacts were achieved (aside from a small number of students and faculty who provided input and feedback during the developmental phase). An evaluation plan is in place which will include a pre and post online survey for students completing modules (see attached). These questions will assess knowledge of clinical documentation as well as self-perceived confidence in clinical documentation skills and any new skills or behaviour changes implemented as a result of the modules. Students will also be asked to assess their overall experience with navigating the online content in terms of accessibility, clarity and ease of use. Likert scales will be used to assign numerical ratings to each question. This summer (2020) a pilot group of 10 students will be asked to participate in a focus group to assess impact and experience with clinical documentation post module completion and to inform integration into the academic program (see focus group facilitator guide attached).



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.

-UBC TLEF showcase May 2, 2019, poster presentation.

-Plan to present at Association of Faculties of Pharmacy of Canada, Canadian Pharmacy Education and Research Conference once rescheduled (on hold indefinitely secondary to COVID-19).

-Once evaluation data available, plan to disseminate findings in Pharmacy education peer-reviewed journal.

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?

Personally, involvement in this project has increased my awareness of online learning resources and dramatically increased comfort with leveraging online content delivery as an effective means of teaching. It has also expanded my understanding of student evaluation in an asynchronous learning environment and use of non-test based approaches to assessment such as reflections, peer-evaluation etc. I will be co-coordinating a new course in the pharmacy curriculum this fall and as a result of involvement in this TLEF have decided to implement many novel assessment methods. Given the increased demand for online learning, accelerated by the current climate with COVID-19, use of online modules and teaching methods is highly timely and sustainable.

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?

Despite TLEF funding ending, we have a team committed to continuing work on this project to ensure the pilot is completed with pharmacy students. Based on feedback from students and faculty we plan to expand reach of the modules to impact an many pharmacy students as possible throughout the academic program including a mandatory component of integration activities and a new primary care elective course being launched in the fall term 2020. Once finalized, these modules can be deployed in other settings beyond the undergraduate pharmacy program such as in the pharmacy practice residency program and the UBC flexible PharmD program as a resource for practicing pharmacists. Finally, the BC ministry of Health is working the faculty on funding expansion and integration of pharmacists into family health teams in British Columbia. It is expected that these modules can be deployed as part of a broader training program for these pharmacists as they transition into new practice roles. Given the nature of clinical documentation, it is anticipated that modules will have a long lifespan with minimal updates required.