



# TLEF Project – Final Report

Report Completion Date: (2024/12/18)

## 1. PROJECT OVERVIEW

### 1.1. General Information

<b>Project Title:</b>	Development and implementation of teledentistry to support clinical practice and structural competence among undergraduate dental and dental hygiene students		
<b>Principal Investigator:</b>	Leeann Donnelly		
<b>Report Submitted By:</b>	Leeann Donnelly		
<b>Project Initiation Date:</b>	April, 1 2022	<b>Project Completion Date:</b>	May 6, 2024
<b>Project Type:</b>	<input type="checkbox"/> Large Transformation <input checked="" type="checkbox"/> Small Innovation <input type="checkbox"/> UDL Fellows Program <input type="checkbox"/> Hybrid and Multi-access Course Redesign Project <input type="checkbox"/> Other: [please specify]		

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

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Resource development (e.g., learning materials, media)                  | <input type="checkbox"/> development/implementation, learning communities)  |
| <input type="checkbox"/> Infrastructure development (e.g., management tools, repositories, learning spaces) | <input type="checkbox"/> Student experience outside the classroom (e.g., wellbeing, social inclusion)                   |
| <input type="checkbox"/> Pedagogies for student learning and/or engagement (e.g., active learning)          | <input checked="" type="checkbox"/> Experiential and work-integrated learning (e.g., co-op, community service learning) |
| <input type="checkbox"/> Innovative assessments (e.g., two-stage exams, student peer-assessment)            | <input type="checkbox"/> Indigenous-focused curricula and ways of knowing   |
| <input type="checkbox"/> Teaching roles and training (e.g., teaching practice development, TA roles)        | <input type="checkbox"/> Diversity and inclusion in teaching and learning contexts                                      |
| <input checked="" type="checkbox"/> Curriculum (e.g., program)  | <input type="checkbox"/> Open educational resources   |
|   | <input type="checkbox"/> Other: [please specify]  |



**1.3. Final Project Summary** – *What did you do/change with this project? Explain how the project contributed toward the enhancement of teaching and learning for UBC students.*

This project enabled the development of 3 didactic sessions and 2 experiential session related to teledentistry and virtual care. Currently this content was missing from curriculum, but the pandemic demonstrated clearly the need for students to be prepared to shift how they practice at times. Being a virtual provider also provided students with first hand experiences of the SDoH that impact many while trying to access dental information and care. Feedback from students has indicated that this curriculum enhanced their communication skills, their understanding of dental benefits and their understanding of how to triage clients effectively.

**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
Vanessa Johnson	PhD Candidate UBC Dentistry	Development, implementation and evaluation of the project
Mario Brondani	Professor, UBC Dentistry	Committee member who provided critical feedback on the project
Michael Wong	Pediatric Graduate Student, UBC Dentistry	Conducted the literature review on dentist’s knowledge, attitude and behavior toward teledentistry
Susan Grossman	Director, Center for Community Engaged Learning	Committee member who provided critical feedback on the project

**1.5. Courses Reached** – *Please fill in the following table with past and current courses (e.g., HIST 101, 2017/2018) that have been 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	Academic Year
DENT 440	2023/2024
DENT 410	2024
DHYG 110	2024
DHYG 310	2024
DHYG 410	2023/2024



**2. OUTPUTS AND/OR PRODUCTS**

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

Output(s)/Product(s):	URL (if applicable):
3 teledentistry didactic sessions and 2 experiential sessions for dental and dental hygiene students	
A database of oral health resources for use in the experiential sessions	

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

Item(s) Not Met:	Reason:

**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-satisfaction
- Teaching practices
- Student wellbeing, social inclusion
- Awareness and capacity around strategic areas (Indigenous, equity and diversity)
- Unit operations and processes
- Other: [please specify]



**3.2. Please provide details on each of the impact areas you selected in 3.1.** – *For example, explain in which ways your teaching practices changed; how student wellbeing was impacted; how students wellbeing benefited from your project, etc.*

Prior to this project, our students did not have any curricular content related to teledentistry or any experience in conducting it. The project enabled us to develop and implement this important aspect of care and community engagement. Students learned about what teledentistry is, the logistics and legal implications, its various forms and how to utilize it in a variety of contexts including as a virtual provider for our hotline – DentalLink. Students' awareness and capacity around addressing the SDoH which greatly impact access to dental information, resources and services was a key impact from this project. Through direct interactions with users of the hotline as well as discussions around case scenarios, students were able to better understand how to meet the oral health needs of a diverse clientele.

**3.3. How do you know that the impacts listed in 3.1/3.2 occurred?** – *Describe how you evaluated changes/impacts (e.g., collected survey data, conducted focus groups/interviews, learning analytics, etc.) and what was learned about your project from the evaluation. You are encouraged to include graphical representations of data and/or scenarios or quotes to represent and illustrate key themes.*

**Surveys were collected after each didactic session to measure their satisfaction with the session, assess whether the content was appropriate and to gain information from the learners on how it could be improved. This information was used each year to refine the sessions for overall quality improvement. Personal interviews were also conducted with a sample of learners after their experiential session(s) to gain further insight into the value of the experience, what they learned from it as well as how they will use this experience in their future practice.**

**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?*

The PhD student was the educator for this project and over time I witnessed a clear change from a typical lecture style delivery to one that was much more interactive so students remained engaged and could put into practice was being taught. This was in part due to the feedback from student surveys and also from other faculty member suggestions who were also in attendance. The use of technology in the classroom also increased as a way of engaging the learners. I believe that this project has taught the PhD student some valuable teaching skills that will serve her well in the future as an academic.



**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 project sustainment?*

The course and module coordinators have seen the benefit of this curricular content and it is now permanently housed in the courses where it was piloted. The PhD student is also now conducting interviews with various faculty members and administration to explore how best to fully incorporate the hotline into our Faculty operations. One challenge that we see is that not all faculty members appreciate or value non clinical approaches to care, or do they fully understand why it is necessary. Another challenge will be to identify the best place for the experiential learning to take place. Currently it is done in a community site due to access to a social worker, but some students who are traveling just for this one activity have indicated it might be good to also offer this on campus, but space within the Faculty is tight.

**6. DISSEMINATION** – *Please provide a list of scholarly activities (e.g., publications, presentations, invited talks, etc.) in which you or anyone from your team have shared information regarding this project. Be sure to include author names, presentation title, date, and presentation forum (e.g., journal, conference name, event). These will be included on the TLEF scholarly output page.*

**Presentations**

Johnson V, Brondani M, von Bergmann H, Wallace B, Grossman S, Donnelly L. Development and implementation of a dental institution-based oral health helpline. UBC Faculty of Dentistry, Research Day 2024.

Johnson V, Donnelly L. Teledentistry education to support care navigation and social responsibility among dental and dental hygiene students. American Dental Education Association Annual Session and Exhibition, March 10, New Orleans. 2024

Johnson V, Brondani M, von Bergmann H, Wallace B, Grossman S, Donnelly L. Development and implementation of a dental institution-based oral health helpline. IADR/AADR/CADR General Session & Exhibition. Mar 14 New Orleans. 2024.

**Publications**

Johnson V, Brondani M, von Bergmann HC, Wallace B, Grossman S, Donnelly LR. Development and Implementation of a Dental School-Based Oral Health Helpline: A Pilot Project. Journal of the Canadian Dental Association (in press)

Johnson V, Brondani M, von Bergmann HC, Wallace B, Grossman S, Donnelly LR. Student Perspectives on Integrating an Oral Health Helpline into Dental and Dental Hygiene Undergraduate Education. European Journal of Dental Education (conditionally accepted February 2025)