



# TLEF Project – Final Report

Report Completion Date: (YYYY/MM/DD)

## 1. PROJECT OVERVIEW

### 1.1. General Information

<b>Project Title:</b>	Integrating Architecture and Landscape Architecture with Community Forest Management		
<b>Principal Investigator:</b>	Joseph Dahmen		
<b>Report Submitted By:</b>	Joseph Dahmen		
<b>Project Initiation Date:</b>	April 1, 2022	<b>Project Completion Date:</b>	March 31, 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: [TLEF Small Projects 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. 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.*

Students from UBC School of Architecture and Landscape Architecture collaborated with UBC Forestry to design and develop public infrastructure for a remote coastal community in British Columbia using timber harvested from the Bamfield-Huu-ay-aht Community Forest (BHCF). The hands-on pedagogical approach created reciprocal relationships between forestry practices and design of architecture and landscapes. Three design projects in successive years were undertaken by students, who worked with local members of two adjacent coastal communities on the West Coast of Vancouver Island. Students met with residents of Bamfield and Anacla, a Huu-ay-aht First Nation (HFN) community, who related their experience and provided feedback on the student’s designs for an interpretive forest paths and a visitor centre for Kiixin, a significant ancestral site continuously inhabited by Huu-ay-aht people for 4,000 years. The projects articulated the relationships architectural materials to the forest ecologies from they are harvested, while training architecture and landscape architecture students in regenerative approaches that use resources to build cultural understanding and environmental equity. The project contributed to practical learning, interdisciplinary education, indigenous engagement and student experience.

**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
Joseph Dahmen	Associate Professor, SALA	Project concept and supervision
Dr. Suzanne Simard	Professor, UBC Forestry	Review and provide feedback on student designs
Dr. Gregory Paradis	Assistant Professor, Forest Resources Management, UBC Forestry	Technical assistance in interpreting BHCF Forest management plan
Isobel McLean	Coordinator, SALA M.Arch student	Project coordination and documentation
Lorena Polovina	Coordinator, SALA M.Arch student	Project coordination and documentation
James Willock	President and Chair of Bamfield Community Affairs	Bamfield liaison coordinating community feedback on Active Transportation Network desogns
Stefan Ochman	Bamfield Resident and Member, BHCF	Provide Guidance on BHFC practices and procedures
Cheryl Eardley	Economic Development Manager, Huu-ay-aht First Nation	Represent HFN Council perspective and provide feedback on student designs
Charlie Clappis	Infrastructure Manager and past council member, Huu-ay-aht First Nation	Huu-ay-aht liaison coordinating HFN feedback on Kiixin designs
Qiic Qiica	Anacla Resident and Kiixin Tour Guide	Provide operational perspective on Kiixin ancestral site



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
LARC 504/505	W1 2023/24
LARC 504/505	W1 2022/23
ARCH 544C	W2 2023/24
ARCH 544C	W2 2022/23
FRST 415*	W1 2023/24
CIVL 302*	W2 2023/24

\*Guest lectures delivered in these courses.



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):
Construction documents for Bamfield Pavilion	
Conceptual design for Active Transportation Network for Bamfield, BC, including landscape-level harvesting plan for BHCF	
Conceptual design options for Kiixin interpretive Centre and Trail Network for Huu-ay-aht First Nation	

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:
Illustrated site level Forest Land Management Plan for BHCF	Scale and scope exceeded student capacity.

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: Interdisciplinary approach to design; Hands-on experiential learning



**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.**

The TLEF grant provided unique opportunities for student learning and knowledge in the areas of student engagement and attitudes, built awareness and capacity of Indigenous, equity and diversity issues, and practiced an interdisciplinary approach to design, as well as opportunities for hands-on experiential learning. Project funding enabled two groups of students to travel to the remote coastal communities of Bamfield and Anacla on the west coast of Vancouver Island to observe and catalogue project sites and meet with local government officials, community members, and the leadership of the Bamfield-Huu-ay-aht Community Forest (BHCF). Prior to the site visits, students met with Indigenous foresters at UBC to discuss forestry management practices and visited the Indigenous Health Research and Education Garden (IHREG) to gain familiarity with indigenous landscape practices. During the site visits, students experienced first-hand the forest ecologies of the BHCF and culturally significant ancestral sites for the HFN, connecting these ecological and cultural sites to the materials they used in their subsequent designs for buildings and landscapes. Following the immersive multi-day visit to the project sites, students worked on collaborative teams to develop designs for the communities of Bamfield and Anacla, which were presented via multiple Zoom meetings to community members and council members throughout the term. Faculty and students members from UBC Forestry provided expertise on sustainable harvesting strategies that students integrated into their designs. Foresters and others at UBC TLEF funding was used to acquire materials for full scale mockups and architectural models, creating opportunities for hands on experiential learning during the design process. The community feedback was then incorporated into the designs. At the end of term, the design documents were provided to the communities for use in fundraising.

These activities provided students with valuable practical experience working on collaborative design teams in an interdisciplinary project-based setting that connected abstract sustainable principles to real-world decision making. The experiential learning that takes place in the design studio was reinforced with first-hand observation on site visits and meetings with stakeholders. The collaborative design assignments empowered student learners as peer teachers, leveraging their collective intelligence. Designing from initial concepts through to construction documentation provided invaluable experience to students preparing to enter design professions. Working with representatives from the jointly managed BHCF also exposed students to Indigenous knowledge, providing valuable insights into sustainable approaches to design.

**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.**



The impacts outlined above were distilled from frequent interactions with students during the term, as well as anonymous student experience of instruction surveys at end of term.

The small size of the design studios (13 students) provided ample opportunities during the term to gain insights regarding the student experience. The quotations below, taken from the anonymous student surveys at the end of term, suggest that the project provided unique and meaningful opportunities for students:

**Student 1:** *“Overall, this was a fantastic studio and in my opinion a very successful project. Strengths:*

- *being grounded in real world project is highly motivating and a great learning opportunity*
- *real community engagement*
- *working in such a large group meant that a variety of skills were learned and practiced such as file/workflow planning and coordination, taking leadership roles, supporting others, learning other ways of working, etc – often missing in other studios...*

**Student 2:** *“I’ve never taken a studio working with an Indigenous community and it was incredibly interesting and rewarding.”*

**Student 3:** *“The trip to Bamfield and UBC indigenous garden were really great learning experiences. Bringing in experts in indigenous forestry, and forestry students also supported our learning...”*

**Student 4:** *“I have never worked in a team like this in a studio before. It was different and a great experience to have.”*

**Student 5:** *“This was my favourite studio course that I’ve taken at SALA! Working with real clients was a valuable learning experience and I enjoyed how much detail we went into. I appreciated how practical and hands-on this studio was.”*

**Student 6:** *“This studio will be one of my most memorable experiences at SALA.”*

**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 been informed by my interactions with the Huu-ay-aht First Nations, as well as the collaboration with faculty in the Faculty of Forestry. I appreciate the ways in which Indigenous practices can inform western ideas of sustainability, particularly in the area of forestry practices and the time scales of intervention. I am deeply impressed with the generosity and patience of our Huu-ay-aht counterparts, and strive to employ similar patience and understanding with my students. These changes are profound and will be lasting. From comments made by collaborators and students in the Faculty of Forestry, seeing the world through a design lens also changed their perspective on forestry.



**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?*

While the immediate project goals have been fulfilled, I anticipate future projects employing a similarly integrated approach with existing and new partners. Future projects will target an understanding of design in the context of local and regional ecological cycles. Working with existing partners will build on positive relationships established in the past year; future projects will require investing in relationships and building trust with First Nations and other communities.

**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.*

Teaching Learning Enhancement Fund (TLEF) Online Showcase. Poster: *Integrating Design with Community Forest Management*. May 7, 2024.

Bi, B., Kuo, M. Garland, S., Brunas, S., Ferguson, S., Fleck, A, Loyola, A, Kwok, J. Polovina, L., Wong, K., Hein, E., Adams, H. Wojtowicz, A., and Dahmen, J., 2024. Kiixin Interpretive Centre: Concept Proposals. 24 page illustrated report by graduate studio participants compiling conceptual design proposals for visitor centre for ancestral site. Submitted to Huu-ay-aht First Nations, March 5th, 2024.

Rutherford, A., Finn, A., Qiu, C. Kennedy, C., Evans, H., Chen, J., Neudorf, J., Reddekopp, K., Jia, M., Pudlas, M., Wilson, M., Barnard, R, Xiao, W. and Dahmen, J., 2023. Bamfield Active Transportation Network. 56 page illustrated report by graduate studio participants compiling conceptual design proposals for pedestrian and kayak network for remote coastal community. Submitted to Bamfield Community Affairs February 1, 2023.

Guest Lectures at UBC

2024 CVL 302: *Civil Engineering Impacts*. Presented Kiixin design and materials research to 125 upper level undergraduate students. March 7, 2024.

2023 FRST 415: *Sustainable Forest Policy*. Presented Bamfield design research supported by TLEF to 60 undergraduate students. November 9, 2023.

2023 DES 200: *Thinking by Design*. Presented design research to 40 undergraduate students. October 27, 2023.

2023 DES 430: *Environment, Urban Form, Infrastructure*. Presented research to undergraduate course. October 25, 2023.

2022 DES 430: *Environment, Urban Form, Infrastructure*. Presented research to undergraduate course. October 26, 2022.