TLEF Project – Final Report

Report Completion Date: 2026/01/23

1. PROJECT OVERVIEW

1.1. General Information

Project Title:	Hybrid Learning in the Pharmacy Program (HIPP) project		
Principal Investigator:	Dr. Kerry Wilbur and Dr. Kathy Seto		
Report Submitted By:	Leonie Harper		
Project Initiation Date:	Apr 2023	**Project Completion Date:**	Dec 2025
Project Type:	☒ Large Transformation ☐ Small Innovation ☐ UDL Fellows Program ☐ Hybrid and Multi-access Course Redesign Project ☐ 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. 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.

In 2021, an evaluation of online modalities used during the pandemic yielded important guiding principles for the Entry-to-Practice PharmD program revision, particularly greater adoption of hybrid curriculum delivery using online and in-person activities. This project aimed to develop and implement asynchronous learning activities (ALAs, online content completed at the students' preferred time and location) as core components of hybrid delivery throughout the program.

Throughout this project, we contributed to the design and development of 9 Asynchronous Learning Activities (ALA) that aligned with Universal Design for Learning (UDL) and Equity Diversity and Inclusion (EDI) principles. For each ALA, we followed a collaborative process that engaged students, faculty, and staff with relevant expertise. We organized content into manageable, engaging activities and incorporated interactive elements such as knowledge check assessments, embedded videos, and case-based learning. We also helped streamline the instructional flow and provided feedback from students on content clarity, accessibility, and alignment with learning objectives.

This project enhanced learning by promoting self-paced, flexible engagement with course material, allowing students to revisit concepts as needed. It also supported diverse learning styles through multimedia content and real-life clinical applications. The structured format improved knowledge retention and provided a foundation for deeper learning during synchronous sessions.

As a result of the project, a policy was implemented in the Entry-to-Practice PharmD program to guide the future development and implementation of ALAs and an asynchronous course, *Creating Asynchronous Learning Activities in the Faculty of Pharmaceutical Sciences*, was created to support development beyond the project period.

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
Kerry Wilbur	Associate Professor/ Pharmaceutical Sciences	PA(s) for this project. • Provided strategic direction for development and delivery of TLEF project outputs, products, and deliverables. • Fostered partnerships with project team, faculty, staff, and students, built on mutual respect and inclusiveness.
Kathy Seto	Associate Professor of Teaching; Director, Entry-to-Practice PharmD/ Pharmaceutical Sciences	

Name	Title/Affiliation	Responsibilities/Roles
Leonie Harper	Senior Manager, Strategic Initiatives/ Pharmaceutical Sciences	Co-Applicant for this project. • Contributed knowledge from previous program-delivery assessments and guided the project's adherence to relevant standards. • Supported incorporation of EDI into all aspects of the project. • Led the evaluation of the project. • Disseminated learnings from this project (e.g., through Canvas, presentations to student leadership group (PhUS), etc.).
Ginette Vallée	Senior Manager, Academic Portfolio/ Pharmaceutical Sciences	Co-Applicant for this project. • Collaborated with Faculty partners/leadership, UBC experts and support units (e.g. Centre for Teaching, Learning and Technology, CTLT), and students to leverage existing resources and ensure appropriate consultation throughout. • Supported incorporation of EDI into all aspects of the project. • Led policy development processes.
Jon-Paul Marchand	Director, Educational Technology and Learning Designs/ Pharmaceutical Sciences	• Provided strategic educational technology and learning design consultation.
Jocelyn Micallef	Manager, Educational Development, Office of Educational Technology and Learning Designs (OETLD)/ Pharmaceutical Sciences	• Led learning design processes. • Supported project PAs with administration of the project. • Supported hiring of learning designer and student staff. • Supported ALA development processes, implementation activities, and guided sustainability activities. • Aligned project with UDL and EDI principles. • Collaborated with subject matter experts to propose, design, and develop ALAs. • Trained and supported student workers in executing development tasks.
Arkin Au	Learning Designer, Education Innovation/ Pharmaceutical Sciences	• Coordinated project. • Conducted ALA development processes, implementation activities, and supported sustainability activities. • Implemented UDL and EDI principles throughout project outputs.

Name	Title/Affiliation	Responsibilities/Roles
		• Collaborated with subject matter experts to design and develop ALAs. • Trained and supported student workers in executing development tasks.
Marion Pearson	Associate Dean, Students (formerly Interim Associate Dean, Academic)/ Pharmaceutical Sciences	• Provided leadership, insight, and support for the resourcing required to develop and deliver the project, including future sustainability. • Provided subject-matter expertise in pharmacy for asynchronous content development and curriculum alignment.
Robert Pammett	Associate Professor (Partner)/ Pharmaceutical Sciences	• Provided subject-matter expertise in pharmacy for asynchronous content development and curriculum alignment. • Provided expertise and shared experiences with UDL and asynchronous teaching.
Jon Grosshuesch	Assistant Professor of Teaching/ Pharmaceutical Sciences	• Provided subject-matter expertise in pharmacy for asynchronous content development and curriculum alignment.
Lia Hughes	Program Manager, Integration Activities/ Pharmaceutical Sciences	• Provided program logistics expertise in program planning and program operational support for asynchronous content implementation.
Leah Villalobos	Program Manager, Entry-to-Practice Doctor of Pharmacy/ Pharmaceutical Sciences	
George Pachev	Director, Office of Educational Assessment (OEA)/ Pharmaceutical Sciences	• Provided consultation on assessment strategies and alignment of hybrid content with program assessment plan.
Paulo Tchen	Lecturer and Coordinator, Office of Experiential Education (OEE)/ Pharmaceutical Sciences	• Provided consultation on alignment with student practicum experiences and relevance to real-world clinical practice. • Provided EDI expertise.
Jasmin Kaur Gill	Student (later Alumni)/ Pharmaceutical Sciences	• Contributed learner-centered feedback on the development, delivery, and evaluation of the project.
Grace Song	Pharmacy Undergraduate Society Student Rep, VP Academic/ Pharmaceutical Sciences	• Contributed student feedback (learner-centered) on the development, delivery, and evaluation of the project.
Sarah Kim	Pharmacy Undergraduate Society Student Rep, VP Academic/ Pharmaceutical Sciences	

Name	Title/Affiliation	Responsibilities/Roles
Mina Rim	Pharmacy Undergraduate Society Student Rep, VP Academic/ Pharmaceutical Sciences	
AAS	Work Learn Student, MSc 2025	• Provided student perspectives to inform ALA design. • Reviewed course content, as it relates to other elements of their program curriculum, to limit overlap and redundancies. • Assisted with multimedia asset production. • Drafted and refined ALA content. • Contributed to ALA evaluation. • Disseminated learnings from this project to students.
EC	Work Learn Student, PharmD 2025	
OL	Work Learn Student, PharmD 2025	
SL	Work Learn Student, PharmD 2025	
AM	Work Learn Student, PharmD 2025	
PM	Work Learn Student, MEd 2024	
SJN	Work Learn Student, PharmD 2027	
AR	Work Learn Student, PharmD 2025	
TR	Work Learn Student, BA 2025	
MS	Work Learn Student, PharmD 2025	
AS	Work Learn Student, PharmD 2027	
JT	Work Learn Student, BPSc 2025	
AW	Work Learn Student, PharmD 2026	
CY	Work Learn Student, PharmD 2024	

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
PHRM_V 100	PY1 (2023-2024)
PHRM_V 212	PY2 (2023-2024)
PHRM_V 100	PY1 (2024-2025)
PHRM_V 111	PY1 (2024-2025)
PHRM_V 212	PY2 (2024-2025)

Course	Academic Year
PHRM_V 311	PY3 (2024-2025)
PHRM_V 100	PY1 (2025-2026)
PHRM_V 311	PY3 (2025-2026)

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):
The ALA Development Course: *Creating Asynchronous Learning Activities in the Faculty of Pharmaceutical Sciences*	Enrollment link **Note that all below links can be accessed after enrolling in the course*
ALA PHRM 100 – Pharmaceutical Care I	N/A
ALA PHRM 100 – Pharmaceutical Care II	N/A
ALA PHRM 100 – Laboratory and Diagnostic Testing	Link from within ALA Development Course
ALA PHRM 111 – Anatomy and Physiology of Human Skin	Link from within ALA Development Course
ALA PHRM 111 – Minor Fungal Skin Infections	Link from within ALA Development Course
ALA PHRM 111 – Introduction of Infectious Disease Patient	Link from within ALA Development Course
ALA PHRM 212 – Opioid Calculation	Link from within ALA Development Course
ALA PHRM 212 – Introduction to Insomnia	N/A
ALA PHRM 311 – Anatomy and Physiology of the GI System	N/A
ALA PHRM 311 – Pathophysiology of Major Depression Disorder	N/A
ALA PHRM 311 – Acute (non-specific) Diarrhea	N/A
ALA PHRM 311 – Patient Workup	N/A
ALA PHRM 312 – Basic Science of Toxicology	N/A
AP-29 Asynchronous Learning Activities policy	Link to policy within OETLD Tutorial Hub
EDI Self-Check Tool	Link to tool within OETLD Tutorial Hub

Output(s)/Product(s):	URL (if applicable):
Staff Role Descriptions (Student roles and Learning Designer/Project Manager role)	Link from within ALA Development Course
Sample Surveys	Link from within ALA Development Course
Sample focus group guide	Link from within ALA Development Course
ALA Consultation tool	Link from within ALA Development Course

2.2. Item(s) Not Met

Please list intended project outputs and/or products that were not completed and the reason(s) for this. ***NA***

Item(s) Not Met:	Reason:
N/A	N/A

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.

(i) **Student learning and knowledge:** The ALAs provided students with clear, organized, and accessible learning pathways. Content was split into smaller sections, focused ALAs supported by interactive components such as knowledge check questions and visual aids, which enhanced knowledge retention. Clinical case examples and embedded questions encouraged students to

apply concepts in clinical settings, reinforcing deeper understanding. Students could revisit difficult sections at their own pace, which was particularly helpful for complex topics.

(ii) **Student engagement and attitudes:** The flexible format of the ALA allowed students to engage with material at times that suited their schedules, which reduced stress and increased autonomy in learning. Feedback from students indicated that they appreciated the ability to learn asynchronously while still feeling connected to the learning objectives through interactive components and clear structure. The use of multimedia elements in alignment with UDL principles made the content more engaging and catered to different learning preferences.

(iii) **Teaching practices:** Developing the ALA shifted teaching approaches from traditional lecture delivery to a more student-centered design. Our faculty began to think more intentionally about how students interact with asynchronous content focusing on clarity, accessibility, and cognitive load. This included scripting concise narration, incorporating formative assessment within ALAs, and anticipating areas where students may need more guidance. It also emphasized the importance of UDL, such as downloadable PDFs, ensuring content was accessible to all learners.

(iv) **Unit operations and processes:** The project led to the creation of a formal ALA policy for the E2P PharmD program. The policy establishes clear guidelines for the design, approval and integration of asynchronous elements into the curriculum, streamlines the oversight processes, and reduces ambiguity for faculty interested in developing an ALA. In the context of this project, we also created the Canvas Catalog course "Creating Asynchronous Learning Activities in the Faculty of Pharmaceutical Sciences" which houses resources, templates, examples and guidelines to support the development of new ALAs.

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.

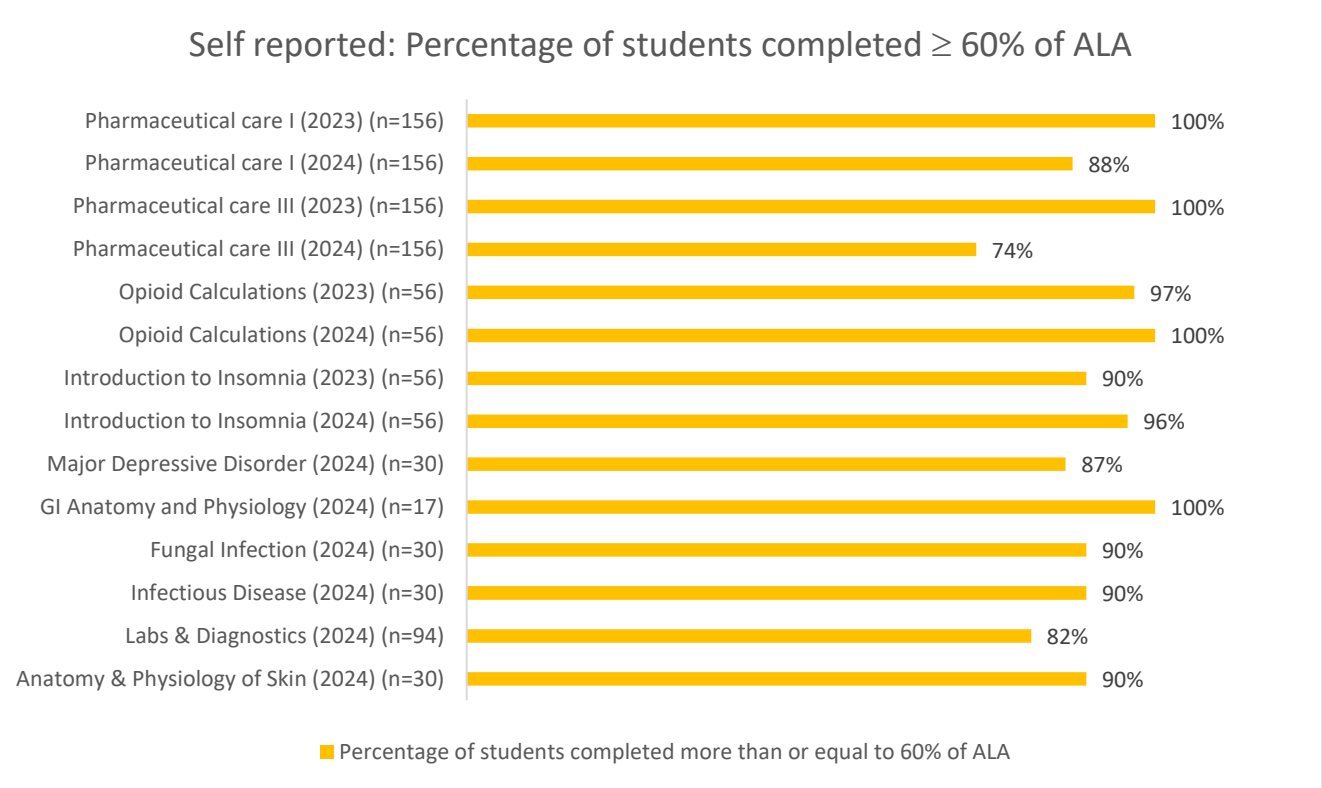
(i) **EVALUATION METHODS**

To evaluate the effectiveness of the ALA, we used both quantitative and qualitative methods.

(a) Student survey data: After completing the ALA, students were invited to fill out an anonymous survey evaluating their experience. Key questions addressed difficulty of content, amount of information provided, usefulness, and engagement.

The chart below shows the self-reported percentage of students who completed at least 60% of the ALA. Overall, most courses demonstrated high levels of engagement, with completion rates ranging from 74% to 100% of students completing the survey. These results suggest that students who completed the surveys were generally engaged with the ALA content. Among the ALAs released in 2024W, the highest reported completion rate was observed in the GI Anatomy and Physiology ALA, although this may be due to the low

response rate for that survey. Labs and Diagnostics had the lowest completion rate (82%) among new ALAs.



We asked why students chose to complete the ALAs. Of the 432 students who answered this specific question (across all ALAs), the most commonly reported responses were that the activities **included examinable content**, and that they were **useful to prepare for the synchronous component of the hybrid learning activity**. Additional motivations included finding the activities **fun or engaging**, their value as a **study tool**, and the **desire for more practice** in the topic.

Conversely, of the 32 students who reported that they did not complete the ALAs, the most frequently cited reasons were that the activities were too time-consuming, and that there was excessive coursework in either this course or other courses.

Overall, the responses suggest that most students were motivated by the educational relevance and perceived usefulness of the ALAs, but faculty members should stay aware that time constraints and perceived lack of value could be barriers to completion.

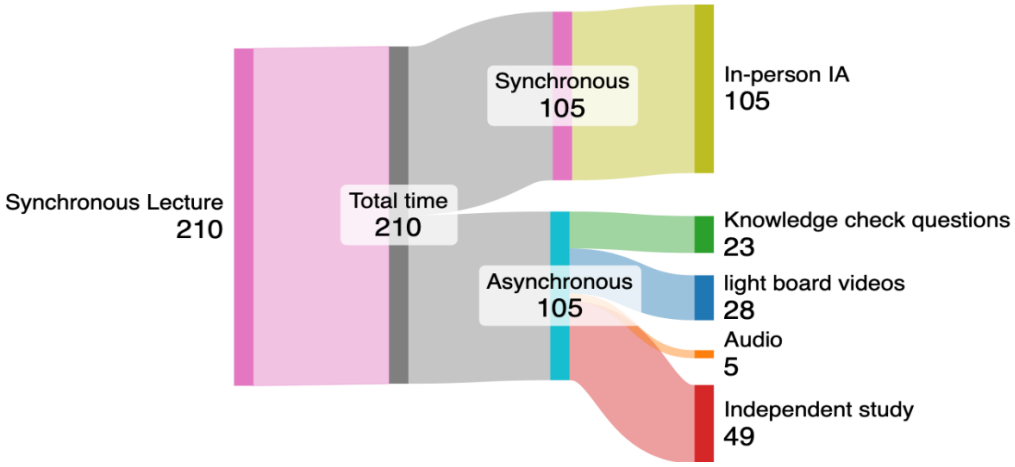
Reasons why students completed the ALAs (N = 432)	Reasons why students did not complete the ALAs (N = 32)
✓ Include examinable content (n = 365) ✓ Help to prepare for synchronous component of the hybrid learning activity (n = 331) ✓ Fun/engaging (n = 180) ✓ Useful study tool (n = 156) ✓ Want more practice in the topic (n = 116)	✓ Found them too time consuming (n = 5) ✓ Have too much coursework in this course (n = 5) ✓ Have too much coursework in other courses (n = 3) ✓ Did not find them helpful (n = 3) ✓ Found them boring (n =3) ✓ Found them confusing (n = 3) ✓ Plan to complete at a later date (n = 1)

(b) Learning analytics:

The figure below depicts an example of the amount of time (minutes) that students experienced learning in the original approach to the delivery of content (on the left-hand side) and compares that to the modalities used in the new ALA/hybrid format. Additional Sankey Diagrams of the redistribution of time for all ALAs are available in the HIPP Evaluation Report. These figures clearly demonstrate the move from one modality to a variety of modalities, which inherently meets some of the UDL goals: 1) providing multiple means for engagement, 2) providing multiple ways in which information is represented, and 3) providing multiple means for action and expression.

ALA Exemplar Opioid Calculations (PHRM_V 212):

This ALA replaced 3 hours of lecture content with a combination of in-person integration activity and ALA sessions including audio, video recordings, Knowledge Check Questions (KCQs), and some independent time.



(c) Focus group interviews: Students were interviewed to provide comments on what they found most useful and what needed to be improved.

Student feedback from the ALAs delivered in 2023 and 2024 focused on three key aspects of ALAs, which were covered in both quantitative and qualitative feedback:

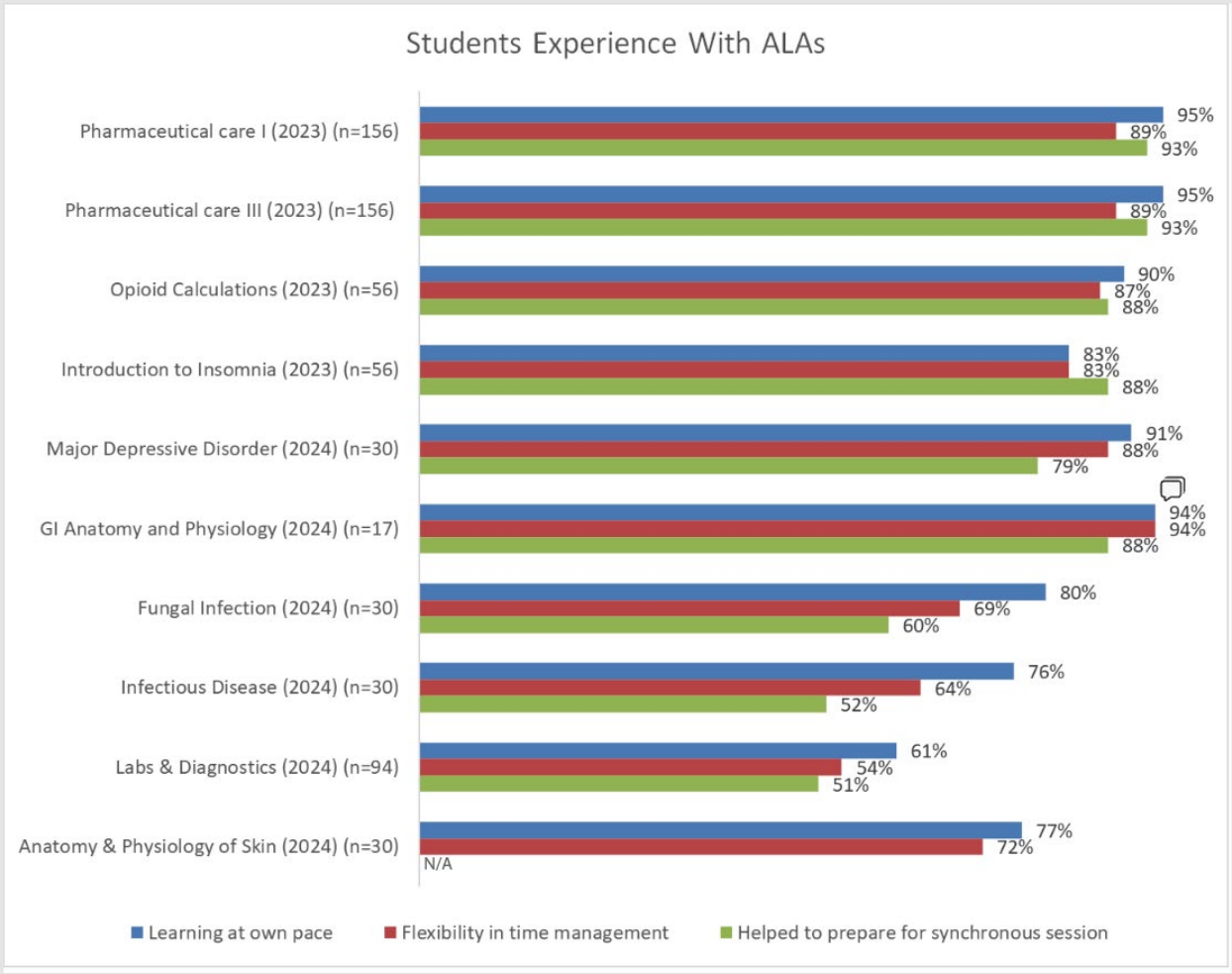
- ability to learn at their own pace,
- flexibility in time management,
- and preparedness for synchronous sessions.

These findings highlight the overall effectiveness of ALAs while also identifying specific ALA modifications or enhancements that could better support student learning experiences.

Overall, most ALAs received high ratings across all three dimensions.

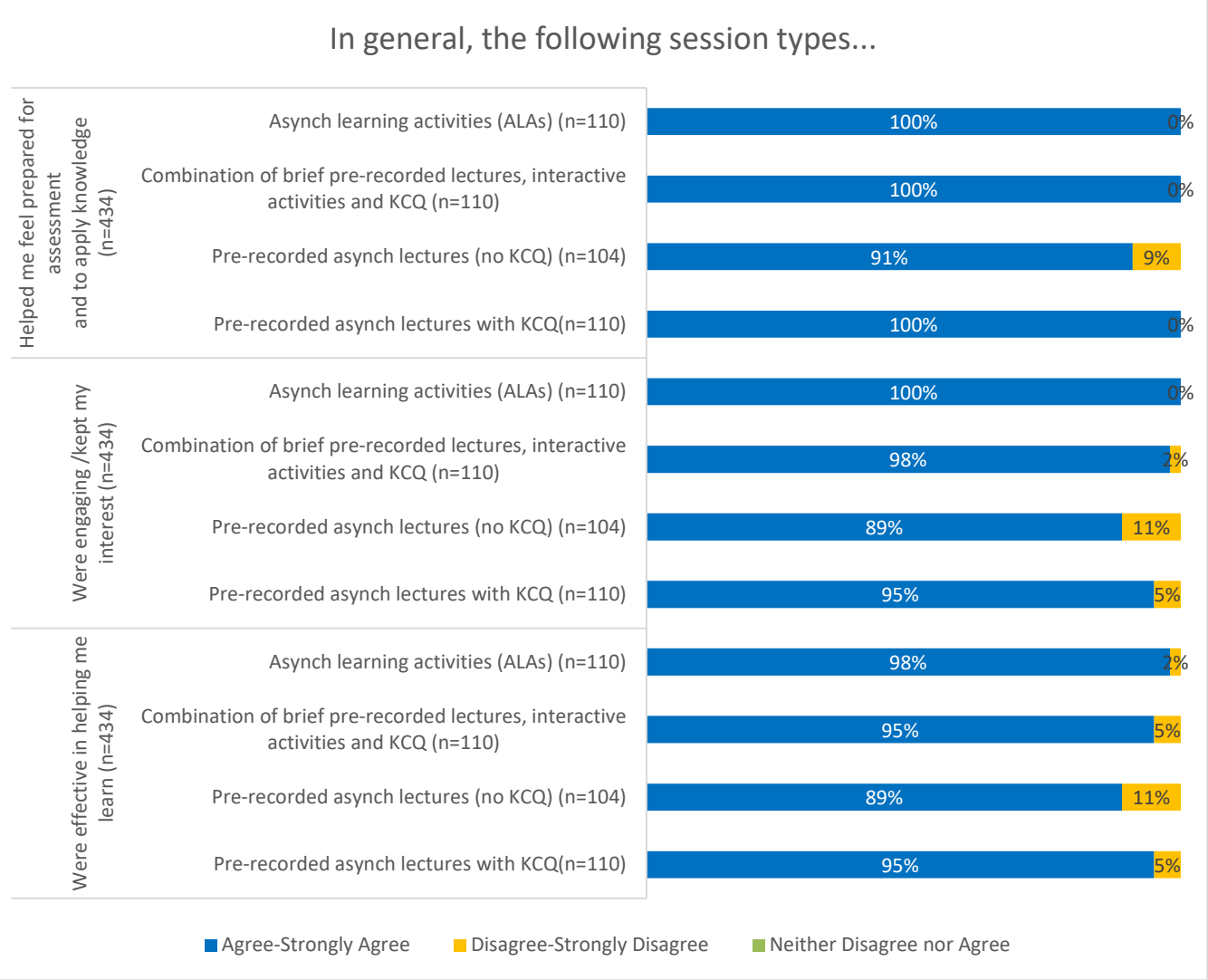
The ability to "learn at own pace" was the most consistently appreciated feature, with agreement rates exceeding 80% in nearly all ALAs, indicating that students highly value the autonomy provided by ALAs.

The most significant point of negative feedback was related to ALAs with high volumes of content. Some students also expressed preference for fully in person learning.



Across all dimensions, a high proportion of students either agreed or strongly agreed that hybrid sessions of all types were effective in helping them learn, were engaging, and helped students prepare to apply knowledge.

Overall, the findings indicate that students favour session types that integrate interactivity and structured feedback, with ALAs and combined formats being the most positively received across all three learning outcomes.



(d) Faculty reflections: Post-ALA, faculty were asked to reflect on the ALA's impact. Several observed a smoother transition into synchronous sessions, demonstrating that students had a better understanding of the synchronous content after completing the ALA.

Faculty and staff members expressed thoughts about the hybrid sessions that they developed with ALAs as the core. Overall, feedback was positive, with key themes emerging around communication, planning, workload, support, and student experience.

Communication: Across all ALAs, written (e.g., emails) and verbal communication from the project and Educational Technology and Learning Designs (OETLD) team was consistently described as excellent—clear, efficient, and professional. Expectations were clearly communicated throughout the development process, contributing to a positive collaborative experience.

Process: Faculty generally felt that their involvement in the ALA development process aligned with their expectations. While most ALAs progressed smoothly, some faculty members experienced occasional delays due to scheduling conflicts. Despite this, the overall process was seen as well-structured and effectively managed.

Workload and Time Commitment: Developing an ALA typically requires significantly more upfront work compared to preparing a new synchronous lecture, often two to three times more. However, many faculty noted that the investment of time was worthwhile, with potential time savings in future offerings. In some cases—such as when student staff played a major role or content was repurposed with only minor changes—the faculty workload was minimal and less than expected.

Flexibility and Support: Faculty across all ALAs praised the project team and staff for their flexibility and support in accommodating individual schedules and availability. This was particularly appreciated when faculty were located off-site or faced scheduling challenges. The support from both staff and student staff, especially regarding technological expertise, was noted as a key facilitator in successful ALA development.

Technology: The technology used in ALA creation—such as Lightboard, Articulate, and video/audio recording tools—was seen as effective in enhancing asynchronous delivery. Prior experience with these tools was helpful but not necessary, thanks to the support provided. In some ALAs (e.g., Labs and Diagnostics, Pharmacare), specialized tools were not required, and content was built using existing slide sets and recordings.

Faculty Perception of Student Experience:

General: Faculty widely agreed that the ALA format offers students the flexibility to engage with content at their own pace. This was especially beneficial for complex or dense topics (e.g., Labs and Diagnostics), allowing for repetition and gradual understanding.

Some concerns were raised about reduced real-time interaction and difficulty gauging student understanding asynchronously.

Content-specific insights:

i. **Pharmaceutical Care**: Faculty noted that students confirmed reviewing ALA content before the synchronous class. Some follow-up questions were raised and addressed.

ii. **Opioid Calculation**: Faculty reported that students generally appeared well prepared for math-based in-class discussions, but some skipped the ALA, leading to the need for repetition.

iii. **Infectious Disease**: Faculty believed the self-paced nature of the ALA allowed students to better absorb difficult topics.

iv. **Labs and Diagnostics**: It appeared that asynchronous content paired with in-class application session enhanced student understanding. Students appreciated the flexibility of the ALA, but the faculty noted that real-time comprehension checks were limited. It was observed that this topic is very dense and was challenging even when delivered fully synchronously in class, before the ALA was created.

v. **Derm ALAs**: Knowledge check questions were effective in promoting engagement. Lower-than-expected student interactions on Piazza were noted but may reflect either improved comprehension or a cohort less prone to engaging over Piazza.

(ii) WHAT WAS LEARNED

Based on the evaluation feedback and project team reflection on the experiences, the following recommendations were proposed to the Entry-to-Practice PharmD Program Committee, and can be considered in other contexts:

1) Maintaining and Expanding the Use of a Variety of Learning Modalities across the Program

- Continuing integrating self-paced and interactive learning modalities, including ALAs, throughout our programs. The products from the E2P PharmD project can serve as tools for other programs.

2) Identify and Implement Strategies to Encourage/Ensure ALA Use

- When developing an ALA, faculty members are encouraged to identify and implement strategies to ensure that students are aware of what an ALA is, and the importance of ALA completion, including recommended timing of completion to optimize its value.
- For example, faculty members could use class time prior to the ALA release date to explain the purpose of the ALA, and how timely completion is important to best prepare them for any specific related synchronous sessions and remind them that ALAs contain examinable content. Another strategy could be to provide more context to any linkages between ALAs and synchronous sessions in the related Canvas page.

3) Review Content Volume and Modify as Required

- Review ALAs flagged for excessive content and identify approaches to reduce student perceptions of overwhelm/improve completion.
- For example, if content is considered excessive, identify whether any content could be made optional, if the ALA could be split into multiple ALAs, or whether more time needs to be allocated for students to complete the ALA.
- Where possible, pilot ALAs to ensure that the 'expected time for completion' is as representative as possible.

4) **Consider Providing More Knowledge Check Questions (KCQs) in all ALAs**
- Review the number and complexity of KCQs in all ALAs and identify whether there are opportunities to provide additional questions to allow students to further their engagement and understanding. Consider including more challenging KCQs as optional, to push students' application skills.

5) **Enhance Communication of ALA Expectations and Supports**
- Ensure students are clearly informed about the principles of the ALA modality in general, and how it compares to other commonly used modalities in the program (e.g., lectures, labs). This may help reduce the perception of ALAs being an optional resource.
- Ensure every ALA is accompanied by clear resources (or links to resources) on how to access supports like video captions.

6) **Use Evaluation Data to Guide Iterative Improvement**
- Continue to collect and incorporate student feedback across new and significantly modified ALAs to iteratively refine ALAs and align with evolving learner needs.
- Consider using the most highly rated ALAs (e.g., Insomnia and Pharmaceutical Care) as examples of best practices for individuals who are new to developing ALAs.

7) **Collaborate with Students in ALA development or Piloting**
- When developing ALAs, faculty members should be encouraged to prioritize student involvement either as part of the team (through, for example, Work-learn positions or Directed Studies projects), or as pilot testers to ensure that the material is appropriately targeted.

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?*

We observed a gradual but meaningful shift in teaching practices over the two-year project period. Instructors increasingly began to view asynchronous activities as integral components of course design rather than supplementary add-ons. More faculty members recognized the value of providing flexibility for both instructors and students, which in turn enables more effective use of in-person class time for interaction and discussion. By delivering foundational or static information in advance and allowing students to access it autonomously, students came to class better prepared and able to engage in deeper, more meaningful discussions.

Among the 13 ALAs developed during the project, several were created by returning subject matter experts. The evolution in their approach to course design was evident: moving from simply converting lecture slides into web-accessible content to purposefully integrating interactive activities and multimedia assets to enhance learning. We also saw increased inquiries about developing ALAs more broadly, indicating a growing interest and comfort with this mode of teaching.

Overall, these developments suggest a positive shift in perceptions of ALAs, and we expect this momentum to support the continued sustainability of ALA adoption over time.

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?

Over the course of the project, we consolidated our experiences and feedback from collaborators to develop the Faculty's Asynchronous Learning Activity Policy. This document provides a comprehensive roadmap for anyone interested in creating an ALA: from identifying suitable curriculum content to navigating the approval process. It is complemented by the training course on Canvas, *Creating Asynchronous Learning Activities in the Faculty of Pharmaceutical Sciences*, which supports users through every stage of development: from early design concepts, to technical guidance for building the ALA, to accessing support contacts, and finally to publishing and evaluating the completed activity.

Together, these resources streamline the ALA development process, enabling the entire process to be carried out by a small team or even a skilled individual. With this increased accessibility, we anticipate steady growth in the number of ALAs incorporated into the curriculum.

As noted in the Faculty Reflections section, ALA development requires a significant upfront investment of time and effort. Sustaining our work beyond the project period will depend on continued promotion of the long-term benefits of ALAs, ensuring that these advantages are clearly understood to outweigh the initial workload.

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.

Event	Event Date	Presentation Name	Presentation Type	Presenter	Authors
CHES 2023	Oct 2023	An approach to stewarding change: Incorporating flexible delivery strategies into UBC's Entry-to-Practice PharmD program	Poster	Leonie Harper	Leonie Harper, Jocelyn Micallef, Ginette Vallée, Robert Pammett, Jon-Paul Marchand, Sandra Jarvis-Selinger
Celebrate Research 2024	21 Feb 2024	HIPP Replacement for In-Person Curriculum: Evaluation of an Asynchronous Learning Activity	Oral	Marion Pearson	Leonie Harper, Jocelyn Micallef, Ginette Vallée, Marion Pearson
TLEF Showcase	7 May 2024	Hybrid Learning in the PharmD Program (HIPP)	Poster	Maric Son, Leonie Harper	Kerry Wilbur, Katherine Seto, Leonie Harper, Ginette Vallée, Marion Pearson, Jon Grosshuesch, Robert Pammett, Leah Villalobos, Lia Hughes, George Pachev, Jon-Paul Marchand, Paulo Tchen, Jasmin Kaur Gill, Nakyung Kim, Arkin Au, Jocelyn Micallef

Event	Event Date	Presentation Name	Presentation Type	Presenter	Authors
CTLT Spring Institute	6 Jun 2024	EDI Tool Interactive Workshop	Workshop	Ginette Vallée, Paulo Tchen	Ginette Vallée, Paulo Tchen
AFPC 2024	13 Jun 2024	Piloting Hybrid Learning: Enhancing Student Flexibility	Oral	Marion Pearson	Marion Pearson, Jocelyn Micallef, Robert Pammett, Arkin Au, Jasmin Kaur Gill, Kerry Wilbur, Ginette Vallée, Leonie Harper
CHES 2024	2 Oct 2024	Piloting hybrid learning: Enhancing student flexibility	Oral	Jocelyn Micallef	Jocelyn Micallef, Marion Pearson, Robert Pammett, Arkin Au, Jasmin Kaur Gill, Kerry Wilbur, Katherine Seto, Ginette Vallée, Leonie Harper
TLEF Showcase	8 May 2025	Hybrid Learning in the PharmD Program (HIPP)	Poster	Arkin Au, Leonie Harper, Ginette Vallée	Jocelyn Micallef, Arkin Au, Leonie Harper, Ginette Vallée, Katherine Seto, Kerry Wilbur
PERL Retreat	28 May 2025	HIPP Unwrapped: A summary of the Hybrid Learning in the Pharmacy Program TLEF	Oral	Leonie Harper	Jocelyn Micallef, Arkin Au, Leonie Harper, Ginette Vallée
CHES 2025	22 Oct 2025	From pilot to business as usual: Designing for sustainability of a hybrid learning initiative	Oral	Sara Jamshid-nezhad	Sara Jamshid-nezhad, Jocelyn Micallef, Leonie Harper, Ginette Vallée, Arkin Au, Katherine Seto, Kerry Wilbur