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<b>SUBJECT</b>	Generative AI in Teaching and Learning at UBC - Progress Update
<b>SUBMITTED TO</b>	Learning & Research Committee
<b>MEETING DATE</b>	June 3, 2025
<b>SESSION CLASSIFICATION</b>	Recommended session criteria from Board Meetings Policy: OPEN
<b>REQUEST</b>	For information only - No action requested
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**PRIOR SUBMISSIONS**

The subject matter of this submission was most recently considered by the Learning & Research Committee on [June 10, 2024 \(OPEN SESSION\)](#) Action/Follow up: Request from the committee to return with an update in one year

The following Executive Summary provides a status update from the date of the most recent submission.

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**EXECUTIVE SUMMARY**

This update outlines significant progress made by UBC in integrating generative AI (GenAI) into teaching and learning through the Future Digital Learning Initiative (FDLI) in the last year. Organized around three pillars—listening, learning, and experimenting—key initiatives aimed to support faculty to ethically and effectively embed emerging digital tools in UBC’s educational environment are highlighted below.

**Listening:** A student pulse survey of over 3,200 respondents revealed frequent use of AI tools among students, primarily for information retrieval, grammar checking, and exam preparation. The findings emphasized the need for clearer AI usage guidelines, discipline-specific training, adapted assessment methods, and consideration of ethical and environmental implications of these technologies. These themes were further explored at the Generative AI Symposium, through panels and presentations, engaging over 500 community members.

**Learning:** UBC has substantially invested in faculty and student development to build institutional capacity in AI through workshops, hands-on sessions, and collaborations. Notable highlights include over 3,000 faculty, staff, and student registrations in AI workshops and consultations; a student-focused AI readiness assessment tool developed collaboratively with the University of Sydney; the launch of an AI “Training Hub” to establish a set of competency frameworks in AI for the UBC community; and the delivery of micro-courses for IT professionals focused on addressing both technical and managerial AI competencies.

**Experimenting:** Efforts in experimentation support pedagogical innovation. The newly established Learning Technology Innovation Centre (LTIC) strengthens technological infrastructure and support, while spaces such as the Large Language Model (LLM) Sandbox and the “Play Station” at the Okanagan Campus’ Centre for Teaching and Learning (CTL) provide safe environments for faculty to pilot AI tools. In addition, and \$1.3M of funding from the Teaching and Learning Enhancement Fund (TLEF) has been allocated to support 20 diverse AI-related projects across seven faculties.

Looking ahead to the upcoming academic year, a broad suite of activities that build on and add to these activities is underway. These include:

- formation of a cross-campus Student AI Advisory Council;
- a comprehensive assessment of AI's environmental footprint aligned with sustainability commitments;
- development of a new *Applications of AI for All* interdisciplinary foundational AI literacy course, with implementation planned for 2026;
- renewal and expansion of digital infrastructure through a collaborative effort between VPAO and VPRI; and,
- strengthening academic integrity resources to address GenAI’s evolving impact on teaching and student assessment.

Through these initiatives, UBC is emerging as a leader in responsibly integrating generative AI into higher education, aiming to enhance teaching quality, student preparedness, and institutional innovation.

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## APPENDICES

1. Generative AI in Teaching and Learning Report

## Generative AI in Teaching and Learning Report

### Introduction

Previous reports on the approach for and impact of generative AI in a teaching and learning context have been presented to the Board of Governors Learning and Research Committee in June 2023 and June 2024. The Looking Forward section of the 2024 report outlined a plan of action that would allow us to move forward under the umbrella of a 'Future Digital Learning Initiative' (FDLI), a 2-year plan for action with the following goals:

- To support faculty in integrating emerging digital tools and capabilities into their courses and programs in ethically appropriate and educationally effective ways;
- To support students in ways in which GenAI tools can enhance their formal learning and their experiential, co-op and work-integrated learning opportunities;
- To enhance and advance UBC educational programs to be the very best blend of in person and digital learning activities; and
- To further broaden and deepen UBC's reputation for development, application and evaluation of emerging and effective digital learning pedagogies.

This report outlines a wide range of activities undertaken over the past 12 months towards these goals, highlighting their reach, initial impact, and the ongoing and upcoming future work generated by this initial phase of the plan. The content is organized around three main pillars of the FDLI: learning, listening and experimenting.

### Listening:

UBC faculty, staff and students hold a wide variety of viewpoints and levels of comfort for the ways that generative AI tools are impacting higher education, and the core teaching and learning mission of institutions. We have heard perspectives ranging from evangelical optimism and excitement at the prospects and opportunities that lie ahead, to anger, fear, mistrust and denial. A strong sense of overwhelm, particularly around where even to start in a technological space that is advancing so rapidly, was a common theme expressed by many.

It was essential to listen carefully and repeatedly to what our various community groups are thinking – what are they excited about, what concerns them, and what do they feel they need in order to be more confident or comfortable. Like many other institutions, hearing directly from our students was a critical part of this process.

**Student pulse survey.** In December 2024 both Provost's offices ran a short, "pulse" survey of undergraduate and graduate students from both campuses. This five-question survey was shared with students through an announcement on the Canvas LMS student learning software from December 23, 2024 to January 10, 2025. In total, 3,201 students responded, with approximately 75% from Vancouver and 25% from Okanagan. About 84% of respondents were undergraduate students and 16% graduate. There were only a few, relatively minor, differences in results between graduate and undergraduate respondents.

Highlights from the results include:

- 56% of students said they use AI tools at least once a week; 22% said they never did so;
- About 80% said they know if they are allowed to use AI tools in at least a few of their courses; 19% said they don't know if they are allowed to use them in any of their courses; and
- Top reasons to use AI tools included searching for information, checking grammar/spelling, summarizing documents, and study/practice for exams.

Several recommendations have emerged from the data, largely from the two open-ended questions on the survey: a desire by students to establish more clear guidelines and policies for use of AI; further, discipline-specific training for faculty and students; adapting assessment methods; addressing ethical and environmental concerns; and considering impacts on student wellbeing and accessibility. This student feedback data has proven invaluable in shaping some of the current activities underway, presented in more detail in the final section of this document.

**Generative AI in Teaching and Learning Symposium.** The student survey data was shared as part of a full-day Symposium on Generative AI in teaching and learning, held virtually in February 2025. Over 500 UBC community members registered for the sessions, which included:

- A faculty and student panel, moderated by the President, explored both the opportunities that generative AI affords and the associated concerns and limitations;
- Presentation of the student pulse survey results, along with findings from a complementary survey conducted by the Vancouver campus Faculty of Graduate and Postdoctoral Studies; and,
- A series of faculty-led lightning talks featuring 12 faculty members who had incorporated generative AI tools into their teaching and/or student assessment activities, highlighting their experiences and sharing lessons learned.

In a space where the technological capabilities of tools are changing rapidly, it is important to maintain regular engagements and timely pulse checks with our community – ensuring that we remain responsive to emerging needs and perspectives without over-burdening faculty and students.

Learning:

The learning pillar of the FDLI includes several distinct yet complementary areas of the activity. The first encompasses the training, support, and development opportunities provided to members of the UBC community. This section presents examples of initiatives that have been specifically designed to engage with faculty, staff and students. A second aspect involves partnering with other institutions to learn from their approaches – for example, a collaboration with the University of Sydney Educational Innovation team led to the development of a student-facing self-assessment tool for generative AI readiness.

**Faculty development activities through CTLT/CTL.** Over the past year, the Centre for Teaching and Learning Technology (CTLT) has continued to offer a wide range of well-attended workshops, consultations, and other events. These include workshops on foundational knowledge about AI and teaching and learning, AI and assessment, AI and Universal Design for Learning, and many more. In addition, a series of hands-on ‘maker’ sessions have enabled participants to experiment with AI tools, such as creating quizzes using AI tools, or building chatbots, and there are weekly drop-in studios feature “news of the week” and “tools of the week,” followed by a Q&A session. Between July 2024 and April 2025, these offerings saw over 3,000 registrations from UBC faculty, graduate students, and staff.

On the Okanagan campus, the Centre for Teaching and Learning (CTL) staff have supported faculty development through 1:1 consultations, facilitated a student panel on AI tool use, and hosted “GenAI in the Circle: Honoring Indigenous Voices and Knowledge”, a collaborative dialogue that incorporated Indigenous ways of knowing.

**Partnership for application development.** In the Fall of 2024, we worked collaboratively with a team from the University of Sydney [widely recognized as global leaders in AI in education, having received multiple international awards for development of the Cogniti platform, including the Quacquarelli Symonds (QS) Wharton Reimagine Education Gold Award]. In a little over two months, we collaboratively developed a student readiness assessment tool designed to evaluate students’ preparedness and comfort with various aspects of generative AI in an academic context. The tool was built as a custom Generative Pre-trained Transformer (GPT), enabling students to engage in a conversational way with the agent, which in turn assesses the strengths and areas of development for students based on their text inputs and interactions with the agent.

**A Training hub framework.** Starting in the Summer of 2024, a dual-campus working group designed and begun implementation of an AI “Training Hub” featuring a set of competency frameworks for faculty, staff and students. This framework outlines three levels of competency (foundational, proficient, expert) in multiple topic areas, including: foundational knowledge, technical skills, ethical and legal considerations, administrative tasks, teaching and learning, and academic integrity. It is currently being refined, and the collection of relevant training/professional development resources (from UBC and beyond) is being finalized. These materials will serve as the building blocks for learning outcomes for training and support activities tailored to each audience.

**AI for IT professionals.** UBC and Information Technology (IT) have collaboratively developed a series of stackable micro-courses aimed at building a comprehensive program of competency development for IT professionals. This program features two distinct tracks – technical and managerial, that share common and distinct content, culminating in a capstone experiential learning project. The first offerings will launch in early summer 25 for a pilot launch, with plans to expand to IT professionals beyond UBC in the future.

### Experimenting:

**Supporting faculty pedagogical innovation and enquiry.** The reliance on technology in teaching and learning has been steadily rising for some time, but the pace has greatly accelerated with the introduction of AI. Suddenly, educators are grappling with mundane questions like “can these tools save me time”, through ethical and integrity questions such as, “how can I tell if a student is doing their own work”, all the way to existential questions, such as, “can an AI tool replace large parts of my job as an educator?”.

Ultimately, faculty not only need support in how to use AI tools effectively, but also need access to software and infrastructure necessary to help them experiment and drive pedagogical innovations. To meet this need, the Learning Technology Hub (LTHub), currently housed as a sub-group in CTLT, will transition into a new unit in the Vice-Provost Teaching and Learning portfolio as of July 1, 2025: the Learning Technology Innovation Centre (LTIC). It will have a dual mandate: offer reliable access to advanced tools for faculty, and provide an incubator and underlying compute technology to enable faculty to experiment, pave the way, and shape the future of education.

**The UBC Vancouver Large Language Model (LLM) Sandbox and Incubation Innovator.** These were developed to provide faculty with a ‘walled garden’ to experiment and determine how, where and if these tools align with their course design and pedagogical goals. They are designed as a safe place to test out pedagogical questions and to pilot educational transformation. It is imperative that technology and technical expertise not become barriers to educators across the institution asking those questions, regardless of the answers.

The sandbox environment provisions compute access to various LLM models and secure data storage for faculty and student data and intellectual property (IP). The incubation innovator service supports tool development and deployment for faculty who should not be expected to possess the technical skills needed build and deploy their own tools. A number of Canadian institutions have expressed the desire to understand from our LTIC staff how implement a similar model within their own institutions.

**The UBC Okanagan CTL “Play Station” Space.** This space will support instructor readiness in using GenAI/emerging technology in teaching and learning. The re-purposed space in CTL will host a workstation, supported by CTL staff, providing a safe and supportive environment for instructors to explore and experiment with a range of GenAI technologies and tools.

**Leveraging the Teaching and Learning Enhancement Fund (TLEF) to support experimentation.** In June 2024, to catalyse the work of faculty and incentivise experimentation, \$1.3M from the TLEF budget was allocated through a special call for AI-specific educational transformations. We are now funding and supporting 20 projects across 7 Faculties: Applied Science (3), Arts (4), Forestry (1), Pharmaceutical Sciences (4), Science (5), Sauder School of Business (1), and Medicine (2). These projects represent a diverse range of investigations and mark a formidable first step in moving all the Faculties forward into rethinking education with the new AI-enabled capabilities in the foreground. This is a significant initial investment and places UBC ahead of its peers, allowing UBC academics to shape the new landscape rather than simply respond to it.

### [Looking ahead to 25/26](#)

Our activities during the first year of the FDLI have also brought into sharp focus the gaps in our approach and the additional activities which follow to address these. Work currently underway includes:

- **Establishment of a cross-campus Student AI Advisory Council.** The Student AI Advisory Council will comprise of approximately 40 students from different disciplines and programs, representing the broad range of student perspectives and opinions surfaced through the student pulse survey. Co-chaired by the Vice-Provost Teaching and Learning (Vancouver) and the Associate Vice-President, Students, Okanagan this council will serve as both a sounding board for planned activities and a conduit for direct student feedback and dissemination of ongoing work. This will complement existing governance structures by providing valuable

opportunities for additional student input. The Student AI Advisory Council will be formally constituted in June 2025.

- **Additional pulse surveys planned for the fall.** In addition to the Student AI Advisory Council, we plan to conduct another student AI survey in late 2025 or early 2026, as a companion to the one held in December 2024. This follow-up will be expanded to gather information from students on further aspects of AI use in their learning. We also intend to design and launch a faculty survey in the coming year, to better understand faculty needs, concerns, and evolving use of AI at UBC.
- **Understanding the environmental implications of expanding AI use.** Understanding the environmental footprint of AI usage is important to aligning with UBC's climate action commitments. While the impact of individual AI tasks at the level of a single user is very small, the rapid scaling up of use across tens of thousands of users and over time becomes highly significant. Furthermore, the environmental impacts are highly localized in particular locations (e.g., where large data centres are located). UBC is currently assessing the impact of AI use, as a component of the overall institutional digital footprint, together with potential mitigations for the institution and individual users. A position paper, developed in collaboration with the UBC Sustainability Hub, is being drafted for summer 2025. In a quickly evolving field, this paper will include an invitation for others to contribute information and feedback for possible next steps.
- **Applications of AI for All: a proposed new course.** Student feedback has articulated an urgent need to develop foundational critical AI literacy skills that support effective, ethical, and responsible use of AI. As AI continues to have significant and long-lasting transformational effects on many aspects of our lives, including learning, research, and work, it is crucial that students are able to leverage opportunities while recognizing and mitigating risks and potential harms.

To support this goal, a process is currently underway, with input from many Faculties across both campuses, to design a course tentatively titled "Applications of AI for All." This will be a scalable first-year, interdisciplinary, undergraduate course designed to meet the anticipated high student demand. Early planning has identified multiple topics, including foundational knowledge of generative AI, legal and ethical considerations, effective strategies for use such as prompting and critically evaluating content, and disciplinary applications.

The course is targeting for a pilot delivery in January 2026, with full implementation planned for September 2026. A course design team from CTLT is working with a faculty course design advisory group of 12-15 faculty across both campuses to develop the course blueprint.

- **Digital infrastructure partnership between the Vice-President Academic (VPA) and the Vice-President Research and Innovation (VPRI).** To date, all of the activities supporting generative AI in teaching and learning have been delivered using existing resources and funding to support a period of deliberate experimentation. Looking ahead, meeting the growing demand for access to compute, secure data storage, and incubator support (as described above) will require additional investment to be able to scale access across a larger fraction of the UBC community.

To address this, the VPA and VPRI offices have partnered to develop a shared digital infrastructure enhancement proposal, leveraging the respective strengths and expertise across teaching and research support. In FY26, this collaboration will be initiated using in-kind and

existing funding to enable us to start scaling up offerings. A formal budget request is being prepared for FY27-31 to align with the emerging priorities in the Strategic Plan refresh.

- **Relaunch of the Aspire 2040 Learning Transformations Fund (ALT- 2040 Fund).** UBC Okanagan is relaunching the ALT-2040 Fund competition with a call for proposals planned for Fall of 2025. GenAI will be a new priority focus area to support projects that develop approaches for the use of GenAI tools by instructors and students in teaching and learning contexts (e.g. assessment, course design, writing, academic integrity, etc.). This new funding priority aims to advance the use of AI in education, aligning with UBC's strategic priorities and Generative AI initiatives to explore innovative, ethical, and impactful applications of emerging technologies in teaching, learning, and assessment.
- **AI and academic integrity work.** The Academic Integrity Hub on the Vancouver campus is expanding its resources on GenAI and academic integrity, including collaborating with the CTLT on a workshop for instructors around Generative AI and academic integrity. In response to student survey feedback, additional resources are in development, including further information on generative AI and the academic misconduct process, and resources for instructors around creating additional guidelines for GenAI use in their courses.

Meanwhile, the Academic Integrity Matters office on the Okanagan campus is updating existing resources and developing new material to support students' understanding of use of GenAI tools and academic integrity. The office is also collaborating with CTL and the Associate Vice-President, Students, Okanagan to develop additional programming and ensure alignment with instructor-facing initiatives.