

Canadore College Generative Artificial Intelligence Position Statement

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BACKGROUND

Generative Artificial Intelligence (Generative AI) encompasses a class of machine learning models designed to generate diverse content, such as text, images, and even music, from user prompts. Generative AI is poised to reshape industries, specifically education, and change how we interact with information and technology. Of course, this has major implications for how students learn and express their learning, while also challenging how faculty teach and assess learning. With the advent of Generative AI tools, like ChatGPT in November 2022, today's students are entering post-secondary education with Generative AI as a digital tool. Therefore, it is crucial to establish a clear institutional position statement outlining its appropriate use in academic settings and providing direction for students, faculty, and administrators.

Canadore College is committed to fostering innovation and recognizes the profound impact Generative AI will have on society. This understanding makes it imperative for Canadore to provide students with the knowledge and skills necessary to harness its potential.

Our dedication to student success lies at the heart of our mission as

we strive to equip our students with the tools and understanding to navigate and contribute to a world increasingly proliferated by Generative AI. This position statement underscores our commitment to preparing our students, while empowering our faculty, for the challenges and opportunities presented by Generative AI.



FACULTY DISCRETION

Faculty at Canadore College have the autonomy to decide whether students can use Generative AI tools in their classes if their Program permits its use. This autonomy is granted to faculty to ensure that the use of Generative AI aligns with the specific goals and learning outcomes of their courses – as well as course relevance and professional preference. Faculty play a critical role in curriculum development, course design, and delivery and are therefore best positioned to evaluate whether Generative AI can enhance or detract from learners' educational experience. Ethical and equitable use of Generative AI tools in academic settings must support teaching and learning. Furthermore, faculty must have learners acknowledge when and how they used Generative AI tools on submitted coursework and assignments. When making decisions about whether to allow Generative AI in their classes, faculty should consider the following factors:

FACULTY DISCRETION DECISION FACTORS

Educational Objectives	<ul style="list-style-type: none"> • Faculty evaluating Generative AI's role in education should balance its integration with course learning outcomes. • View Generative AI not just as a technological advancement or shortcut, but as a pedagogical tool. • Integration should align with the core competencies and skills the course aims to develop. • Generative AI's use should facilitate deeper understanding, augment research capabilities, develop writing skills, and enhance critical thinking or problem-solving skills. • Integration into the curriculum should focus on supporting educational outcomes and enabling knowledge acquisition and intellectual growth. • The goal is to ensure technology serves to support education and foster the desired development of competencies and skills.
Relevance to Discipline	<ul style="list-style-type: none"> • Suitability of Generative AI in academia is not universal; it varies across programs based on content nature and learning outcomes. • Differences exist due to the distinct needs of various academic disciplines and industries. • In STEM fields, Generative AI may aid in simulation and modeling but could oversimplify complex reasoning processes. • In the humanities, Generative AI can analyze large texts but may undermine nuanced understanding of cultural and historical contexts. • Faculty must evaluate Generative AI's role based on its enhancement of learning, meaningful engagement, and alignment with cognitive demands and skills development. • The evaluation should ensure Generative AI complements intellectual rigor and inquiry, rather than replacing them in higher education.
Learning Outcomes	<ul style="list-style-type: none"> • Faculty should consider course learning outcomes when contemplating Generative AI use. • The goal is to leverage AI capabilities to enhance educational experiences. • Academic rigor must be preserved in the integration of Generative AI. • Ensuring that learning remains an active, thoughtful process for students is crucial.
Ethical Reflections	<ul style="list-style-type: none"> • Faculty integrating Generative AI into coursework must prioritize academic integrity and address ethical concerns. • Vigilance is needed to prevent the misuse of Generative AI for academic dishonesty. • Generative AI's potential replication of biases and stereotypes requires faculty to critically evaluate AI outputs. • Discussions about biases encourage student awareness of Generative AI limitations and promote critical thinking about its societal role and impact on different demographic groups.
Privacy	<ul style="list-style-type: none"> • Faculty should address privacy concerns related to Generative AI use in education. • The collection and utilization of student data by AI systems can raise substantial privacy issues. • A conscientious approach is needed to foster a learning environment that respects student privacy. • Understanding Generative AI as a powerful tool with limitations is crucial. • Students should be reminded to practice basic Internet safety when using Generative AI, such as avoiding sharing personal or confidential information, inappropriate or illegal content, and security credentials.

GENERATIVE AI AND CRITICAL THINKING

Canadore College students are expected to be critical thinkers who regularly engage deeply with ideas, challenge assumptions, and develop thoughtful and reasoned perspectives. While Generative AI is a useful tool for learning, its use should always support this expectation. Whether being used for brainstorming, exploring different perspectives, or refining communication, Generative AI must be a tool that facilitates and enhances critical thinking, and not replace it. Students are expected to remain active participants in their learning. Accordingly, the use of Generative AI must be performed ethically and responsibly to expand student understanding, question sources, and ultimately form their own insights.

SECTION SPECIFIC INFORMATION DISCLOSURE

To ensure transparency and clarity, faculty must clearly communicate their position on the use of Generative AI in their Section Specific Information for each course. This position must include whether Generative AI tools are allowed and to what extent they can be used [see Appendix A for sample statements]. This may encompass specific assignments, projects, or scenarios where Generative AI is permitted or prohibited. Students should have a clear understanding of when and how Generative AI can be used, which can help them make informed choices regarding their learning. Faculty must require students to acknowledge their use of Generative AI in completing classwork and assignments. Students must provide a statement explaining how Generative AI was used (i.e., to create an essay outline, check grammar and style, test coding, etc.) to complete assignments. When allowing students to use Generative AI in their classes, it is important for faculty to explain why they have made this decision (I.e., What skills and knowledge do you hope students to attain through using Generative AI?).

Faculty should inform students that Generative AI is not perfect, and that Generative AI can produce incorrect and illogical information. Students should always fact-check the information they receive from Generative AI tools to ensure accuracy. Importantly, faculty should inform students that Generative AI tools can reproduce social biases.

ACADEMIC INTEGRITY

The rules for using Generative AI tools are defined by the specific instructions provided by faculty and/or Program. Any application of these technologies that surpasses these parameters is deemed a breach of academic integrity. This includes instances where Generative AI is used to carry out tasks that are meant to be completed independently or in groups by students. Violations of this nature are considered serious and are governed by the [A-18 Academic Integrity Policy-15](#), which spells out the repercussions of such actions. The policy underscores the importance of maintaining honesty and originality in academic work, while ensuring that the use of Generative AI remains a supplement to teaching and learning rather than a substitute for students' own work.

GENERATIVE AI DETECTION SOFTWARE

To uphold academic integrity, Canadore College uses AI detection tools to help identify potential misuse of Generative AI tools. However, it is crucial to emphasize that such detection tools should not be used as singular evidence of academic dishonesty. The college's program for detecting Generative AI use is designed to assist faculty in identifying potential misuse of AI-generated content. It offers an additional layer of scrutiny to maintain academic integrity. Still, it is essential to recognize that detection tools have limitations: these tools can identify instances of potential AI-generated content, but they are also known to sometimes produce false positives or negatives. As such, they should not serve as the sole basis for determining academic dishonesty.

STEPS TO TAKE IF ACADEMIC INTEGRITY IS IN QUESTION

In cases where inappropriate Generative AI use is suspected, the college encourages a comprehensive investigation that considers multiple factors. Faculty are advised to engage in a dialogue with students, review the context of the

work, and explore additional evidence before making any allegations. This approach ensures a fair and thorough assessment of the situation, with the objective of upholding academic integrity while giving students the opportunity to clarify and explain their academic work.

The following steps are recommended to determine whether a student used Generative AI as a breach of academic integrity:

STEP 1	Use Copyleaks to Assess Suspected AI Use	<ol style="list-style-type: none">1. Upload the assignment into Copyleaks through iLearn.2. Keep a copy of the report for documentation.
STEP 2	Collect and Compare Evidence	<ol style="list-style-type: none">1. Review student's previous written submissions or writing samples (e.g., assignments, discussion posts, emails, etc.).2. Consider differences in tone, structure, vocabulary, and complexity.3. If references are provided, review references to ensure these are real and not falsely created by AI.
STEP 3	Invite the Student to a 1:1 Meeting (Use AI Misconduct Question Guide)	<ol style="list-style-type: none">1. Send an email inviting the student to a meeting framed to discuss understanding their writing/research process.2. Avoid language that presumes misconduct as this helps reduce student anxiety and keeps the conversation open and fair.3. Using the AI Misconduct Question Guide, ask some or all the questions to learn about the student's writing/research process.4. Based upon student responses, determine whether, and to what extent, academic consequences are required.

Before determining consequences, consider a second opinion if you are unsure how to proceed. Speaking with your Academic Lead or the Centre of Academic Excellence and Lifelong Learning (CAELL) Teaching and Learning Specialist can add perspective and help to ensure consistent and supportive responses across disciplines. As with any academic integrity infraction, it is important to keep notes of your observations, steps taken, and the outcome of the student meeting should the situation escalate or is appealed.

DOMAINS OF GENERATIVE AI USE FOR STUDENTS

Depending on the discretion of individual faculty, the following domains of use could be deemed acceptable for academic learning. These domains highlight Generative AI technology as a tool to support learning. Regardless of the domain of use, assignments and coursework must always comprise of student work and Generative AI tools must never be used in-and-of-themselves to complete assignments and coursework for students. The following domains of use have been created to highlight Generative AI technology as a tool to support learning. If interested, the following are some concrete examples demonstrating how to use the technology.

DOMAINS OF GENERATIVE AI USE FOR STUDENTS: EXAMPLES

Research Support	<ul style="list-style-type: none"> Students using AI for academic research gain efficiency in distilling complex information and identifying focal points. Generative AI can quickly provide summaries of extensive research papers and condense findings into comprehensive literature reviews. It utilizes its vast knowledge database to identify unexplored areas or unanswered questions in scholarly discourse. This capability streamlines the initial stages of research and guides students toward original contributions to their field. Thoughtful integration of AI augments the research process, enabling students to focus on creating original work based on synthesized knowledge.
Writing Aids	<ul style="list-style-type: none"> Generative AI assists students in the initial drafting phase by providing ideas and phrases to overcome writer's block. It suggests grammatical corrections and stylistic improvements as students progress, streamlining the revision process. The interaction with Generative AI teaches students about language use and writing mechanics. Integration of Generative AI creates a virtual tutor, elevating the standard of writing and promoting a better understanding of effective communication.
Study Aids	<ul style="list-style-type: none"> AI identifies specific areas requiring reinforcement for students. Generative AI creates flashcards for memorization and recall of key information using spaced repetition. Interactive learning modules simulate real-world scenarios. AI-generated study aids are adaptive, and adjust difficulty based on student performance. This approach ensures a more efficient and targeted learning process. Personalization reinforces learning, making it more engaging and effective by addressing diverse learning styles and needs.
Language Learning Support	<ul style="list-style-type: none"> Learners engage in dialogue with Generative AI as they would with a human partner. Allows learners to use targeted and new vocabulary in context and practice grammar in real-time. AI conversation partners are always available, which allows for learners to practice anytime. Generative AI, engaging in vocalization, offers instant feedback on pronunciation by detecting nuances in the learner's speech and providing corrections to improve accent and intonation. Feedback from Generative AI helps learners make quick adjustments. Advanced natural language processing abilities enable AI to adjust the conversation difficulty based on the learner's proficiency.
Problem Solving Exercises	<ul style="list-style-type: none"> Generative AI creates a diverse range of practice problems with solutions for STEM students. Students gain access to an unlimited pool of tailored questions simulating real exam scenarios. Intensive practice is facilitated, along with immediate feedback on solutions, identifying areas of weakness and improving understanding. Generative AI adapts to the user's learning pace and style, enhancing personalized learning. Engagement with AI-generated content allows students to observe diverse problem-solving approaches, fostering a deeper grasp of underlying concepts. Problem-solving exercises through Generative AI help students prepare effectively for exams and enhance analytical skills.

GENERATIVE AI AS A SUPPORT TOOL FOR FACULTY

Besides including Generative AI in teaching and learning, it is also a great support tool for both curriculum development and lesson planning. Canadore College faculty can use Generative AI as an active partner in curriculum planning by applying it to brainstorming course outcomes, designing learning modules, and matching assessments with program objectives. Faculty can input major themes or program skills and receive generated outlines to an entire course or unit according to logical progression and accreditation requirements. Generative AI can support in selecting applicable, current material and recommend reading sources and propose real-world examples or case studies related to specific fields. It can be particularly beneficial in the rapidly developing fields where current affairs and nascent technologies need to be integrated into learning outcomes. When applied thoughtfully, Generative AI allows faculty to devote fewer hours on course planning and can therefore dedicate greater attention to individualizing material to students' needs and interests.

While Generative AI is helpful in curriculum development, it is also an extremely supportive tool when it comes to lesson planning and assessment. Generative AI tools can provide insightful pedagogical ideas for differentiated lessons, class discussions, and assessments to match course learning outcomes. As an example, an instructor could ask Generative AI to provide differentiated activity ideas to meet the needs of diverse learners or recommend interactive methods to unveil an abstract concept to students. Generative AI can be employed to create draft rubrics by entering assignment instructions and levels of desired skills so that clarity, consistency, and learning stage alignment are ensured. Faculty can examine and edit AI-created rubrics and thus reduce the effort required to make grading more transparent. When employed effectively and responsibly, Generative AI becomes an effective partner in creating worthwhile and inclusive learning experiences.

GENERATIVE AI AS A RESEARCH TOOL

When considering adopting Generative AI tools for research purposes, researchers should first understand that Generative AI tools support, but do not replace, critical research processes. This includes key steps such as formulating research questions, conducting literature reviews, analyzing data, interpreting results, and drawing conclusions—each requiring the researcher's critical thinking, contextual understanding, and ethical judgment. In alignment with recommendations from the [Government of Canada](#), all researchers should:

- Assess whether Generative AI is the appropriate tool for research questions, methodology, and objective;
- Evaluate privacy and security conditions and potential biases of the tool
- Researchers should use institutionally supported tools;
 - If using a tool that is not licensed by Canadore, the researcher should seek approval from the Research Centre and Information Technology Services

As with all research, it is imperative that results are objective and deduced from sound data and data analysis. Accordingly, if using Generative AI tools, the researcher must establish clear guidelines for documenting the tool's use throughout the research process, including inputs, settings, modifications, and its role in preparing research materials. This ensures transparency, reproducibility, and accountability.

If using Generative AI, researchers must adhere to the guidelines below:

- Evaluate the quality and validity of any AI-generated data by cross-referencing with other sources or through manual verification processes;
- Ensure compliance with data security and privacy regulations when using generative AI tools;
- Identify and address ethical risks in consultation with Canadore's Research Ethics Board;
- Maintain transparency and reproducibility by documenting inputs, prompts, tools, data sources, and any code or scripts used

APPENDIX A: SAMPLE STATEMENTS FOR SECTION SPECIFIC INFORMATION

1. Generative AI may be used as a supplemental resource in this course. You may use Generative AI tools to brainstorm, outline, revise, and edit, however students must acknowledge whether, and to what extent, Generative AI was used for each assignment.
2. The use of generative AI tools (such as ChatGPT, Grammarly, and Bard) is allowed to assist the learning process of the students. It can be used to brainstorm, generate questions to study from, summarize readings, or enhance grammar. Yet, final submissions are to demonstrate the student's own knowledge and independent thought. Usage by the student which directly assists graded work needs to be clearly indicated through a one-sentence note in the assignment submission.
3. This course encourages responsible use of generative AI to support academic development. You may use tools like ChatGPT to brainstorm, practice dialogue, clarify concepts, and build drafts—as long as you critically evaluate and revise the output. AI should serve as a collaborator, not a substitute for your own voice. All AI use must be transparently cited.
4. Writing, analytical, and critical thinking skills are learning outcomes of this course, so all assignments should be prepared by the student or group. Developing strong competencies in these areas will prepare you for the workplace. Generative AI can be used however to verify coursework answers, as a study tool, and to edit writing. Students must acknowledge whether, and to what extent, Generative AI was used for any submitted coursework.
5. The use of Generative AI is permitted only for research purposes within this course. Any written work, such as essays or reports, must be entirely original work. Use of Generative AI for these assignments is not permitted and may be subject to academic scrutiny.
6. This course does not permit the use of any Generative AI tools. The use of any Generative AI tools for completing course assignments is prohibited. Evidence of Generative AI use will be considered academic dishonesty.

APPENDIX B: APA CITATION METHODS FOR GENERATIVE AI

The American Psychological Association (APA) explains that when citing text generated by ChatGPT in an APA Style paper, it is important to note that this text is not accessible to others and does not come from a personal communication with a human. Instead, the retrieved answer is the output of an algorithm. Therefore, the appropriate way to cite this would be to acknowledge the creator of the algorithm in both the reference list and the in-text citation, as this reflects the true source of the information. For example, if citing ChatGPT. The following information is as follows:

Author: OpenAI

Date: The date is the year of the version used. The version number provides the year to be used.

Title: Write the name of the model, which in this case is ChatGPT in italics. The version number is included unitalicized and in parentheses. OpenAI uses the date for ChatGPT's version number, but other large language models may use different numerical systems.

Following the title name and the version number, use square brackets and write "Large language model" enclosed within the brackets. The APA explains that using bracketed text is used in references for additional descriptions.

Source: <https://chat.openai.com/chat>

Accordingly, the reference and in-text citations should look as follows:

Reference: OpenAI. (2023). ChatGPT (Mar 14 version) [Large language model]. <https://chat.openai.com/chat>

Parenthetical citation: (OpenAI, 2023)

Narrative citation: OpenAI (2023)

APPENDIX C: LIST OF COMMON AI TOOLS

While Generative AI tools will continue to evolve, Durham College's [Generative AI Tools for Teaching and Learning](#) clearly outlines common Generative AI tools and also highlights the benefits, challenges, and other considerations associated with each listed Generative AI tool.

Generative AI will continue to advance, however, as new tools become available, it is important to consider the privacy and security concerns of each tool. Just because a tool exists and is effective as a teaching tool, does not mean it is to be used without concern. To determine whether a tool is appropriate to use at Canadore, reach out to CAELL's Teaching and Learning Specialist.