



A Case Study of GenAI in Higher Education: Problems, Concerns, Responses, Opportunities, and Possible Innovation

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ABSTRACT

GenAI has brought rapid, multidimensional changes to many domains. However, there are uncertainties regarding the disruptive technology and its ripple effects, particularly in higher education. The purpose of this research is to understand the current approaches and strategies of GenAI in universities. To answer the research question, “What approaches are currently applied to incorporate ChatGPT usage into higher education,” this research conducted twenty interviews with executives, managers, and staff who worked in change and IT/IM capacities at a Canadian university and reviewed GenAI policies and guidelines from 22 Canadian universities. The findings helped identify underexplored areas in the literature and promoted innovative thinking about real problems in higher education and next steps in GenAI adoption.

Keywords: GenAI, higher education, technology adoption, managing changes, policy

INTRODUCTION

GenAI has brought tremendous change to society and everyone’s life at a rapid pace. Chat Generative Pre-Trained Transformer (ChatGPT) is a large language model (LLM) – a machine learning system with advanced natural language processing capabilities, in-context learning that autonomously learns from a massive data set of text, and reinforcement learning from human feedback as well as their relationship – can produce sophisticated writing and interact with users conversationally (Sardana et al., 2023; Van Dis et al., 2023; Wu et al., 2023; Zhu et al., 2023). Introduced in November 2022, ChatGPT has demonstrated the ability to respond to queries, acknowledge errors and misinterpretations, and challenge counterfactual and hypothetical scenarios (Sardana et al., 2023). At the same time, ChatGPT exhibits numerous flaws in information quality and accuracy. For example, when it comes to technical knowledge, such as in health, ChatGPT can provide incorrect information, misaligning with credible literature (Van Dis et al., 2023). The cost of development, including the hardware resources required for significant amounts of data and the carbon emissions from millions of users every day, is high (Wu et al., 2023). For example, it costs approximately USD 12 million to train the basic large

model GPT-3 (Wu et al., 2023). Therefore, many questions arise regarding the inhibitors that prevent GenAI from helping people understand or accomplish tasks.

The controversies surrounding ChatGPT have sparked debates about its impact on academic learning and teaching. This research aims to examine current perspectives on the nature and direction of change in higher education due to GenAI tools. Using a case study, the researcher interviewed 20 participants and reviewed GenAI policies from 22 Canadian universities to address the research question: “What approaches are currently applied to incorporate ChatGPT usage into higher education?”

The following sections are arranged in five parts. The background section provides an overview of the literature on GenAI in education. The methodology section provides details on the case study. The findings include the insights from the interviewees and the policies. The discussion links the literature and the findings from the case study. The conclusion outlines the limitations of this research and identifies directions for future research.

Regarding terminology, the interchangeable usage of ChatGPT, Copilot, and GenAI is not random. This research focuses on ChatGPT, the earliest and most widely used GenAI tool, to understand the phenomenon of GenAI. Some interviewees mentioned Copilot as a tool similar to ChatGPT but more suited to internal use required by institutions. GenAI refers to a variety of tools and the phenomenon of using them. As a case study, this research generalizes the understanding of universities’ approaches and strategies for GenAI tools. Therefore, the interchangeability among ChatGPT, Copilot, and GenAI in this paper is not to be mistaken for conceptual ambiguity. Rather, it is to follow the current trend in the usage of tools: many people use ChatGPT for various reasons; some people use Copilot because of institutional requirements and availability in the professional network; and policies and regulations in universities target GenAI as an entity instead of distinguishing among ChatGPT, Copilot, and other tools. In this way, including both ChatGPT and Copilot helps conceptualize the phenomenon of GenAI, which in turn helps understand how it shapes usage and guidelines for the tools.

BACKGROUND

GenAI, particularly ChatGPT’s capacity to replicate human interactions and language use, marks a significant milestone in the application of natural language in AI. There is no doubt that ChatGPT, as a disruptive innovation, has sparked excitement, controversy, uncertainty, and concern (Sardana et al., 2023; Van Dis et al., 2023; Wu et al., 2023; Zhu et al., 2023). In this case, the questions are not whether ChatGPT affects different industries but how it does so and what types of changes it would bring. After a review of academic literature, industry white papers, and opinion pieces, this section examined ChatGPT in three aspects: 1) the positive sides in its technology and teaching, 2) the negative sides in its information quality and reliability, and 3) the mixed responses with concerns about academic integrity and the future of education.

The Positive Sides of Technology and Teaching

The benefits of ChatGPT are evident in its technical maturity and its potential for teaching. First, the technical maturity of ChatGPT enables it to produce academic essays, draft research papers, polish language in formal writing, summarize literature, perform statistical analysis, and write computer code, with quality that resembles human-written works (Sardana et al., 2023; Siegle, 2023; Tili et al., 2023; Van Dis et al., 2023; Zhu et al., 2023). In education, 24/7 support, explanations of complex concepts, and personalized feedback become possible (Crompton & Burke, 2024). Therefore, the literature has advocated proactive policy formulation to incorporate ChatGPT into curricula, training, and instruction to enhance adaptability and flexibility (Balahadia et al., 2025).

Second, the rapid advancement of ChatGPT or GenAI in general has brought transformative change to education (Kerneža, 2023; Jang & Choi, 2025). The possibilities in a classroom setting are unlimited, including tailored self-directed and inquiry-based learning, the development of teaching/learning materials, process-

oriented teaching and assessment, research, and administrative work (Jang & Choi, 2025). Several studies have examined the changes ChatGPT has brought to teaching. In 2021, Okonkwo and Ade-Ibajola analyzed 53 articles and found that chatbot technology was used primarily in teaching and learning (66%), compared with other areas of education (assessment, administration) (Kerneža, 2023). A qualitative study interviewed physics teachers and found that students could benefit from ChatGPT's detailed explanations of processes/theories/solutions; logical formula development; quoting laws accompanied by solving each problem; immediate feedback; and interactive, query-and-answer interactions with specific examples (Jang & Choi, 2025). Therefore, for educators, ChatGPT offers an opportunity to facilitate learning, particularly for gifted students, by enabling AI-generated content, supporting personalized learning, enhancing technical and problem-solving skills, facilitating collaboration, and enabling independent research (Siegle, 2023).

The Negative Sides of Information Quality and Reliability

The negative side involves ChatGPT's information quality and reliability. In general, the weaknesses of ChatGPT include dependence on the learners' knowledge of the subject to provide targeted questions and probes, inconsistency in responses to the same question, inherent limitations of its learning algorithms to generate entirely novel solutions to problems, and language restraints among different languages (Jang & Choi, 2025).

Specifically, as the original content provider, ChatGPT produces errors, presents misleading information, fabricates references to specific information, and presents false information when the data in the field is limited (Lancaster, 2023; Tlili et al., 2023; Zhu et al., 2023). Moreover, ChatGPT can be contradictory, providing opposite answers to the same questions (Lancaster, 2023; Stojanov, 2023). For example, when three educators initiated a new conversation with ChatGPT, asked the same question from the exact location within the same university network, and received three different responses, ChatGPT demonstrated that it could not be relied upon when seeking information (Tlili et al., 2023). More concerning, users may not always detect inconsistencies in ChatGPT responses, leading them to falsely believe they have received the "truth" (Stojanov, 2023). This was particularly dangerous when ChatGPT may be used to write fake news stories, spread conspiracy theories, and generate ethically questionable responses (Lancaster, 2023). Thus, the quality and limitations of the information/knowledge generated by ChatGPT, as well as its reliability, have become significant concerns (Tlili et al., 2023).

Mixed Responses in Higher Education

There is no doubt that GenAI has catalyzed a new culture of learning and teaching in higher education (Christ-Brendemühl, 2025). The literature has primarily focused on debates over disruptive potential and ethical dilemmas (Christ-Brendemühl, 2025), with universities responding with mixed responses. In response to such disruptions, the University of Hong Kong and the Chinese University of Hong Kong initially prohibited the use of ChatGPT in higher education, but these universities now permit its use with specific guidelines on academic integrity (Huang et al., 2024). McDonald et al. (2024) examined documents from 116 US universities, including policies and procedures, and found that 63% of universities encouraged the use of GenAI. 41% provided detailed guidance for the use of GenAI in the classroom. 56% offered sample syllabi, and 50% provided sample GenAI curricula and activities to help instructors integrate and leverage GenAI in their classrooms. Christ-Brendemühl (2025) analyzed the content of guidelines from 67 German universities on GenAI. This study found that a majority of university guidelines explicitly permitted university lecturers and students to engage with GenAI, as it was important to build AI literacy and prepare students for evolving workforce demands. Noticeably, 56.7% of university guidelines recognized that the opportunities and transformative impact of GenAI on teaching and research outweighed the risks. In addition, the results of a workshop with 25 faculty members highlighted the need for AI-related skills and for early training in students' curricula.

At the same time, GenAI is not explicitly designed for academic use, yet its ability to generate academic text has sparked debates among students about academic integrity when using ChatGPT (Lancaster, 2023). It is a

particularly challenging area in higher education, where students may inappropriately use ChatGPT to complete their work rather than putting in their own effort. This is particularly concerning when universities lack the tools to accurately distinguish between student-generated content and ChatGPT-produced content (Perkins, 2023). Therefore, universities are concerned about students' dependence on and plagiarism stemming from using ChatGPT to complete schoolwork, conduct research, or write exams (Siegle, 2023).

The industry white papers adopt an innovative approach that goes beyond the advantages and limitations of GenAI. The Georgia Tech Center for 21st Century Universities (C21U) white paper emphasized the need to rethink and re-evaluate the concept of authentic and personalized assessment to determine content validity (what to measure) and construct validity (assessment approach) (Lee & Soylu, 2023). The white paper identified culture as the deepest challenge and the most significant opportunity in implementing changes, GenAI acceptance, and adoption (Liu & Bates, 2025). In this sense, rules must extend beyond cultural and regulatory restrictions to enable changes with practical guidelines and consideration of digital divide-related access issues (Liu & Bates, 2025).

Most recently, various opinion pieces have been published regarding GenAI and the future of higher education. One article, "AI is Destroying the University and Learning Itself," identified the central problem in education: "We are approaching educational bankruptcy: degrees without learning, teaching without understanding, institutions without purpose" (Purser, 2025). While cheating has always existed, the view of modern education as a dating service and a chance to party, according to Conservative economist Tyler Cowen, signalled the death of universities' intellectual mission and a shift toward consumption and transactions (Purser, 2025). Instead of addressing the underlying problems in education, universities, such as San Francisco State University, began issuing layoff threats and outsourcing education by charging premium prices for a chatbot that students had already been able to use for free (Purser, 2025).

The Gaps – Real Problems and Data

Divided perceptions of ChatGPT in education have led to calls for academic policies to regulate its use, but there remain gaps in the holistic examination of AI tools in learning, of the potential real problems in the education system, and of the broader environmental and social impacts of ChatGPT on education. There are two notable unanswered questions in the literature: whether regulation is a sound approach for GenAI, and the value and concerns of data.

First, in light of recent literature advocating policy and regulatory support for the use of GenAI in teaching and learning (Christ-Brendemühl, 2025), it would be dangerous to use regulation to suppress ChatGPT, as this would only address the symptoms of the current educational system. The changes in GenAI in education have had profound environmental and social impacts, beyond the micro-lens of academic performance. For example, suppose ChatGPT was perceived as the ultimate knowledge authority and a single source of truth (Cooper, 2023). Moreover, given the significance of education in society, the use of ChatGPT could alter the current educational structure, including by facilitating discipline-specific interventions (Lancaster, 2023). Yet the current recognition of ChatGPT in education has not been linked to the broader social environment beyond the campus. Therefore, it was unclear whether regulating by restricting use was a sound approach for ChatGPT. Most importantly, what is the real problems in higher education?

Second, technology and data have been inseparable and equally crucial components of any technical product, as all types of technologies generate data through human use. Discussing technology without mentioning data is impractical. Yet data are ubiquitous, and their volume and complexity are increasing across boundaries in the age of big data (Russell et al., 2017). With an ever-expanding number of data repositories, accessing useful data became increasingly difficult (Davis, 2010). However, when discussing GenAI, the literature focuses on algorithms without adequately acknowledging the biased and flawed data produced by the social system in the human world.

METHODOLOGY

This research employed a case study method to investigate the integration of ChatGPT into higher education. To understand activities within specific circumstances, a case study examines the complexity of a case or a phenomenon, such as an event, a process, or an institution, in an empirical manner (Merriam, 1988; Stake, 1995; Yin, 2009). This was a suitable approach, as ChatGPT has introduced new phenomena in university teaching and learning.

This research was a single-case study, focusing on the specific instance of ChatGPT in higher education (Swanborn, 2010). A case study requires multiple sources of evidence and data (Yin, 2009). Therefore, this research collected data from two sources: interviews and policy document reviews. The two data sources complement each other – the interview data were collected from a single university to examine the phenomenon of ChatGPT in depth, while policy documents provide a broader picture of responses to ChatGPT in higher education.

First, the research has received ethics approval from the University of Ottawa in November 2023, where the researcher was completing a PhD, to conduct the interviews (S-10-23-9648). The researcher recruited participants and conducted interviews at a Canadian university for a year, until November 2024. The interviewee selection followed three criteria. Interviewees 1) were currently working in a university in Canada; 2) had worked with technology-related change projects; 3) had stories and insights on change project success and failure. There were no restrictions on specific job roles/tasks, faculties, or universities.

The interviewees were recruited through three channels: 1) emails sent to identified potential interviewees, if they are listed on the departmental websites. 2) emails sent to departmental general mailboxes, if there is no information on the IT staff on the internet. 3) snowball sampling by asking interviewees to forward research information to colleagues and staff members. The response rate to emails is high among executives and managers, while staff members are mostly recruited with snowball sampling. The 20 interviewees were deemed sufficient because they yielded a representative sample and provided rich, diverse professional experiences, the details of which are included in the next sections. The recruitment was terminated when the interviewees' responses began to overlap and yielded no novel information, showing data saturation.

All interviewees reviewed the consent form and provided consent prior to the interviews. The researcher conducted 20 semi-structured interviews, including eight executives (decision makers), five managers (change adopters), and seven staff members (users of new technology). The interviewees had 10-30 years of experience in IT-related roles and a variety of career paths. All executives had experience in managing IT needs, overseeing technology governance and technical/policy strategies, and interacting with university leadership to adopt solutions. All managers had experience in leading and managing IT services, operations, and implementation. All staff members had worked in support roles on IT (change) projects, including serving as liaisons between learning and teaching, adapting applications and solutions for education and research, and reporting. A demographic table of the 20 interviewees is in [Appendix A](#).

Twenty interviews were conducted to gather data with two questions:

- What do you think of the changes that ChatGPT bring to higher education? (Prompt: teaching, learning, student usage...)
- What is the potential change direction that your university will take regarding ChatGPT, in your opinion? (Prompt: policy, regulation, usage...)

Second, the policy document review included AI-related policies, guidelines, and frameworks of 22 major Canadian universities. There were two steps in the search. First, Maclean's (2025) survey ranked the top 50 Canadian universities. To obtain a representative sample, this study examined only the first 30 universities. The

researcher further adjusted the list based on provincial coverage. Therefore, Toronto Metropolitan University (formerly Ryerson University), Wilfrid Laurier, Concordia University, and Sherbrooke University were excluded due to the overrepresentation of Ontario and Quebec universities. The University of New Brunswick was included to reflect the inclusion of the province. The complete list of included universities was as follows:

1. University of Toronto
2. University of British Columbia
3. McGill University
4. University of Waterloo
5. McMaster University
6. Université de Montréal
7. Queen's University
8. Simon Fraser University
9. University of Alberta
10. Western University
11. University of Calgary
12. Université Laval
13. York University
14. Dalhousie University
15. University of Victoria
16. University of Ottawa
17. University of Guelph
18. Carleton University
19. University of Manitoba
20. Memorial University
21. University of Saskatchewan
22. University of New Brunswick

The second Google search included the university's name and the GenAI policy. The results included various GenAI policies and guidelines in different schools within the university. The data being collected from both sources were qualitative. To analyze qualitative data, the first author conducted coding independently as a single researcher, under the supervision of the second author. The themes were validated constantly against raw data and the research questions. There were no disagreements between the authors during the coding process. The coding was conducted manually.

The themes are generated through inductive and deductive approaches, employing open coding, axial coding, and selective coding (Krueger et al., 2014; Strauss & Corbin, 1990, as cited in Orlikowski, 1993). First, open

coding enabled the researcher to extract knowledge from the data and to form initial categories (Creswell, 2002). Based on the two questions, the initial categories were developed to capture the broad range of interviewees' views: the first question on ChatGPT's impact on higher education, and the second on universities' change directions. The subcategories for the first question are optimistic, passive, and observant. For the second question, the subcategories include technical changes, strict policy, guidelines, and innovative thinking. The third subcategory was developed from the second data sources, GenAI policies and guidelines in 22 Canadian universities.

Second, axial coding was applied to centre one open coding category and relates other categories to it (Krueger et al., 2014). Such other categories include factors that influence the core phenomenon and the actions taken in response to it in the case study (Krueger et al., 2014). This coding is particularly important to the observant view in the first question and the third subcategory on GenAI policies because it enables further subcategory development in relation to other categories. For the observant view, it is further sub-categorized into irreversible impact, real issues in higher education, and uncertainty, reflecting deeper thinking about the impact on higher education beyond the positive or negative views of technical use. The third subcategory, GenAI Policies and Guidelines in 22 Canadian Universities, was presented as common focuses across universities and distinguishing features, which related to interviewees' views in other categories in both questions.

Third, selective coding, the final stage of coding, enabled the researcher to write reflections and discussions based on the interrelationships among the categories developed through axial coding (Creswell, 2002). Such reflections and discussions were included in the discussion section.

FINDINGS

The findings for each question are presented in the following two sections: ChatGPT's changes to higher education and universities' changes in direction. The third section includes the analysis of GenAI policies and guidelines in 22 Canadian universities.

ChatGPT's Changes to Higher Education

The findings in this section are generated from this question:

- What do you think of the changes that ChatGPT bring to higher education? (Prompt: teaching, learning, student usage...)

There is no doubt that ChatGPT has brought irreversible changes to higher education and will continue to shape the future. One manager mentioned that s/he had no experience with ChatGPT because the university has adopted Copilot. In general, most responses recognized the beneficial changes and the detrimental aspects. To break these responses down, there were three views about ChatGPT/Copilot/GenAI in higher education: optimistic, passive, and observant.

Optimistic

The optimistic views focused on the positive changes that ChatGPT could bring. Such positivity emphasizes ChatGPT's usefulness, its support for teaching and learning in higher education, and its efficiency. First, regarding usefulness, interviewees acknowledged that ChatGPT/Copilot provided a helping hand in many areas, including 1) preparing presentations, summaries, creation of documents, and slides; 2) fast translating from English to French (37 pages in 10 seconds) with 90% accuracy and only missing some cultural reference between institution and organization; 3) reducing redundant tasks, such as checking spelling, grammar, and tone when editing an email and publishing after validating scripts; 4) helping people structure ideas, translate,

and do initial research, risk assessment, and cost-benefit analysis; 5) making a big difference in project management and software development with the assistance of people aspects and audience map. An executive noted that the future looked bright with AI, but higher education was only beginning to scratch the surface. There was enormous potential to make teaching, learning, research, and administrative tasks more efficient with fewer resources.

"I use ChatGPT to translate every day from English to French, 90% perfect. It may miss the cultural reference. For example, use institution, not organization, but ChatGPT doesn't pick on that."
(Interviewee 5, Staff)

Second, a university was about education, so it needed to embrace any tools that helped students learn. This has not been a new concept. For decades, professors have used virtual teaching assistant tools to explain concepts, answer students' questions, and save time. Interviewees have identified key learning enablers, aiming to think from the students' perspectives. ChatGPT could effectively filter out noise, so students did not need to spend hours searching for answers within answers on Google. Instead, students could learn more efficiently, have time for creative thinking, and become better at critically evaluating the qualities of answers.

"AI tools like ChatGPT are revolutionary. It changes everything. It will have a profound impact on higher education, particularly in teaching and learning." (Interviewee 17, Staff)

Third, ChatGPT was efficient at providing relatively high-quality answers, especially in technical fields. For example, it took one-quarter as long to code as it would for humans. It could also respond instantly 24/7. Most importantly, the explanations suited students' educational level, age, environment, and emotions. This level of customization led to a more efficient and effective learning process. In this way, AI tools such as ChatGPT could address students' needs for conceptualizing complex subjects, clarifying difficult concepts, and receiving immediate feedback and explanations.

"AI will be able to respond instantly, at any time of day, with explanations that are perfectly suited to the student's educational level, age, disabilities, and intelligence. This level of customization could lead to a more efficient and effective learning process, making it almost symbiotic between the student and the AI." (Interviewee 17, Staff)

Passive

The passive views focused on ChatGPT's adverse effects on learning and the consequences of cheating and reputation loss in higher education. One staff member noted that universities and professors were doing too much for students, which could lead students to stop thinking for themselves. For example, Engineering students should be able to create specific solutions independently, rather than relying on AI. It's similar to teaching children how to eat, rather than spoon-feeding them all the time. What if AI were down? We cannot rely on technology too much without first understanding its limitations. After all, ChatGPT was not sufficiently reliable to provide high-quality text validation or summarization.

"Teach a person to fish, not fish for the person." (Interviewee 3, Staff)

When students relied entirely on GenAI rather than as a supplement, they might get answers directly from it. More than stopping thinking by themselves, it was cheating. Moreover, a professor needed to teach students to learn independently, rather than relying on ChatGPT or other generative AI to build courses. While it might be acceptable for individuals or enterprises to use ChatGPT for information or problem-solving, this approach should not be applied to education. This was because universities' reputations would suffer if students used ChatGPT to cheat or if professors relied on it to prepare for classes. When universities allowed ChatGPT to bridge learning and teaching with fewer funds, capacity, and resources, educational institutions are no longer merely elite.

*"AI is an amazing tool and I hope to see it evolving, like keep the error rate going down."
(Interviewee 11, Staff)*

Observant

The third view, observant, received the most responses across all interviewee levels. Being observant, interviewees were cautious about taking sides on the technical features of GenAI. Instead, interviewees preferred to understand GenAI's impacts beyond its surface-level technical use and its hidden impact on higher education. Such observations included acknowledging its irreversible impact, recognizing the real issues in higher education, and experiencing uncertainty.

GenAI has made an irreversible impact, so arguing about it is pointless; it's better to acknowledge it and plan for the next steps. The current zest of GenAI has been alarming, according to a staff member. The 40 licenses offered by a university were allocated within 2 minutes due to high demand. Moreover, people were using GenAI regardless. An executive noted that programmers already use GenAI in projects. It was not highly sophisticated, but it could help point programmers in the right direction to solve problems better than Google could. However, this was not a new phenomenon. Google made a similar revolutionary change and irreversible impact in the last century as well. At the time, users required little training to navigate Google, just as they do now when interacting with GenAI.

Admitting Irreversible Impact. To address the irreversible impact, the following steps were taken: to mitigate ungrounded fear, to explore value-adding solutions, and to enhance the detection of wrongdoing. First, it is necessary to reduce the ungrounded fear and examine GenAI rationally. An executive dismissed fears that AI would become students' crutches, noting that AI was only as good as the data it had. Human data would never be perfect, so the fear that AI would be too good and that students would stop learning on their own was unfounded. Moreover, even though it was unlikely that AI would replace professors entirely, as a staff member pointed out, it would eventually take over many aspects of education. However, AI cannot replace the physical and interpersonal interactions that underpin human teaching and learning.

"Academia is afraid that it will be used as a crutch by students." (Interviewee 19, Executive)

Second, after eliminating ungrounded fear, it was necessary to consider various ways to add value with AI. Beyond facilitating communication among people, AI could adapt to the target audience, using the appropriate words, demonstrations, and mechanisms to create a personalized teaching and learning experience. For students, ChatGPT provided detailed explanations of why they made mistakes. Such personalized tutoring and adaptive learning paths would help guide students on their educational journey, with implications that go beyond task assistance. Therefore, traditional training methods for staff to use new technology, such as interfaces, were no longer applicable. It was crucial to explore the value of AI to a new level.

One staff member proposed to generate a rules-based ChatGPT to produce publicly available materials, such as news and bios. Executives proposed 1) to create easy buttons to request ChatGPT to complete admin tasks, such as drafting proposals and letters of introduction; 2) to feed data to ask for data analysis on trends; and 3) to catalyze changes in organizational functions/positions/roles. This was not about job loss, such as answering phones, but being replaced unless we embraced changes and evolved with them.

"Understanding that universities can't push back against AI but embrace it". (Interviewee 20, Executive)

Third, wrongdoing always came with value-adding potential. AI made detecting wrongdoings extremely difficult because students could effectively generate almost anything from ChatGPT. So, it makes it difficult for professors to detect wrongdoing, possibly not a master's thesis, but materials from an early stage of education.

Therefore, plagiarism detection should no longer focus solely on copy-and-paste but should also explore the use of AI to detect changes in style and patterns.

*“ChatGPT brings a fundamental crisis to higher education, and it is not necessarily a bad thing.”
(Interviewee 20, Executive)*

Real Issues in Higher Education. As discussed in the last section, there was no turning back from AI or avoiding using it. At the same time, AI could be an opportunity to help identify the real problems in education beneath the apparent concerns that the status quo has long obscured.

First, issues in education should never be black-and-white. The real problem was the lack of desire to fully understand technologies, use them properly, and recognize their darker sides. This applied to all technologies, including email, Microsoft Office, and the Internet, which were essential to any administration. Using the internet as an example, we conducted everything online, but this did not guarantee that all answers were reliable. It was the same for ChatGPT. Interviewee 7, a manager, noted that AI could answer, but that did not mean it was the correct answer, just as asking someone a question and assuming everything the person said was fact. At the same time, the licensing price for ChatGPT/Copilot has increased to \$150 per user for enterprise customers. Universities were also uncertain about how to regulate their usage, particularly in creative work/arts, as a staff member noted.

“You ask AI something, and it gives you an answer. It doesn’t mean it’s right.” (Interviewee 7, Manager)

Second, the real issue in teaching and learning was not technology but the fear of what was real and what was not, and how to facilitate fundamental cultural change. It was never the case that students used a tool solely for cheating, but there were always students who took shortcuts and committed plagiarism long before the internet was introduced. Therefore, plagiarism was not the real issue. Instead, professors were uncertain about what constituted original student work, what was created in an artificial environment, and what was considered stolen in the traditional sense of plagiarism.

This meant professors needed to rethink their teaching methods, grading processes, and re-evaluation of students’ work. They must also guide students in using and leveraging GenAI, while being mindful of its implications and how to foster improvement. It was no secret that students used it daily, and professors who kept silent out of fear of losing their jobs were groundless. Therefore, professors needed to start seriously thinking in four areas – 1) how to encourage transparent usage of ChatGPT to encourage learning and achieve better learning outcomes; 2) how to relate workplace requirements to use ChatGPT effectively and responsibly, such as people cannot use GenAI to produce a list of made-up court cases and hand to the judge; 3) how to communicate better, so there is always a need for talking to a real human in an AI world; 4) how to measure successful learning, create hands-on practices, and care about students’ experience; and 5) have a voice in the management, governance, and policy implementation of AI to help facilitate the delivery of education to students.

“Professors need to change. They are traditionally resistant to change, but they have to change their ways of teaching now.” (Interviewee 20, Executive)

Third, data were a significant challenge. We did not yet understand the full potential of data in GenAI because we could not directly link data to individuals (e.g. sampling, training...). What was poured into AI training and solutions needed boundaries to distinguish between personal and aggregate data. Moreover, we needed to know how AI used data regarding privacy (personal, financial, and health). Therefore, the central issue with AI data was the lack of a standard due to numerous uncertainties.

“We can’t allow AI to act on its own.” (Interview 18, Manager)

Uncertainty. An executive noted that ChatGPT and GenAI were advancing rapidly across higher education and industry, which was alarming in many respects. There was a lot that we did not understand. A staff member also mentioned that ChatGPT was exciting, scary, and could be present in many places. There were several uncertainties, including research,

A staff member and a manager have voiced uncertainty about how much ChatGPT could contribute to original research because the algorithm could miss racialized people and bring bias. Moreover, a more urgent question was whether ChatGPT would take away individual creative processes. It depended. According to a staff member, this was not the case because we already used search aids, research aids, templates, and pre-existing structures, such as iMovie. So just let the technology do the job. However, the uncertainty came when ChatGPT wrote a film script. Who would take the credit? Who owned the content? How could individuals still be creative? There was no answer yet, so academic experts and researchers needed to lead the exploration and research to understand the disruption.

“ChatGPT is powerful. In education, it can go the opposite direction from what we expect from students.” (Interviewee 3, Staff)

The way of teaching would change, but what the future holds remains uncertain. How good could teaching get with the help of GenAI? Could we use GenAI to build tools to enhance teaching? What is the increased capacity of integrating things to connect the dots? Is the basic programming language still being taught, or can GenAI do it quickly? How do professors teach students to detect wrong answers from ChatGPT and learn from finding the correct answers? Can ChatGPT help reduce errors in the news and teaching materials? The same goes for learning – the role of AI in student learning could evolve in ways we cannot yet fully predict.

To understand these uncertainties, higher education has started discussions at various levels. The university has now issued guidelines for students and faculty, including guidance on the use of AI and large language models. Open dialogue with students was key to creating the right environment, rather than being dazzled by vendors into moving in the wrong direction or trying to push it back. Executives emphasized that GenAI is here to stay; therefore, we must understand it, define it clearly, govern it effectively, and mitigate risks to ensure that students can use it appropriately and enhance learning. After all, uncertainties can bring problems but also many opportunities.

“Just like Spider-Man, for a university, great power comes with great responsibility.” (Interviewee 3, Staff)

ChatGPT and Universities’ Changes in Direction

The findings from this section are generated from this interview question:

- What is the potential change direction that your university will take regarding ChatGPT, in your opinion? (Prompt: policy, regulation, usage...)

When change was inevitable, higher education needed to embrace it. Although not everyone would embrace them, higher education would have no choice, as a staff member pointed out, given that the rest of the world has been using GenAI. It should be noted that change goals and needs differed between public institutions and private companies, with the primary consideration being cost reduction and process streamlining. AI tools require management and governance in higher education, and various discussions on AI policies, regulations, and appropriate usage are underway. Although the direction was uncertain, interviewees expressed four possible directions: technical changes, strict policies, guidelines, and innovative thinking.

Technical Changes

It was natural to utilize technical advancements in response to the evolving landscape of AI. Some universities have been exploring ways to let ChatGPT write business proposals and reports in the background. Instead of ChatGPT, some universities used Copilot because of their existing contractual agreements with Microsoft. It ensured that data did not leave the universities; however, the technical limitations were disappointing compared to ChatGPT. Some universities have already implemented Copilot in MS Office applications or integrated it into MS Edge. Although there were many expectations, such as the availability of Copilot tools for various roles (programmers, security...), the direction of technical changes remained unclear.

“In the future, we’ll likely have Copilot tools for different staff roles, including programmers and security teams.” (Interviewee 17, Staff)

Strict Policy

Policy has been a perpetual instrument in responding to changes in higher education. Some interviewees suggested that current policy/regulations actions should focus on rule-based changes (can use or cannot use), including 1) not using computers during exams or in the classroom in some (European) universities; 2) not allowing students to create homework or thesis with GenAI to prevent plagiarism, especially in life-or-death businesses, such as medicine; 3) network control, such as blocking ChatGPT on campus and may only allow Copilot; 4) creating strict punishing mechanism, such a disqualification, for offenders; 5) openness and better information management to avoid losing control of data.

Interviewees proposed that policy drafting needed to 1) engage the industrial partners to start pilot programs to understand AI platforms and concepts better in order to make concrete policies; 2) engage teaching and learning support to meet the needs across campus as a university-wide engagement instead of faculty-based initiatives; 3) require educators to understand AI, be skeptical, and be able to contribute to the detection of irresponsible ways of using of ChatGPT and changes in student evaluation in policies; and 4) strengthen the role of the ethics board to ensure genuine research proposals.

The problem with policy measures was how to administer them, as a manager pointed out. Academic integrity and its violations have always been present; while some individuals took responsibility, others did not. Therefore, responsibility for administering the policy needed to be assigned. Another problem was the slow policy change when “the next big thing” arrived, as a staff member mentioned, and the following slow changes in administrative activities once the policy changed.

“Policy is important. It needs to be governed appropriately at different levels.” (Interviewee 2, Manager)

Guideline

A guideline should apply to a range of community audiences, including students, researchers, and employees. Therefore, an advisory committee with diverse representation, particularly professors, should be established, as a manager explained. Suggestions of the guideline stances focused on 1) recommendations on what to use (to search and as a muse) and what not to use (no copy and paste or plagiarism), just like teaching how to use the internet; 2) explanations on the discrepancies because people would not get the same answer with the same query; 3) clear guidance on how to use ChatGPT, how to ask questions, and how to reference it, without long sentences on data gap or theories or any confusions; 4) preserving cognitive and commutative skills without sacrifice essential intellectual abilities, such as using correct grammar, while quickening research processes. It should be noted that the guidelines and actual usage differed, as an executive pointed out. Moreover, technology moved too fast, so guidelines needed to be prepared for new understandings, expanded, and continually adapted to new disruptions.

“The AI tools are there already. Universities can’t restrain or control the use of them. They can only recommend or guide on best practices.” (Interviewee 13, Executive)

Innovative Thinking

The entire AI world has been causing changes, and ChatGPT has just been the tip of the iceberg. Exploring AI and related changes needed innovative thinking. One staff member mentioned that guidelines should focus on encouraging the usage of ChatGPT rather than limiting it. To enhance learning outcomes and quality, universities should encourage students to use ChatGPT in projects, thereby reducing coding errors, increasing work efficiency, and improving quality, thereby freeing staff time for administrative work. For example, institutions should encourage 20% time for learning and using ChatGPT/Copilot to develop initial drafts of code, summaries, or translations. Then staff members could go through it. This approach not only provided staff with a ready draft to work on but also reduced fears of job displacement by AI, as it helped them understand how AI would change job functions. After all, AI would assist people in their work tasks and eventually replace certain functions/positions altogether.

Change direction should not focus solely on the technical side, but also on the ripple effects, including ongoing costs, legal aspects, and data storage. Therefore, a change of direction is needed to adopt a cost/record/system perspective for executives and management to make their environments and businesses more efficient for AI, or it would be costly (licensing, not salary reductions) in the long run. This was not about starting from scratch, but about improving processes and operations in a different world. Staff members needed to be involved in implementing changes and to consider practical challenges, including those related to bilingualism and privacy. A manager emphasized that AI brought a significant shift in education, which had remained unchanged for far too long. It was time to move beyond small-scale thinking and ask the right questions, ensuring that higher education retains its focus on the big picture instead of compromising opportunities.

“There has to be a shift in education. Education has stayed the same for far too long. There has to be a shift. Something’s going to change. Kids don’t learn the same way as I did in my own. You’re going to need to use AI to help you.” (Interviewee 18, Manager)

GenAI Policies and Guidelines in 22 Canadian Universities

Policies and guidelines from 22 Canadian universities were examined and analyzed. A summary of the key elements, summaries, and links to GenAI policies and guidelines at these universities is included in **Appendix B**. This section had two parts. Given the similar focus and distinctive features across the 22 universities, the first part examined their commonalities. This provided a pattern of policy focus and guideline principles. The second part focused on the distinguishing features and overall directions among these universities, showing that the pattern of differences lay in approaches, coverage, and direction, rather than in the contents demonstrated in the first part. This section used one direct quote in each commonality and difference. Additional direct quotes are available in **Appendix B**.

Common Focuses Across Universities

Across all 22 universities, there was a pattern of guiding responsible use (transparency, instructor, operations), voicing cautions (integrity, ethics, privacy, and security), and promoting literacy. Academic integrity was a repeated theme and focus for all universities. Responsible, ethical, and secure usage was the core of policies and guidelines for students, instructors, and administrators. Moreover, there was a relatively high degree of autonomy and discretion in facilitating innovation and learning. Specifically, the common focus areas are listed below.

- Academic Integrity: Emphasis on citing GenAI tools, ensuring AI use does not constitute cheating and plagiarism, and treating unauthorized use as academic misconduct. Research ethics is critical in graduate studies and thesis work.
 - *“By failing to comply with the instructor’s specific instructions that you not use generative AI tools in writing your term paper, you have knowingly used an unauthorized aid in preparing your assignment.”* (University of Toronto)
- Transparency and Disclosure: Required disclosure of GenAI use in research, theses, and assignments.
 - *“GenAI tools can have the potential to enrich learning, for example by supporting idea generation, studying, or writing – with proper acknowledgement.”* (University of British Columbia)
- Ethical Use: Promotion of responsible and human-centred use of GenAI. Emphasis on fairness, bias mitigation, and responsible behaviour.
 - *“Regularly delete stored AI conversations where possible to minimize data retention risks.”* (University of Waterloo)
- Instructor Autonomy: Instructors define whether GenAI is allowed and how GenAI can be used in their courses.
 - *“Instructors must be explicit in course outlines about the expectations for use of generative AI tools and may set limits on their use in assessment tasks.”* (McGill University)
- Operational Use: Guidelines for administrative and institutional applications.
 - *“Tools to detect text or other outputs produced by GenAI are not reliable. False accusations can be devastating. No detection tool has been approved for use at the University of Saskatchewan. USask continues to monitor and assess detection strategies.”* (University of Saskatchewan)
- Privacy and Data Security: Caution against inputting sensitive data into GenAI tools.
 - *“Do not share documents that contain sensitive or personal information, such as academic records, financial data, student results, and research data.”* (Université Laval)
- Tool Literacy: Provision of training and resources to improve GenAI literacy.
 - *“GenAI literacy refers to understanding and effectively using GenAI tools and technologies. It does not mean you must adopt GenAI, but rather that your approach should be informed and in line with your own needs and values.”* (York University)

Distinguishing Features

Even though there were similarities in AI policies and guidelines, Canadian universities showed different approaches, coverage, and directions regarding GenAI policies and guidelines. This was understandable, as each university had its own way of developing policies and guidelines based on its understanding and determined priorities for GenAI. These differences did not conflict with the common focuses among universities.

- Different universities took different approaches to AI policies. For example, the University of Toronto integrated policies across research, teaching, and operations. The University of British Columbia broke down AI guidelines into principles, teaching and learning, and academic integrity. Some universities, such as the Université de Montréal and the University of Manitoba, gave faculty members the freedom to set their own guidelines.
 - *“Keep in mind that asking or requiring your students to access these tools is complicated by the fact that genAI tools have not been vetted by the University of Manitoba for privacy or security.”* (University of Manitoba)
- There was various coverage in each university. For example, the University of Ottawa’s policy was among the most detailed in Canada, addressing both the technical and ethical dimensions of GenAI. It promoted a balanced approach to innovation and risk, with a strong emphasis on privacy, fairness, and institutional accountability. The University of Calgary had detailed rules for graduate students in research and writing.

- “The University recognizes the need to define its risk tolerance for the use of AI. A balanced approach will be adopted, considering both the potential benefits and the associated risks. AI systems that could potentially affect safety, fundamental rights, or introduce significant ethical issues will be considered high risk.” (University of Ottawa)
- Different universities showed quite distinguished directions. For example, Queen's University took a prohibition-by-default approach, whereas the University of Guelph required written approval from a supervisor for the use of GenAI in graduate research. By contrast, the University of Calgary encouraged a responsible, balanced use of AI as a supplement rather than a replacement, guiding graduate students to use GenAI for application writing. Some universities encouraged the use of Copilot as an institutionally supported tool for safeguards, such as at McMaster University and Université Laval.
 - “In graduate studies, GenAI technology should be used to enhance rather than replace human creativity and judgement.” (University of Calgary)

DISCUSSION

This research has answered the research question “What approaches are currently applied to incorporate ChatGPT usage into higher education?” in two areas: identifying current strategies to target ChatGPT in higher education and methods to enhance the success of ChatGPT implementation.

Strategies to Target ChatGPT in Higher Education

The interview findings provided valuable additions to the literature, which was still in its early stages of research. It should be noted that, although higher education was the focus of both the literature review and the interviews, the literature review adopted a more general approach to GenAI and related technologies. In contrast, the interviews conducted in universities demonstrate a more focused approach to higher education. **Table 1** summarizes the findings from the literature, interviews, and policy reviews.

Both the literature and the interviews demonstrated general sentiments, considerations, and mixed responses, even though the target levels (general or higher education) varied. The GenAI policies and guidelines addressed those considerations and provided general guiding principles to promote the responsible use of GenAI, reflecting the interviewees’ views of ChatGPT and acknowledging its irreversible impact. The findings also indicated that, although strategies to target ChatGPT in higher education existed, no specific strategy had yet been implemented. This is unsurprising, as traditional planning for technology adoption is no longer applicable to GenAI, which arrives in a disruptive manner and lacks a lifecycle.

In other words, it evolves faster than organizations can plan for, and users have already begun using it without requiring organizations to implement it.

Table 1. Actions and responses towards ChatGPT in universities from the literature, the interviews, and the policy review

	Literature		Interviews
Positive	Technical maturity, opportunities for teaching, and business opportunities	Optimistic	Usefulness, enablement of teaching and learning in higher education, and efficiency.
Negative	Information quality and reliability	Passive	Adverse effects on learning and the consequences of cheating and reputation loss in higher education
Mixed	Disruptive potentials and ethical dilemma.	Observant	Admit its irreversible impact, understand the real issues in higher education, and feel uncertainty.
Responses: GenAI Policies and Guidelines in 22 Canadian Universities			
Academic Integrity, Transparency and Disclosure, Ethical Use, Instructor Autonomy, Operational Use, Privacy and Data Security, Tool Literacy			

Therefore, to effectively manage changes like ChatGPT, it is crucial to understand the new realities and requirements of technology and its impacts on higher education. Nevertheless, policies and guidelines are already in place, despite the availability of strategies to understand the role of GenAI in higher education. A review of GenAI policies and guidelines from 22 Canadian universities found that universities are applying a mix of policy, guideline, and technical changes, identified in the interviews, but not innovative thinking. To be specific, the 22 Canadian universities did not apply a strict policy; rather, they used a policy format and language to guide responsible and ethical use of GenAI. Technical changes regarding information and data security are acknowledged. However, these are merely responding to what interviewees have predicted. No policy or guideline has indicated a willingness to leverage GenAI to understand real problems in higher education and to use such innovative thinking to drive real innovation in university teaching and learning.

“It no longer makes sense to state expectations to be 'NO GENAI USE' because the technology is now embedded in both new and pre-existing tools and increasingly difficult to avoid.” (University of Saskatchewan)

Each university exhibited distinct characteristics in its GenAI policy direction. These documents reflected two key trends: awareness and responsibility.

First, universities are aware of the changes that GenAI brings and are preparing for ongoing responses across their various capacities. Across 22 universities, GenAI policies and guidelines demonstrated broad policy convergence with the consensus on foundational GenAI principles in higher education. Some universities have established task forces and training modules to better position themselves to adapt.

Second, universities have been aware of the complex responsibilities and requirements regarding GenAI. For example, regarding equity and access, some explored GenAI’s potential for inclusive learning. However, given the nature of education and research, there is no single standard to ensure absolute equity in the use of GenAI across various learning, teaching, and research purposes. At the same time, GenAI intersects with other complex digital domains, including privacy and security. Therefore, responsibilities for ethical use are tied to risk management, which involves mitigating risks for and by each user.

What was lacking in these policies and guidelines could be considered the next steps for higher education to better adapt to the new realities of teaching and learning collaboratively. One notable observation was the absence of a unified framework in higher education, nor within individual universities. In other words, while the coverage of GenAI policies and guidelines was wide, there has been no collaboration among faculties within or across universities. Such a lack of cooperation could hinder the sharing of sound practices and the aggregation-based evaluation of impact. More importantly, a lack of cooperation can hinder the understanding of real issues in higher education, as interviewees voiced. Innovative thinking, identified in the interviews, cannot be realized without cooperation and an understanding of real issues. This point is included in the last section on future research.

Enhance the Success of ChatGPT Implementation

Facing such a disruptive technology, with no strategies and no way of planning in place, it seems unanswerable how to enhance the success of ChatGPT change implementation. As discussed in the background section, the gaps identified in the literature concern the dangers of simply using regulation to suppress ChatGPT and to obscure the real problems in the current educational system, as well as the value of data, concerns, and complexity.

The interviewees have acknowledged all these gaps to various degrees. For the first gap, the need for understanding GenAI first and its absence have been recurring themes in both the literature and the interviews. One danger the interviewees identified was the enforcement and governance of regulations or policies. This was a valid concern, as ChatGPT has become a part of students’ activities and outpaced the development of

policy or regulation. Another concern about suppressing ChatGPT in higher education was that it might mask underlying problems. Interviewees identified real problems, such as a lack of interest in understanding technology and a fear of facilitating fundamental cultural change in universities. Innovative thinking, such as encouraging the use of ChatGPT, was mentioned in the literature and in interviews. However, this is not a new issue. ChatGPT is facing the same technical issue as past technologies – is it a suitable innovation for an organization? For example, in the public sector, such as education, when culture and process changes are complex and nearly impossible to implement, could ChatGPT act as a catalyst or another doomed change failure when regulations are used to protect the status quo?

Such innovative thinking was relevant to data, the second gap in the literature. The interviewees recognized issues related to data management, including the need to plan data life cycles, metadata schemas, and data ownership, integrity, and management. Regarding GenAI, data security was the primary reason universities selected Microsoft Copilot, although interviewees acknowledged that the function was not comparable to ChatGPT. However, the real problem is that there is insufficient discussion of data and its quality within organizations, or of the feasibility of applying GenAI solutions when data are scarce or of low quality. In this sense, it is premature to discuss algorithmic bias before examining the data sources used for AI training. Therefore, it is necessary to explore the data underlying GenAI as a distinct topic to demystify its challenges and considerations.

CONCLUSION, LIMITATION, AND FUTURE RESEARCH

This research has answered the research question “What approaches are currently applied to incorporate ChatGPT into higher education?” Through a literature review, policy review, and interviews in higher education, this research has systematically examined GenAI in higher education while addressing key issues in education amid numerous uncertainties.

Nevertheless, a limitation of this research is the many unanswered questions. For example, what does successful change in technology adoption look like in the age of GenAI? This is due to the many unknowns about the ripple effects of the changes that GenAI brings and its rapid evolution. For example, the interviewees offered many insightful ideas and comments, but there was insufficient in-depth discussion. It is normal, given the time constraints of one-hour interviews, the inherent complexities and uncertainties surrounding change, and the scarcity of successful change. The death of the Artificial Intelligence and Data Act (AIDA), the AI legislation that did not pass the House of Commons (Attard-Frost, 2025), illustrates the unreadiness of regulations and how uncertainties about AI hinder responses to change.

For future research, academia and industry need to form a new partnership to share knowledge, apply the findings from this research to practice, and further develop sound practices. This conclusion is drawn from the Discussion section. - while faculties developed tailored AI policies and guidelines to meet the needs of their distinguished domains, it was necessary to initiate nationwide academic networks to move to more integrated policy making, interdisciplinary GenAI exploration, horizontal co-curricular programs by domains instead of by institutions, and sound practices and results sharing to evaluate impact and achieve ongoing learning and evolution to respond to the ever-changing nature of GenAI in the digital age. Moreover, the traditional academic study of specific issues that do not integrate interdisciplinary knowledge and ideas is no longer applicable to the new realities of rapid evolution and the multifaceted ripple effects of GenAI. Therefore, future research should not only be subject-oriented but also consider the shifts in culture within current academic research and its relations with industry.

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Appendix A. Demographic Table of the 20 Interviewees

This table includes high-level demographic information to maintain interviewees' anonymity. First, the table only includes the information that is not relatively unique to the interviewee. For example, if an executive was in the current role for only a year, the year spent working in the domain were included. Similarly, if a staff member has worked in the domain for more than 40 years, their years of experience would exceed 20 years in the university sector. Second, the table excludes traditionally accepted demographic information, such as gender and workplace department. In this way, the table does not help identify any interviewee, such as a female executive with one year of experience in the current faculty role, even though the university is not listed.

Interviewee #	Rank	Years of Experience in the current role/domain/sector	Current role/domain/sector (university)
1	Executive	>10 in the current role	IT needs and interaction with the leadership
2	Manager	>30 in the domain	IT services
3	Staff	>20 in the domain	IT systems
4	Executive	>20 in the domain	Technology development, governance, and change
5	Staff	>10 in the domain	IT support
6	Staff	>25 in the domain	Learning and teaching with technologies
7	Manager	>20 in the sector	IT project management and services
8	Manager	>20 in the sector	IT management and support
9	Executive	>15 in the domain	Architecture and project management
10	Staff	>30 in the domain	Programming and IT infrastructure
11	Staff	>10 in the domain	Programming and information management
12	Staff	>15 in the sector	Information management and technology application
13	Executive	>10 in the sector	Software and IT solutions
14	Executive	>20 in the domain	IT applications and advancement
15	Executive	>10 in the domain	Software architect and IT management
16	Manager	>10 in the sector	Technology implementation
17	Staff	>20 in the sector	Web applications and service streamlining
18	Manager	>15 in the current role	IT infrastructure and software/system implementation
19	Executive	>30 in the sector	IT strategy and governance
20	Executive	>20 in the domain	IT infrastructure and operations

Appendix B. Key Elements, Summaries, and Links to AI Policies/Guidelines of 22 Canadian Universities

The 22 universities are listed as below:

1. University of Toronto
2. University of British Columbia
3. McGill University
4. University of Waterloo
5. McMaster University
6. Université de Montréal
7. Queen's University
8. Simon Fraser University
9. University of Alberta
10. Western University
11. University of Calgary
12. Université Laval
13. York University
14. Dalhousie University
15. University of Victoria
16. University of Ottawa
17. University of Guelph
18. Carleton University
19. University of Manitoba
20. Memorial University
21. University of Saskatchewan
22. University of New Brunswick

University of Toronto	
Key Elements	Academic integrity, AI task force, teaching & learning, research & citation, security & ethics, responsible use, marketing & communications
Summary	Principles: Emphasizes safety, security, academic integrity, and responsible use. Developed a strategic vision for AI integration. Scope: Applies to students, faculty, and staff across all campuses. Focus Areas: Research enhancement, student success, and operational efficiency. Strategic integration of GenAI across research, teaching, and operations; evolving guidelines; co-curricular engagement.
Policy/Guideline Link (sample)	https://ai.utoronto.ca/guidelines/

University of British Columbia

Key Elements & Coverage	Teaching & learning Advisory Subcommittee, graduate education, administrative use, academic integrity, ethical use, human interaction
Summary	Documents: Includes Principles for Use and Teaching & Learning (downloadable) Guidelines. Focus: Academic integrity, balancing AI with human interaction, and responsible and ethical use in teaching and learning. Audience: Faculty, staff, and students
Policy/Guideline Link (sample)	https://genai.ubc.ca/guidance/

McGill University	
Key Elements & Coverage	Digital standards, research, teaching & learning, graduate studies, tools
Summary	Tailored for graduate research. Focuses on research – ethical and transparent use of GenAI. Emphasizes transparency, authorship, ethical considerations, and responsible use. Acknowledges the limitations of GenAI tools and the importance of students to avoid overreliance, especially in scholarly writing and data interpretation.
Policy/Guideline Link (sample)	principles_on_generative_ai_in_teaching_and_learning_at_mcgill.pdf

University of Waterloo	
Key Elements & Coverage	General policy, responsible use, alignment with federal/provincial frameworks, and tool-specific guidance
Summary	Ethical and secure use of GenAI tools and detailed tool guidance. General Policy: Existing university policies apply to AI use. Responsible Use: Aligns with federal and provincial AI ethics frameworks. Key Principles: Fairness, accountability, transparency, security, and human-centric design. Tool Use: Cautions against using unlicensed GenAI tools with university data
Policy/Guideline Link (sample)	https://uwaterloo.ca/information-systems-technology/about/policies-standards-and-guidelines/guidance-artificial-intelligence-use

McMaster University	
Key Elements & Coverage	Teaching & learning, research, operational and responsible use, advisory committees, academic integrity, privacy, transparency,
Summary	Research: Emphasizes transparency, documentation, and ethical use during the whole research lifecycle—preparation, execution, and dissemination. Use of GenAI requires explicit approval in graduate research. Teaching & Learning: Task force established to guide AI integration in pedagogy. Encourages faculty to define GenAI expectations in syllabi. Encourages use of institutionally supported tools (e.g., Microsoft Copilot). Supporting innovation through institutional tools and faculty development.
Policy/Guideline Link (sample)	https://provost.mcmaster.ca/generative-artificial-intelligence-2/provisional-guidelines-on-the-use-of-generative-ai-in-research/

Université de Montréal	
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Key Elements & Coverage	Applies to graduate students and supervisors, requires transparency and explicit approval for GenAI use in theses and research, warns against plagiarism and misuse of confidential data, and emphasizes academic integrity, data privacy, and intellectual property.
Summary	Rigorous and research-focused, the policy mandates full disclosure of GenAI use, encourages critical evaluation of AI-generated content, prohibits unauthorized use, and highlights the risks of bias, misinformation, and ethical breaches.
Policy/Guideline Link (sample)	Utilisation_IA_Memoire_et_these_Octobre2024.pdf

Queen's University	
Key Elements & Coverage	Prohibited by default, academic integrity, research ethics, and transparency
Summary	A cautious and ethics-driven approach, the default stance is prohibition unless explicitly permitted in course materials. Emphasizes academic integrity, contract cheating, research ethics, as well as the risks of misinformation, bias, and academic misconduct. Warns against overreliance on LLMs due to their unreliability and lack of transparency. Promotes responsible innovation through guiding principles.
Policy/Guideline Link (sample)	https://www.queensu.ca/politics/about/policy-use-artificial-intelligence

Simon Fraser University	
Key Elements & Coverage	Academic integrity, responsible use, and transparency
Summary	Slowly responding to AI, the university focuses more on strategy and guidelines than policy. Regarding students' use, expectations of not engaging in deception in academic work and resources on ChatGPT citation are provided. Regarding teaching, there are guidelines for both instructors and unit leaders.
Policy/Guideline Link (sample)	https://www.sfu.ca/students/enrolment-services/academic-integrity/using-generative-ai.html

University of Alberta	
Key Elements & Coverage	Emphasizes clarity, academic integrity, adaptability, training, and responsible use.
Summary	Supports a decentralized approach, empowering departments and instructors to set clear expectations, and fosters a culture of collaborative development and transparency around GenAI use between faculty and students.
Policy/Guideline Link (sample)	https://www.ualberta.ca/en/artificial-intelligence/index.html

Western University	
Key Elements & Coverage	Experiment responsibly, safely, and ethically with five principles: transparency, accountability, integrity, privacy, and inclusion.
Summary	Promotes responsible innovation with GenAI. It supports academic freedom while reinforcing institutional policies, academic integrity, and ethical standards. Encourages ethical and accountable use of GenAI across teaching, research, and administration. Instructors have autonomy in integrating AI into courses. Students must follow course-specific rules and act with honesty and transparency.

Policy/Guideline Link (sample)	https://ai.uwo.ca/Guidance/index.html
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University of Calgary	
Key Elements & Coverage	Responsible use of GenAI in graduate studies, emphasis on enhancing human creativity (not replacing it), risks of overreliance, bias, and IP/privacy violations, and encourages transparency, accountability, and ethical use while maintaining academic integrity and research quality.
Summary	Focuses on ethical and effective use of GenAI in graduate research and writing, discourages overreliance on GenAI to preserve critical thinking and writing skills, promotes transparency, originality, and ethical considerations, warns against using GenAI detection tools due to reliability and privacy concerns, highlights the evolving nature of GenAI policy and the importance of program-specific guidance, and emphasizes transparency, authorship, privacy, and data security.
Policy/Guideline Link (sample)	https://grad.ucalgary.ca/current-students/important-resources-and-supports/graduate-ai-guidelines

Université Laval	
Key Elements & Coverage	Ethical, secure, and responsible GenAI use across teaching, research, and administration with structured guidance for integrating GenAI into all aspects of academic life.
Summary	Comprehensive and values-driven, the policy supports GenAI use while safeguarding privacy and academic standards. It emphasizes academic integrity, privacy, transparency, and IP protection. Laval also provides Microsoft Copilot access with institutional safeguards and tailored resources for students, faculty, and administrative staff.
Policy/Guideline Link (sample)	https://www.ulaval.ca/technologies-de-linformation/systemes-dintelligence-artificielle-generative

York University	
Key Elements & Coverage	Citation of Gen AI tools required, instructor discretion, student responsibility, and ethical use.
Summary	Flexible yet firm in upholding integrity, York promotes digital literacy through resources on GenAI bias, ethical awareness surrounding GenAI tools, and transparency. It emphasizes that GenAI use must be documented and cited. It empowers instructors to set boundaries and expects students to act transparently and responsibly in clarifying course-specific rules.
Policy/Guideline Link (sample)	https://www.yorku.ca/teachingandlearning/gen-ai/for-students/

Dalhousie University	
Key Elements & Coverage	Guiding principles for course delivery and academic integrity, as well as faculty-specific integration into syllabi and pedagogy.
Summary	Supports thoughtful integration of GenAI into teaching while maintaining academic standards, emphasizes faculty autonomy, ethical use, and ongoing adaptation to evolving technologies, and includes resources, webinars, and Q&A sessions.
Policy/Guideline Link (sample)	https://dal.ca/libguides.com/genai/dal

University of Victoria	
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Key Elements & Coverage	Promotes thoughtful integration of GenAI, balancing innovation with academic integrity. Supports instructor autonomy, student education, and ethical use, while warning of GenAI's limitations.
Summary	Embraces responsible and ethical use of GenAI in teaching and research. Instructors decide whether GenAI is allowed in their courses; syllabus templates are provided. Students must cite GenAI use and include prompts if required. Does not allow GenAI for grading and discourages reliance on AI detection tools.
Policy/Guideline Link (sample)	https://teachanywhere.uvic.ca/academic-integrity/genai-position-statement/

University of Ottawa	
Key Elements & Coverage	Security, privacy, fairness, transparency, accountability, reliability, risk assessment, data protection, and responsible use. Discourages entering confidential data into GenAI tools.
Summary	A comprehensive framework for evaluating and deploying AI tools focusing on secure and ethical use of GenAI, with a strong emphasis on data privacy, bias mitigation, accountability, and risk assessment. Encourages departments to define AI use in context-specific ways.
Policy/Guideline Link (sample)	https://www.uottawa.ca/about-us/information-technology/it-artificial-intelligence/Cybersecurity-AI-guidelines

University of Guelph	
Key Elements & Coverage	Research-focused, supports responsible use and accessibility, and bias awareness.
Summary	Detailed and research-focused, Guelph emphasizes accessibility, academic integrity, and disciplinary norms. It supports responsible use while requiring transparency and advisor oversight. Graduate students must obtain explicit approval for GenAI use and document the usage in research and writing. While acknowledging GenAI's potential to support accessibility and learning equity, it warns of bias and misuse of AI-generated content.
Policy/Guideline Link (sample)	https://graduatestudies.uoguelph.ca/generative-ai

Carleton University	
Key Elements & Coverage	Highly pedagogical, offering practical tools for instructors. Emphasizes transparency, academic integrity, authorship, ethical concerns, student support, and the evolving best practices for AI in education.
Summary	Encourages pedagogical innovation and thoughtful integration of GenAI into teaching and assessment. Encourages instructors to define AI expectations. Provides syllabus language, academic integrity examples, and ethical considerations. Discourages reliance on AI detection tools.
Policy/Guideline Link (sample)	https://carleton.ca/ai/instructors/academic-integrity/

University of Manitoba	
Key Elements & Coverage	Emphasizes instructor discretion, academic integrity, and privacy.
Summary	Cautionary and student-focused, the use of GenAI must be explicitly permitted by instructors. The university provides syllabus statements, assessment design tips, and practical tools for managing GenAI in coursework and assessments. It warns against the risks of privacy and bias and discourages the use of AI-detection tools due to concerns about reliability.

Policy/Guideline Link (sample)	https://umanitoba.ca/centre-advancement-teaching-learning/integrity/artificial-intelligence
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Memorial University	
Key Elements & Coverage	Strict on academic misconduct and emphasizes transparency, privacy, and ethical responsibility. Encourages education on GenAI's risks and benefits and provides institutional support for responsible use.
Summary	Unauthorized GenAI use is an academic offence. Students must seek instructors' permission and cite AI-generated content. Memorial emphasizes data privacy, intellectual property, bias awareness, ethical use, and training.
Policy/Guideline Link (sample)	https://www.library.mun.ca/researchtools/guides/integrity/ai/

University of Saskatchewan	
Key Elements & Coverage	A robust, multi-layered approach to GenAI that emphasizes transparency, academic integrity, and ethical research practices. Students are expected to understand the risks of bias and IP violations and to use GenAI tools responsibly with proper disclosure.
Summary	Promoting transparency and ethical GenAI use in research and coursework, there is an emphasis on academic integrity, supervisor approval, and responsible tool use. Instructors define GenAI use in syllabi. Students must follow course-specific rules. Unauthorized use or failure to cite GenAI constitutes academic misconduct.
Policy/Guideline Link (sample)	https://academic-integrity.usask.ca/gen-ai.php

University of New Brunswick	
Key Elements & Coverage	Allows decentralized GenAI policy enforcement, supports ethical use in research, and maintains strict academic integrity standards.
Summary	A decentralized approach that allows instructors to decide whether GenAI tools are permitted in their courses. It maintains a strict stance on academic integrity regarding GenAI-related misconduct, including plagiarism and cheating. Encourages AI literacy and responsible integration into academic workflows by offering resources for ethical AI use in research and publishing contexts, including grant writing and peer review.
Policy/Guideline Link (sample)	https://lib.unb.ca/guides/artificial-intelligence-ai-graduate-students-and-researchers

Sample direct quotes:**Academic Integrity:**

- “Using AI tools to generate content for assignments and presenting it as one’s own original work, as well as copying or paraphrasing the content produced by AI tools without proper citations and the instructor’s consent, are both considered to be in violation of academic integrity.” (Carleton University)
- “It is an academic offence at Memorial University to submit work created through the unauthorized use of generative artificial intelligence (GAI) tools and present it as your own original work.” (Memorial University)

Transparency and Disclosure:

- “Since norms regarding the use of generative AI technologies vary across academic disciplines, graduate students who plan to use generative AI tools in researching or writing, including the completion of the Qualifying Examination, must seek unambiguous approval for planned uses in advance from their advisor(s) and advisory committee. Approvals must be documented and adhere to departmental and/or field-specific policies where they exist.” (University of Guelph)
- “Using AI uncritically, or without acknowledgement can result in problems with research integrity.” (University of New Brunswick)

Ethical Use:

- “We recognize potential concerns associated with the use of GAITs, including potential biases in the algorithms and the possibility that GenAI might be used in ways that violate academic integrity principles and intellectual property rights. Faculty and instructors are best positioned to make decisions about the use of GAITs in their courses.” (University of Victoria)

Instructor Autonomy:

- “You must clearly indicate on your course syllabus whether the use of generative artificial intelligence tools are acceptable, permitted in specific situations, or unacceptable in your courses. This sets clear expectations for your students.” (Western University)

Operational Use:

- “AI tools have the potential to improve efficiency and enrich experiences in teaching, research, student life, and administration. However, these tools should be used with careful evaluation of their risks and alignment with core commitments as outlined in the university’s strategic plans. AI systems often have limitations, including built-in biases and exclusion of certain types of knowledge.” (University of Alberta)

Privacy and Data Security:

- “Research conducted using algorithmic systems may violate the University’s regulations regarding research integrity (a subcategory of academic integrity; see ‘Integrity in Research’) in a variety of ways, such as if you do not know the character or provenance of the system’s training data, whether the data was legally obtained, or how the data was modelled.” (Queen’s University)

Tool Literacy:

- “As Generative Artificial Intelligence (GenAI) is rapidly transforming our daily lives, this guide is designed to help Dalhousie’s students, staff, and faculty explore resources that go over how to effectively, efficiently, and responsibly, navigate GenAI in their work, teaching, learning, and research.” (Dalhousie University)

Different universities took different approaches to AI policies:

- “Les facultés et les unités/départements/écoles peuvent avoir des exigences ou des restrictions spécifiques concernant l’utilisation de l’IA générative qui vont plus loin que les présentes lignes directrices.” (Université de Montréal) English translation: “Faculties and units/departments/schools may have specific requirements or restrictions regarding the use of generative AI that go beyond these guidelines.” (University of Montreal)

There was various coverage in each university:

- “Students are expected to possess a comprehensive understanding of the GenAI tools employed in their research or writing process. This includes being able to critically evaluate the outputs generated by GenAI systems. This proficiency enables students to confidently defend and explain the results, interpretations, or conclusions derived from AI-generated content during academic assessments or scholarly discussions.” (University of Calgary)

Different universities showed quite distinguished directions.

- “Delegating a task that you were supposed to perform to an algorithm is no different than delegating it to another person, so delegating a task that you were supposed to perform to an algorithmic system violates academic integrity.” (Queen’s University)
- “McMaster has an enterprise license for Microsoft Copilot which ensures that, when logged in using McMaster credentials, data used is not shared with either Microsoft or McMaster and confidential, personal or proprietary information can therefore be used.” (McMaster University)