

Artificial Intelligence, Student Success, and Integrity in Higher Education: A Day of Deliberation

Guide for participants

Organized by [PIA](#) and Université de Montréal
Wednesday, May 31, 2023, starting at 8:30
[Pavillon Jean Coutu](#), Université de Montréal
[2940, chemin de la polytechnique, Montréal](#)

Context

Since November 2022, the open-access launch of ChatGPT, a conversational agent using artificial intelligence (AI) developed by the company OpenAI, has highlighted both the power of generative AI tools, their availability to the general public, and the ethical issues they raise. Numerous articles report on the impressive capability of this type of tool to process different types of language and to generate, among other things, texts that emulate human writing skills; at the same time, many of these articles point out the challenges that the arrival of these tools represents for our societies and, in particular, in the education sector. Within institutions of higher education, recent and rapid developments in this area call for critical reflection. Beyond the risk of new forms of plagiarism and fraud, the accessibility of generative AI tools raises questions about fundamental dimensions of education, such as the evaluation of learning and the very nature of teaching.

Apart from the regulation that states may exercise on the development and availability of generative AI tools, what are the implications of their arrival in teaching activities at the college and university levels? How does their introduction put education at risk? How can they improve our pedagogical practices and academic success? What principles should be established to guide the use of these tools in higher education?

These questions form the basis of a day of reflection and deliberation organized by the *Pôle montréalais d'enseignement supérieur en intelligence artificielle* (PIA) and the *Université de Montréal* aimed at the college and university education community, focusing on an issue that is both shared and structuring : the oversight of the use of AI systems in higher education.

Objective of the event

Complementary to the [May 15, 2023 event](#) organised by the *ministère de l'Enseignement supérieur* (MES) and the *Institut de valorisation des données* (IVADO), the goal of this day is to generate critical perspective and thought-provoking interactions among the participants, in order to collectively identify general recommendations for framing the use of generative AI tools such as conversational agents, in higher education.

Target audience

The event is intended for faculty, administration and students from the Québec college and university network (PIA member institutions)

Format

The day is organized around plenary conferences, panels and deliberative workshops that will address both the characteristics of the new tools and the ethical issues raised by their use. The toolkit “[Integrating the Ethics of Artificial Intelligence in Higher Education](#)”, developed by a team from Algora Lab and Rosemont College with the support of PIA, has been used as a reference for the design of the deliberative process.

Scientific Committee

The event was prepared drawing on the ideas and generous contributions of the members of a scientific committee that embodies a wealth of expertise and diversity:

Anctil, Dave	Philosophy instructor	Collège Jean-de-Brébeuf
Brasseur, Lamiel	Director, direction de l'apprentissage et de l'innovation pédagogique	HEC
Bruneault, Frédéric	Philosophy instructor	Cégep André-Laurendeau
Charland, Patrick	Professor, education department	UQAM
Davidson, Ann-Louise	Professor, education department	Université Concordia
Deschamps, Jean-Marc	Computer science instructor	Cégep du Vieux Montréal
Dilhac, Marc-Antoine	Professor, department of philosophy, and director of Algora Lab	Université de Montréal - Mila
Dumouchel, Pierre	Director, technology transfer	IVADO
Kamga Kouamkam, Raoul	Professor, education department	UQAM
Laferrière, Thérèse	Professor, education department	Université Laval et PÉRISCOPE
Larnder, Chris Isaac	Physics instructor	John Abbott College
Moukhachen, Madona	Adjoint director, technopedagogical innovation	Collège Ahuntsic
Peters, Martine	Professor, education department	UQ Outaouais
Poellhuber, Bruno	Academic director, Centre de pédagogie universitaire	UdeM
Prom Tep, Sandrine	Professor, marketing	UQAM
Sabourin Laflamme, Andréane	Philosophy instructor	Cégep André-Laurendeau

Organizing team

Barnabé-Légaré, François	Senior Advisor for Academics	UdeM
Pagé, Benoit	Director	PIA
Stahn, Christian	Project coordinator	PIA
Torres, Juan	Deputy Vice-Rector, Undergraduate Studies and Lifelong Learning	UdeM

Program

8:30-9:00 Agora, pavillon Jean Coutu	Registration	
9:00-9:15 Amphitheater, Pavillon Jean Coutu	Welcome & Opening Remarks	<i>Pascale Lefrançois</i> , vice-rectrice aux affaires étudiantes et aux études, UdeM <i>Benoit Pagé</i> , directeur, PIA
9:15-10:00 Amphitheater, Pavillon Jean Coutu	Panel: “Understanding Generative AI Tools”	<i>Dave Anctil</i> , Collège Jean-de-Brébeuf <i>Chris Isaac Larnder</i> , John Abbott College <i>Guillaume Lajoie</i> , UdeM and Mila Animation: <i>Pascale Sirard</i> , director, Collège de Bois-de-Boulogne
10:00-10:20	Break	
10:20-12:00 Pavillon Claire-McNicoll	Workshop I: “Exploring issues related to the use of generative AI in teaching” (Group sessions)	
12:00-13:00 Agora, Pavillon Jean Coutu	Lunch and networking	
13:00-13:30 Amphitheater, Pavillon Jean Coutu	Panel: Workshop summary	Facilitators of workshop I
13:30-13:45 Amphitheater, Pavillon Jean Coutu	Report from MES/IVADO AI event (15 mai 2023)	<i>Eve-Marie Gendron-Pontbriand</i> , IVADO
13:45-14:45 Amphitheater, Pavillon Jean Coutu	Panel: “Challenges in higher education”	<i>Patrick Charland</i> , UQAM <i>Bruno Poellhuber</i> , UdeM <i>Andréane Sabourin Laflamme</i> , Cégep André-Laurendeau <i>Ann-Louise Davidson</i> , U. Concordia Animation: <i>Juan Torres</i> , UdeM
14:45-15:00	Break	
15:00-16:40 Pavillon Claire-McNicoll	Workshop II: “Towards a framework for using generative AI systems in teaching” (Group sessions)	
16:40-16:50 Agora, Pavillon Jean Coutu	Closing Remarks	<i>Pascale Sirard</i> , Bois-de-Boulogne, PIA co-president <i>Juan Torres</i> , UdeM, PIA co-president
17:00-19:00 Agora, Pavillon Jean Coutu	5 à 7 and Networking	

Workshop material

Workshop I: “Exploring issues related to the use of generative AI in teaching”

- Goal: Based on a concrete situation, identify the ethical issues at stake and collectively determine the three most important issues
- Each designated sub-group is randomly assigned one of the four prepared use cases, to trigger and structure the reflection, each case corresponding to a concrete situation
- **General questions: With reference to the ten principles of the [Montréal Declaration for a Responsible Development of AI](#) (see appendix),**
 - o **What ethical issues can be identified in the concrete situation?**
 - o **What are the three most important issues?**

Situation A

A teacher is preparing her course outline and wants to integrate the use of ChatGPT into at least one of the assignments scheduled for the session. While doing so, in order to become familiar with the tool, she asks ChatGPT to formulate pedagogical objectives and a rationale for using the tool itself as a learning medium in her course. The result is a very rich syllabus, but part of it was written with the support of the conversational agent.

Specific questions

At what point does the use of the conversational agent compromise the teacher’s contribution? What is the true role of the teacher when a generative AI tool is available and used? How does the teacher’s role change? What impact can the use of this type of tool have on the work of other teachers, on the program, and on the institution? What abuses can be triggered by the integration of these tools into the work of teaching?

Situation B

As part of an assessment for his final term course, a student has to prepare an 8,000-word essay. To write the first draft of one of the sections of this assignment, he follows the lead of many of his colleagues and uses ChatGPT. His experience with the tool allows him to capture the most effective prompts to get a series of highly relevant elements from the conversational agent, which he then puts into his hand, reworking the text, expanding on certain ideas, and adding to it to fit well with the rest of the material already prepared.

Specific questions

How might the use of generative AI tools be legitimate or not? How would access to the conversational agent advantage or disadvantage the student in the learning process? What does the use of the conversational agent allow us to do better or, on the contrary, prevent us from doing well in our colleges and universities? Beyond its impact on the individual learning process, what would be the effects of using these tools on higher education?

Situation C

The members of the plagiarism committee received a report: the work submitted by a team of students had been produced using a conversational agent; however, the use of this type of tool was prohibited in the context of the exercise, the evaluation of which counts for a significant part of the final grade. The report is based on the result of a similarity detection tool that has recently been able to detect with a certain level of reliability the contribution of conversational agents with AI in the production of texts.

Specific questions

How would the treatment of this case be different from or similar to other forms of plagiarism or fraud? What value should be placed on detection tools in a context of constantly evolving technologies? What impact might the advent of generative AI tools have on the way we think about integrity, plagiarism, and fraud? How does the role of the committee change with the arrival of these tools?

Situation D

A working group is preparing a video to educate the student community about the issues of using generative AI tools. The working group includes representatives from faculty, the student community, and academic administrators. The members' opinions diverge as to the main message to be conveyed through the video: for some people, it should focus on digital literacy and advocate responsible use of the tools; for others, the main message should be to discourage the use of these tools.

Specific questions

What other stakeholders would need to be represented in the group to make such an awareness-raising tool? What could they contribute? How would the issues raised by access to generative AI tools be common or different among stakeholders? What should be the main message to the target audience and why? How would this message be different if the video were aimed at teachers instead?

Workshop II: "Towards a framework for using generative AI systems in teaching"

- Goal: develop recommendations for the use of generative AI tools in teaching in colleges and universities.
- Each sub-group of the workshop meets again, this time to brainstorm about a desirable future and the conditions to bring it about.
- **General questions: In a 5-10 year time frame (2028-2033),**
 - **What would be the characteristics of an ideal scenario with respect to the place generative AI tools should occupy and the role they would play in higher education?**
 - **What recommendations could be made to make such a scenario a reality and what would be the top three recommendations?**

Note: This guide was translated from the French with help from the AI-based online translator DeepL (<https://www.deepl.com/translator>)

Appendix: Principles of the [Montréal Declaration](#) for a Responsible Development of AI

1. Well-Being	The development and use of artificial intelligence systems (AIS) must permit the growth of the well-being of all sentient beings.
2. Respect for Autonomy	AIS must be developed and used while respecting people’s autonomy, and with the goal of increasing people’s control over their lives and their surroundings.
3. Protection of Privacy and Intimacy	Privacy and intimacy must be protected from AIS intrusion and data acquisition and archiving systems (DAAS).
4. Solidarity	The development of AIS must be compatible with maintaining the bonds of solidarity among people and generations.
5. Democratic Participation	AIS must meet intelligibility, justifiability, and accessibility criteria, and must be subjected to democratic scrutiny, debate, and control.
6. Equity	The development and use of AIS must contribute to the creation of a just and equitable society.
7. Diversity Inclusion	The development and use of AIS must be compatible with maintaining social and cultural diversity and must not restrict the scope of lifestyle choices or personal experiences.
8. Prudence	Every person involved in AI development must exercise caution by anticipating, as far as possible, the adverse consequences of AIS use and by taking the appropriate measures to avoid them.
9. Responsibility	The development and use of AIS must not contribute to lessening the responsibility of human beings when decisions must be made.
10. Sustainable Development	The development and use of AIS must be carried out so as to ensure a strong environmental sustainability of the planet.