Policies and Principles on Using Generative AI Tools in Education

A Proposal by Fordham’s AI Vision Committee

July 2023

This document presents recommendations from Fordham's AI Vision Committee, established by Provost Dennis Jacobs in June 2023, with the aim of formulating policies and principles that leverage the benefits of GAI tools to enhance teaching and research at Fordham University. The following proposal has been thoroughly discussed and endorsed by the AI Vision Committee. Membership includes:

Co-chairs:
- Prof. Aditya Saharia (Information, Technology, and Operations; Gabelli School of Business)
- Prof. Yijun Zhao (Computer and Information Sciences; Arts & Sciences)

Committee members:
- Prof. Elissa Aminoff (Psychology; Arts & Sciences)
- Prof. Navid Asgari (Strategy and Statistics; Gabelli School of Business)
- Prof. Lauri Goldkind (Graduate School of Social Service)
- Prof. Russell Pearce (School of Law)
- Prof. Joshua Schrier (Chemistry; Arts & Sciences)
- Prof. Ralph Vacca (Communication and Media Studies; Arts & Sciences).

Introduction

Generative artificial intelligence (GAI) focuses on creating systems capable of generating content, including text, images, music, and computer programs. These systems use statistical models trained on vast volume of text (including academic papers) and image samples to generate outputs that mimic human-like creativity in response to natural language inputs. GAI tools are freely or inexpensively available on the internet, making them accessible even to technologically unsophisticated users.

The integration of GAI in education presents both challenges and opportunities for institutions and has the potential to transform higher education. Given that GAI can generate non-reproducible content that mimics human creators, there is a legitimate concern that students will exploit GAI for academic dishonesty or cheating. However, when used properly, students can leverage GAI to enhance their critical thinking skills by engaging in interactive discussions with AI-generated content. GAI can aid in improving writing abilities by providing suggestions, grammar corrections, and even generating draft content. GAI can also serve as a valuable tool in data analysis, as well as in the creation and debugging of computer programs, and as such, can lower barriers for including these topics in non-specialist courses. It is crucial to maintain a balance between leveraging AI tools for support and preserving the authenticity and originality of student work to uphold academic integrity. A key objective of the AI Vision Committee is to address these challenges and harness the potential of GAI as a valuable educational resource while safeguarding
the principles of academic integrity, recognizing that GAI offers us the potential for transforming how teaching, scholarship, and service are expressed in the Fordham environment.

A vital consideration surrounding GAI is its impact on social justice. While generative AI has the potential to address educational inequalities and enhance access to education, there are concerns regarding bias and fairness in AI-generated content based on the data these systems are trained on; equity issues surrounding how different types of students can access such tools; and harms that AI potentially poses to our democratic system and the public good. It is essential to critically evaluate and address potential biases and ensure that GAI systems promote inclusivity, diversity, and equal opportunities for all learners, as well as to understand the potential ramifications of AI for democracy and the public good. Fordham has an opportunity to help students develop AI literacy to evaluate the implications of GAI tools and, thus, use them ethically and responsibly.

As New York's Jesuit University, Fordham is uniquely positioned to integrate generative AI into its ethos. By emphasizing "Cura Personalis" and adopting the principles of RomeCall1, Fordham can prioritize AI ethics, social justice inclusivity, and individual well-being. In AI and education, interdisciplinary curricula can be developed to enhance quality and provide equal opportunities through accessible delivery methods. Specific responses and considerations may be implemented to ensure the ethical and responsible use of GAI. These responses may involve establishing guidelines and frameworks for the integration of GAI in teaching practices, addressing potential challenges related to academic integrity, and fostering discussions around the social and ethical implications of this technology within the Fordham community. Additionally, it is essential to educate students to use GAI responsibly and ethically, enabling them to make informed decisions while harnessing the potential of this powerful technology.

The proposal is organized into teaching, scholarship, and external engagement recommendations. Specifically, the proposal outlines the rationale and action items in the following key areas:

**Teaching**
1. Promoting critical AI literacy among students, faculty, and staff
2. Guidelines for the use of GAI tools in classroom learning
3. Guidelines on adapting teaching and assessment for ethical GAI use and equal student access
4. Upholding academic rigor and integrity as essential principles of education

Furthermore, the committee recommends implementing a public website titled "Teaching and Learning in Response to Generative AI Tools" for the Fordham community. The website complements the above recommendations with additional details. A prototype for this website can be accessed here: [https://storm.cis.fordham.edu/~yzhao/GAI-website-prototype.html](https://storm.cis.fordham.edu/~yzhao/GAI-website-prototype.html)

**Scholarship**
1. Establishing a research center or institute to promote interdisciplinary research on advancing AI, its applications, and its impact on society

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2. Allocating internal funding for research on the ethical and social impacts of AI and its applications
3. Hiring additional scholars and faculty to advance AI research at Fordham

External Engagement
1. Facilitating inter-university discussions on learning goals and pedagogy
2. Collaborating with the industry on the future of knowledge and AI literacy
3. Community engagement

The AI Visioning Committee recommends that the administration take the following immediate actions:

- Request the academic integrity committee to review and update the integrity statement.
- Coordinate with deans to disseminate a statement regarding the responsible use of generative AI tools to faculty members for the upcoming fall semester.
- Encourage department chairs and program directors to revisit their learning goals in light of rapid advances in GAI.
- Organize workshops on GAI literacy for faculty members, providing them with essential knowledge and skills about this rapidly evolving capability.
- Designate a dedicated point of contact for faculty members to address inquiries related to technology assistance and teaching strategies for integration of GAI tools.

Teaching

1. **Fordham University is committed to promoting critical AI literacy among students, faculty, and staff.** To achieve this, the following action items are recommended:

   a) Provide technical support and guidance to students, faculty, and staff on the effective utilization of GAI. This can be facilitated through the development of online video tutorials, webinars, or workshop series.

   b) Provide guidelines for the ethical use of generative AI in teaching and research. This will include updates to the university’s Academic Integrity policies for students, faculty and staff. The integrity statements will provide frameworks for students to identify the use of GAI in completing the course work and for faculty to identify the use of GAI in research and other scholarly publications. Additionally, the committee recommends involving the IRB and University Research Council to ensure the responsible and ethical use of GAI in research and publications.

   c) Establish a dedicated forum, such as a center, consortium, or other centrally administered unit, bringing together faculty members from across the university who share research and teaching strategies, tools, and projects focusing on ethical and social justice in the deployment of AI tools.
d) Create a Frequently Asked Questions (FAQ) page to address common queries and concerns. Some sample questions are as follows:

- What is generative AI?
- How does generative AI work?
- What are the limitations of generative AI?
- Can I use generative AI for my teaching?
- What are the potential benefits of generative AI in education?
- What are the potential risks and challenges of using generative AI?
- How can generative AI be used responsibly in teaching and learning?
- How can academic integrity be maintained when using generative AI?
- What generative AI tools are available in the market?
- Are there tools to detect AI-generated content, and why are they not so great?
- Are there guidelines for citing and attributing AI-generated content?
- What are the ethical considerations when using generative AI?
- How can I address potential biases in AI-generated content?
- How can I address the implications of AI for democracy and the public good?
- Where can I learn about generative AI and other Generative AI tools?

2. Guidelines on using generative AI tools in classroom learning

a) Sample statements in syllabi: In order to effectively integrate generative AI tools into classroom learning, the committee offers the following statements for inclusion in course syllabi:

- For a "No-AI" approach:
  
  “Generative AI tools are not permitted in this course. Students [or learners] must rely on their own originality, creativity and critical thinking skills to complete assignments and engage with course material.”

- For a “Limited-Al” approach:

  “Limited usage of generative AI tools may be allowed for specific assignments in this course, enabling exploration of ideas, complex data analysis, and creative solution development, when explicitly permitted by the instructor. When using these tools, it is mandatory to clearly indicate the sections of your work that were generated using them for proper attribution and transparency, and indicate the prompts and software versions that were used. It is critical to adhere to ethical standards by refraining from activities like plagiarism or creating misleading content. Additional guidelines or restrictions will be provided for specific assignments.”

- For a “Full-Al” approach:

  “This course allows the use of generative AI tools to facilitate exploration of innovative ideas, complex data analysis, and creative solution development. Students must clearly indicate the sections of the work that were generated using generative AI tools for
proper attribution and transparency, and indicate the prompts and software versions that were used. It is critical to adhere to ethical standards by refraining from activities like plagiarism or creating misleading content. Additional guidelines or restrictions will be provided for specific assignments.”

b) **Sample assignments embracing GAI tools:** For instructors actively seeking to integrate generative AI tools into their assignments, some suggested ideas include:

- Conduct in-class discussions analyzing AI-generated writing to understand its strengths and limitations.
- Assign students to revise and edit AI-generated texts to elevate them to their own standards. Students will submit both the original AI draft and their final version.
- Organize in-class presentations comparing and contrasting AI writing with human writing. Prompt students to reflect on elements replicable by ChatGPT and aspects unique to human authors in their work.
- Explore refinement techniques by having students compose variations of the same prompt to fine-tune AI-generated results.
- Scaffold engagement with AI tools by encouraging students to interact with AI, using it for brainstorming or divergent thinking exercises.

c) **Sample assignments deterrent of GAI tools:** For instructors seeking to prevent the utilization of generative AI tools in their assignments, some suggested ideas include:

- Require oral presentation of coursework to assess students' understanding and communication skills effectively, providing them with an opportunity to articulate their knowledge verbally.
- Employ interactive, in-class exercises to promote active learning and real-time application of concepts, fostering a deeper understanding of the subject matter.
- Engage in case studies based on current events. This offers a short-term defense, as the base models are trained on content that does not include the past 6-12 months; however, emerging technologies giving GAI access to web-search content may erode this defense.

d) **Sample new assessment methods:** The advent of GAI necessitates new grading methods to mitigate the influence of AI writers. For assignments that prohibit GAI tools, some new assessment ideas include:

- Assess the uniqueness of content using plagiarism detection tools or comparison with existing sources. However, it's important to acknowledge that existing tools are highly imperfect, as they may fail to detect AI-generated content and may also inaccurately identify work by non-native writers as AI-generated.
- Compare the quality and creativity of take-home assignments with in-class work, considering factors such as coherence, style, and relevance.
- Evaluate content accuracy and relevance in addressing assignment objectives.

For assignments that allow GAI tools, some assessment ideas include:
• Prompt students to reflect on GAI's benefits and limitations, justifying their responses.

• Require students to submit the prompts used for GAI and assess their ability to effectively customize and adapt AI-generated content to fit specific contexts or target audiences.

• Assess the practicality and usefulness of AI-generated content in real-world scenarios, such as marketing materials or informational texts.

• Appendix I presents a rubric (adapted from www.Turnitin.com) that helps educators review assignment prompts for vulnerabilities to generative AI tools and create prompts without those weaknesses. Focusing on areas where AI falls short as a student writer, the rubric guides educators in designing assignments less susceptible to misuse while promoting the ethical use of generative AI tools.

3. **Fordham University is committed to ethical use and equal student access to GAI.** To achieve these objectives, the committee recommends the following action items:

   a) **Advise faculty to have an explicit statement on the acceptable use of generative AI in the syllabus:** Faculty members should be encouraged to incorporate a dedicated section in their course syllabi that outlines the guidelines and expectations for the appropriate use of generative AI tools. This statement should clarify the scope of usage, highlight ethical considerations, and emphasize the responsible application of generative AI within the course context.

   b) **Encourage faculty to review the learning goals and assignment alignment in their courses:** Faculty members need to be encouraged to critically evaluate the learning goals of their courses in light of the integration of generative AI tools. They should reflect on how these tools can enhance the achievement of learning objectives and prompt students to engage more deeply with course concepts. Furthermore, faculty members should reconsider the role and format of assignments, exploring how generative AI tools can be integrated to foster critical thinking, creativity, and problem-solving skills among students, and also how assessments can be designed to reduce the temptation of cheating.

   c) **Request area chairs and program directors to review and update the learning goals for their academic programs:** Area chairs and program directors should collaborate with faculty to review and update program learning goals, ensuring alignment with the curriculum's overall objectives when integrating generative AI tools. While revising the goals, ethical implications, pedagogical effectiveness, and impact on student outcomes must be considered. Additionally, consideration should be given to appropriately preparing students for post-graduation studies and careers in a world with these tools.

   d) **The Writing Center's role in GAI integration:** The Writing Center should lead campus discussions on the responsible integration of generative AI tools, focusing on plagiarism awareness, appropriate use in Eloquintia Perfecta courses, and faculty and student training.

4. **Fordham University is committed to upholding academic rigor and integrity as essential principles of education.** To achieve this, the following action items are recommended:
a) Revision of Academic Integrity Statement and Standards: The Academic Integrity Statement and Standards will be carefully reviewed and updated to align with the evolving academic landscape. In particular, this revision will address the ethical considerations and challenges associated with emerging technologies, including generative AI. It will reinforce the importance of honesty, originality, and responsible use of resources. It will also clarify the expectations and consequences regarding academic integrity violations.

b) Communication to Students: Deans will inform all students based on the outcome of a), providing notice about the revised standards of academic integrity. This communication will emphasize the significance of upholding ethical conduct and integrity in their academic work. It will also provide clear guidelines and expectations regarding the use of generative AI tools, ensuring that students are aware of their responsibilities and obligations.

By revising the Academic Integrity Statement and effectively communicating the revised standards to students, Fordham will reaffirm its commitment to maintaining high standards of academic rigor and integrity while addressing the ethical considerations associated with emerging technologies like generative AI.

**Scholarship**

1. Establishing a research center or institute to promote interdisciplinary research on advancing AI, its applications, and its impact on society: The center will serve as a hub for interdisciplinary research, bringing together faculty, some of whom are already leaders in research on AI, as well as students from diverse fields, and providing a platform for collaboration, knowledge exchange, and innovation in data science and AI. It aims to form partnerships with industry, government agencies, and academic institutions while considering Fordham's unique niche at the intersection of theology/Jesuit scholarship, technology, ethics/morality, and democracy/the public good. The center will also act as a facilitator, engaging internal stakeholders, including the Digital Humanities Consortium, Public Interest Technology University Network, Center for Community Engaged Learning, Center for Digital Transformation, Center for Information Law and Policy (CLIP), and the McGannon Center, as well as external stakeholders, such as Fordham alumni and IBM. This initiative is inspired by similar centers and institutions established at peer universities:

NYU: [https://cds.nyu.edu/](https://cds.nyu.edu/)
NYU Shanghai: [https://research.shanghai.nyu.edu/datascience](https://research.shanghai.nyu.edu/datascience)
Columbia: [https://datascience.columbia.edu/](https://datascience.columbia.edu/)
Stevens Institute of Technology: [https://www.stevens.edu/stevens-institute-for-artificial-intelligence](https://www.stevens.edu/stevens-institute-for-artificial-intelligence)
Caltech: [Center for Science, Society, and Public Policy](https://www.caltech.edu/centers/ccsp)
USC: Center for Generative AI and Society
Vanderbilt: [Future of Learning and Generative AI Initiative](https://www.vanderbilt.edu/generativeai/)
Stanford: [Human Centered AI](https://humancenteredai.stanford.edu/)
Public Interest Technology Initiative (umass.edu)
2. **Allocating internal funding for AI research:** To promote research on AI's ethical and social impacts, the committee suggests allocating internal funding from the Office of Research or Deans' grants. This funding will support projects exploring ethical considerations, societal implications, and policy issues related to AI technologies. Areas of investigation may include AI tools and applications, bias and fairness in AI algorithms, privacy concerns, transparency in decision-making, AI's impact on employment, socio-economic structures, and the public good. Providing internal funding incentivizes faculty and students to conduct rigorous research addressing AI's complex ethical and social challenges.

3. **Hiring additional scholars and faculty to advance AI research at Fordham:** AI is a rapidly evolving domain. By recruiting additional experts in the field, the university can enhance its research capabilities, foster interdisciplinary collaborations, and enrich its academic programs. These scholars and faculty members will contribute valuable insights, innovative methodologies, and cutting-edge knowledge to advance Fordham's GAI initiatives. Their expertise can also help to address complex challenges and explore new applications across disciplines, reinforcing Fordham's commitment to staying at the forefront of emerging technologies.

**External Engagement**

The committee proposes initiating AI-focused discussions among Jesuit universities and fostering collaboration with industry leaders.

1. **Inter-University Discussions on learning goals and pedagogy:** Facilitate inter-university dialog, particularly among Jesuit universities, to explore and revise learning goals and pedagogical approaches in response to AI advancements. These discussions will foster collaboration and knowledge-sharing among institutions, enabling the efficient development of comprehensive strategies for AI integration across curricula.

2. **Industry collaboration on the future of knowledge and AI literacy:** The committee recommends active collaboration with industry leaders to gain valuable insights into the future of knowledge work and the expected AI literacy of graduates. This collaboration is particularly crucial as the recent white paper published by Goldman Sachs predicts the potential elimination or reduction of 300 million jobs, with many in knowledge work, due to advancements in AI. These statistics underscore the pressing need for universities to engage industry leaders and align their educational initiatives with emerging trends.

3. **Community Engagement:** The committee proposes dedicating efforts and resources to fulfill Fordham's mission of community engagement. Generative AI, though new and largely mysterious to many, presents a unique opportunity for Fordham to offer workshops and other interactive initiatives for educating our neighbors, fostering AI literacy, and encouraging questions. We recommend allocating resources to the Center for Community Engaged Learning, Fordham in Community, Fordham Foundry, and Fordham's Office of Student Involvement. These organizations can play a crucial role in educating the community about generative AI, its potential benefits for individuals, and promoting informed usage.
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<th>Improve the prompt by reflecting on:</th>
<th>Emerging</th>
<th>Advanced</th>
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<tr>
<td><strong>Student voice</strong></td>
<td>Does the writing task propose a clear purpose that requires students to write to their audience?</td>
<td>The prompt does not require students to take ownership of the task and/or purpose. Students will not have to demonstrate a perspective or consider the audience in order to respond to the prompt.</td>
<td>The prompt demands students take powerful ownership of the task and purpose. Students will have to demonstrate a definitive perspective, considering the audience’s knowledge and values, in order to respond to the prompt.</td>
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<td><strong>Critical thinking / Reasoning</strong></td>
<td>Does the writing task ask students to thoughtfully consider the issue and draw a conclusion based on their evaluation?</td>
<td>The prompt does not require students to analyze and synthesize the issue. Students will not have to infer a conclusion based on what the prompt demands.</td>
<td>The prompt requires students to skillfully analyze and synthesize the issue. Students should infer a logical conclusion considering multiple expert viewpoints based on what the prompt demands. The prompt encourages students to create new knowledge based on novel ideas.</td>
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<td><strong>Sources &amp; Citations</strong></td>
<td>Does the writing task require students to include real, verifiable sources throughout their essay?</td>
<td>The prompt does not require students to cite verifiable sources, including a variety of facts, concrete details, quotations, or examples. The prompt does not ask students to include a reference list.</td>
<td>The prompt requires students to cite verifiable sources, including a strong variety of facts, concrete details, quotations, or examples. It’s clear the sources must be current and relevant to the writing task, and a full reference list is required.</td>
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<td><strong>Personalization</strong></td>
<td>Does the writing task ask students to reference an event that required their presence or personal experience?</td>
<td>The prompt does not ask students to reference an authentic experience, such as a classroom discussion, a field trip, or an event from their personal lives. Students can answer the prompt without including original thoughts and/or experiences.</td>
<td>The prompt demands students to reference an authentic experience, such as a classroom discussion, a field trip, or an event from their personal lives. Students will need to smoothly integrate their experiences and show evidence of original thinking to respond to the prompt.</td>
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<td><strong>Emphasize iteration and process.</strong></td>
<td>Are there opportunities to iterate and build on feedback?</td>
<td>The prompt is not ever paired with ongoing formative feedback for students to iterate on.</td>
<td>The prompt is paired with formative feedback prompting the student to respond to feedback in their iterations.</td>
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