University Committee on AI in the Classroom

AI in Pedagogical Practice

Executive Summary - Recommendations

The public awareness of Generative AI (GenAI) tools, and the proliferation of text and image generation products enabled by these tools, has led to large and growing discussions about their use both in the world at large and in higher education. The fundamental mission of an institution like Tulane extends beyond merely generating, preserving, and imparting knowledge to students; it also, and perhaps more crucially, aims to foster deep curiosity and critical thinking skills. Despite the fundamental tension between the internal pedagogical practices of any learning institution and external cultural forces that aim to bypass, undermine, or replace those practices, this interplay typically results in a positive and dynamic relationship. External cultural pressures help large, relatively change-adverse institutions build the momentum necessary for change. Generative AI presents an excellent example of this dynamic.

Within the past 18 months GenAl has come to dominate discussions around almost every topic from art and labor to education and analysis. Overall, there seems to be a split between excitement over the capabilities of the new tools and trepidation over their impact. In the context of higher education, there are potentially great strides to be made in terms of analysis, composition, translation, and administration (to name just a few); however, these long-term gains may, in the short term, come at the expense of some of our traditional pedagogical and research practices.

The immediate context of this report is the disruption that GenAl tools have caused within the academic practice of the university. At this moment, the sudden availability and widespread use of these instruments has exposed our pedagogical practices to those forces that would circumvent or weaken them. The goal of this report is to provide the Tulane-specific context necessary to develop a clear understanding of where the institution sits in relation to this rapidly shifting landscape and to provide suggested courses of action for the refinement of our academic enterprise. We must adapt to preserve a pedagogical space that encourages the development of our students as thought leaders and critical analysts. Without a unified response from the institution to this challenge, we risk devolving into gamesmanship, where our students merely race to meet the basic requirements of their programs without fully engaging with or thinking comprehensively about their work.

The demand for AI and GenAI skills by employers is expected to increase substantially in the upcoming years. The International Monetary Fund claims that AI will affect almost 40 percent of jobs globally and approximately 60 percent in advanced economies.¹ Dire predictions abound about losses of jobs due to automation and AI,² but almost equally abundant are perhaps embellished descriptions of job creation. "AI, like other major inventions in history – including mass production, the PC, the internet, and social media – will create exponentially more jobs

¹ Kristalina Georgieva, "Al Will Transform the Global Economy. Let's Make Sure It Benefits Humanity," IMF Blog, January 14, 2024. https://www.imf.org/en/Blogs/Articles/2024/01/14/ai-will-transform-the-global-economy-lets-make-sure-it-benefits-humanity

² Ian Shine, "We often hear that AI will take our jobs. But what jobs will it create?" World Economic Forum. September 18, 2023. https://www.weforum.org/agenda/2023/09/jobs-ai-will-create/

than it will cost." ³ As AI creates new fields of work and helps expand others, those with AI skills are likely to be best able to navigate this transformation. ⁴ ⁵ At colleges and universities, the demand for AI skills is likely to be equally robust. From 2022 to 2023, AI-related listings on *The Chronicle of Higher Education*'s job site more than doubled, with five institutions alone – Northeastern University, Carnegie Mellon University, University of Pennsylvania, Clemson University, and the University of Florida – accounting for nearly half of those postings. ⁶ In this evolving landscape, proficient use of AI is likely to be one of the most important skills we can provide our graduates.

The AI in the Classroom Committee, composed of representatives from across nine academic units, along with the Executive Director of CELT and the Director of the ILC, met regularly from November 2023 to April 2024. The committee shared materials and discussed the potential benefits and challenges of integrating Artificial Intelligence (AI) into the educational settings of their respective schools. This was followed by the design and implementation of a brief survey, which resulted in a total of 186 responses from full- and part-time faculty. The committee also spent time reviewing peer and aspirational institutions' approaches to Gen AI.s. This methodology allowed the committee to gather a wide range of insights and perspectives on AI's role in education.

Findings from these efforts culminated with the development of ten recommendations that we hope will lay the groundwork for the ethical, effective, and equitable integration of AI tools into Tulane's academic environments. The recommendations outlined here are developed further in subsequent sections.

Strategic Integration and Alignment:

- Define clear educational objectives for Al use within the curriculum, ensuring that
 the use of Al tools aligns with broader institutional goals and student learning needs and
 reflects the diverse perspectives of faculty, staff and students across different academic
 disciplines.
- 2. Establish guidelines for the acceptable use of Al in coursework and assessments, clarifying when and how Al assistance is permissible. Create a standardized format to cite/acknowledge where and how Al tools were used.

³ Eli Amdur, "Al Job Growth: Let's Get Specific, Starting with Health Care," Forbes, March 4, 2024. https://www.forbes.com/sites/eliamdur/2024/03/04/ai-job-growth-lets-get-specific-starting-with-health-care/?sh=30375d0c6b55

⁴ Rakesh Kochhar, "Which U.S. Workers are More Exposed to AI on Their Jobs?" Pew Research Center, July 26, 2023. https://www.pewresearch.org/social-trends/2023/07/26/which-u-s-workers-are-more-exposed-to-ai-on-their-iobs/

⁵ Ben Simon, "How AI will create more jobs than it takes: A comprehensive outlook," LinkedIn, August 8, 2023. https://www.linkedin.com/pulse/how-ai-create-more-jobs-than-takes-comprehensive-outlook-ben-simon/ ⁶ Taylor Swaak, "AI will shake up higher ed. Are colleges ready," *The Chronicle of Higher Education*, February 26, 2024

- 3. Develop a strategy regarding the transparent use of GenAl tools for both students and faculty, including its capabilities, limitations, and the logic behind its recommendations or decisions. Emphasize the importance of ethical considerations in Al applications, promoting responsible use and decision-making.
- 4. Adhere to strict data privacy and security protocols, ensuring that student and faculty data are protected and used responsibly. Provide clear information to users about data collection practices, usage, and their rights regarding personal information to foster trust and transparency.

Academic Experience:

- 5. Leverage Al to offer individualized academic experiences, adapting to individual needs, styles, and pace. Ensure that Al resources and support are accessible to all faculty and students, regardless of ability, to promote equitable learning opportunities via university-supported options for faculty and students.
- Regularly assess the effectiveness and impact of Al tools on learning outcomes, student engagement, course objectives, and academic integrity. Solicit feedback from both faculty and students to identify areas for improvement and ensure ongoing optimization of Al integration.

Support and Development:

7. **Provide comprehensive training and ongoing support for faculty** to effectively integrate AI tools into teaching and learning processes. These programs will allow faculty to build confidence and proficiency in AI utilization. The university must work actively to reduce barriers and create opportunities for faculty learning.

Innovation and Culture:

- Foster a growth mindset encouraging the exploration of new Al tools and approaches
 in teaching and learning. Remain adaptable to emerging technologies and pedagogical
 trends, updating guidelines and practices accordingly to stay at the forefront of
 educational innovation.
- 9. **Orient students to Al tools being used,** including their purpose and how they will be integrated into their future careers. Facilitate open discussions about Al's role in education and empower students to make informed decisions about their participation.
- 10. Consider the cultural and community context of Al use, ensuring it aligns with institutional values and respects diverse perspectives. Engage stakeholders within Tulane, New Orleans, and the wider academic community in discussions about Al

integration to address concerns, promote inclusivity, and build consensus within the educational community.

At its core, the committee emphasizes that the broader adoption of AI into Tulane's academic mission by students and faculty is likely to require more extensive support and resources by the University through the expansion of existing centers, e.g., the Connolly Alexander Institute for Data Science (CAIDS), the Center for Engaged Learning and Teaching (CELT), the Innovative Learning Center (ILC), and the Center for Community Engaged Artificial Intelligence (CEAI).⁷

⁷ A joint appointment among some or all of these entities to provide the content knowledge, technical support, faculty trainings and training materials is suggested. A potential job description is provided in Appendix C.