Report and Recommendations from Lehigh's Generative AI Advisory Group

May 9, 2025

Executive Summary

In January 2025, Lehigh University established a Generative AI Advisory Group to assess the opportunities, support needs, and policy gaps related to generative AI across education, research, and operations. The group found growing but uneven adoption of AI, with faculty and staff expressing both interest and concern. Faculty are using AI to enhance writing, create instructional materials, and automate administrative tasks, while also voicing strong ethical and pedagogical reservations, especially around critical thinking, mentorship, and academic integrity. In research, AI is used primarily for literature review and data analysis, with broad interest in expanding use, especially for grant proposal support and for data analysis, visualization, and interpretation. Many faculty support creating a dedicated AI research initiative. Operationally, staff are leveraging AI for enhanced communication, efficiency, and user support, but remain cautious about data security, bias, and loss of human connection.

Recommendations include department-led AI integration, an institutional "AI-readiness" promise for students, an interdisciplinary academic hub centered around AI, targeted AI adoption in administrative units, expanded access to vetted tools, and tailored training. The group advocates for clear policies, continued dialogue, and flexible support for both AI experimentation and thoughtful restraint. An annual review of AI-related policies is recommended to ensure alignment with evolving needs and values. Lehigh is encouraged to adopt a balanced, intentional approach to AI adoption, centered on educational integrity, innovation, and ethical responsibility.

I. Introduction

On January 20, 2025, Provost Urban created a Generative AI Advisory Group, charged to provide guidance to him and the Vice President of Finance and Administration on the following questions:

1. Where is there the greatest opportunity to employ generative AI to improve Lehigh's ability to achieve specific educational, research, and administrative goals?
2. How can we better support faculty and staff in their ability to use generative AI effectively and ethically?
3. Where do we have gaps in policy regarding appropriate use of generative AI for educational, research or operational purposes?

The Advisory Group met throughout the spring semester of 2025, focused on five areas:

- Reviewing reports and research on generative AI in higher education and industry.
- Developing a shared understanding of existing efforts at Lehigh related to generative AI adoption, including tools, policy considerations, guidelines, and support.
- Conducting a gap analysis of existing Lehigh policies related to generative AI.
- Better understanding the perspectives and needs of faculty, staff, and unit leadership.
- Developing recommendations to define Lehigh's next step in this area.

II. Key Observations about Generative AI in Higher Education and at Lehigh

There is no doubt that this emerging technology will continue to shape our university and broader society for years to come, yet perspectives differ on exactly how generative AI will impact teaching, learning, research, and work. In light of this fact, it is up to all of us at Lehigh to make wise choices about whether and how to adopt this technology—and it is incumbent upon us to prepare our students to do the same. Failure to do so will negatively impact not only on our students' future-readiness but also Lehigh's competitiveness among our peers.

What counts as a wise choice about AI adoption is highly context dependent. In nearly every context, there are some uses that one would be unwise not to adopt and some uses one would be unwise to adopt. Moreover, because of the rapid development of both general-use and domain-specific AI tools, today's best answers may no longer be the best answers even in the very near future.

We are now several years into the era of generative AI and, from the start, Lehigh has been attending to these questions. Within weeks of the launch of ChatGPT, LTS developed and shared general guidelines, offered workshops, invited faculty and staff to join an AI community of practice, and created ai.lehigh.edu, a centralized repository for information and guidance. The Provost encouraged faculty to "discuss the use of these tools in their classes with students and to invite submissions of ideas about potential uses of these technologies." A group of faculty and staff created "LehighAI," a FutureMaker grant-funded "digital hub for collaborative efforts to explore how AI technologies can enhance learning, teaching, research, and community engagement." These efforts were soon followed by many open discussions, panels, symposia, talks, and an AI@Lehigh Summit, all of which encouraged conversation, exploration, critique, and experimentation. Throughout this work, organizers have aimed to present a range of perspectives, foster discussion, and share information. In addition, various advisory groups have reviewed policies and weighed various risks related to generative AI, including information security risks and risks to our position in the higher education landscape – both of which increase if we get the pace or direction of adoption wrong.

1. Generative AI in Education at Lehigh

Individual faculty across many departments have developed a range of courses where students learn how to use these tools and develop informed perspectives on their strengths and limitations. Although we have no mechanism for listing all such courses, our recent faculty survey provides a sense of the uses faculty have adopted and are encouraging in their students, and which uses they are purposefully avoiding.

Faculty have integrated generative AI into teaching in various ways, including improving writing and editing (43%), administrative task automation (29%), instructional content creation (21%), and enhanced assessment design (16%). For students, the most common uses recommended or required include enhanced writing and research support (24%), language and communication development (20%), and personalized tutoring/study assistance (16%). Faculty see AI as useful for brainstorming, idea generation, editing, proofreading, language translation, task support, efficiency, and image generation. However, they are most hesitant about agentic AI (60%), personalized feedback to students (44%), and adaptive teaching strategies (40%). They also express concerns about diminished critical thinking, problem-solving skills (63%), plagiarism/academic dishonesty (56%), and accuracy of AI-generated content (56%). Key concerns include the impact on critical thinking and writing skills, loss of human interaction and mentorship,

misunderstanding of humanities perspectives, ethical concerns, potential harms, and issues with AI detection and intellectual property.

Despite these misgivings, faculty are open to exploring AI, especially for adaptive teaching strategies, curriculum development, and research integration in teaching. They seek discounted access to paid AI tools, more workshops, and guidance documents tailored to their departments. Faculty also want clear guidelines on AI use in syllabi and assignments, along with explanations of the rationale behind adopting or rejecting AI tools. Many see great promise for enhancing or optimizing their own work as teachers and their students as learners, while others have significant concerns about how AI will affect student learning.

2. Generative AI in Research at Lehigh

When asked how they are using generative AI to enhance their research, scholarship or creative work, faculty listed literature review and summarization (30%), grant proposal and manuscript writing support (22%), and data analysis and interpretation (20%). Fewer are using AI for co-creation of artistic or creative works (16%), for data processing and visualization (12%), or for hypothesis generation and experimental design (10%).

Although our survey did not ask faculty about their areas of research, supporting faculty research in artificial intelligence is clearly crucial for advancing the field and maintaining Lehigh's competitiveness. Therefore, as an institution, we would be wise to support an institutional response, such as a center or institute, to provide dedicated resources and foster interdisciplinary collaboration in AI research and education. On this topic, the majority of faculty respondents agreed (43%) or strongly agreed (27%) with the statement that “Lehigh should establish an institutional initiative or home to further develop artificial intelligence research and education,” with 30% disagreeing or strongly disagreeing.

Lehigh has the opportunity to build AI education and AI research programs that are truly interdisciplinary, with the fundamental questions about AI at the front and center. Given the pervasiveness of AI, there is opportunity for all members of our academic community to be a part of this work, including those who are creating or applying AI-related technologies and those who are skeptical or critical. Here, too, we encourage the development of additional guidance specifically tailored to the work of researchers at Lehigh.

3. Generative AI in University Operations at Lehigh

In our recent survey of Lehigh staff, we learned that staff members are using generative AI for improved writing and editing (55%) and communication and outreach (43%). Fewer use it for efficiency and automation (14%), data analysis and decision support (14%), or enhanced user support (14%). AI is seen as useful for improving efficiency and automation, enhancing communication and writing, data analysis and summarization, user support and FAQs, and content creation and ideation. However, staff are hesitant about using AI for strengthened policy compliance (50%), streamlining hiring or employee support (50%), enhanced user support (42%), and optimized resource management (42%). Major concerns include the loss of human connection, data privacy and security, accuracy and reliability of AI-generated content, ethical considerations and bias, and job displacement and automation.

Several administrative units have already adopted AI for specific use cases, such as Admissions for customized communications with prospects, University Communications for content enhancement, Library and Technology Services for enhanced search, AI-enhanced chatbots, and compliance document queries, and the Office of Research for grant document review.

At the 2025 Summit on Generative AI@Lehigh, participants shared ways they were finding value in AI adoption for academic and administrative uses, shared perspectives on ways they did not find AI valuable in their work, and called for continued training and education, clear policies and guidelines, access and equity, communication and collaboration, and support for innovation.

4. Looking forward

Most faculty (54%) and staff (60%) believe Lehigh is moving at the right pace in AI adoption, overall. However, there are varying views on the pace of change in education and administrative uses. Some faculty (32%) feel the pace is too slow in their departments; very few (6%) feel the pace is too fast in their department. Staff also have mixed feelings, with a third wanting faster adoption for administrative tasks and only a few (4%) feeling that the pace of adoption in their department/team is too fast.

Where might we go from here? Any path forward starts from the recognition that, while half of the faculty respondents report using generative AI tools in their work a few times a week or more, the other half report that they do not use generative AI tools at all or use them only rarely. If we are hoping to make wise choices in the use of generative AI for teaching and learning, we should continue to support those who are actively experimenting and we should also support those who are focused on teaching very different types of knowledge and skills or are looking for ways to mitigate what they see as the negative impact of AI on student learning.

A key next step will be to build on the curiosity and openness faculty have expressed when asked about specific uses. Over half of all faculty respondents indicated that they are curious about and would consider using AI for adaptive teaching strategies, curriculum development, and research integration in teaching. Over a third expressed the same curiosity about using AI for enhanced assessment design, generating personalized feedback for students and instructional content creation. Importantly, those numbers do not change much when looking only at faculty who report that they “do not use” or “rarely use” generative AI tools.

An equally important step is continuing to support faculty when they prefer to prioritize helping our students develop knowledge and skills that have nothing to do with automation, efficiency, or the technological augmentation of human intelligence. Faculty and students have, and should continue to have, nuanced views on how to succeed in a world where AI is always nearby. By supporting faculty when they lean into AI as well as when they lean away, or when they choose AI for one task but reject it for another, we will arrive in a place where we are best able to help our students develop as whole people, themselves informed and ready to make wise choices about technology use in their personal and professional lives.

Looking at administrative or operational uses, promising next steps would be to focus on providing greater guidance and support for those uses staff have expressed interest and curiosity about: workflow efficiency and automation (65%), data analysis & decision support (62%), strengthened stakeholder engagement (57%), and optimized resource management (54%). Those numbers are even higher among

staff who report that they “do not use” or “rarely use generative AI tools,” which indicates broad curiosity and openness to learning more about these uses.

When asked what they would find helpful in terms of tools and professional development opportunities, the most common responses from faculty were: discounted access to paid generative AI tools, more or different workshops and guidance documents, and tools and workshops specifically tailored to their department. Similarly, staff said the AI tools Lehigh currently provides are meeting their needs, but many others asked for more or different workshops and guidance, with 46% noting that they think their department, program, or team would be interested in AI tools and workshops specifically tailored to their needs.

III. Recommendations for Lehigh

Our recommendations are based on research into AI adoption in higher education, adapted to the Lehigh context and our sense of campus readiness. The recommendations all point to an overarching goal that we commit, both individually and as an institution, to the work of deepening our understanding of what AI is and conceptualizing what it should be. That is to say, all future decision making should be aligned with and support our core values and the kind of educational experience, research capacity, and operational approaches we most highly value. Members of the Lehigh community have, and should continue to have, nuanced views on how to succeed in a world where AI is always nearby. We should therefore conceptualize teaching and researching about AI with ethical considerations, literacy about AI-generated misinformation, awareness of biases and environmental impact, and humanity, at the front and center. In short: we should promote and support broader adoption of AI tools where such tools make sense for us, and we should promote deeper awareness of the ethical questions, biases, and technological limitations that may lead some to the purposeful non-use of AI.

Recommendation 1. Department-Led AI

- The Provost and Deans: task department chairs to lead faculty discussions on integrating generative AI into curricula and student learning.
- Departments:
    - Consider becoming an “AI Innovator” department for enhanced AI resources and faculty development opportunities.
    - Designate an "AI Ambassador" for department-wide leadership and coordination with centralized efforts.
    - Discuss AI-related minors or tracks within majors.
    - Ensure language in syllabi and assignments convey AI expectations, both for use and non-use.
    - Develop clear AI usage guidelines for instructors and students.
    - Identify courses where AI education is essential.

Recommendation 2. AI-Focused Academic & Career Initiatives

- President and Provost: Make an AI-readiness promise to our students: “All students will leave Lehigh AI-ready, fully prepared to use AI tools effectively and ethically, having had meaningful engagement with generative AI in their coursework and professional development preparation.”

- Create an institutional initiative to further develop artificial intelligence research and education: An Interdisciplinary AI Hub to
    - Expand existing communities of practice.
    - Develop ways to identify and label “AI-Intensive” courses in registration systems.
    - Support creation of cross-college AI-related academic programs (undergrad, grad, executive education, certificates).
    - Supporting interdisciplinary AI research and education.
    - As a first step, appoint a new Provost Faculty Fellow for AI to partner with the LTS/CITL AI Readiness Specialist to coordinate with Department Ambassadors and College AI Coordinators
- Deans:
    - Identify 1-2 departments for deep AI integration (“AI Innovator departments”) and 1-2 departments who are getting started but committed to learning more (“AI Explorer departments”) to reinforce the goals of department-led AI articulated above.
    - Accelerate creation of AI-related academic programs (undergrad, grad, executive education, certificates).
    - Identify an AI Coordinator for the college to provide college-wide leadership and coordination with centralized efforts.
- LTS:
    - Coordinate with College AI Coordinators and Department AI Ambassadors to align technologies, faculty development programming, and user support.
    - Develop a peer-to-peer program for students that taps into students with AI skill sets to support students and faculty in AI-Intensive courses (extension of TRAC Writing Fellows Program).
    - Expand and enhance existing AI Communities of Practice.
- Office of Vice Provost for Educational Innovation and Assessment:
    - Develop scalable, low-effort ways faculty can assess the impact of AI adoption on student learning outcomes through targeted interventions with AB testing related to student experience and performance.
- Career & Professional Development:
    - Launch an AI micro-skills badge program for students
    - Continue integrating guidance to students on effective use of AI in professional development and in the job search.
- Office of Institutional Data:
    - Explore how AI tools—such as large language models (LLMs)—can help make data analysis and trend-tracking easier and more effective at Lehigh. These efforts support the university’s Data and Innovative Teaching strategic initiatives.
- A Shared Bethlehem Experience:
    - Explore how AI tools can enhance outreach and engagement with local stakeholders.

Recommendation 3. AI Integration in Administrative Units

The Provost & VPFA:

- Select several administrative units for “AI Expansion” projects based on the promise of ongoing high-value impact and likelihood of success. Prioritize Admissions, Research Administration, UCPA, Human Resources, Office of Institutional Data, and LTS

- Select several administrative units for “AI Exploration” projects that would benefit from ramping up experimentation with AI. Prioritize budget and finance, DAR, Investment Office, registration, advising, and Student Affairs.
- LTS: Partner with each of these priority administrative units in a phased process:
    1. Guidance as needed in identifying AI use cases.
    2. Provide consultation on effective adoption of free, vetted AI tools
    3. Connect users to local and external expertise.
    4. As needed, provide gated access to higher-end paid AI tools like Copilot & Gemini Advanced, with access to the higher-end GenAI tools initially restricted to identified administrative groups who are committed to substantial exploration and adoption.
    5. Partner with administrative units to explore and evaluate built-in or specialized AI tools to enhance operational workflows, provide AI-driven insights, etc (e.g., the enterprise AI tools being rolled out for Ellucian, Atlassian, Microsoft)
- Point individuals or units to the existing Organization of the Future “Opportunity for Improvement" process, where cross-functional support teams can support selected AI-related projects that enhance campus operations.

Recommendation 4. Campus-Wide AI Infrastructure, Access, and Support

LTS:

- Maintain access to, and promote, secure, free or low-cost AI tools like ChatGPT Sandbox, Gemini, LibreChat Gateway.
- Expand and publicize vetted paid AI tools for broader campus use (Gemini Pro, Microsoft CoPilot)
- Expand AI-related seminars and workshops for faculty, staff, and students (including those offered through LinkedIn Learning and Data Camp)
- Partner with HR and CCPD on Lehigh AI micro-credential programs.
- Continue to offer guidance on both AI-engaged and AI-resilient teaching and assignments.
- Partner with academic and business units to evaluate enterprise AI software opportunities (e.g. Ellucian, Atlassian, R25)
- Partner with Provost and VPFA to ensure Lehigh’s infrastructure and support are meeting emerging needs of faculty, student and staff.
- Continue to offer the annual AI@Lehigh Summit and explore other methods for sharing emerging new technologies and use-cases.
- Offer AI workshop, run by internal or external experts, based on areas of interest and curiosity, starting with:
    - For faculty: adaptive teaching, curriculum development, learning assessment, tutoring, research support.
    - For staff: AI for data analysis, communications, finance, resource optimization.
    - For faculty and staff: AI for workflow efficiency through appropriate automation.
    - For students: how to access and use vetted AI tools responsibly and effectively.

Recommendation 5. Annual Review of Policies Impacted by Ongoing Changes in AI

Ensure policies are up-to-date in light of changes in AI tools and capacities:

- LTS: work with the Provost's Office to draft an AI Policy Statement, in line with recent guidance from Middle States.
- Advisory Council for Information Services(ACIS), ISSC, Data Governance Committee, and Cyber Governance, Risk, and Compliance Committee (CGRC): review AI-related policies twice a year to discuss if the policy is meeting the university needs, and make updates and recommendations as needed.
- Office of Research: develop a guiding statement for faculty on using AI in Research.
- Office of Student Conduct: continue work updating the Student Code of Conduct to explicitly name generative AI tools in relevant sections.
- The Office of Student Conduct, the Provost's Office and LTS: update all Academic Integrity websites, guidance pages, and communications to ensure advice to faculty and students is clear and consistent.

Respectfully submitted by the Generative AI Advisory Group,

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