



WHITE PAPER SERIES

Jonathan Brand, President September 2025

"Our ability to teach AI, as well as collaboration, empathy, and ethical behavior, can serve as anchors for strong and effective decision makers."

Artificial Intelligence (AI) as a Disruptor in Higher Education

AI technology is rapidly changing the face of business and individuals' lives. While the adoption of AI varies by industry and individual temperament, it is clear that higher education must adapt swiftly to this technology to serve our students. It is a central disruptor, and we don't even fully appreciate how much it will disrupt us AND also help us in the future.

If you are willing, I'd like for you to join me in this high-level stage of exploration.

To date, on campus, faculty and staff have begun to explore AI's potential to improve everything that we do at Cornell, from teaching and learning, to supporting students, to improving our processes. We have consulted with experts at other institutions to better understand AI's uses and potential. We have experimented with AI in the classroom, for example, to generate new ideas worthy of analysis or to improve lesson plans. We have offered guidance to students in terms of how we think that they should use, and not use, AI (in their academic pursuits).

AI provides both an opportunity and a challenge. We want to encourage students to explore and use AI to their advantage and to become fluent in its use, while at the same time, continue their pursuit of knowledge and critical thinking, which takes mental effort and will distinguish them from others in their futures. Defining the line between helpful and harmful is a challenging pursuit, and one that continues to be a moving target at the rapid pace of AI advancement. While AI is already incredible in its breadth and its speed,

it cannot engage in moral reasoning. It cannot engage in the dynamic process of "collaborative discovery." Thus, AI is not an end unto itself. Rather, it's a means. It's a tool, and an essential one at that.

In fact, when I asked Claude, the AI assistant, how to consider the use of AI within a college setting, it responded as follows: "AI literacy is as fundamental as traditional literacies—reading, writing, quantitative reasoning—that we require not merely for job readiness but for informed citizenship and intellectual engagement."

The truth is, AI is going to increasingly be a part of our lives in virtually every way possible. It will be for college leadership and faculty to imagine the role that AI will play in the futures of Cornell students, faculty, and staff. How can we incorporate it into the classroom? How does AI enhance our educational priorities? How will it change our day to day interactions? How can it improve what we do in educating and supporting students? How can it be a strategic advantage for Cornell? Not doing more at Cornell related to AI would both be a missed opportunity and a significant institutional risk. We have to embrace AI's potential, especially when we see how it is transforming the workplace.

Ultimately, we need an institutional strategy for AI integration, and that is where we are headed. We need to set our direction as an AI-forward institution that will not only transform the Cornell experience but will also promote our role as innovators for students and their families, thus supporting student retention and recruitment.

The student experience

Everything that we do begins and ends with our students—their experiences, their successes, and their opportunities. It's our mission. We exist to offer "an innovative and rigorous learning community where faculty and staff collaborate with students to develop the intellectual curiosity, creativity, and moral courage necessary for a lifetime of learning and engaged citizenship." Our goal is to prepare students for a successful future in work and life, including to resolve 21st century challenges across the world.

At one level, our mission means that we, as a college, aspire to be leaders in helping our students to become lifelong learners, thanks in part to the block system, thus affording them significant advantages in the workplace. At another level, our mission also means that we are leaders in teaching practical skills that train our students to work smarter and not just harder.

If our vision is to boldly anticipate students' evolving needs and confidently deliver a highly-desired, accessible education to achieve our mission, then it is hard to imagine that AI will not play an important role in our work.

Job readiness

Fortunately, our mission and our current vision for Cornell line up perfectly with what prospective students and their families say that they are looking for in a college experience. As their highest priorities, they expect:

- 1. A clear understanding of costs as well as more financial aid funding (closer to full need) so that they graduate with little, to no, debt.
- 2. A job upon graduation.
- 3. Those skills that are necessary for success in their job.

From a 2024 study on AI aptitude and job preparedness,¹ we know that employers are increasingly looking for employees who are both AI-literate and who understand how to tailor AI to an employer's specific industry. These employees (our graduates) will need to know how to use AI at a fundamental level as well as how to ask questions, examine existing processes for improvement, and collaborate with colleagues to discuss and implement change to their best advantage. Cornell's strength here is in our ability to encourage students to innovate boldly in a supportive environment; use their interdisciplinary knowledge to connect concepts into the new ideas; and employ their critical thinking to determine how technology and people integrate effectively.

Our ability to teach AI as well as collaboration, empathy, and ethical behavior can serve as anchors for strong and effective decision makers. In fact, on this point, Jen Rouse, our Director of the Center for Teaching and Learning and Consulting Librarian, Arts & Humanities, noted that: "studying AI, exploring AI, engaging with AI by using information literacy skills, such as asking well-developed questions and turning them into prompts—those are the ways we "teach" AI. We encourage empathy and ethical behavior when we ask students to consider the ways AI is being used within their chosen field of study and consequently their future careers and how they bring humanity to a tool that exists by studying our patterns and "thinks" purely based on prediction."

As referenced in the May/June, 2024 issue of *Trusteeship* magazine, the Chair of the Association of Governing Boards of Universities and Colleges (AGB) wrote:

"AI is going to impact every single field and if our students aren't learning how it's impacting their field, they're going to be behind students graduating from universities where the curriculum has incorporated AI ... [t]hen industry will find that even though the students may have good skills, industry will have to teach them what they are missing and it will be a couple of years before they may be productive ... a best-in-class approach that all institutions should be striving toward is embedding AI and data analytics education specific to the needs of students in different academic disciplines ... even general exposure to AI will not be enough to equip students to be effective in many jobs of the future without carefully targeted and applied education."

In addition, employment rates for individuals with AI skills are **significantly higher** than for those without. AI expertise is in high demand across industries, and professionals with AI-related skills often secure jobs more quickly and command higher salaries.³

Where we need to go

Knowing that AI is rapidly being incorporated into everything naturally leads me to believe that we must ensure that ALL students graduate with marketable AI skills—not a few students ... but all students. AI literacy needs to be a graduation requirement much as other outcomes are, such as critical reasoning/thinking and effective communication skills.

¹ Microsoft. (2024). 2024 Work Trend Index Annual Report Executive Summary. https://assets-c4akfrf5b4d3f4b7.z01.azurefd.net/assets/2024/05/2024_Work_Trend_Index_Annual_Report_Executive_Summary_663b2135860a9.pdf

² Tobenkin, David. Artificial Intelligence and the Future of Higher Education, Part 2. Trusteeship, May-June 2024, p. 20.

³ Wells, R. (2024, November 5). 71% of employers prefer Al skills above experience in 2024. Forbes. https://www.forbes.com/sites/rachelwells/2024/11/05/71-of-employers-prefer-ai-skills-above-experience-in-2024/

Many institutions offer AI minors as an option for students who want to specialize in artificial intelligence alongside their major. However, there are very few colleges/universities that currently **require** AI literacy or competency in order for students to graduate. This represents an opportunity for us, and one that surely won't last as more schools accelerate their investments in AI.

AI as a support model for success

Though this may seem minor relative to student learning, discussed above, there is another aspect to AI that we are incorporating into the Cornell experience—as a relatively straightforward support tool that can organize, simplify, and assist everyone as they go about their daily lives. AI agents, in the form of chatbots can automate simple tasks, provide answers to frequently asked questions, and even address routine matters (thus liberating people to do that which might require more thought and reflection). As a result, we are actively exploring adding an AI chatbot to our website as a support tool for students, faculty and staff. This investment may seem relatively insignificant (relative to a focus on student learning). And yet, because time is the one resource that is truly limited, any cost-effective improvement that can simplify our students' lives and the work of the faculty and staff is a plus.

AI and institutional focus/distinction

Though I don't yet know with specificity what this will mean, I do know that AI will continue to disrupt or render obsolete a range of activities that we are used to doing—central to the liberal arts. For example, what does AI mean for learning how to write? Acquiring proficiency in another language? Doing mathematical calculations? These are just a few examples of the important questions with which we will have to struggle. It would be misguided for us to think that AI won't force us to change what we do and how we deliver it, much as it did, for example, when we embraced technology/computer science decades ago.

AI also leads us to double-down on that which AI can perhaps enhance BUT cannot replace—those activities that comprise our fundamental humanitarian gift to our students:

- 1. AI cannot replace community. It cannot replace the effort and the joy that comes from learning to live in community with others—something that we want all Cornell students to learn while at Cornell. It cannot replace human interactions and the sense of belonging that comes when people are engaged in meaningful shared interactions.
- 2. AI cannot replace experiences—playing an instrument; singing in choir; playing on an athletics team; mock trial; studying abroad. While AI can support these activities, it cannot replace them.
- 3. AI cannot replace team-building—that occurs, for example, while traveling on an off-campus trip, playing in an ensemble, or being a member of an intercollegiate team. One of the great joys is being a part of a team—responsible and accountable to others. Being a part of a team is the only way to learn how to be a successful part of a team.
- 4. AI cannot teach life skills. Our students need to learn for themselves what it takes for them, individually and collectively, to have agency and independence—to live and thrive on a daily basis.

Thus, I believe that, increasingly, success for colleges and universities, including Cornell, will be driven by their ability to achieve the following: (1) offer a healthy and vibrant community with those meaningful experiences that AI cannot replace and (2) provide opportunity and space for exploration of important emerging technologies like AI.

Once again, I asked Claude, the AI assistant, to attempt to summarize how I see AI at Cornell, and it provided: "The dual approach you outline—AI [literacy] paired with community building, experiential learning, and collaborative leadership—positions Cornell to produce graduates who can work alongside AI while bringing the creativity, ethical judgment, and human connection that technology cannot replace." Yes—let's go there.

There you have it, my friends. I wanted to share with you where I see us right now with AI and our next steps. There is more to come on AI at Cornell College, and we will keep you informed. Onward and upward!

Jonathan Brand President

Jana L Brans

