

Redefining the Faculty Role in the Age of AI

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Abstract: Higher education is undergoing a seismic transformation with the rapid rise of GAI (generative artificial intelligence), including tools like ChatGPT, Claude, and Gemini. These technologies challenge the traditional role of faculty as primary transmitters of knowledge by offering instant access to content creation, problem-solving, and analytical capabilities across disciplines. Rather than rendering educators obsolete, this moment demands a redefinition of their purpose. The future of academia belongs to the evolved educator—one who serves as a cognitive architect, ethical steward, and mentor. This paper argues that faculty must transition from content delivery to designing learning experiences that foster critical thinking, ethical reasoning, and intellectual curiosity in an age of intelligent machines. By embracing mentorship, integrating AI literacy across disciplines, and leading institutional innovation, faculty can ensure that human wisdom, not machine output, remains at the heart of higher education.

Key words: GAI (generative artificial intelligence), AI (artificial intelligence), ML (machine learning), LLMs (large language models), modeling, ethical artificial intelligence, mentorship, ChatGPT, Claude, Gemini.

1. Introduction

The landscape of higher education is changing and with it, the role of faculty. One of the most significant developments in the history of higher education is the emergence of generative artificial intelligence (GAI) [1]. Figure 1 illustrates how large language models (LLMs)—such as ChatGPT, Claude, and Gemini—can now generate good quality essays, translate complex texts, synthesize research, and even simulate scholarly discourse. Their ability to produce vast volumes of information challenges the traditional role of professors as the sole or primary gatekeepers of knowledge.

However, this transformation does not mean that the role of faculty is going to diminish. Instead, it signals the urgent need to reconceptualize academic identity. The authority of the professor can no longer rest on exclusive control of information, since machines are now capable of generating content at an unprecedented scale and speed. Instead, the future of teaching will hinge on distinctly human capacities that AI cannot replicate:

- **Mentorship:** Faculty provides the human presence and guidance that enable students to translate abstract knowledge into personal growth and professional identity.
- **Advising and coaching:** Beyond dispensing information, professors help students navigate uncertainty, make informed choices, and chart life paths that no algorithm can anticipate.
- **Critical challenge:** Human educators ask uncomfortable questions, push students beyond easy answers, and foster intellectual resilience—qualities that pre-programmed outputs cannot provide.
- **Contextualization:** Professors locate knowledge within cultural, historical, and ethical frameworks, helping students differentiate meaning from mere information.

Therefore, GAI should not be viewed as a replacement for faculty, but as a catalyst for redefining what it means to teach. The professor's value will increasingly rest not in *what* they know, but in *how* they guide others to engage knowledge responsibly, ethically, and imaginatively.

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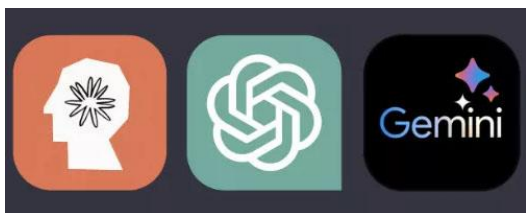


Fig. 1 New era of GAI representation.

2. From Content Expert to Cognitive Architect

The ongoing advancement of technology, ingenious systems built on AI (artificial intelligence) with cognitive skills, has been intimately associated with education in recent years. Here, the focus is on the enormous potential of cognitive computing in the fields of learning and education. According to this association, the way education is delivered, made accessible, and customized will be significantly impacted by the incorporation of complex cognitive processes into the teaching and learning process. The high-level points listed below are emphasized:

2.1 The Decline of Knowledge Scarcity

Historically, faculty served as custodians of specialized knowledge, with pedagogy flowing largely in one direction. Today, AI systems can generate summaries, essays, and code across disciplines (i.e., Figure 2). While powerful, they are prone to hallucinations, errors, and bias, often lacking historical depth or moral awareness [2].

Faculty must therefore transition into cognitive architects who design assignments that require critical engagement with AI. Rather than rewarding retrieval, teaching should emphasize analysis, synthesis, and originality [3]. The classroom becomes a laboratory of judgment, where students interrogate AI reasoning, evaluate sources, and situate conclusions in context.

2.2 AI as Pedagogical Support

AI can serve as a powerful complement to faculty work, enhancing rather than replacing their contributions. Early adoption shows promise in:



Fig. 2 Human and AI pedagogy integration.

- Syllabus and curriculum design, where AI generates draft outlines, maps learning objectives and suggest readings. At the University of Michigan, AI-assisted syllabus tools help align course goals with accreditation standards.
- Assignment scaffolding, where AI produces draft prompts that faculty and students refine collaboratively. Arizona State University has experimented with this in its writing programs.
- Formative feedback, where platforms like Gradescope now integrate AI-driven feedback for coding tasks, reducing turnaround time [4].
- Accessibility, through captioning, text simplification, and translation. The University of Sydney utilizes AI captioning tools to enhance accessibility for students with hearing impairments.
- Administrative efficiency, such as chatbots that handle student advising. Georgia State University's AI advising system has significantly reduced the phenomenon known as "summer melt".

AI frees up teachers to concentrate on mentoring, providing in-depth feedback, and fostering moral and intellectual development by automating repetitive tasks.

However, risks remain. Poorly designed systems can increase workload, widen inequities, or erode faculty

autonomy if adopted without consultation. The AAUP (American Association of University Professors) [5] emphasizes that the implementation of AI must respect shared governance, academic freedom, and disciplinary expertise.

To ensure that AI serves as a tool of empowerment—not control, universities must establish structural safeguards and support systems in place. These should include:

- **Transparent policies on AI use:** Clear institutional guidelines are essential for defining acceptable and unacceptable uses of AI in pedagogy. These policies should be co-authored with faculty and communicated to students in syllabi and course contracts.

- **Ongoing professional development:** Faculty must be supported with training programs that enhance AI fluency—not only in terms of tool functionality but also in evaluating AI’s ethical, social, and disciplinary implications.

- **Opt-in adoption models:** Faculty should be able to experiment with AI technologies at their own speed and within their own educational contexts if adoption is elective. Forced use runs the risk of resistance and estrangement.

- **Monitoring and evaluation systems:** It is crucial to guarantee accountability and continuous improvements regardless of whether AI tools actually lessen faculty labor, improve learning results, or unintentionally worsen them.

For accountability and continuous improvement, feedback loops and assessment measures must be established.

- **Shared governance and faculty voice:** Faculty should be meaningfully represented in decisions on the adoption of AI. Institutional AI plans should be actively shaped by academic councils, departmental committees, and faculty senates.

2.3 Mentorship in an Era of Simulation

While AI may simulate cognition, it cannot embody character. It cannot sit with students in uncertainty,



Fig. 3 GAI driven human memory.

provide sympathetic feedback, or model moral courage (i.e., Figure 3). These relational and unpredictable dimensions of education remain uniquely human [6].

Faculty must embrace their role as cognitive and moral mentors, guiding students to navigate ambiguity, wrestle with meaning, and develop resilience. Unlike AI, which generates answers, mentors teach students how to live with questions.

This reorientation of pedagogy emphasizes:

- **From memorization self-inquiry:** Students will now prioritize self-inquiry over mere fact retention for examinations. This indicates they will have the ability to formulate their own inquiries and relate new information to their personal values and experiences. The goal is not just to absorb knowledge but to build a framework for understanding what it means and why it matters to them.

- **From certainty curiosity:** Education is no longer about finding one single “right” answer. In an AI-driven world, there will always be multiple perspectives and layers of complexity. This shift encourages students to move from seeking certainty to embracing curiosity. They will learn to explore different viewpoints, question assumptions, and feel

comfortable with ambiguity, which are critical skills for navigating an ever-changing world.

- From performance transformation: The focus of education is shifting beyond simple academic performance (such as achieving a good grade) toward personal and ethical transformation. The ultimate goal is to foster reflective and ethical agency, enabling students to develop the ability to think critically, make informed decisions, and act with integrity. This approach ensures that education encompasses not only technical skills but also character development and civic responsibility.

Examples illustrate mentorship's irreplaceability. In medical education, AI diagnostic tools are now routine, but faculty mentors still model empathy and ethical judgment. In law schools, AI may assist with generating briefs, but professors guide students through the process of moral reasoning and civic responsibility.

Research confirms that mentorship improves student persistence, engagement, and well-being [7]. Ultimately, mentorship ensures that education is not reduced to technical training but remains a process of character and civic formation [8].

3. Faculty as Ethical Stewards of AI Literacy

Bias, privacy, and transparency are pressing ethical issues that require scholarly attention as AI becomes more integrated into education (Figure 4).

The following are few high-lighted and holistic pointes as:

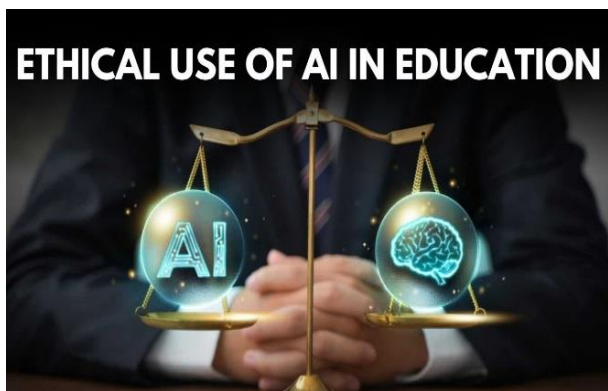


Fig. 4 Ethical reflection on AI in education.

3.1 Embedding Ethics Across Disciplines

The integration of AI raises pressing concerns: plagiarism, surveillance, bias, misinformation, and authorship [9]. Faculty are uniquely positioned to embed ethical reflection across disciplines.

Students should confront questions such as:

- What constitutes originality when machines generate text?
- How should accountability be assigned for algorithmic errors?
- How do privacy, fairness, and consent operate in AI-mediated contexts? [10].

Some institutions have adopted ethical frameworks, such as the ETHICAL AI Principles for Higher Education, which emphasize transparency, fairness, and inclusivity. These initiatives, however, must align with shared governance and academic freedom [11].

3.2 Modeling Transparency

Faculty reinforce ethical literacy by modeling responsible use of AI. This includes:

- defining acceptable AI practices in syllabi;
- revising honor codes for the digital era;
- requiring student reflections on AI use;
- demonstrating their own practices transparently [12].

Through such efforts, educators move beyond teaching ethics as an abstraction and instead embody ethical practice.

4. Institutional Transformation and Faculty Empowerment

To survive, many institutions of higher education are under increasing pressure to maintain competitive academic standards, stimulate innovation, and enhance student outcomes. Faculty members are the driving forces behind teaching, research, and institutional culture; therefore, professional development is critical to attaining these objectives. Institutional leadership is in a unique position to promote this growth by establishing an inventive and constantly learning culture (Figure 5).



Fig. 5 Faculty's driven management studies.

Here are few high-lighted few points of view.

4.1 Rethinking Evaluation

The role of the evolved educator cannot thrive under outdated metrics. Traditional measures of productivity—such as publication counts, classroom hours, or standardized teaching evaluations—no longer capture the scope of intellectual and social contributions faculty make in the age of AI. A new framework for evaluation must recognize the multifaceted role of faculty as designers of learning ecosystems, mentors of ethical engagement, and public intellectuals in a rapidly shifting digital society.

Faculty contributions should be recognized in areas such as:

- Designing AI-integrated curricula:

Textbooks and linear course plans are no longer the mainstays of curriculum design. While maintaining rigor, equity, and integrity, the modern educator must create inquiry-driven, adaptive learning experiences that include generative AI tools. This calls for both technological expertise and pedagogical vision, which entails developing tasks that inspire students to critically evaluate AI outputs, apply them sensibly, and develop unique thoughts. Successful faculty members are changing the epistemic underpinnings of higher education rather than just updating curricula.

- Leading interdisciplinary ethics seminars:

As AI systems touch nearly every discipline—from

medicine and law to art and philosophy, faculty who convene conversations across these domains play a crucial role in preparing students for responsible citizenship. Such seminars foster critical reflection on bias, accountability, privacy, and human agency. Evaluation must therefore value the ability to convene diverse voices, bridge disciplinary silos, and guide students toward ethical reasoning in contexts where technological change outpaces regulation.

- Advancing digital literacy:

Digital literacy is no longer optional—it is the grammar of the 21st century. Faculty must help students learn not only how to use AI systems effectively, but also how to question them: Where do these systems fail? What assumptions do they encode? What human skills remain irreplaceable? Faculty who pioneers digital fluency, especially for students from underrepresented or non-technical backgrounds, expand the reach of higher education's mission and reduce inequalities in access to opportunity.

- Engaging in public scholarship on technology and society:

The academy cannot remain cloistered while AI reshapes labor markets, social discourse, and democracy itself. Faculty who translates complex debates into accessible public scholarship—through essays, podcasts, community forums, or policy consultation—extend the university's impact far beyond campus walls. Evaluation systems must begin to recognize the civic value of this engagement, even when it does not fit neatly into traditional peer-reviewed or classroom-based metrics.

In sum, rethinking evaluation means shifting from counting outputs to assessing impact—measuring how faculty expand human understanding, foster ethical responsibility, and equip the next generation to navigate a world shaped by intelligent technologies.

4.2 Supporting Faculty Innovation

Sustainable change requires robust institutional support. Faculty need:

- time and funding for experimentation, through seed grants, course releases, or innovation awards;
- development academies where they gain both technical and ethical fluency with AI;
- shared governance structures that ensure faculty input on adoption and policy [5];
- safe environments where risk-taking is encouraged and failures are treated as learning opportunities.

Examples include Stanford and MIT's AI innovation grants, Arizona State University's AI teaching hubs, and the University of Michigan's Center for Academic Innovation, which treats failed pilots as valuable institutional learning.

When supported in this way, universities become not only sites of instruction but also laboratories of pedagogical innovation. Faculty are empowered as co-researchers, continually testing how AI can enhance learning outcomes, equity, and engagement.

4.3 The Evolved Educator as Cultural Architect

Technological revolutions—from the printing press to the personal computer—have always required pedagogical adaptation. AI may be the most consequential shift yet.

However, technology alone does not shape society. People do. In higher education, faculty shape the students who, in turn, shape the world.

The evolved educator is not a passive bystander but an architect of culture. Through mentorship, ethical stewardship, and curricular vision, faculty ensure that students not only adapt to the AI age but also actively shape it with justice, creativity, and wisdom.

5. Conclusion

The emergence of artificial intelligence (AI) represents a turning point in the history of higher education, but it is not a catastrophe; rather, it is a call for human educators to resume their most important and unique role. Although robots can already create, mimic, and automate, they are currently unable to foster,

encourage, or develop the deep human traits of moral bravery, wisdom, and empathy. The value of the human educator is increased rather than diminished by this technological revolution.

Teachers must welcome this changing role as cognitive architects who design learning experiences that go beyond basic knowledge retrieval. We must become consultants, mentors who support kids in navigating uncertainty, posing intelligent questions, and developing strong moral character. Lastly, we need to be ethical stewards by setting an example of openness and encouraging critical thinking about the societal ramifications of AI in all fields.

The institution's goal has always been to prepare students for meaningful engagement in a complex and dynamic society, in addition to equipping them for a career. This goal has not only not changed with the addition of AI; instead, it has become much more urgent. In a future where information is abundant, the most valuable competitive advantage will be the ability to differentiate fact from fiction, assess sources, and utilize knowledge effectively. By accepting our new position, we can ensure that our students are empowered to create a more creative, intelligent, and just future, rather than merely being passive AI consumers.

Note: AI has been used to improve the quality of the sentences and clean up grammar and spelling.

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