Let Them Use GenAI: A Manifesto for Teaching with Generative AI, Not Policing It

Sami S. H. Hajjaj,

School of Computing and Artificial Intelligence, Research Centre for Human-Machine Collaboration (HUMAC), Faculty of Engineering and Technology, Sunway University, Selangor, Malaysia.

Corresponding author: Sami S. H. Hajjaj (e-mail: samihajjaj@sunway.edu.my).

Abstract

This paper presents a manifesto for teaching with Generative AI (GenAI) in higher education, not policing it. Drawing on three years of practitioner experience across undergraduate and postgraduate courses, it explores how tools like GPT-4, Gemini, and Copilot were meaningfully integrated into assessments, labs, and class activities. Using an action research approach, the study captures how students transitioned from passive AI use to more reflective, critical engagement when guided by structured prompts and ethical reflection. Supported by recent literature, including Holmes (2023) and UNESCO (2023), the paper emphasizes the need for AI literacy, inclusive access, and educator readiness. Key findings show improved student metacognition, ethical awareness, and academic integrity, particularly when GenAI was framed as a thinking tool rather than a shortcut. The educator's role is redefined—from content gatekeeper to learning facilitator—highlighting the urgent need for institutional policies and support. Ultimately, GenAI can raise educational standards if we teach students how to use it well.

Keywords:
Generative AI in education, ChatGPT, inclusive curriculum, prompt engineering, critical thinking, SDG 4, Universal Design for Learning, future-ready teaching

Introduction

Across higher education, discussions around Generative Artificial Intelligence (GenAI) have intensified. Tools like GPT-4, Gemini, and Copilot are reshaping how students write, code, and learn. While some institutions hesitate —delaying policies or enforcing restrictions— these hesitations often stem from concerns about academic integrity, the potential for plagiarism, over-reliance on AI-generated content, and fears that students may lose essential critical thinking or writing skills. While these concerns are not unfounded, I take a different stance: I believe these risks emerge not from AI itself, but from the absence of structured, ethical teaching around it. This belief—that we must teach GenAI rather than fear it—was the central motivation behind the work I reflect upon in this paper

This paper presents a manifesto for teaching with GenAI, not policing it. Based on three years of experience as an educator, curriculum designer, and active GenAI practitioner, I argue that the true risk is not students using AI, but educators failing to teach it. Today's learners— especially those from Gen Z and Alpha—are already using these tools. Yet without guidance, their engagement remains shallow, uncritical, and sometimes counterproductive.

While my teaching is situated within a School of Computing and Artificial Intelligence—where GenAI tools are naturally aligned with course content—I believe the arguments presented here extend far beyond technical disciplines. In fact, GenAI's relevance to writing, problem-solving, critical analysis, and creative production makes it increasingly applicable across a wide range of subjects, including the humanities, social sciences, business, and design. The core issue is not the field, but the readiness of educators to guide students in using GenAI thoughtfully and ethically. This cross-disciplinary relevance is also reflected in ongoing institutional efforts, such as the GenAI-in-Education Task Force at my university, which I was invited to contribute to alongside colleagues from diverse faculties.

Rather than treat GenAI as a threat to academic integrity, we should embrace it as a tool for deeper learning. When integrated with purpose, GenAI can help reimagine assessment, classroom interaction, and critical thinking. This approach aligns with UNESCO's Sustainable Development Goal 4: ensuring inclusive and quality education. By reframing GenAI as a pedagogical ally, we can prepare students for an AI-augmented future—ethically, creatively, and inclusively.

Literature Review: Teaching with GenAI

The rise of Generative AI in education has sparked wide-ranging responses from scholars and institutions. While concerns around academic integrity and overreliance persist, recent literature emphasizes the importance of educator-led integration.

Much of this early literature has taken a cautious or risk-averse stance, often focusing on potential harms rather than pedagogical possibilities. In contrast, the works cited below offer more pragmatic and constructive approaches, which align closely with the values and intentions of this paper.

Kasneci et al. (2023) highlighted both the potential and risks of large language models in education, urging thoughtful use rather than outright bans. Holmes (2023) similarly called for developing "AI literacy" as a graduate attribute—promoting critical engagement over fear-driven restriction. Zawacki-Richter et al. (2019) further stressed that AI tools are most effective when embedded in active, teacher-guided learning environments.

At the policy level, OECD (2021) and UNESCO (2023) advocate for equitable, ethical AI use, encouraging institutions to prepare students and staff alike. Selwyn et al. (2021) added a pedagogical dimension, urging integration of AI into broader learning design.

Practitioner insights, such as Mollick and Mollick's (2023) work with MBA students, show that GenAI can foster deeper engagement when paired with reflection and ethical prompts.

Together, these sources point to a core message: the challenge is not GenAI access, but readiness to teach it well. Institutions must shift from reaction to redesign—supporting learners through guided, inclusive, and purposeful AI use. This gap—between access to GenAI tools and the pedagogical readiness to integrate them meaningfully—remains an underexplored area in practice-focused research. The work presented in this paper was motivated by a desire to address this gap through sustained, classroom-based experimentation and reflective action.

Methodology: Integrating GenAI into Teaching Practice

This paper adopts a practitioner-led, reflective methodology grounded in educational action research principles. Specifically, it draws on the model proposed by Kemmis and McTaggart, which emphasizes cyclical processes of:

- **Planning** interventions based on observed classroom needs,
- **Acting** by implementing GenAI strategies in teaching and assessment,

- **Observing** how students interact with the tools and the curriculum, and
- **Reflecting** on outcomes to inform redesign in the next cycle.

Over the course of three academic years (2022 – 2025), I completed three full action research cycles—one per year—each allowing iterative refinement of my teaching practices, assessment methods, and institutional engagement with GenAI integration. The first cycle was exploratory, as GenAI tools had only just emerged and their classroom role was still unclear. The second focused on ethical concerns, particularly addressing issues of misuse and academic integrity. The third cycle emphasized effective integration—teaching students how to use GenAI critically, creatively, and responsibly.

The integration of GenAI occurred across three main courses taught at the undergraduate and postgraduate levels in data science, artificial intelligence, and statistics for learning. The courses were delivered in blended or fully online modes, depending on institutional timelines. The students came from diverse cultural and academic backgrounds, many of them digital natives already informally using tools such as ChatGPT, Grammarly, and GitHub Copilot.

The main GenAI tools introduced included:
- **OpenAI's ChatGPT** (3.5 & 4.0)
- **GitHub Copilot** (for Python and MATLAB labs)
- **Microsoft Copilot** with Moodle and Microsoft Word
- **Blackboard Ultra with AI-enabled quizzes** (for formative assessment)

These tools were embedded into weekly assignments, lab activities, and discussion prompts. Rather than restricting their use, students were openly encouraged to engage with GenAI—but with reflective guidance. For instance, prompts were designed not merely to get answers but to evaluate, critique, and improve them, thereby teaching students how to think with AI.

No formal survey or interview was conducted. Instead, the following qualitative data sources informed the findings:

- Instructor field notes and weekly reflections,
- Patterns observed in student submissions (before and after AI integration),
- Group discussions during feedback sessions,
- Common student queries and concerns on the learning platforms,
- Peer moderation reports during internal assessment reviews.

While the study does not rely on quantitative measures, it provides grounded and practice-oriented insights drawn from sustained classroom implementation—an approach that is

especially valuable when exploring emerging tools like GenAI in complex learning environments. This flexible, adaptive methodology aligns with the call from Holmes (2023) and Mollick & Mollick (2023) for evidence grounded in lived classroom realities rather than laboratory simulations.

Findings & Discussion: Manifesto for Teaching with GenAI

The integration of GenAI tools in higher education has reshaped how students learn, think, and engage. Based on real classroom experience, the following themes emerged. Based on real classroom experience, the following themes emerged. These findings did not emerge all at once but developed gradually across three years of implementation. As my own understanding of GenAI's role in learning evolved, so too did my approach—from early experimentation, to addressing ethical concerns, to focusing on deeper pedagogical integration in the later stages.

From Passive Use to Reflective Engagement. Students were eager to use GenAI but often in shallow ways. Structured activities like AI Use Reflections shifted their approach toward critical engagement. They began refining prompts and comparing outputs—supporting Holmes' (2023) call for AI literacy. Guided assignments led to deeper thinking, with GenAI used to brainstorm, test ideas, and clarify concepts—consistent with Mollick & Mollick's (2023) vision of AI as a thinking partner.

As shown in Figure 1, nearly half of the students were observed using GenAI critically and reflectively, while a sizable portion continued using it superficially or not at all. This variation highlights the need for explicit guidance in AI-integrated pedagogy.
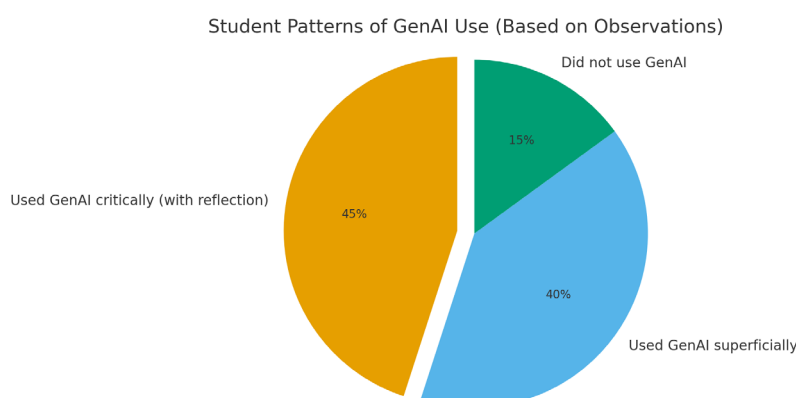

Student Patterns of GenAI Use (Based on Observations)

Did not use GenAI — 15%
Used GenAI superficially — 40%
Used GenAI critically (with reflection) — 45%

Figure 1 – Students' utilization of GenAI tools for learning

The following themes represent the core of a practitioner's **Manifesto for Teaching with GenAI in higher education**. They are addressed to educators, curriculum leaders, and

academic institutions committed to integrating AI ethically, inclusively, and with pedagogical purpose.

Promoting Integrity and Transparency. As students documented their AI use, awareness of ethical practice improved. Non-native English speakers especially benefited from GenAI as a writing aid. However, some misused it, prompting updates to rubrics to emphasize critical thinking over polished output.

Reimagining the Educator's Role. Educators now act as facilitators, not gatekeepers. Teaching with GenAI requires guiding students to think with AI, not outsource learning. Institutional support is vital; without it, the real risk becomes teacher unreadiness, not student misconduct (Zawacki-Richter et al., 2019).

Equity, Access, and Institutional Readiness. GenAI can support underserved learners, but only if access is inclusive and use is responsible. Institutions must avoid silence or bans and instead develop clear, empowering policies aligned with SDG 4 (UNESCO, 2023).

A Call to Redesign, Not Retreat. GenAI, used wisely, raises academic standards. The challenge is not its presence—but how we teach with it. This is a moment to rethink learning itself, not retreat from it.

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