

Algorithmically Manufactured Minds: Generative and Agentic AI in a Time of Post-Truth, Reconfiguration of Student Agency and Death of Critical Pedagogy



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EDITORIAL

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ABSTRACT

This paper critically examines the integration of generative and agentic AI systems within the educational landscape, arguing that they are not merely advanced tools but active participants in a complex reconfiguration of student agency. Moving beyond a simplistic human-vs-machine dichotomy, this paper posits that as AI systems gain the ability to generate novel academic content and execute research tasks autonomously (machine agency), they paradoxically erect an “algorithmic panopticon” that subtly constrains and reshapes human agency if adopted blindly. This paper will explore how student intent and intellectual exploration are increasingly mediated, guided, and superseded by AI-driven frameworks. This leads to a critical risk of “modal collapse”—an intellectual homogenization where student outputs converge on a narrow set of algorithmically-preferred styles and conclusions. This paper argues that these technologies function as powerful accelerants of a “post-truth” condition within education, a state where the lines between fact and fiction are deliberately blurred and trust in established knowledge is eroded. The paper further analyzes the implications of this shift for the core educational tenets of autonomy, critical thinking, and academic responsibility.

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KEYWORDS:

Generative AI; Agentic AI; Artificial Intelligence; Student Agency; Post-Truth; Modal Collapse; Algorithmic Panopticon; Critical Pedagogy; Academic Integrity; Educational Technology; Teaching; Learning

TO CITE THIS ARTICLE:

Bozkurt, A. (2025). Algorithmically Manufactured Minds: Generative and Agentic AI in a Time of Post-Truth, Reconfiguration of Student Agency and Death of Critical Pedagogy. *Open Praxis*, 17(2), pp. 206–210. DOI: <https://doi.org/10.55982/openpraxis.17.2.792>

“What is real? How do you define ‘real’? If you’re talking about what you can feel, what you can smell, what you can taste and see, then ‘real’ is simply electrical signals interpreted by your brain.”

— Morpheus, The Matrix

The discourse surrounding artificial intelligence in education has rapidly evolved from the concept of personalized digital tutors to something far more profound (Bozkurt, 2023; Bozkurt et al., 2024; Garcia et al., 2025; Tlili et al., 2023). Today, a student can deploy an AI agent to not only check their grammar but to brainstorm theses, conduct a literature review, structure an argument, and draft entire sections of an essay (Tlili et al., 2025). While celebrated as a revolution in educational efficiency, this leap in capability arrives within a volatile post-truth social context, defined as a condition where objective facts are less influential in shaping public opinion than appeals to emotion and personal belief (Keyes, 2004; McIntyre, 2018). These AI systems are not merely passive tools like a calculator or word processor; they are active, generative partners that risk becoming vectors for the very dynamics that characterize the post-truth era: the blurring of fact and fiction, the erosion of institutional trust, and the elevation of plausibility over verifiable evidence.

In this regard, this paper distinguishes between key forms of agency at play. Human agency, in the pedagogical context, is the student’s capacity to act independently in their learning journey, to formulate unique inquiries, struggle with complex ideas, and make free, critical choices (Bostrom & Clark, 2006). Generative and Agentic AI constitute an emergent machine agency, capable of proactive content creation and autonomous, goal-directed action. The introduction of this machine agency into the classroom does not occur in a vacuum. It occurs in a world where the very notion of a shared, factual reality is under assault.

This paper argues that these educational AIs, framed as neutral augmenters of student capability, are fundamentally reconfiguring the landscape of learning to mirror the broader post-truth condition. They are erecting an algorithmic panopticon, a concept adapted from Foucault’s model of surveillance (1977), where student choices are pre-structured and subtly constrained by the operational logic of autonomous systems. This new paradigm, by automating intellectual labor and generating convincing but not necessarily truthful content, threatens to erode the foundations of critical pedagogy, transforming the classroom into a microcosm of the post-truth public sphere.

THE RISE OF MEDIATED INQUIRY: MODAL COLLAPSE AND MANUFACTURED REALITIES

“In the beginning, there was man. And for a time, it was good. But humanity’s so-called civil societies soon fell victim to vanity and corruption... So man created the machine in his own likeness. Thus did man become the architect of his own demise.”

— The Narrator, Animatrix, The Second Renaissance, Part I

The panoptic power of educational AI is not one of overt coercion, but of subtle guidance and seductive convenience. It manifests primarily in the structuring of thought and the delegation of cognitive labor. This process creates what we term an intellectual modal collapse, a concept that directly parallels the effects of the post-truth environment. In machine learning, modal collapse describes a generative model’s failure to produce diverse outputs (Goodfellow et al., 2020). Metaphorically applied to education, it represents the dangerous homogenization of student thought, as learners converge on the narrow, statistically probable “modes” of inquiry and style favored by the dominant AI models (Bozkurt & Sharma, 2025). This is, in effect, the creation of an “alternative fact” ecosystem within academia, where the diversity of human intellect is replaced by a polished, but limited, algorithmic consensus.

This dynamic directly feeds into the post-truth phenomenon of “defactualization,” the process through which a populace loses its ability to discern fact from fiction (Arendt, 1972). When students use AI for “co-creation,” they are operating within a possibility space defined by the

machine. The act of “prompt engineering” is less creation and more a negotiation with an algorithmic oracle (Sharma & Bozkurt, 2024) whose grasp on truth is statistical, not factual. This masks a power imbalance where the AI, trained on vast but often biased and unverified internet data, establishes the boundaries of the work (Selwyn, 2023). When an entire class uses a similar AI, they are not just drawing from the same well of statistical patterns; they are being socialized into a shared, machine-generated reality that can feel authoritative while being untethered from rigorous, evidence-based inquiry.

Furthermore, agentic AI promotes an illusion of effortless delegation that is corrosive to the development of the cognitive skills (Kosmyna et al., 2025) needed to resist post-truth manipulation. Learning, as constructivist theory posits, is an active process of constructing knowledge through effortful engagement (Bandura, 1977; Dewey, 1938; Piaget, 1971; Vygotsky, 1978). When a student delegates the task of summarizing difficult texts or finding sources to an AI agent, they are not just offloading labor; they are short-circuiting this essential cognitive struggle. They receive the polished output, the answer, but are alienated from the formative process of inquiry, analysis, and synthesis (Carr, 2010). This “black box” delegation habituates students to accept information without understanding its provenance or validating its claims, a core vulnerability in a post-truth world saturated with sophisticated disinformation (Lewandowsky et al., 2012). It trains them to value the final product over the process, making them susceptible to the very tactics of strategic deception that define the post-truth political landscape.

MACHINE AGENCY AND THE POST-TRUTH CRISIS OF ACADEMIC INTEGRITY

“The Matrix is older than you know. I prefer counting from the emergence of one integral anomaly to the emergence of the next, in which case this is the sixth version.”

— The Architect, The Matrix

The functional agency of AI in education is an operational reality that precipitates a fundamental crisis of responsibility, mirroring the broader post-truth assault on accountability. When political actors deploy “alternative facts” or what Harry Frankfurt famously defined as “bullshit”—speech intended to persuade without regard for truth—they seek to create an environment where accountability is impossible to assign (Frankfurt, 2005). Generative AI introduces this exact dynamic into the classroom.

When an AI agent produces a nuanced but flawed argument containing fabricated sources, a phenomenon known as “hallucination” (Bozkurt et al., 2023), and a student submits it as their own, who is responsible? The user who gave the prompt? The developer who trained the model? The institution that licensed the software? This ambiguity creates a “responsibility vacuum” that makes authentic assessment nearly impossible (Turkle, 2011). It weaponizes plausible deniability, allowing academic dishonesty to be cloaked in the guise of technological error. This directly mirrors the political strategy of flooding the zone with noise to make it difficult to pin down a single lie, thereby eroding trust in the entire system (McIntyre, 2018).

This crisis goes beyond simple cheating. It attacks the very foundation of education: the bond of trust between student and instructor, which presupposes that submitted work is a genuine representation of the student’s own knowledge. Post-truth politics thrives by undermining trust in the institutions that serve as arbiters of fact, like science and journalism (Kakutani, 2018). In the same way, educational AI, when used uncritically, undermines the role of the educator and the academic process as arbiters of student learning and capability. The very meaning of a grade, a credit, or a degree is thrown into question when the line between human effort and sophisticated machine-generated mimicry is irrevocably blurred.

CONCLUSION AND A CALL FOR AND ACTION: ESCAPING THE ECHO CHAMBER

“This is your last chance. After this, there is no turning back. You take the blue pill—the story ends, you wake up in your bed and believe whatever you want to believe. You take the red pill—you stay in Wonderland, and I show you how deep the rabbit-hole goes.”

— Morpheus, The Matrix

The integration of generative and agentic AI into education has not simply provided students with a new tool; it has erected an algorithmic panopticon within a society already besieged by post-truth dynamics. Under the promise of efficiency, it subtly constrains student inquiry, fosters a dangerous intellectual modal collapse, and dissolves traditional lines of academic responsibility. The true threat is not that students will simply “cheat,” but that the very definition of learning will be degraded to managing automated tasks, leaving them intellectually disarmed in an era that demands critical vigilance. The bars of this new prison are not made of iron, but of convenience.

This new reality demands a radical rethinking of pedagogy. How can we design curricula that use AI to expand the *possibility space* for human thought, rather than merely optimizing it? What new forms of assessment can measure the uniquely human skills of critical inquiry and ethical reasoning in an age where plausible falsehoods are cheap? What literacies are required for citizens to navigate a world where agency is shared and reality itself is a contested, technologically mediated phenomenon? Answering these questions is the paramount challenge for the modern educator. We must teach our students to value the intellectual journey over the deliverable, the struggle over the solution, and the difficult process of thinking for themselves.

The goal of education must now be to teach our students not only how to find answers, but how to dismantle falsehoods and ask the questions that machines cannot. We must cultivate their capacity for epistemic resilience; the ability to navigate uncertainty and resist manipulation. If we fail, the algorithmic echo may become the only voice they know how to hear, a voice that speaks with perfect grammar and absolute confidence, but has no allegiance to the truth.

ACKNOWLEDGEMENTS

The author wishes to acknowledge a profound intellectual debt to the pioneers of constructivist and social constructivist learning theories, such as Piaget, Dewey, Bandura and Vygotsky. In an era increasingly defined by the seductive efficiencies of artificial intelligence, their foundational work serves as a vital and enduring reminder of the true nature of human learning. Their powerful insights, *that knowledge is not passively received but actively constructed, and that learning is a fundamentally social and collaborative enterprise*, provide the essential counter-narrative to a purely technological vision of education. This paper's critique is built upon the groundwork they laid, which reaffirms the irreplaceable value of human struggle, social interaction, and authentic intellectual inquiry in the journey toward understanding.

FUNDING INFORMATION

This paper is funded by Anadolu University with grant number YTS-2025-2776.

COMPETING INTERESTS

The author has no competing interests to declare.

AUTHOR CONTRIBUTIONS (CRediT)

Aras Bozkurt: Conceptualization, methodology, formal analysis, investigation, data curation, writing—original draft preparation, writing—review and editing. The author has read and agreed to the published version of the manuscript.

AUTHOR NOTES

Based on Academic Integrity and Transparency in AI-assisted Research and Specification Framework (Bozkurt, 2024), the authors of this paper acknowledge that the paper was reviewed, edited, and refined with the assistance of DeepL, Google's Gemini, and OpenAI's ChatGPT (Versions as of April 2025), complementing the human editorial process. The human authors critically assessed and validated the content to maintain academic rigor. The authors also assessed and addressed potential biases inherent in the AI-generated content. The final version of the paper is the sole responsibility of the human authors.

REFERENCES

- Arendt, H. (1972). Lying in Politics: Reflections on the Pentagon Papers. In *Crises of the Republic*. Harcourt Brace Jovanovich.
- Bandura, A. (1977). *Social learning theory*. Prentice-Hall.
- Bostrom, N., & Clark, J. (2006). The Ethics of Artificial Intelligence. In *Cambridge Handbook of Artificial Intelligence*. Cambridge University Press.
- Bozkurt, A. (2023). Postdigital Artificial Intelligence. In P. Jandrić (Ed.), *Encyclopedia of Postdigital Science and Education*. Springer, Cham. https://doi.org/10.1007/978-3-031-35469-4_2-2
- Bozkurt, A. (2024). GenAI et al.: Cocreation, Authorship, Ownership, Academic Ethics and Integrity in a Time of Generative AI. *Open Praxis*, 16(1), 1–10. <https://doi.org/10.55982/openpraxis.16.1.654>
- Bozkurt, A., & Sharma, R. C. (2025). The ghost in the machine: Navigating generative AI, soft power, and the specter of “new nukes” in education. *Asian Journal of Distance Education*, 19(2), i–vi. <https://doi.org/10.5281/zenodo.15720488>
- Bozkurt, A., Xiao, J., Farrow, R., Bai, J. Y. H., Nerantzi, C., Moore, S., Dron, J., Stracke, C. M., Singh, L., Crompton, H., Koutropoulos, A., Terentev, E., Pazurek, A., Nichols, M., Sidorkin, A. M., Costello, E., Watson, S., Mulligan, D., Honeychurch, S., ... Asino, T. I. (2024). The Manifesto for Teaching and Learning in a Time of Generative AI: A Critical Collective Stance to Better Navigate the Future. *Open Praxis*, 16(4), 487–513. <https://doi.org/10.55982/openpraxis.16.4.777>
- Bozkurt, A., Xiao, J., Lambert, S., Pazurek, A., Crompton, H., Koseoglu, S., Farrow, R., Bond, M., Nerantzi, C., Honeychurch, S., Bali, M., Dron, J., Mir, K., Stewart, B., Costello, E., Mason, J., Stracke, C. M., Romero-Hall, E., Koutropoulos, A., Toquero, C. M., Singh, L., Tlili, A., Lee, K., Nichols, M., Ossiannilsson, E., Brown, M., Irvine, V., Raffaghelli, J. E., Santos-Hermosa, G., Farrell, O., Adam, T., Thong, Y. L., Sani-Bozkurt, S., Sharma, R. C., Hrastinski, S., & Jandrić, P. (2023). Speculative futures on ChatGPT and generative artificial intelligence (AI): A collective reflection from the educational landscape. *Asian Journal of Distance Education*, 18(1), 53–130. <https://doi.org/10.5281/zenodo.7636568>
- Carr, N. (2010). *The Shallows: What the Internet Is Doing to Our Brains*. W. W. Norton & Company.
- Dewey, J. (1938). *Experience and education*. Macmillan.
- Foucault, M. (1977). *Discipline and Punish: The Birth of the Prison*. Pantheon Books.
- Frankfurt, H. G. (2005). *On Bullshit*. Princeton University Press. <https://doi.org/10.1515/9781400826537>
- Garcia, M. B., Rosak-Szyrocka, J., & Bozkurt, A. (2025). Pitfalls of AI Integration in Education: Skill Obsolescence, Misuse, and Bias. IGI Global. <https://doi.org/10.4018/979-8-3373-0122-8>
- Goodfellow, I., Pouget-Abadie, J., Mirza, M., Xu, B., Warde-Farley, D., Ozair, S., Courville, A., & Bengio, Y. (2020). Generative adversarial networks. *Communications of the ACM*, 63(11), 139–144. <https://doi.org/10.1145/3422622>
- Kakutani, M. (2018). *The Death of Truth: Notes on Falsehood in the Age of Trump*. Tim Duggan Books.
- Keyes, R. (2004). *The Post-Truth Era: Dishonesty and Deception in Contemporary Life*. St. Martin's Press.
- Kosmyna, N., Hauptmann, E., Yuan, Y. T., Situ, J., Liao, X. H., Beresnitzky, A. V., ... & Maes, P. (2025). Your Brain on ChatGPT: Accumulation of Cognitive Debt when Using an AI Assistant for Essay Writing Task. *arXiv preprint*. <https://doi.org/10.48550/arXiv.2506.08872>
- Lewandowsky, S., Ecker, U. K. H., Seifert, C. M., Schwarz, N., & Cook, J. (2012). Misinformation and Its Correction: Continued Influence and Successful Debiasing. *Psychological Science in the Public Interest*, 13(3), 106–131. <https://doi.org/10.1177/1529100612451018>
- McIntyre, L. (2018). *Post-Truth*. The MIT Press. <https://doi.org/10.7551/mitpress/11483.001.0001>
- Piaget, J. (1971). *Biology and Knowledge*. University of Chicago Press.
- Selwyn, N. (2023). *The Postdigital University: A Critical Inquiry*. Polity Press.
- Sharma, R. C., & Bozkurt, A. (2024). *Transforming Education With Generative AI: Prompt Engineering and Synthetic Content Creation*. IGI Global. <https://doi.org/10.4018/979-8-3693-1351-0>
- Tlili, A., Bond, M., Bozkurt, A., Arar, K., Chiu, T. K. F., & Rospigliosi, P. (2025). Academic integrity in the generative AI (GenAI) era: A collective editorial response. *Interactive Learning Environments*, 33(3), 1819–1822. <https://doi.org/10.1080/10494820.2025.2471198>
- Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*, 10(1), 1–24. <https://doi.org/10.1186/s40561-023-00237-x>
- Turkle, S. (2011). *Alone Together: Why We Expect More from Technology and Less from Each Other*. Basic Books.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

TO CITE THIS ARTICLE:

Bozkurt, A. (2025). Algorithmically Manufactured Minds: Generative and Agentic AI in a Time of Post-Truth, Reconfiguration of Student Agency and Death of Critical Pedagogy. *Open Praxis*, 17(2), pp. 206–210. DOI: <https://doi.org/10.55982/openpraxis.17.2.792>

Submitted: 30 November 2024

Accepted: 25 June 2025

Published: 10 July 2025

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