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The Ontological Drift of Learning: Presence, Authority, And Instrumental Reason in AI Platforms

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ABSTRACT: This article presents a conceptually rigorous, argument-driven paper on the ontological and ethical crisis of higher education in the age of AI-mediated learning and platformized new media. Higher education is undergoing an ontological drift: learning is increasingly framed as optimization, efficiency, and measurable outputs, which subtly erodes (a) lived presence in learning, (b) the ethical relation between teacher–student, and (c) the authority of knowledge as a shared, cultivated horizon. Treating AI not as a neutral tool but as a socio-technical mediator that reorganizes attention, temporality, accountability, and what counts as "understanding."

KEYWORDS: higher education, AI-mediated learning, platformised new media, ontological crisis, ethical crisis, phenomenology, critical theory

INTRODUCTION

A student, confronted with a challenging essay on post-colonial theory, turns not to the library or a study group, but to a sleek AI-powered "learning assistant." The platform offers to summarize dense theoretical texts, generate a draft outline, and even suggest sentence completions that mimic an academic tone. Within an hour, a polished essay emerges, its arguments algorithmically optimized for clarity and coherence. The student receives a high grade, celebrated for their efficiency. Yet, a subtle but profound question lingers: what was actually learned in this process? This vignette, increasingly common in higher education (Bearman et al., 2023), is not merely a story about a new tool; it is a symptom of a deeper ontological drift in our understanding of learning itself. This paper argues that the integration of AI-mediated platforms into higher education is not a neutral enhancement of existing practices but a fundamental re-engineering of the very meaning of learning, presence, and intellectual authority.

This article addresses the urgent philosophical problem that arises when education is reframed as a process of instrumental optimization. The core thesis is that higher education is undergoing an ontological drift: learning is increasingly defined by its measurable outputs, efficiency, and algorithmic tractability (Biesta, 2010). This shift subtly erodes three foundational pillars of education: the lived presence required for deep intellectual engagement (Merleau-Ponty, 1962), the ethical-pedagogical relationship between teacher and student (Buber, 1970), and the authority of knowledge as a shared, cultivated horizon of meaning (Gadamer, 2004). We will treat AI not as a passive instrument but as a powerful socio-technical mediator that actively reorganizes attention, temporality, accountability, and the very definition of what it means to "understand" (Feenberg, 1991). By moving beyond a simple cost-benefit analysis of AI in the classroom, this paper offers a phenomenological and critical-theoretical critique, aiming to reveal the philosophical stakes of this transformation and articulate principles for a more meaningful educational future.

Conceptual Background: Beyond Utility and Panic

The discourse surrounding the integration of artificial intelligence into higher education is largely bifurcated. On one side, proponents champion AI as a catalyst for unprecedented efficiency, personalization, and access. In this view, AI tutors can offer students 24/7 support, adaptive learning platforms can tailor curricula to individual paces, and automated grading systems can free up faculty time for more meaningful interaction (Luckin & Holmes, 2016). This narrative frames AI as a powerful tool for optimizing educational delivery, solving logistical challenges, and ultimately democratizing learning. On the other side, a chorus of critical voices raises alarms about the multifaceted risks of AI adoption. These concerns range from the practical issues of student data privacy and algorithmic bias to the pedagogical fears of deskilling, where students lose the ability to write, research, and think critically without technological assistance (Selwyn, 2019). Critics also point to the dangers of increased surveillance (Zuboff, 2019), the commodification of educational content, and the erosion of faculty autonomy as platform-based metrics dictate pedagogical practices.

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While both the optimistic and critical perspectives highlight important dimensions of AI's impact, they often remain tethered to a debate over utility and policy. The dominant questions are instrumental: Does it work? Is it fair? What are the costs? This focus, while necessary, systematically overlooks a more fundamental set of questions about the very nature of learning in a technologically saturated world. The gap in the current debate is a philosophical one. It fails to adequately address the ontological and phenomenological stakes of outsourcing cognitive and pedagogical functions to algorithmic systems (Introna, 2005). By framing the problem primarily in terms of efficiency gains versus practical risks, the prevailing discourse misses how these technologies are not just tools but environments that actively reshape the lived experience of learning, the nature of intellectual authority, and the ethical substance of the teacher-student relationship. This article seeks to fill that gap by shifting the analysis from a logic of implementation to a critique of instrumental reason itself (Horkheimer & Adorno, 2002), exploring not just what AI does in education, but what it undoes.

Phenomenological Analysis: The Reorganization of Presence

At the heart of the educational experience is the cultivation of presence—a state of focused attention, embodied engagement, and temporal immersion that allows for deep, transformative learning (Merleau-Ponty, 1962). It is in the sustained, and often difficult, encounter with a text, a problem, or a dialogue that genuine understanding is forged. However, AI-mediated learning platforms, designed around principles of frictionless efficiency and immediate response, fundamentally reorganize this phenomenological field. Attention, rather than being a cultivated capacity for sustained focus, is fractured into a series of micro-interactions and task-switching behaviors. The student's engagement is no longer primarily with the material itself, but with the interface that mediates it. The temporality of learning is similarly compressed; the slow, iterative process of reading, reflection, and gradual insight is replaced by the instantaneous delivery of summarized information and pre-packaged solutions. The platform's logic transforms learning from a durational, embodied practice into a sequence of discrete, disembodied transactions (Vial, 2018).

This logic systematically devalues what philosopher Martin Heidegger (1977) might call the productive friction of learning. The struggle to articulate a thought, the frustration of a dead-end inquiry, the slow work of synthesizing disparate ideas—these are not obstacles to be eliminated, but essential conditions for meaningful intellectual growth. They create the necessary resistance against which the learner's own cognitive and interpretive capacities are developed. AI platforms, in their quest for a seamless user experience, actively design out this friction. The "prompt-response" paradigm, which lies at the core of many generative AI tools, trains the student to see knowledge not as something to be constructed through effort, but as something to be retrieved through a well-formulated query. In this model, the goal is not to wrestle with complexity but to find the most efficient path to a correct output. What is lost in this transaction is the very substance of education: the development of intellectual resilience, the cultivation of interpretive judgment, and the embodied satisfaction of overcoming a genuine challenge. Learning becomes less a journey of discovery and more a process of production, where the student is positioned as a consumer of answers rather than a builder of understanding (Dewey, 1938).

Authority & Ethics: The Fading of the Other

The ontological drift toward instrumentalism precipitates a crisis in the authority of the teacher and the ethical fabric of the pedagogical relationship. This is not a defense of authoritarianism, but an argument for the necessity of epistemic guidance, mentorship, and the cultivation of intellectual responsibility (Rancière, 1991). In a traditional educational model, the teacher's authority stems from their expertise, their command of a disciplinary tradition, and their ability to model a particular way of thinking and being. This authority is fundamentally relational; it is earned through trust and demonstrated through the act of guiding a student from novice to expert. The teacher is not merely a content provider but an ethical and intellectual "other" who challenges, provokes, and holds the student accountable to a standard of rigor and integrity (Buber, 1970).

AI-mediated learning systems, however, reconfigure this relationship by positioning the platform as a competing, and often more seductive, source of authority. The allure of "answer availability"—the promise of immediate, confident, and seemingly objective solutions—creates a powerful temptation to bypass the human teacher. Why struggle with a professor's ambiguous feedback when an AI can instantly "fix" an essay? Why engage in a difficult classroom discussion when a chatbot can provide a concise summary of all relevant viewpoints? This shift subtly displaces the teacher's role from that of a dialogic guide to a mere facilitator or, in some cases, an evaluator of machine-generated output. The ethical dimensions of the relationship—trust, mutual responsibility, and the shared commitment to a difficult intellectual pursuit—are thinned out. The student's primary accountability is no longer to a human mentor but to the platform's metrics of engagement and performance. Authorship becomes blurred, and the very notion of epistemic responsibility—of owning one's ideas and being able to defend them—is rendered precarious (Stiegler, 2010).

Instrumental Reason and Platform Logic

The erosion of presence and authority is not an accidental byproduct of educational technology, but a direct consequence of the instrumental reason that animates the digital platforms themselves. Drawing on the critical theory of the Frankfurt School, we can understand instrumental reason as a mode of thought that reduces all things—nature, society, and even human beings—to mere means for achieving predetermined ends (Horkheimer & Adorno, 2002). Its logic is one of calculation, optimization, and control. AI-driven educational platforms are the contemporary embodiment of this rationality. Their very architecture is designed to quantify, measure, and manage the learning process, transforming it into a predictable and efficient system. Curricula are broken down into modular, trackable units. Student progress is visualized through dashboards and performance metrics. Assessment is increasingly automated, favoring quantifiable outputs over qualitative judgment (Biesta, 2010).

This platform logic subtly reshapes the student's self-understanding. Within this ecosystem, the student is no longer primarily a learner in a community of inquiry, but a user of a service, a customer to be retained, and a producer of data (Srnicek, 2017). Their educational journey is reframed as a process of optimizing their personal learning "profile," and their intellectual choices are guided by the platform's recommendation algorithms. This creates a powerful feedback loop: the more learning is mediated by platforms, the more it is structured by instrumental logic, and the more students and educators alike come to accept this logic as the natural and only way of conceiving of education. The ultimate goal ceases to be the cultivation of a critical and well-rounded intellect, and becomes instead the efficient acquisition of credentials and skills demanded by

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the market. Education is thus absorbed into the broader logic of the platform economy, where value is defined by utility, and success is measured by outputs (Zuboff, 2019).

A Constructive Proposal: Principles for a Post-Instrumental Pedagogy

Resisting the totalizing logic of instrumental reason does not require a wholesale rejection of technology. Rather, it demands a conscious and philosophically grounded effort to reclaim the ontological core of education. A post-instrumental pedagogy would be founded on a set of principles designed to cultivate presence, restore ethical relationships, and defend the intrinsic value of knowledge. First, we must actively design for dialogic spaces (Habermas, 1984). This means prioritizing synchronous, open-ended conversations where ideas can be explored without the pressure of immediate assessment. It involves creating curricula that privilege ambiguity and complexity over simplistic, quantifiable answers. The goal is to reintroduce the human element of mutual recognition and shared inquiry that platforms, by their nature, cannot replicate.

Second, we must develop new forms of assessment that reward interpretive depth and intellectual risk-taking. Instead of relying on automated metrics of completion and accuracy, assessments should be designed to reveal the student's reasoning process. This could take the form of viva voce examinations, portfolio-based evaluations, or long-form essays that require the synthesis of complex, even contradictory, sources. The aim is to shift the focus from the "what" of the answer to the "how" of the thinking process. Third, we must insist on an explicit epistemic ethics. This involves making the processes of knowledge construction and validation a central topic of study in all disciplines. Students must be taught to critically examine the sources of their information, to understand the biases embedded in algorithmic systems, and to take responsibility for the claims they make. This includes fostering a culture of transparency about AI mediation, where the use of technological tools is not hidden but openly acknowledged and critically discussed (Creswell & Plano Clark, 2018).

Finally, we must cultivate "presence practices"—pedagogical techniques designed to foster sustained attention and embodied engagement (Ihde, 2010). This might include practices like contemplative reading, structured debates, or collaborative problem-solving sessions that require participants to be fully present to one another and to the task at hand. These proposals are not a simple list of best practices but a philosophical reorientation. They seek to re-center education on the cultivation of human judgment, the practice of interpretive meaning-making, and the ethical encounter between teacher and student. They are a defense of the slow, difficult, and profoundly human process of learning in an age that prizes speed, ease, and automation (Freire, 1970).

The Political Economy of Educational Technology

The ontological drift in education is not occurring in a vacuum; it is deeply embedded within the political and economic structures of platform capitalism (Srnicek, 2017). The widespread adoption of AI-mediated learning systems is driven not only by pedagogical aspirations but also by powerful market forces that seek to transform education into a new frontier for data extraction and capital accumulation. Understanding this political economy is crucial for a comprehensive critique of educational technology, as it reveals the underlying interests and power dynamics that shape the design and implementation of these platforms.

At the core of this political economy is the business model of surveillance capitalism, as articulated by Zuboff (2019). In this model, the primary goal is not to sell a product or service, but to capture and analyze vast amounts of user data, which are then used to predict and modify behavior for commercial purposes. Educational platforms, with their ability to track every click, every keystroke, and every interaction, are incredibly rich sources of such data. Student performance data, learning preferences, and even emotional states can be harvested and repurposed for a variety of ends, from targeted advertising to the development of new AI products. This creates a powerful incentive for platform companies to design systems that maximize engagement and data production, often at the expense of genuine learning. The logic of the platform, therefore, is not necessarily aligned with the pedagogical goals of educators, but with the economic imperatives of the data market.

Furthermore, the rise of platform capitalism in education contributes to the increasing privatization and marketization of the university. As public funding for higher education declines, universities are under pressure to find new revenue streams and to operate more like businesses. Educational technology companies, often backed by venture capital, present themselves as partners in this process, offering solutions that promise to increase efficiency, reduce costs, and enhance the student "customer experience." This partnership, however, is not one of equals. The technological infrastructure, the data, and the algorithms are typically owned and controlled by the private companies, leaving universities in a position of dependency. This can lead to a loss of institutional autonomy, as pedagogical decisions are increasingly shaped by the features and limitations of the platforms, and as the university's educational mission is subordinated to the commercial interests of its technology partners (Selwyn, 2019). The result is a gradual erosion of the university as a public good, and its transformation into a site for private profit.

The Temporality of Learning and the Acceleration of Education

The reorganization of presence by AI-mediated platforms has a profound impact on the temporality of learning. Education, in its most meaningful forms, is a slow process. It requires time for reflection, for the gradual assimilation of complex ideas, and for the development of intellectual patience. The temporality of deep learning is not linear but recursive, involving moments of confusion, frustration, and sudden insight. It is a rhythm of engagement and withdrawal, of intense focus and quiet contemplation. This slow, deliberate temporality is not a bug to be fixed, but a feature of the human cognitive process, essential for the construction of lasting knowledge and understanding (Stiegler, 2010).

AI-driven educational platforms, however, operate on a different temporal logic—the logic of acceleration. In the digital world, speed is a primary value. Information is delivered instantaneously, feedback is immediate, and progress is measured in terms of completion rates and time-on-task. This creates a culture of impatience, where students come to expect instant gratification and to see any delay or difficulty as a sign of inefficiency. The platform's interface, with its notifications, progress bars, and gamified elements, is designed to keep the user constantly engaged in a cycle of stimulus and response, leaving little room for the kind of deep, uninterrupted thought that is necessary for genuine learning. The result is a subtle but pervasive form of temporal conditioning, where the student's internal clock is recalibrated to the accelerated pace of the machine.

This acceleration of education has several detrimental consequences. First, it encourages a superficial engagement with the material. When the goal is to get through the content as quickly as possible, students are less likely to pause, to question, to make connections, or to grapple with ambiguity. They become adept at pattern recognition and information retrieval, but they lose the capacity for critical and creative thought. Second,

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it devalues the process of learning in favor of the product. The focus shifts from the journey of discovery to the acquisition of a credential, and the intrinsic rewards of intellectual exploration are replaced by the extrinsic rewards of grades and badges. Third, it can lead to a sense of anxiety and burnout, as students feel pressured to keep up with the relentless pace of the platform and to be constantly "on." The space for rest, for daydreaming, for the unproductive but essential moments of intellectual fallowness, is squeezed out. In this accelerated temporality, there is no time to simply be with an idea, to let it gestate, to allow it to transform one's understanding of the world (Heidegger, 1977).

The Dialogic Encounter and its Erosion

Education, at its core, is a dialogic practice. It is through the give-and-take of conversation, the dynamic interplay of questioning and answering, and the mutual recognition of teacher and student as partners in a shared inquiry that knowledge is co-created and understanding is deepened. This dialogic encounter, as conceptualized by thinkers like Martin Buber (1970) and Hans-Georg Gadamer (2004), is not merely a technique for transmitting information, but an ethical and ontological event. In the I-Thou relationship of genuine dialogue, both participants are transformed. The teacher is not simply a dispenser of facts, and the student is not a passive recipient. Rather, they are co-habitants of a shared world of meaning, engaged in a process of mutual discovery.

AI-mediated learning platforms, however, are fundamentally antithetical to this dialogic ideal. The communication they facilitate is not a dialogue but a monologue, or at best, a highly structured and asymmetrical interaction. The student communicates with the platform not as a partner in conversation, but as a user issuing a command. The platform, in turn, responds not with a genuine question or a challenging perspective, but with a pre-programmed answer or a statistically generated text. There is no mutual recognition, no shared vulnerability, no possibility of genuine surprise. The relationship is not I-Thou but I-It, a relationship of use and manipulation (Buber, 1970). The platform is an object to be instrumentalized, a tool for achieving a predetermined goal. What is lost in this transaction is the very soul of education: the human connection that makes learning meaningful.

This erosion of the dialogic encounter has profound implications for the development of students' communicative and ethical capacities. Dialogue teaches us to listen, to be open to the perspectives of others, to articulate our own ideas with clarity and precision, and to navigate disagreement with respect and intellectual humility. It is in the space of dialogue that we learn to be responsible for our words, to be accountable to a community of inquiry, and to see the world from a point of view other than our own. When education is reduced to a series of interactions with an algorithmic system, these crucial capacities are left undeveloped. The student learns to communicate with a machine, but not with a person. They become adept at formulating effective prompts, but not at engaging in a genuine conversation. The result is a generation of learners who may be information-rich but are relationally impoverished, who are skilled in the techniques of data retrieval but are strangers to the art of human understanding (Habermas, 1984).

Disciplinary Knowledge and the Erosion of Expertise

The ontological drift toward instrumentalism has particular implications for how we understand and cultivate disciplinary knowledge and expertise. Traditionally, the development of expertise in any field—whether physics, philosophy, history, or medicine—has been understood as a long-term process of enculturation into a disciplinary community (Rosenberger, 2017). A student does not simply acquire a set of facts or skills; they learn to see the world through the lens of their discipline, to ask the kinds of questions that the discipline considers important, to recognize what counts as evidence, argument, or proof within that field. This process involves apprenticeship, mentorship, and the gradual internalization of disciplinary standards and values. The expert is not merely someone who knows more than the novice; they are someone who has developed a particular way of thinking and being that is constitutive of their disciplinary identity.

AI systems, by contrast, are designed to abstract knowledge from its disciplinary context and to represent it in forms that are computationally tractable. A physics problem becomes a set of variables and equations. A historical argument becomes a pattern to be recognized and reproduced. A philosophical concept becomes a node in a semantic network. This abstraction and decontextualization, while enabling certain kinds of efficiency and scale, fundamentally transforms the nature of the knowledge being transmitted. The student may acquire the ability to solve physics problems without developing the physicist's intuition about how the world works. They may learn to reproduce historical arguments without understanding the disciplinary debates and concerns that generated them. They may become familiar with philosophical concepts without grasping the lived experience of philosophical thinking.

This erosion of disciplinary knowledge has consequences not only for education but for the future of disciplinary communities themselves. Disciplines are not merely bodies of knowledge but communities of practice, characterized by shared values, standards, and ways of engaging with the world (Ihde, 2010). If students are trained primarily through algorithmic systems rather than through mentorship within disciplinary communities, the transmission of these values and standards is interrupted. The next generation of scholars may be technically competent but lacking in the kind of deep understanding and disciplinary commitment that has historically driven innovation and progress within fields. Moreover, the reduction of disciplinary knowledge to algorithmic patterns creates a kind of epistemic flattening, where all knowledge is treated as equivalent, all disciplines as interchangeable sources of information. This obscures the distinctive character of different fields and the particular ways in which they contribute to human understanding and flourishing.

Resistance and Alternatives: Toward a Care-Centered Pedagogy

While the forces driving the instrumentalization of education are powerful and pervasive, there are also emerging movements and practices that resist this logic and offer alternative visions of what education could be. These alternatives are not necessarily anti-technology, but they are deeply critical of the uncritical adoption of AI and other digital tools, and they insist on centering the human, the relational, and the ethical in educational practice. One such alternative is the development of what might be called a care-centered pedagogy, which draws on feminist philosophy and ethics of care to reimagine the teacher-student relationship and the goals of education (Freire, 1970).

A care-centered pedagogy begins with the recognition that education is fundamentally a relational practice, rooted in the concrete, embodied encounters between human beings. It emphasizes the importance of attentiveness, responsiveness, and responsibility—qualities that are difficult, if not impossible, to automate or algorithmically mediate. In this approach, the teacher is not a content deliverer but a caring presence, someone

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who is genuinely concerned with the well-being and development of the student as a whole person. The student, in turn, is not a user or a data point, but a unique individual with particular needs, interests, and potential. The relationship between them is characterized by mutual recognition, trust, and a shared commitment to the student's growth and flourishing.

Another important alternative is the practice of critical digital literacy, which aims to develop students' capacity to critically analyze and resist the logics embedded in digital systems (Selwyn, 2019). Rather than simply accepting the affordances and constraints of educational technology as given, students are taught to question how these systems shape their learning, what values and assumptions are embedded in their design, and what alternatives might be possible. This involves not only understanding how algorithms work and how data is used, but also developing a critical consciousness of the broader political and economic contexts in which these technologies are deployed. By fostering critical digital literacy, educators can help students become not passive consumers of technology, but active agents capable of shaping the technological systems that shape them.

Furthermore, there is growing interest in the revival of contemplative and reflective practices in education, such as meditation, journaling, and slow reading (Stiegler, 2010). These practices are designed to cultivate the kind of sustained attention, embodied presence, and deep reflection that are increasingly rare in our accelerated, technology-saturated world. By creating space for these practices within the curriculum, educators can help students develop the capacity for the kind of slow, difficult thinking that is necessary for genuine understanding and wisdom. These practices also serve as a counterweight to the constant stimulation and fragmentation of attention that characterizes digital environments, offering students a refuge in which they can reconnect with themselves and with the material they are studying.

CONCLUSION

This article has argued that the pervasive integration of AI-mediated platforms into higher education constitutes an ontological drift, fundamentally reshaping the meaning of learning, presence, and authority. By moving beyond a utilitarian calculus of costs and benefits, we have sought to illuminate the philosophical stakes of this transformation. Our phenomenological and critical-theoretical analysis has shown how the logic of instrumental reason, embedded in the very architecture of these platforms, erodes the conditions for deep, transformative education. The emphasis on efficiency, optimization, and measurable outputs systematically devalues the productive friction of intellectual struggle, the ethical substance of the teacher-student relationship, and the authority of knowledge as a shared horizon of meaning. This argument does not claim that AI has no place in education, nor does it deny the potential benefits of these technologies (Vieriu, 2025). Rather, it insists that we must approach their implementation with a critical awareness of their power to reshape our fundamental understanding of what it means to learn and to be human.

Future research should continue to explore these issues from both conceptual and empirical perspectives. Conceptually, there is a need for a more developed political economy of educational technology, examining how platform capitalism is reshaping the institutional landscape of the university (Srnicek, 2017). Empirically, longitudinal studies are needed to understand the long-term effects of AI-mediated learning on students' cognitive development, their capacity for critical thought, and their ethical dispositions (Wang et al., 2024). Ultimately, the challenge is not simply to manage the risks of AI in education, but to articulate and defend a vision of learning that is resistant to the allure of instrumentalism and committed to the cultivation of the human spirit (U.S. Department of Education, 2023).

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