

Artificial Intelligence in Higher Education: Interdisciplinary Perspectives on Literary Pedagogy from English and Computer Education

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Abstract

The increasing integration of Artificial Intelligence (AI) into higher education has created both opportunities and tensions, particularly in disciplines rooted in interpretation, critical reflection, and independent thinking. English studies, traditionally centered on close reading, analytical reasoning, and creative engagement, now encounters AI tools capable of generating essays, summaries, and interpretations. This shift raises important pedagogical questions about authorship, originality, and the very nature of intellectual development in the humanities. This paper adopts an interdisciplinary perspective, bringing together insights from English education and computer science to examine the evolving role of AI in literary pedagogy. It explores how AI tools can support learning processes while also posing significant risks to critical thinking, academic integrity, and the cultivation of a personal voice. From a literary standpoint, concerns arise regarding students' potential dependence on AI for interpretative work, which can circumvent the essential struggle with a text that leads to genuine understanding. From a computational perspective, understanding the functioning, limitations, and inherent biases of large language models becomes essential for their ethical and effective use. The paper argues that deep collaboration between English and computer education can lead to a balanced pedagogical framework. Such a framework emphasizes AI literacy, critical engagement with AI-generated outputs, and a pedagogy of responsible use. By integrating disciplinary strengths, educators can transform AI from a potential threat to academic rigor into a meaningful tool that enhances reflective learning and prepares students for a complex, technologically mediated world. The study contributes to broader discussions on the future of humanities education and the necessity of interdisciplinary approaches in a technologically driven academic environment.

INTRODUCTION

Higher education is undergoing a profound transformation as digital technologies reshape how knowledge is produced, accessed, and evaluated. Among these technologies, Artificial Intelligence (AI) has emerged as a powerful and disruptive force. Unlike previous technological shifts, AI systems are no longer confined to technical or scientific domains; they are now deeply embedded in disciplines traditionally associated with human creativity, interpretation, and subjective judgment, such as literature, philosophy, and the arts. The release of sophisticated large language models has made AI tools capable of generating human-like text, constructing complex arguments, and even mimicking literary styles, making their presence in the classroom unavoidable.

In English studies, the act of reading literature has long been understood as a deeply personal, interpretative, and reflective process. It is a process where the journey of grappling with ambiguity, questioning a narrator's reliability, or tracing a complex metaphor is as valuable as the final interpretation. Students are encouraged to engage deeply with texts, analyze themes, question their own assumptions, and develop original arguments supported by textual evidence. However, the introduction of AI tools capable of generating sophisticated literary analysis in seconds challenges this traditional model at its core. When a machine can produce a coherent, well-structured interpretation of a Shakespearean sonnet or a modernist novel, fundamental questions arise about the nature of understanding, the value of original thought, and the definition of intellectual effort and authorship.

Simultaneously, from the perspective of computer education, AI is not a mysterious or

autonomous sentient entity but a complex system built on algorithms, statistical data patterns, and probabilistic models. It is a technology of prediction, not a source of truth. Understanding how these systems function—their reliance on training data, their lack of genuine comprehension, and their susceptibility to biases—allows educators and students to approach them with a critical, informed perspective rather than passive acceptance. This technical awareness can demystify AI and position it as a powerful, yet fallible, tool rather than a replacement for human thought.

This paper seeks to bridge these two vital perspectives. By examining the intersection of AI with both literary and computational lenses, it aims to develop a more nuanced, holistic understanding of its role in contemporary higher education. The central argument is that meaningful interdisciplinary collaboration is not merely beneficial but essential for addressing the complex challenges and harnessing the genuine possibilities that AI presents. Rather than rejecting AI out of fear or uncritically accepting it as a solution, educators must engage with it thoughtfully and strategically, ensuring that its integration enhances rather than diminishes the core, enduring values of a liberal education: critical inquiry, creativity, and independent thought.

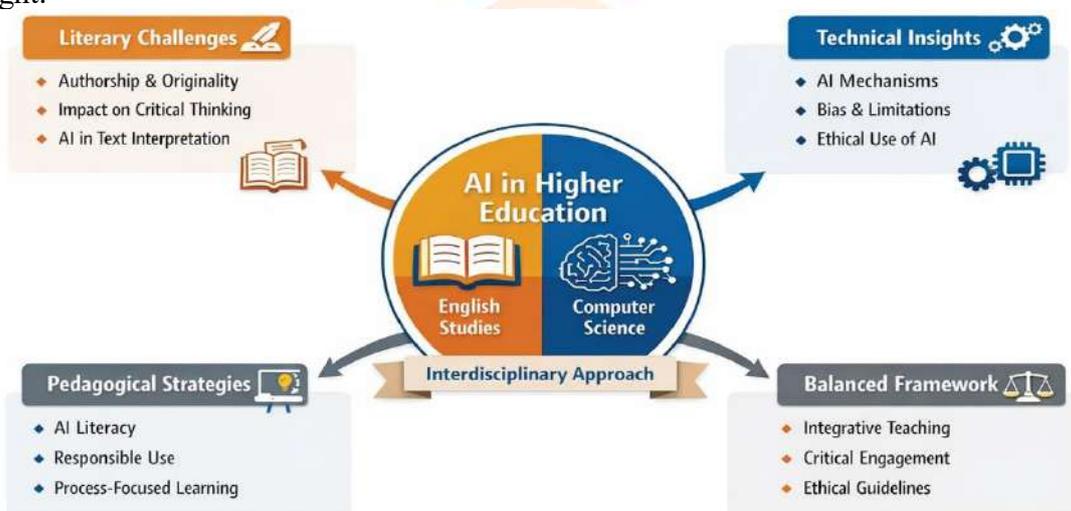


Figure 1: Overview of Artificial Intelligence in Higher Education: Interdisciplinary Perspectives on Literary Pedagogy from English and Computer Education

RESEARCH METHODOLOGY

This study adopts a qualitative, conceptual research design grounded in interdisciplinary analysis. Rather than relying on empirical data collection, the paper draws upon existing scholarly literature, theoretical frameworks, and pedagogical observations from the fields of English education and computer science.

The methodology is interpretative in nature, aiming to:

- Examine the impact of Artificial Intelligence on literary pedagogy
- Analyze the pedagogical implications of AI tools in higher education
- Develop a conceptual framework for responsible AI integration

A thematic analysis approach has been used to synthesize key arguments from prior research on AI in education, academic integrity, and digital pedagogy. This interdisciplinary method enables a holistic understanding of both the technical functioning of AI systems and their philosophical and pedagogical implications.

REVIEW OF LITERATURE

Recent scholarship highlights the transformative impact of Artificial Intelligence on education, while also raising critical ethical and pedagogical concerns.

Bender et al. (2021) argue that large language models function as “stochastic parrots,”

generating text based on probabilistic patterns rather than true understanding. This perspective is crucial in evaluating AI-generated academic content critically.

Selwyn (2019) critically examines the role of AI in education, cautioning against over-reliance on automated systems and emphasizing the need to preserve the human dimensions of teaching and learning. Similarly, Cope and Kalantzis (2020) explore the pedagogical potential of AI while advocating for its responsible integration into learning environments.

Mollick and Mollick (2023) propose practical strategies for incorporating AI into classroom assignments, highlighting both its benefits and risks. Their work underscores the importance of designing assessments that promote critical engagement rather than passive dependence.

Zawacki-Richter et al. (2019) provide a comprehensive review of AI applications in higher education, noting a significant gap in educator-centered research. This gap reinforces the need for interdisciplinary approaches that combine technical understanding with pedagogical insight.

Despite these contributions, limited research explicitly bridges literary pedagogy and computer education, particularly in the context of AI. This paper addresses this gap by proposing an integrated framework that combines interpretative and technical perspectives.

AI AND THE CHANGING LANDSCAPE OF HIGHER EDUCATION

Artificial Intelligence has rapidly expanded its presence in universities, influencing institutional structures, teaching methodologies, assessment practices, and student learning experiences. Its integration is not a future prospect but a present reality, fundamentally altering the educational ecosystem.

a) Expansion of AI Tools in Academic Contexts

AI tools are increasingly ubiquitous and accessible to both students and educators. Beyond the well-known writing assistants and content generators, AI is embedded in adaptive learning platforms, plagiarism detection software, research tools for literature reviews, and even administrative systems. These tools offer unprecedented convenience and efficiency, allowing students to manage academic tasks—from drafting to research—with remarkable speed. However, this ease of access presents a pedagogical paradox. The very efficiency that is celebrated can lead to over-reliance and reduced cognitive engagement. When the friction of writing or the struggle for interpretation is removed, the deep learning that occurs through that struggle is lost.

b) Shift from Information Scarcity to Information Abundance

For centuries, education was structured around the principle of information scarcity. A core skill was locating, accessing, and understanding limited, curated resources. Today, students are immersed in an environment of information abundance, much of it generated or synthesized by AI systems. This shift demands a new set of critical competencies. The challenge is no longer finding information, but evaluating its provenance, questioning its biases, verifying its accuracy, and exercising interpretative judgment to discern what is meaningful and relevant. AI exacerbates this, as its outputs often appear authoritative while lacking a verifiable source.

c) Changing Role of the Teacher and the Classroom

With AI taking on certain instructional and evaluative functions, the role of the teacher is undergoing a profound evolution. The educator is no longer the sole dispenser of knowledge or the primary source of feedback. Instead, the role is shifting towards that of a facilitator of critical thinking, a curator of learning experiences, and a guide for ethical awareness. This shift is particularly significant in humanities disciplines, where interpretation, dialogue, and the cultivation of a personal intellectual voice are central. The classroom becomes less a space for transmitting interpretations and more a space for interrogating them—including those generated by AI. The teacher's role is to model how to engage with AI as a collaborator and a subject of critique, not as an oracle.

LITERARY PEDAGOGY IN THE AGE OF AI

The teaching of literature has historically been built upon a foundation of practices designed to cultivate deep, personal engagement with texts. AI introduces new dynamics that challenge these established pedagogical cornerstones.

a) Impact on Close Reading Practices

Close reading is the disciplined practice of paying careful, sustained attention to a text's language, structure, syntax, and formal elements to build a nuanced interpretation. It is a skill that requires patience and practice. AI tools can generate summaries and thematic interpretations almost instantaneously, creating a temptation for students to bypass this foundational practice. This shortcut risks a severe weakening of analytical skills. If students no longer struggle with a difficult passage or learn to build an interpretation from the ground up, their capacity for nuanced thought and their ability to form independent judgments may atrophy. The pedagogical challenge is to use AI not to replace close reading, but to make its value more apparent.

b) Questions of Authorship, Originality, and Voice

In literary studies, originality is not merely about creating something new, but about the development of a unique critical voice—a personal, evidence-based perspective. AI-generated content fundamentally complicates this notion. It blurs the line between human and machine authorship, raising profound ethical concerns. A student may submit an AI-assisted or AI-generated essay without fully understanding the ideas presented, effectively presenting a machine's probabilistic output as their own intellectual labor. This challenges traditional definitions of plagiarism and forces educators to reconsider the very purpose of assessment. The focus may need to shift from evaluating a final product, which AI can produce competently, to understanding the student's process of arriving at that product.

c) Opportunities for Enhanced Learning and Creativity

Despite the significant challenges, AI also presents compelling opportunities for literary pedagogy. When used responsibly, it can act as a powerful collaborative partner. AI can help students overcome writer's block by generating brainstorming prompts. It can clarify complex historical or theoretical concepts that serve as a foundation for literary analysis. More provocatively, AI can be used to explore multiple interpretations of a text, presenting students with a range of critical lenses they might not have considered, thereby sparking their own counter-arguments. For instance, a student could ask AI to analyze a poem from a feminist perspective and then from a post-colonial perspective, using these outputs as a springboard for their own synthesis or critique. This transforms AI from a shortcut into a tool for intellectual exploration.

UNDERSTANDING AI: A COMPUTER EDUCATION PERSPECTIVE

To use AI effectively and critically in education, it is essential to move beyond a surface-level understanding of it as magic or simple automation. Computer education provides the necessary technical literacy to demystify these systems.

a) Basic Principles of AI Systems: Pattern Recognition, Not Understanding

Modern AI systems, particularly large language models, are fundamentally based on algorithms that analyze and identify statistical patterns in vast datasets. They predict the most probable sequence of words based on a given input. They do not possess understanding, consciousness, intent, or a sense of truth. They generate responses based on complex calculations of probability, not on reasoned comprehension. Recognizing this core limitation is crucial for evaluating the reliability and authority of any AI-generated content. An AI's output is a sophisticated statistical guess, not a verified fact or an original thought.

b) Bias, Hallucination, and Inherent Limitations

AI systems are trained on data created by humans, and therefore they inevitably reflect and can amplify the biases present in that data—whether based on race, gender, culture, or ideology.

Furthermore, AI models are prone to “hallucination,” where they generate confident, articulate, but entirely false or fabricated information. An AI might invent a quote, cite a non-existent source, or create a historical fact with complete grammatical fluency. Students and educators must be acutely aware of these limitations to avoid the dangerous trap of uncritically accepting AI outputs as accurate.

c) The Imperative of AI Literacy

AI literacy, therefore, must become a foundational competency in higher education. It involves understanding how AI tools function at a basic level, recognizing their strengths and limitations, and knowing how to interact with them effectively and ethically. This includes skills like prompt engineering (the art of asking precise questions to get useful results), critically evaluating AI output for bias and accuracy, and maintaining a clear ethical boundary between using AI as a tool and misrepresenting AI-generated work as one’s own. Integrating AI literacy into the curriculum is not an optional add-on; it is a core survival skill for the 21st-century academic and professional world.

INTERDISCIPLINARY COLLABORATION: BRIDGING ENGLISH AND COMPUTER EDUCATION

The complex pedagogical challenges posed by AI cannot be effectively addressed by any single discipline in isolation. A meaningful, sustained collaboration between the humanities and computer sciences offers the most promising path forward.

a) Combining Interpretative and Technical Skills

English education provides the essential expertise in interpretation, critical theory, and the value of human perspective. It equips us to ask the “why” questions: Why does this interpretation matter? What are the ethical implications of outsourcing thought? Computer education provides the essential technical understanding of how AI works, its underlying logic, and its limitations. It equips us to ask the “how” questions: How does this model generate this text? How can we evaluate its output? Together, these perspectives create a robust, balanced framework for engaging with AI that is neither technophobic nor techno-utopian.

b) Developing Ethical Guidelines for Academic Integrity

Interdisciplinary collaboration is essential for developing nuanced, effective institutional guidelines for AI use. Such guidelines should move beyond simple bans, which are impractical, and instead focus on principles of transparency, responsibility, and appropriate use. They must address complex issues like: When is AI use considered legitimate assistance (e.g., for brainstorming or editing) versus academic misconduct (e.g., generating a full essay)? How should students cite or acknowledge their use of AI tools? These are not merely technical questions but deeply ethical and pedagogical ones that require input from both humanists and technologists.

c) Designing Integrated Curriculum Models

The most innovative educational responses to AI will come from integrated curriculum design. This can take the form of co-taught courses in digital humanities, where students learn to use computational tools for literary analysis. It can involve creating modules on AI ethics within computer science courses that use literary texts to explore questions of bias and representation. It can mean designing writing courses where students are explicitly taught how to use AI as a revision tool while also developing their own critical voice. Such integration prepares students not just for a specific job, but for a future where interdisciplinary fluency is a primary asset.

AI AS A PEDAGOGICAL TOOL

When thoughtfully integrated with clear pedagogical goals, AI can become a powerful tool that enhances, rather than replaces, the core processes of teaching and learning.

a) Supporting the Writing and Revision Process

AI tools can be highly effective in the later stages of the writing process. They can help students identify patterns of grammatical error, suggest improvements for sentence clarity and

coherence, and offer structural feedback on organization. Used in this way, AI functions as a sophisticated, always-available writing tutor, allowing students to improve the technical quality of their work while freeing up instructor time to focus on higher-level concerns like argumentation, evidence, and conceptual development.

b) Encouraging Reflective and Metacognitive Learning

AI can be a powerful engine for generating reflection. Educators can prompt students to use AI to generate an opposing argument to their own thesis, or to analyze a text from a perspective different from their own. The student's task is then not to accept this output, but to critique it, compare it to their own analysis, and reflect on the differences. This process makes the student's own interpretative choices more visible and encourages a deeper metacognitive awareness of their own thinking process.

c) Facilitating Personalized and Differentiated Learning

AI-powered adaptive learning platforms can analyze a student's performance and tailor explanations, practice exercises, and reading recommendations to their individual needs. For students who struggle with foundational concepts, AI can provide extra support without singling them out. For advanced students, it can offer more challenging material. This ability to personalize learning pathways can help create a more equitable classroom environment that accommodates diverse learning styles and paces.

CHALLENGES AND ETHICAL CONSIDERATIONS

The path to integrating AI in education is fraught with significant challenges and ethical dilemmas that must be addressed proactively to prevent harm.

a) Redefining Academic Integrity

The use of AI-generated content fundamentally challenges the foundational principles of academic integrity. Traditional definitions of plagiarism, based on copying from another human source, are no longer sufficient. The core ethical issue now shifts to the authenticity of the student's work and their intellectual labor. Institutions must develop new, transparent policies that clearly define acceptable and unacceptable uses of AI, emphasizing that while AI can be a tool for assistance, the ideas, arguments, and final responsibility must belong to the student.

b) The Risk of Dependency and Skill Erosion

There is a genuine risk that over-reliance on AI tools will lead to a decline in essential cognitive skills. If students habitually turn to AI for analysis, problem-solving, or writing, they may fail to develop their own critical thinking, analytical, and creative abilities. This dependency could create a generation of graduates who are adept at using tools but lack the foundational skills to think independently, solve novel problems, or generate original ideas. The pedagogical goal must be to use AI in ways that augment and scaffold skill development, not circumvent it.

c) Equity, Access, and the Digital Divide

Not all students have equal access to high-quality, premium AI tools. Some may rely on free versions with limitations, while others can afford subscriptions. Furthermore, effective AI use requires a certain level of digital literacy and access to reliable internet and devices. This creates a new dimension to the digital divide, potentially exacerbating existing inequalities in learning opportunities and outcomes. Institutions must consider how to provide equitable access to AI tools and, more importantly, to the education needed to use them effectively.

PROPOSED FRAMEWORK FOR RESPONSIBLE AI INTEGRATION

To navigate the complex landscape of opportunities and risks, this paper proposes a pedagogical framework centered on balance, critical engagement, and transparency.

a) Integration of Foundational AI Literacy Across the Curriculum

AI literacy should not be confined to computer science courses. Every discipline must incorporate instruction on how AI impacts its specific field. For English, this means teaching students not just how to use AI, but how to critically analyze its outputs as texts in themselves, understanding their stylistic patterns, biases, and limitations. This foundational knowledge is

the prerequisite for responsible use.

b) Emphasis on Process-Oriented Pedagogy and Assessment

To counter the risk of AI-generated final products, assessment methods must shift to value the learning process. This can include requiring students to submit drafts, research logs, and reflective essays that detail their writing and thinking process. Oral defenses, in-class writing assignments, and portfolio-based assessments that demonstrate growth over time can provide a more authentic picture of a student's intellectual development than a single, high-stakes essay that could be AI-generated.

c) Collaborative, Transparent, and Adaptive Teaching Approaches

The most resilient approach to AI is collaborative. Educators from different disciplines should work together to design courses and strategies. More importantly, this collaboration must extend to students. A transparent approach, where the challenges and possibilities of AI are openly discussed in the classroom, demystifies the technology and builds a community of trust. Pedagogical strategies must also be adaptive, constantly evolving alongside the technology itself, requiring a commitment to continuous learning from educators.

DISCUSSION

The integration of AI into higher education is not merely a technological shift; it represents a fundamental transformation in how knowledge is understood, created, and validated. In literary pedagogy, this transformation strikes at the heart of the discipline, challenging deeply held assumptions about the nature of interpretation, the value of creativity, and the meaning of authorship. The initial impulse to view AI as a threat to the humanities is understandable, as it seems to automate the very processes of reading and writing that define the field.

However, this perspective overlooks the opportunities for renewal. By forcing the discipline to articulate more clearly what it values—the struggle with a text, the development of a unique voice, the ethical act of interpretation—AI can paradoxically strengthen literary studies. An interdisciplinary approach, particularly a partnership between English and computer education, provides a viable way forward. It allows educators to move beyond a binary of acceptance or rejection and into a space of thoughtful, strategic integration. By combining the interpretative and ethical rigor of the humanities with the technical and critical understanding of computer science, we can create a learning environment that values both human creativity and technological fluency. This approach ensures that AI is used as a tool for enhancement and critical inquiry, rather than as a replacement for the irreplaceable work of the human mind.

CONCLUSION

Artificial Intelligence is reshaping the landscape of higher education in profound and irreversible ways, presenting both significant challenges and remarkable opportunities. Its impact is felt acutely in disciplines like literary studies, which are centered on interpretation, reflection, and the cultivation of a personal intellectual voice. While AI presents a clear and present challenge to traditional pedagogical practices like close reading and the assessment of original work, it also offers innovative tools for enhancing learning, fostering creativity, and personalizing instruction.

This paper has argued that an interdisciplinary approach, leveraging the distinct strengths of English and computer education, is not merely helpful but essential for navigating this complex new terrain. A future where AI is integrated responsibly is one where AI literacy is a core competency, where assessment values process over product, and where educators collaborate across disciplines to develop adaptive, ethical, and transparent teaching strategies. By embracing this collaborative model, educators can harness the power of AI while preserving and strengthening the core values of education—creativity, independence, critical inquiry, and the relentless pursuit of understanding. In doing so, we can ensure that the next generation of graduates is not only technologically adept but also deeply, irreplaceably human in their capacity for thought and expression.

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