

A Contextualized Framework for AI Pedagogical Competence in Higher Education English Literature

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Abstract— The disruptive capabilities of Generative Artificial Intelligence (AI) pose a significant challenge to established pedagogical practices in Higher Education (HE), particularly within English Literature classrooms. In this evolving context, traditional passive teaching models long critiqued by Elaine Showalter are increasingly rendered inadequate. Although comprehensive frameworks such as the UNESCO AI Competency Framework and the European DigCompEdu provide valuable guidance, their generic nature limits their applicability to discipline-specific pedagogical concerns. Notably, they fail to address the distinctive demands of literary interpretation, authorship authenticity, and critical textual analysis. Drawing on an extensive theoretical synthesis, this paper critiques the limitations of these broad frameworks by employing TPACK (Technological Pedagogical Content Knowledge) as a conceptual anchor. It argues that AI's instructional potential, interpreted through Bloom's 2 Sigma Problem, legitimizes the delegation of lower-order literary tasks such as summarization and contextual retrieval to AI tools. This redistribution of cognitive labour enables classroom time to be reoriented toward higher-order literary engagement. Such a shift necessitates an Inverted Bloom's Taxonomy, wherein students initially engage in AI-assisted 'Creation' outside the classroom and subsequently focus on in-class 'Analysis' and 'Evaluation'.

Based on this synthesis, the paper proposes the AI-Pedagogy for Literary Interpretation and Criticality Framework, which introduces a crucial discipline-specific dimension: Hermeneutics and Bias. This dimension equips faculty to train students to interrogate AI-generated texts as emergent cultural artifacts shaped by ideological, historical, and algorithmic biases. The framework offers a theoretical blueprint for English Literature departments seeking to redesign curricula and cultivate targeted AI pedagogical competencies, ensuring the preservation and deepening of critical thinking in the AI-mediated educational landscape.

Index Terms—Artificial Intelligence, Pedagogical Competence, English Literature, DigCompEdu, TPACK, Critical Hermeneutics

I. INTRODUCTION

The rapid integration of Generative Artificial Intelligence (AI) into higher education has fundamentally disrupted traditional teaching models, particularly within humanities disciplines like English Literature. While global frameworks such as UNESCO's AI-CFT and the European DigCompEdu provide essential ethical and technical baselines, their 'one-size-fits-all' nature often fails to address the unique demands of literary studies, such as subjective interpretation, authorial voice, and critical aesthetics. This absence of discipline-specific guidance leaves educators struggling to integrate AI while safeguarding the core aims of literary interpretation and critical thinking. By synthesizing Technological Pedagogical Content Knowledge (TPACK) with Bloom's 2 Sigma Problem, this paper argues for a 'cognitive redistribution' that delegates lower-order mechanical tasks to AI. Consequently, it proposes the AI-Pedagogy for Literary Interpretation and Criticality Framework, an original model that utilizes an Inverted Bloom's Taxonomy to reclaim the classroom as a space for 'Critical Hermeneutics' and deep human inquiry.

II. PROBLEM STATEMENT

The rapid entry of Generative Artificial Intelligence (AI) into higher education has begun to reshape everyday teaching and learning practices, especially within humanities disciplines such as English Literature. While AI tools are increasingly capable of handling tasks like summarization, paraphrasing, and

content generation, their growing presence sparks concerns about authorship, academic integrity, and the potential erosion of students' critical interpretive abilities. The core of the problem lies in the fact that existing AI competency frameworks, such as those by UNESCO and the European Commission, adopt a broad, one-size-fits-all approach. English Literature is fundamentally a 'Hermeneutic' discipline one centered on the theory and methodology of interpretation, where meaning is not merely retrieved but actively constructed through the dialogue between reader and text. Because general AI frameworks overlook this interpretive depth, they fail to address the distinctive aesthetic and epistemological requirements of literary studies. In the absence of a discipline-specific framework, educators lack the guidance necessary to integrate AI while safeguarding the central aims of deep literary interpretation and critical thinking.

III. RESEARCH OBJECTIVES

- To critically examine existing AI competency frameworks in relation to the pedagogical needs of English Literature in higher education.
- To analyse the pedagogical implications of Generative AI for literary interpretation, authorship, and critical thinking.
- To conceptualize a contextualized AI pedagogical competence framework tailored for English Literature teaching in higher education.
- To explore how AI integration can be aligned with higher-order cognitive learning through an inverted Bloom's Taxonomy approach
- To integrate critical hermeneutics into AI pedagogy, enabling students to interrogate machine-generated content for ideological and algorithmic biases.

IV. RESEARCH METHODOLOGY

This study adopts a qualitative, theory-based approach centred on conceptual synthesis and framework design. The research began with a comparative analysis of key global frameworks, including UNESCO's AI-CFT and the EU's DigCompEdu, to identify gaps in addressing discipline-specific needs such as subjective interpretation and authorial voice in English Literature.

Building on this analysis, the framework was theoretically anchored using TPACK, Bloom's 2 Sigma Problem, and an Inverted Bloom's Taxonomy to rethink the distribution of cognitive labour in AI-supported learning. These perspectives were then synthesised to develop the proposed AI-Pedagogy for Literary Interpretation and Criticality Framework, with the inclusion of Critical Hermeneutics as a core pillar to address the interpretive and epistemic demands of literary studies.

V. LITERATURE REVIEW

Classical Pedagogies in English Literature
Elaine Showalter's *Teaching Literature* (2003) foregrounds literature pedagogy as an active, dialogic, and student-centered practice, moving beyond passive lecture-based models. Through her rhetorical and cultural teaching models, Showalter emphasizes interpretation, discussion, and performance as central to literary learning, positioning the teacher as a mediator rather than an authoritative transmitter of meaning. Scholars such as Scholes and Graff similarly argue that English studies should prioritize the craft of reading, critical inquiry, and interpretive debate over rote knowledge of literary canons. These pedagogical traditions underscore the importance of higher-order cognitive engagement, aligning closely with Bloom's emphasis on analysis, synthesis, and evaluation. However, while such models offer robust foundations for literary pedagogy, they remain largely disconnected from contemporary AI-mediated learning environments. Their limited engagement with digital epistemologies and algorithmic text production highlights a critical gap that existing AI competency frameworks also fail to address, particularly within discipline-specific contexts such as English Literature (Showalter, 2003).

Digital Turn in Literature Pedagogy

Pallathadka (2020) explores the transformative role of digital technology in English Literature pedagogy, positioning it as an 'essential part' of modern education that improves learning quality and student engagement. The article highlights a significant paradigm shift, noting that traditional teaching methods are often 'obsolete', relying on simplified techniques where students 'repeat data without

understanding it'. This inefficiency is reflected in the study's findings, which indicate that 65% to 85% of students are dissatisfied with conventional approaches. In contrast, the integration of multimedia tools such as audiovisual effects, mobile devices, and social media acts as a 'catalyst' for a 'cognitive revolution', allowing teachers to move away from being mere 'senders of information' to becoming 'guides' and 'facilitators. By utilizing an 'integrated approach to the digital media framework', students can obtain superior results in language refinement and independent thinking, ultimately adapting their skills to natural social environments. Pallathadka concludes that to maintain a competitive edge in a globalized world, institutions must replace 'obsolete' traditional models with electronic curricula and comprehensive teacher training in emerging technologies (Pallathadka, 2020).

The integration of digital technology into the English literature classroom has evolved from a supplementary tool to a foundational necessity that fundamentally alters the attainment of learning outcomes. Traditional, teacher-centered methodologies often result in student passivity and a failure to appreciate the 'aesthetics' of literary texts. In contrast, technology-assisted teaching utilizing visualizations, digital editions, and interactive hypertexts acts as a catalyst for a 'cognitive revolution'. Research indicates that students taught through these digital frameworks significantly outperform those in traditional settings, showing marked improvements in critical thinking, creativity, and autonomous text interpretation. Ultimately, this shift enables a 'delicate balance between human intuition and machine precision,' ensuring that while technology simplifies the learning process, the primacy of critical inquiry remains at the centre of literary study (Alfaruque, Sultana, Rastogi, & Jabeen, 2023).

Generative AI and Pedagogical Disruption

Recent scholarship emphasizes that integrating artificial intelligence into higher education necessitates a profound shift in how academic integrity and pedagogical competence are defined. Fowler posits that the transition from manual plagiarism to the 'automated expression' of AI-generated content challenges the traditional foundations of independent scholarship. For the English Literature classroom, this

shift demands a 'nuanced comprehension' of the student-AI symbiosis, where AI acts not merely as a tool but as an 'accomplice' in the writing process. Fowler argues that educators must calibrate a 'delicate balance between human intuition and machine precision' to harness AI's potential for personalized learning without succumbing to a 'dumbing down' of the curriculum. Fowler highlights that a 'contextualized' approach is vital, as educators' 'preparedness, attitudes, and strategies' are the primary determinants of whether AI serves as a 'pedagogical companion' or a 'harbinger of inequities (Fowler, 2023).

The rapid emergence of Generative AI, particularly ChatGPT, has catalysed a profound paradigm shift in higher education, necessitating a move from traditional 'obsolete' teaching methods toward a more dynamic, technology-assisted model. Current research categorizes the impact of these tools into distinct thematic clusters, including academic integrity, student engagement, and the evolution of the learning environment. While traditional literature instruction often risks student passivity and rote repetition without deep understanding, digital tools such as visualizations, interactive hypertexts, and large language models offer unique opportunities to scale critical thinking and creativity. The proactive integration of AI requires robust digital literacy and a recalibration of academic policies to ensure that AI serves as a 'pedagogical companion' rather than a substitute for independent thought (Bhullar, Joshi, & Chugh, 2024).

The UNESCO AI-CFT as a Foundational Global Reference

The UNESCO AI Competency Framework for Teachers (AI-CFT) provides a global reference for the ethical and responsible use of artificial intelligence in education. Aligned with the Education 2030 Agenda, it promotes a human-centred approach that protects teacher agency, student learning, and intellectual development, while addressing concerns such as algorithmic bias and data misuse. The framework outlines 15 competencies across five broad areas, offering institutions a structured foundation for integrating AI into teaching practices.

Despite its value, the AI-CFT remains a broad, general framework and does not fully address the specific

needs of English Literature pedagogy. It offers little guidance on subjective interpretation, emotional engagement, or questions of authorial voice and literary aesthetics. The framework also places responsibility on teachers for AI-generated outputs, even though these systems often function as opaque 'black boxes. Moreover, UNESCO acknowledges that issues of affordability and access fall outside the framework's scope, raising concerns that advanced AI competencies may be limited to well-resourced institutions. These limitations highlight the need for a more contextualized, discipline-specific approach to AI pedagogy in English Literature (UNESCO, 2024).

DigCompEdu

The European Framework for the Digital Competence of Educators (DigCompEdu) establishes a standardized model for the 'pedagogical digital competence' required by educators across all levels of instruction. The framework is structured around six distinct competence areas: Professional Engagement, Digital Resources, Teaching and Learning, Assessment, Empowering Learners, and Facilitating Learners' Digital Competence. These areas move from the broader professional environment to the specific orchestrations of digital tools within the instructional process. Centrally, Area 5 'Empowering Learners' acts as a transversal pillar, emphasizing that the primary value of digital technology lies in fostering inclusion, personalization, and the active engagement of students through 'learner-centred' strategies (Redecker, 2017).

VI. LIMITATIONS OF EXISTING AI FRAMEWORKS

Bloom's 2 Sigma

The Bloom's 2 Sigma Problem refers to a significant pedagogical finding by Benjamin Bloom in 1984, which demonstrated that students tutored one-on-one using mastery learning techniques performed two standard deviations or '2 sigma' better than those in a traditional 30-to-1 classroom setting. This discovery revealed that the average tutored student outperformed 98% of students in a conventional environment, posing a major challenge for educators to find scalable ways to replicate these high-level results in group-based instruction (Bloom, 1984). In the context of modern higher education, this problem serves as a primary

justification for the integration of Generative AI, as these tools can function as personalized 'pedagogical companions' or tutors. By delegating lower-order cognitive tasks like summarization and retrieval to AI, educators can provide the individualized support necessary to bridge this performance gap, effectively allowing every student to reach the achievement levels previously reserved for those with one-on-one human tutoring.

VII. TPACK

Technological Pedagogical Content Knowledge (TPACK) is a widely accepted theoretical framework that explains the complex knowledge base required for effective teaching with technology. Proposed by Mishra and Koehler, TPACK extends Shulman's concept of Pedagogical Content Knowledge by recognizing technology as an integral dimension of pedagogy rather than a neutral tool. At its core, TPACK argues that meaningful teaching emerges not from isolated mastery of subject matter, pedagogy, or technology, but from a dynamic and context-sensitive integration of all three.

TPACK functions as a theoretical framework because it offers a conceptual structure for analysing teaching practice. Its primary inputs consist of three interrelated domains: Content Knowledge (knowledge of the discipline), Pedagogical Knowledge (knowledge of teaching and learning processes), and Technological Knowledge (knowledge of digital tools and systems). The intersections among these domains particularly Technological Pedagogical Content Knowledge explain how teachers make informed instructional decisions when technology mediates learning. Importantly, TPACK emphasizes contextual judgment, acknowledging that technology integration is shaped by institutional conditions, learner needs, and disciplinary epistemologies (Shulman, 1986).

VIII. INVERTED BLOOM'S TAXONOMY

Dr. Michelle Kassorla introduces her 'Inverted Bloom's Taxonomy' model for teaching writing with AI. The proposed Inverted Bloom's Taxonomy is a strategic response to the shifting agency in the modern digital classroom, where students frequently engage in AI-assisted 'Creation' as a point of entry. Traditionally, 'Creation' occupied the pinnacle of the cognitive

hierarchy, preceded by the linear accumulation of remembering, understanding, and applying. However, the immediate production capabilities of Generative AI allow students to generate complex artifacts such as literary summaries or initial drafts bypassing these foundational stages.

To ensure academic rigor, this shift necessitates a pedagogical inversion:

- **Asynchronous AI-Assisted Creation:** Students initially engage in production outside the classroom, delegating lower-order tasks like summarization and contextual retrieval to AI tools.
- **Synchronous Human-Led Analysis:** Instructional time is subsequently reoriented toward in-class ‘Analysis’ and ‘Evaluation’, where students ‘toil after the creation’ critiquing, deconstructing, and justifying the AI’s output (Kassorla, n.d.).

Solving the 2 Sigma Problem through Cognitive Redistribution

This inversion finds further legitimization in Benjamin Bloom’s 2 Sigma Problem, which posits that students receiving one-on-one tutoring perform two standard deviations better than those in conventional classrooms. By delegating ‘mechanical’ and ‘lower-order’ literary tasks to AI, educators can provide every student with a personalized ‘pedagogical companion’ that manages the foundational cognitive labour previously attainable only through individualized human tutoring.

Rather than accepting AI outputs at face value, students are challenged to apply the ‘syntactic structures’ of their discipline the rules for establishing validity and truth to interrogate machine-generated content.

X. RECLAIMING CLASSROOM PEDAGOGY

Dr. Michelle Kassorla suggests

- **Delegating the Mechanics:** In the age of AI, ‘correctness’ in mechanics is a baseline expectation. By moving these mechanical tasks (summarization and retrieval) to the machine, we resolve the ‘2 Sigma’ barrier, ensuring all students enter the classroom with a shared foundational text.

- **The Classroom as a Laboratory of Thought:** The English Literature classroom is reclaimed for the most human part of scholarship: arguing over meaning, evaluating nuance, and exploring the ‘aesthetics’ of a text.
- **From Production to Critical Accountability:** By starting with a ‘Creation’ at home, students are forced to engage in metacognitive reflection in class. They must defend why the AI organized an essay in a certain way, shifting their role from a passive consumer to a critical judge of literary truth.

This reorientation ensures that the literature department does not merely react to AI, but proactively redesigns the curriculum to cultivate the Critical Hermeneutics necessary for the AI-mediated educational landscape (Kassorla, n.d.).

By adopting an inverted Bloom’s Taxonomy approach, educators can offload the ‘repetition of data’ to digital tools, thereby prioritizing higher-order cognitive engagement such as analysing complex symbolism and character motives.

XI. LIMITATIONS OF EXISTING AI FRAMEWORKS

The reviewed literature shows a clear shift from human-centred literary pedagogy to digitally mediated and, more recently, AI-driven learning environments. While traditional frameworks emphasise interpretation, dialogue, and critical engagement, they are not fully equipped to address the epistemological challenges posed by generative AI. Studies on AI-enhanced learning often frame pedagogical competence as a generic skill, overlooking the discipline-specific demands of English Literature, where meaning-making and ethical interpretation are central. This gap highlights the need for a contextualized framework of AI pedagogical competence aligned with the critical aims of higher education English studies.

To achieve a successful paradigm shift in the humanities, AI integration must be governed by ‘pedagogical intent’ rather than the random adoption of trendy tools. Kharbach (2026) suggests that educators act as ‘navigators’ who must ‘tame’ unruly AI systems by aligning them with established

instructional blueprints such as Bloom's Revised Taxonomy and the TPACK model. This is particularly critical in English Literature, where the 'machine-like recognizable patterns' of current AI models reach a ceiling at the undergraduate writing level. By utilizing source-centered tools like NotebookLM, which prioritize 'traceability and control' over uploaded texts, instructors can facilitate a 'source-first' workflow. This approach supports an inverted Bloom's Taxonomy by offloading basic synthesis to AI while preserving the classroom space for the higher-order 'human intuition' required for deep literary inquiry (Med).

Synthesis: Connecting DigCompEdu to the Inverted Bloom's Taxonomy

The DigCompEdu framework, though organised as a hierarchy of teacher competence, promotes a shift from teacher-led instruction to learner-centred learning. This makes it well suited to an Inverted Bloom's Taxonomy in English Literature classrooms. In this model, teachers use their digital expertise to delegate lower-order tasks such as summarisation or basic information retrieval to AI tools. As a result, classroom time can be redirected toward higher-order activities like analysis, evaluation, and interpretation. DigCompEdu's focus on active engagement helps ensure that students remain critical users of AI rather than passive recipients.

Despite its strengths, TPACK shows clear limitations in AI-mediated higher education. It largely treats technology as a neutral support tool and does not sufficiently address the ethical, epistemic, and power-related implications of artificial intelligence. The framework also underrepresents learner agency and dialogic meaning-making, which are central to English Literature pedagogy. In addition, its abstract structure makes pedagogical competence difficult to measure beyond basic technology integration.

Nevertheless, TPACK provides an essential conceptual foundation for this study. Its emphasis on the integration of content, pedagogy, and technology offers a starting point for rethinking teaching in AI-rich contexts. When read alongside UNESCO's AI-CFT particularly its progression from Acquire to Deepen and Create it supports an Inverted Bloom's

approach in literature classrooms. Building on these insights, this paper proposes a contextualized framework for AI pedagogical competence that preserves ethical judgment, disciplinary depth, and human-centred interpretation.

XII. THE AI-PEDAGOGY FOR LITERARY INTERPRETATION AND CRITICALITY MODEL

The AI-Pedagogy for Literary Interpretation and Criticality Model is the contextualized framework proposed by this research to bridge the gap between general AI competencies and the specific needs of Higher Education English Literature. It moves beyond technical 'AI literacy' to establish a discipline-specific 'Pedagogical Competence'.

The framework functions as a single system through the following three interconnected pillars:

1. Inverted Bloom's Taxonomy: Structural pillar
This pillar reorganizes the 'where' and 'when' of learning to reclaim the classroom for deep thought.
 - Asynchronous Phase (AI-Assisted Creation):
Students use AI outside of class to handle 'lower-order' tasks such as summarization, contextual retrieval, and basic drafting.
 - Synchronous Phase (Human-Led Analysis): In-class time is redirected toward 'higher-order' activities like analysis, evaluation, and the 'aesthetics' of a text.
 - Metacognitive Shift: Students move from being 'passive consumers' to 'critical judges,' where they must defend and justify the AI's organizational and interpretive choices.

2. Cognitive Redistribution; Functional Pillar

This pillar uses AI to solve the Bloom's 2 Sigma Problem, providing a scalable way to achieve high-level results in group settings. While delegating tasks to AI can replicate the scalability of Bloom's 2 Sigma tutoring, it introduces a unique risk: unlike a human tutor, AI functions as an opaque 'black box'. Therefore, the educator must transition from a 'transmitter of meaning' to a 'navigator' who ensures that machine precision does not replace human intuition.

- The AI 'Accomplice': AI handles the 'mechanical' labor of 'automated expression' and 'repetition of data'.

- The Human 'Navigator': The educator acts as a 'guide' or 'facilitator' who 'tames' the AI to ensure it serves as a 'pedagogical companion' rather than a substitute for thought.
- Achievement Gap: By delegating foundational tasks, the framework allows every student to enter the classroom with a shared baseline, effectively replicating one-on-one tutoring.

3. Critical Hermeneutics and Bias: Epistemic Pillar
This pillar addresses the 'black box' nature of AI by treating machine outputs as emergent cultural artifacts rather than absolute truths. To operationalize this, students apply the following Metacognitive Interrogation Protocol:

- Traceability: Can the AI-generated claim be mapped back to a specific passage in the primary text, or is it a 'hallucinated' pattern? This ensures 'traceability and control' over the primary literary text.
- Ideological Bias: Does the AI's summary lean toward a Western-centric or 'neutral' interpretation that erases the text's inherent aesthetic or political tensions? This trains students to identify ideological and algorithmic biases.
- Aesthetic Awareness: Where does the AI fail to capture the 'aesthetics' of the author's prose, such as symbolism or character motives? This preserves the 'human intuition' and deep inquiry required for literary study.

XIII. OPERATIONALIZING THE FRAMEWORK

Case Study: Post-Colonial Critique of Heart of Darkness

Objective: To transition students from 'passive consumers' of AI summaries to 'critical judges' of literary truth.

Phase	Activity	Cognitive Level (Inverted Bloom's)
Asynchronous (Outside Class)	Students use NotebookLM to summarize thematic parallels between Conrad's text and Achebe's critique ⁷ .	Creation/Summarization (AI-Assisted)
Synchronous (In-Class)	Students interrogate the AI output as an 'emergent cultural artifact,' identifying if the AI's 'machine-like patterns' ignored colonial nuances.	Analysis & Evaluation (Human-Led)
Source-First Evaluation	Students rewrite a portion of the AI draft to inject 'human intuition' and deep literary inquiry.	Critical Accountability

XIV. CONCLUSION

This study adopts a qualitative, theory-driven methodology focused on conceptual synthesis and framework development. It begins with a comparative review of established global frameworks, including UNESCO's AI Competency Framework for Teachers and the EU's DigCompEdu, to examine how current models address AI integration in education and to identify gaps related to discipline-specific concerns such as subjective interpretation and authorial voice in English Literature.

Drawing on these insights, the proposed framework is theoretically grounded in TPACK, Bloom's 2 Sigma Problem, and an Inverted Bloom's Taxonomy to reconceptualise the distribution of cognitive labour in AI-supported learning environments. These theoretical strands are then synthesised to develop the AI-Pedagogy for Literary Interpretation and Criticality

Framework, with Critical Hermeneutics introduced as a central dimension to address the epistemic, ethical, and interpretive demands of literary pedagogy.

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