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From Quality to Originality: A Conceptual Framework for Cultivating Digital and AI Literacy through Creative Writing in Secondary Education

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Abstract: This conceptual paper proposes a theoretical framework for integrating Generative Artificial Intelligence (AI) as a tool to enhance creative writing in secondary education, with particular attention to the dialectical relationship between quality and originality. Drawing on McNaughton et al. (2018) conditional augmentation hypothesis and Feraco et al. (2025) work on self-regulated learning, we argue that AI literacy and digital literacy function as prerequisites not consequences of effective AI integration in developing higher-order soft skills such as critical thinking and creative expression. Through literature analysis examining both affordances (Kasneci et al., 2023; Baidoo-Anu & Ansah, 2023) and challenges (Barrot, 2023; Perkins, 2023), we identify key tensions around discourse homogenization, academic integrity, and student voice preservation. The paper presents conceptual propositions rather than empirical findings, offering a three-stage pedagogical framework that shifts emphasis from product to process in text production. Importantly, we address equity considerations and ethical dimensions often absent from techno-optimistic narratives, including implementation adaptations for resource-constrained contexts and concrete strategies for developing critical AI literacy in young learners. While empirical validation remains necessary, this framework contributes to emerging scholarship by demonstrating how thoughtful pedagogical design can transform AI from a potential threat to student authorship into a tool for cultivating originality, multimodal communication, and responsible digital citizenship in contemporary secondary education.

Keywords: Artificial Intelligence; Creative writing; Soft skills; Secondary education; Digital literacy; Equity; AI ethics

1. Introduction

The rapid evolution of Artificial Intelligence (AI) technologies over the past two years has caused a structural transformation in the global educational landscape. At the centre of this change

is Generative Artificial Intelligence (Generative AI), which, through Large Language Models (LLMs), offers unprecedented capabilities in the production and processing of written discourse. For secondary education, this evolution is not merely a new technical



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challenge, but a profound pedagogical quest that redefines the concept of authorial creativity and student authenticity.

Creative writing, as a higher-order cognitive and emotional process, requires students to coordinate multiple skills: from linguistic literacy to imagination and critical choice. The integration of tools such as ChatGPT into this process creates a fundamental paradox. On one hand, AI can function as “digital scaffolding”, supporting students with low performance or language difficulties in structuring well-formed texts (Kasneci et al., 2023). On the other hand, there lurks the danger of “statistical homogenization” of discourse, where student voice recedes before algorithmic perfection (Barrot, 2023).

This paper argues that the bridge to overcoming this paradox lies in the cultivation of Soft Skills and Digital Literacy. Within the context of graduate studies in the program “Soft and Digital Skills in Education” at DIPAE, this approach focuses on empowering students as “architects” of their knowledge. The capacity for self-regulation, critical evaluation of digital outputs, and ethical use of technology emerge as the critical factors that will enable AI to function as an enhancer of originality rather than at its expense.

The following sections will analyze the theoretical framework of Generative AI as a scaffolding mechanism, identify challenges to student originality, and present a comprehensive three-stage instructional model. Importantly, this paper is positioned as a conceptual and theoretical contribution that proposes a pedagogical framework requiring future empirical validation. The goal is to offer educators a robust conceptual foundation for leveraging AI that transforms the digital challenge into an opportunity for cultivating 21st-century skills in diverse school contexts, while explicitly attending to questions of equity, access, and ethical implementation that have been underexamined in existing literature.

2. Literature Review

2.1 The 21st-Century Educational Paradigm and Digital Literacy

In contemporary pedagogical reality, the transition from the traditional teacher-centred model to student-centred approaches makes the cultivation of 21st-century skills imperative. In secondary education, learning is now

understood as an active, socially mediated process, where critical thinking, creativity, and collaboration constitute its basic pillars (Zympoulaki et al., 2022).

Digital literacy plays a central role in this framework. According to Özeren (2023), it transcends mere technical use of tools. It is a multidimensional capability that incorporates cognitive and socio-emotional parameters, constituting the strongest predictive factor for problem-solving. A digitally literate student can perceive emerging technologies, such as Artificial Intelligence, not as authority but as a supportive tool (“digital scaffolding”) that enhances their own creative voice.

However, the effective integration of technology in elementary school is not automatic. Olszewski and Crompton (2020) emphasize that technological innovation bears fruit only when specific “educational conditions” are met: systematic pedagogical guidance, the formation of a safe environment for experimentation, and focus on reflection and the management of error as a learning opportunity. Consequently, the introduction of AI tools into creative writing is not an end in itself, but part of a broader pedagogical design aimed at student autonomy and critical development.

2.2 Soft Skills and Self-Regulated Learning in the Writing Process

Creative writing is not merely a linguistic exercise but a complex cognitive and metacognitive activity that requires the coordination of multiple soft skills. In secondary education, where student identity formation is ongoing, the skills of self-regulation, emotional awareness, and adaptability are crucial (Palaiologou & Karanikola, 2023).

According to Feraco et al. (2025), self-regulated learning is the framework within which soft skills are transformed into academic outcomes. Students who develop goal-setting and reflection strategies show higher quality and originality in their written discourse. In the digital environment, this process is enhanced through digital socialization and collaborative knowledge construction (Yusof et al., 2022).

Technology, however, does not function additively but augmentatively. Adopting the “conditional augmentation hypothesis” of McNaughton et al. (2018), it is argued that digital tools and by extension Artificial

Intelligence can enhance students' social and cognitive skills only when they: (a) encourage exploration rather than ready-made answers, (b) promote reflection on the process rather than only on the product, and (c) ensure critical interaction of the student with the medium. Consequently, the cultivation of soft skills is the necessary prerequisite for AI to function as a partner rather than a substitute for student creativity.

2.3 Generative Artificial Intelligence as Dynamic “Digital Scaffolding”

Generative Artificial Intelligence is not merely an automation tool but introduces a new form of pedagogical scaffolding. According to Kasneci et al. (2023), Large Language Models (LLMs) function as dynamic assistants that provide personalized feedback, adapted to the specific needs of students in real time.

In the process of creative writing, AI's contribution is twofold:

1. Cognitive Offloading: AI assumes the cognitive load of lower-level tasks such as spelling correction, syntax, and basic structural organization. This allows students to focus on higher-order cognitive processes, such as conceiving original ideas and developing complex plots (Baidoo-Anu & Ansah, 2023).

2. Qualitative Enhancement: By suggesting richer vocabulary and improving coherence, AI enhances students' confidence, particularly those facing difficulties in written discourse by providing a safe environment for experimentation.

However, the use of AI as “scaffolding” in the classroom presupposes that the student remains the “architect” of their work. Digital support must be temporary and targeted, aimed at the student's eventual autonomy and preservation of their personal voice against the system's suggestions.

2.4 The Challenge of Originality, Voice Formation, and the Risk of “Statistical Homogenization”

Despite the qualitative enhancement offered by Generative AI, its use in education raises critical questions about preserving student voice. Barrot (2023) warns that using tools like ChatGPT can produce linguistically perfect texts that nevertheless lack authentic creative distinctiveness.

This phenomenon, known as “statistical homogenization” stems from AI's nature of producing statistically most probable answers based on pre-

existing data. For early secondary education students, the risk is twofold: Loss of Authorial Identity, uncritical adoption of AI suggestions can stifle personal expression during its critical formation phase; and False Sense of Authenticity, as Gao et al. (2023) note, the generated texts are so convincing that the boundaries between human and artificial creation become indistinguishable.

Critically, recent scholarship in digital writing studies challenges simplistic notions of “voice protection”. As scholars of authorship in digital contexts argue, voice is not a pre-existing essence that students possess and must shield from technological interference. Rather, voice is emergent and constituted through the very act of writing itself (Prior, 2006; Ivani, 1998). For young writers in particular, whose authorial identities are still forming, voice develops dialogically through interaction with texts, tools, teachers, and peers. This understanding shifts the pedagogical challenge: the question is not simply how to protect an already-formed student voice from AI contamination, but rather how AI might participate in, and potentially enrich, the ongoing formation of that voice. This requires educators to move beyond a defensive posture and instead consider how guided interaction with AI tools can become part of the apprenticeship into authorship, provided such interaction is scaffolded with explicit attention to voice development and critical reflection on the sources of one's words and ideas.

To ensure academic integrity within this more nuanced understanding, Perkins (2023) proposes a shift from plagiarism detection to “authentic assessment”. In practice, this means educators evaluate not only the final product but primarily the process: the student's mode of interaction with AI, critical selection or rejection of the system's suggestions, and reflection on transforming digital material into personal work. Thus, originality in the age of AI is not ensured through prohibition, but through cultivating higher-order skills of creative judgment and metacognitive awareness of one's developing authorial voice.

3. Conceptual Framework and Pedagogical Propositions

3.1 Positioning this Work: A Theoretical Contribution

This paper is positioned explicitly as a theoretical and

conceptual contribution to the emerging field of AI-enhanced creative writing pedagogy. Unlike empirical research studies that collect and analyze data from classroom implementations, we offer a conceptual framework grounded in existing educational theory and informed by literature on AI in education, digital literacy, and writing pedagogy. The illustrative scenarios presented in Section 5 are pedagogical thought experiments designed to demonstrate how the theoretical principles might function in practice; they are not case studies or findings from actual classroom interventions.

3.2 Theoretical Gaps Addressed by this Framework

Despite the rapid development of literature on Artificial Intelligence in education, critical gaps remain that make this conceptual framework timely:

1. Educational Asymmetry: While AI use is extensively discussed in higher education, there is a research deficit in lower grades (elementary/middle school). These ages are when fundamental soft skills and self-regulation are formed (Feraco et al., 2025), making theoretical frameworks for intervention critical.

2. The Quality-Originality Paradox: It remains theoretically unclear whether the linguistic improvement AI offers (Baidoo-Anu & Ansah, 2023) must necessarily come at the expense of student voice and authentic expression (Barrot, 2023), or whether pedagogical design can resolve this tension.

3. Absence of Comprehensive Pedagogical Models: While AI is recognized as “scaffolding” (Kasneci et al., 2023), we lack specific pedagogical frameworks that articulate the conditions (Olszewski & Crompton, 2020) under which technology enhances creativity rather than promoting passivity.

4. Equity and Ethics Deficit: Much existing literature adopts a techno-optimistic stance that overlooks questions of access, resource constraints, and the concrete ethical challenges of AI deployment in diverse educational contexts, particularly regarding algorithmic bias and its impact on young learners.

3.3 Central Theoretical Proposition

This framework proposes that Generative AI can function as a tool for enhancing 21st-century skills and creative autonomy in secondary education when specific pedagogical conditions are met: (1) students possess foundational digital and AI literacy that enables

critical evaluation of algorithmic outputs; (2) soft skills, particularly self-regulation, critical thinking, and metacognitive awareness, are deliberately cultivated as prerequisites for, not consequences of, AI use; (3) assessment shifts from product to process, valuing the student’s dialogic engagement with AI over the polished final text; and (4) implementation attends explicitly to equity considerations and ethical dimensions, including resource constraints and algorithmic bias.

3.4 Specific Conceptual Propositions Guiding the Framework

Rather than posing empirical research questions, this framework advances the following conceptual propositions for theoretical consideration and future empirical testing:

Proposition 1 (Quality): Structured interaction with AI in creative writing can improve students’ performance in terms of text structure, coherence, and lexical richness without requiring students to surrender authorial control, provided the interaction is mediated by explicit pedagogical scaffolding that maintains the student as decision-maker.

Proposition 2 (Originality and Voice): The uniqueness of ideas and development of personal creative voice are preserved-and potentially enhanced-when students are explicitly taught to use AI suggestions as material for critical reflection rather than as final answers, and when assessment values the student’s reasoning about accepting or rejecting AI input over the surface perfection of the final text.

Proposition 3 (Digital Literacy as Mediator): Students with higher levels of digital literacy and AI literacy will be better positioned to use AI as a tool for enhancement (rather than replacement) of their originality, as they possess the critical frameworks necessary to evaluate, adapt, and selectively integrate AI suggestions into their own creative vision.

Proposition 4 (Soft Skills as Foundation): Self-regulation and critical thinking are not merely beneficial but necessary conditions for productive AI use in creative writing. Students who develop these metacognitive and evaluative capacities will produce work that demonstrates greater originality and authorial voice when using AI tools compared to students who have not developed such capacities.

3.5 Objectives of the Conceptual Framework

This framework seeks to achieve the following

objectives:

1. Theoretical Documentation: To delineate and refine the concept of “digital scaffolding” within the framework of Generative AI, highlighting how this technology can support the cognitive processes of creative writing when properly implemented (Kasneci et al., 2023).

2. Highlighting Soft Skills: To demonstrate the theoretical necessity of soft skills, such as critical thinking and self-regulation, as prerequisites for avoiding “statistical homogenization” of student discourse (Barrot, 2023).

3. Pedagogical Design: To propose a three-stage instructional model (Pre-writing, Writing, Post-writing) for integrating AI in the classroom that theoretically enhances quality without undermining originality (Olszewski & Crompton, 2020).

4. Reformulation of Assessment: To articulate principles of “authentic assessment” that shift emphasis from the final text to the process of creative student-machine interaction (Perkins, 2023).

5. Equity and Ethics Integration: To explicitly address implementation variations necessitated by resource constraints and to provide concrete strategies for developing critical AI literacy that helps students identify and critique algorithmic bias.

6. Educator Empowerment: To offer a practical conceptual framework for secondary education teachers to manage the AI challenge as an opportunity for cultivating digital literacy and 21st-century skills (Özeren, 2023).

4. Pedagogical Framework: The Three-stage A.I. Writing Cycle

For Generative AI to function as “digital scaffolding” without replacing student initiative, a structured pedagogical framework is proposed that integrates soft skills into each phase of the writing process.

4.1 Stage One: Pre-Writing - Strategic Brainstorming and Critical Selection

In the first stage, AI is used as an “idea partner”. Students are called to interact with ChatGPT to generate central themes, characters, or scenarios.

The Soft Skill: Critical thinking and decision-making are cultivated here. Students do not passively accept the first idea but learn to formulate complex “prompts” (commands). According to Kasneci et al.

(2023), AI’s ability to generate multiple versions of an idea helps students overcome the “fear of the blank page” provided they function as the final judges of quality.

4.2 Stage Two: Drafting - Dynamic Scaffolding and Linguistic Enhancement

During the main writing phase, students develop their text, using AI selectively to improve coherence or enrich vocabulary.

The Soft Skill: Self-regulation is key at this stage. Students must regulate how much the machine will help. As Baidoo-Anu and Ansah (2023) note, relief from anxiety about spelling or syntax allows students to focus on structure and flow of meaning. AI functions here as “corrector” and “style advisor”, enhancing student confidence (Olszewski & Crompton, 2020).

4.3 Stage Three: Post-Writing - Reflection and Preservation of Originality

This is the most critical stage for ensuring Originality. Students compare their final text with AI’s initial suggestions and are called to justify the changes they made.

The Soft Skill: Self-regulated learning and metacognition. Students reflect on their “voice” (voice identification). To avoid “statistical homogenization” (Barrot, 2023), students must be able to explain why they rejected a “perfect” AI suggestion in favor of their own, more “imperfect” but authentic expression. This aligns with Perkins’ (2023) “authentic assessment”, where the dialogic relationship between student and AI is graded, not just the text.

5. Illustrative Pedagogical Scenario: “Conversing with the AI Muses”

For fuller understanding of the proposed conceptual model, we present an illustrative teaching scenario. This scenario is hypothetical and pedagogical in nature. It is not drawn from empirical classroom data but rather functions as a thought experiment demonstrating how the three-stage framework might be implemented in practice. The scenario is addressed to sixth-grade elementary or first-year middle school students, within the Language or Literature course.

5.1 The Scenario and Objective

Students are asked to write a short mystery story with the theme “The disappearance of the last book from the

library of the future” . The objective is not simple text production, but critical collaboration with ChatGPT.

5.2 Workflow and Soft Skills Engagement

Pre-Writing Phase: AI as “Brainstorming Partner”

Activity: Students enter a general prompt: Give me three unusual ideas for a hero living in a digital library in the year 2150.

The Soft Skill (Critical Thinking): Students don’t choose the first idea. They analyze AI’s proposals and identify clichés (e.g. a robot that wants to become human). They decide to combine two ideas, asking AI to modify them. Keep the hologram-librarian idea but make him afraid of technology. This applies Kasneji et al.’s (2023) theory of AI as a tool for overcoming creative impasse through personalized feedback.

Writing Phase: AI as “Dynamic Scaffolding”

Activity: Students write the first paragraph alone. Then, having difficulty describing the environment, they ask AI: Help me make the library description more atmospheric, using words that evoke.

The Soft Skill (Self-Regulation): Students must decide which suggested words fit their own style. If AI proposes overly complex vocabulary, students reject it, maintaining control of their “voice” (Barrot, 2023). This process embodies self-regulated learning (Feraco et al., 2025), as students monitor and regulate their cognitive effort relative to provided assistance.

Reflection Phase: AI as “Object of Critical Analysis ”

Activity: After completing the story, students ask AI to identify three weak points in their plot. Then they write a short 100-word text explaining: In which points did AI really help me and where did I feel it tried to change my story in a way I didn’t like?

The Soft Skill (Metacognition): Students recognize technology’s limits and their own superiority in making creative decisions. This stage applies “authentic assessment” (Perkins, 2023), as educators would evaluate conscious use of the tool, not just the final story.

6. Challenges and Pitfalls: Beyond Automated Writing

Integrating Generative AI in the classroom entails risks that, if not prevented, can nullify pedagogical benefits. It is critical for educators to recognize the following traps:

1. The “Ready Answer” Trap (Passive

Consumption): Students often tend to ask AI to write the entire text with a simple prompt (e.g., “Write me a story about a dog”). This practice eliminates cognitive effort and leads to complete absence of soft skills. *The Countermeasure:* Educators must prohibit copy-paste and enforce gradual text construction, where AI intervenes only as advisor on specific questions.

2. The Illusion of Academic Perfection: AI texts are often overly perfect syntactically but lack emotion and authenticity. *The Challenge:* Students may become discouraged by their own “imperfect” attempts when comparing them to algorithmic outputs. As Barrot (2023) notes, education must restore the value of error and imperfection as structural elements of human creativity.

3. Ethics and Bias: Students rarely realize that AI can reproduce stereotypes (social, racial, gender-based) inherent in its training data. *Pedagogical Intervention:* Uncritical adoption of AI descriptions is a flawed practice. Developing digital literacy (Özeren, 2023) requires students to check whether machine suggestions are fair and inclusive.

4. Digital Over-reliance: There is a risk students will feel unable to write anything without ChatGPT’s help. *Coping Strategy* “Digital scaffolding” must, by definition, be temporary. The goal is gradual withdrawal of assistance (fading) as students develop their own writing and soft skills (Olszewski & Crompton, 2020).

7. Equity Considerations and Implementation Adaptations

A critical limitation of much existing literature on AI in education is its tendency toward techno- optimism that presumes universal access to resources and infrastructure. This framework explicitly acknowledges that the pedagogical model outlined above presupposes conditions that are far from universal: reliable internet connectivity, individual or small-group access to generative AI tools, and teachers with sufficient professional development to facilitate critical AI literacy. These assumptions risk exacerbating existing digital divides if left unaddressed.

7.1 Resource Constraints and Classroom Adaptations

The three-stage AI writing cycle can be adapted for under-resourced classrooms through several implementation variations:

Single-Device Demonstration Model: In classrooms

with limited technology access, the teacher can conduct AI interactions on a single device with classroom projection, transforming individual AI use into collective critical analysis. Students observe the teacher formulating prompts, evaluating AI responses, and modeling critical selection. This approach may offer pedagogical advantages by making the decision-making process more visible and subject to group discussion. Students then complete their writing individually without AI assistance but informed by the critical literacy skills developed through collective observation.

Rotation Model: Where few devices are available, small groups can rotate through AI-assisted brainstorming stations while other students work on different stages of the writing process. This requires careful sequencing of activities but can maintain engagement across the full three-stage cycle.

Hybrid Print-Digital Approach: Teachers can pre-generate AI responses to common creative writing prompts and provide these as printed materials for student analysis and selective integration. While this loses the interactive dimension, it preserves the critical literacy component of evaluating and selectively using AI-generated content.

Offline Preparation: In contexts with intermittent connectivity, teachers can prepare AI-generated materials during planning periods for offline classroom use, focusing student learning on critical evaluation rather than real-time generation.

7.2 Teacher Professional Development Considerations

Successful implementation of this framework requires teachers to possess not merely technical facility with AI tools, but sophisticated understanding of how to cultivate critical AI literacy in young learners. Professional development must therefore address:

- Pedagogical strategies for making AI decision-making processes visible and subject to critique
- Methods for assessing process-based learning rather than only evaluating final products
- Understanding of how AI systems work sufficiently to explain their limitations and biases to children
- Adaptation strategies for varying levels of resource availability and student technical skill

Importantly, teacher professional development

should model the same critical, reflective engagement with AI that we hope to cultivate in students, avoiding both uncritical enthusiasm and reflexive rejection.

7.3 Contextual Variations and Cultural Considerations

While this framework is developed with the Greek educational context implicitly in view, its principles must be adapted to local educational cultures, language contexts, and pedagogical traditions. Implementation in multilingual contexts, for instance, raises particular questions about whether AI assistance should be provided in students' home language, language of instruction, or both. Similarly, classrooms serving students with diverse learning needs may require differentiated approaches to AI integration, with some students benefiting from more extensive scaffolding while others require explicit constraints to prevent over-reliance.

8. Ethical Use and AI Literacy: Developing Critical Awareness in Young Learners

One of the most crucial objectives of integrating AI in secondary education is cultivating AI Literacy, not just as technical skill but as ethical competence and critical awareness. For young learners, encountering algorithmic bias is not merely a theoretical possibility but a concrete potential harm, particularly regarding gender, cultural, and racial representation. This section provides specific pedagogical strategies for helping secondary-aged students identify and critique biased outputs.

8.1 Understanding AI Limitations: Making the Invisible Visible

Secondary-aged students often anthropomorphize AI systems, attributing human-like intelligence and neutrality to them. A foundational step in developing critical AI literacy is helping students understand that AI systems:

- Are created by humans and reflect human choices and values
- Learn from existing texts on the internet, which contain human biases and stereotypes
- Make predictions about what words should come next, rather than "knowing" truth
- Can be wrong, incomplete, or biased even when they sound confident

8.2 Concrete Classroom Activities for Identifying Bias

Activity 1: Character Role Reversal

Objective: Help students identify gender stereotypes in AI-generated story elements.

Process: Ask AI to generate character descriptions for common story roles (scientist, nurse, firefighter, teacher, engineer). Have students examine whether AI assigns gender to these roles and whether those assignments reflect stereotypes. Then explicitly ask AI to reverse the genders and compare the descriptions. Do the personality traits, behaviors, or story roles change?

Discussion Questions: Why might the AI have made these assumptions? Where did it learn these patterns? Are these patterns fair or accurate representations of real people? How can we write our own characters that break these stereotypes?

Activity 2: The “Default” Question

Objective: Help students recognize when AI makes assumptions about “normal” or “default” characters.

Process: Ask AI to generate a story about a family without specifying any details. Examine what the AI assumes: What does the family look like? How many parents? What are their genders? What race or ethnicity does it seem to assume? What kind of home do they live in? Then ask students to revise the prompt to be more specific and inclusive, requesting families that reflect different structures, cultures, and circumstances.

Discussion Questions: Why did the AI make these particular assumptions? Do all families look like this? Whose families might feel left out by this description? How can we give AI better instructions to create more inclusive stories?

Activity 3: Cultural Representation Audit

Objective: Develop awareness of cultural stereotyping and one-dimensional representation.

Process: Ask AI to generate descriptions of characters from different cultural backgrounds or to set a story in various countries. Have students examine whether the descriptions rely on stereotypes, clichés, or tourist-like external features rather than depicting complex, individual human beings. Students then research and rewrite these descriptions with more nuance and authenticity.

Discussion Questions: Does this description show

a full person or just surface details? What is missing? How would someone from this background feel about this description? What makes a respectful, authentic representation of people different from us?

8.3 Age-Appropriate Language for Discussing Bias

When discussing algorithmic bias with secondary-aged students, educators should use concrete, age-appropriate language:

Instead of “algorithmic bias” say: The computer learned patterns from stories written by people, and sometimes those patterns aren’t fair to everyone.

Instead of “statistical homogenization” say: Sometimes AI makes everything sound the same, like everyone is exactly alike, but real people are all different and unique.

Instead of “training data reflects societal inequities” say: The AI learned from stories on the internet, and some of those stories have unfair ideas in them that we need to notice and fix.

8.4 Responsible Digital Citizenship: Ethical Frameworks for Young Learners

Beyond identifying bias, students must understand that responsible use of AI tools requires:

Awareness of Limitations: Understanding that AI can make mistakes, provide incomplete information, or generate biased content, and that humans must critically evaluate all AI outputs.

Ethical Responsibility: Recognizing that even when AI generates content, the human user bears responsibility for what they choose to use, share, or present as their own work.

Social Empathy: Considering how automated discourse production affects human communication, creativity, and the value we place on authentic human expression and connection.

Critical Questioning Habit: Developing the habit of asking: Who created this AI? What was it trained on? Who might benefit or be harmed by this output? What perspectives or voices might be missing?

By foregrounding these ethical dimensions from the earliest stages of AI integration, educators can help ensure that secondary-aged students develop not merely technical facility but critical consciousness, the foundation for responsible digital citizenship in an AI-mediated world.

9. From Product to Process: The Authentic Assessment Framework

The entry of Generative AI into the classroom renders traditional assessment methods (grading only the written test) outdated and often unreliable. To ensure academic integrity and promote learning, adoption of Authentic Assessment is proposed.

9.1 Process-Based Assessment

Rather than focusing exclusively on whether the text is well-formed, educators assess the stages that led to it. **Practical Application:** Students submit a Writing Portfolio that includes:

- (1) the initial draft (without AI),
- (2) the history of “prompts” (what they asked ChatGPT), and
- (3) corrections and critical interventions they made to the machine’s suggestions.

As Perkins (2023) argues, this “visible learning” makes plagiarism impossible, as students are graded on their thinking about using the tool.

9.2 Highlighting “Student Voice” as Quality Criterion

Originality in the age of AI is now defined as the student’s ability to differentiate from the average. Assessment Criteria include:

Creative Choice: Why did the student choose idea A rather than idea B proposed by AI?

Emotional Fingerprint: Are there elements in the text (personal experiences, local idioms, particular humor) that AI cannot reproduce?

As Barrot (2023) emphasizes, “statistical homogenization” is avoided only when students are encouraged to develop their own authorial identity, which represents the highest level of the soft skill of self-awareness.

9.3 The “Collaborative Writing” Rubric: Operational Criteria

An enhanced scoring rubric is proposed that examines not only grammar and syntax but also Digital and Soft Skills. To address concerns about operational specificity, the following criteria include concrete behavioral indicators:

Criterion 1: Critical AI Evaluation

Definition: The student’s ability to identify errors, biases, stereotypes, or inappropriate suggestions in AI

responses and explain their reasoning for accepting or rejecting AI input.

Exemplary (4): Student identifies multiple instances where AI suggestions were problematic (stereotyped, clichéd, or factually questionable) and provides specific, thoughtful explanations for why they rejected these suggestions. Shows evidence of comparing multiple AI outputs and selecting most appropriate elements.

Proficient (3): Student identifies at least one substantive issue with AI suggestions and explains their reasoning. Shows some evidence of selective use rather than wholesale acceptance of AI output.

Developing (2): Student notes that they changed some AI suggestions but provides only surface-level explanations “I didn’t like it” without deeper reasoning.

Beginning (1): Student accepts all AI suggestions without critical evaluation or provides no evidence of selective judgment.

Criterion 2: Transformation and Authorial Revision

Definition: The extent to which the student actively worked on and transformed AI-generated content, making it their own through revision, addition, deletion, and creative adaptation.

Exemplary (4): Final text shows substantial creative distance from AI suggestions. Student has significantly rewritten, reorganized, or reimagined AI content. The final work reflects the student’s voice, ideas, and creative choices, using AI material as raw material for transformation.

Proficient (3): Student has made meaningful changes to AI suggestions, revising wording, adding personal details, or reorganizing structure. Evidence of active engagement with the material rather than passive acceptance.

Developing (2): Student has made minor surface changes (word substitutions, slight reordering) but the text remains very close to AI output.

Beginning (1): Text appears to be unmodified or minimally modified AI output with little evidence of student creative input.

Criterion 3: Emotional Fingerprint and Personal Voice

Definition: The presence of elements in the text that reflect the student’s individual perspective, experiences, cultural context, humor, or distinctive way of expressing ideas, elements that AI systems cannot

authentically reproduce.

Exemplary (4): Text includes multiple specific, authentic elements: references to personal experiences, use of local idioms or culturally specific details, distinctive humor or emotional perspective, unusual metaphors or descriptions that feel individually crafted. The work “sounds like” this particular student.

Proficient (3): Text includes some personal or distinctive elements. There are moments where the student’s individual voice emerges, even if other parts remain more generic.

Developing (2): Text is largely generic with minimal personal markers. Reads like it could have been written by anyone about anything.

Beginning (1): No discernible personal voice or distinctive elements. Text is entirely generic and algorithmic in feel.

Criterion 4: Metacognitive Reflection

Definition: The student’s ability to articulate and explain their process, including what they learned through collaboration with AI, where they maintained creative control, and how they made decisions about using or modifying AI suggestions.

Exemplary (4): Reflection demonstrates sophisticated metacognitive awareness. Student articulates specific learning, explains their decision-making process with examples, identifies moments of tension between AI suggestions and their own vision, and reflects on how their understanding of their own voice developed through the process.

Proficient (3): Reflection shows clear awareness of process. Student can explain what AI helped with and where they made their own choices, with some specific examples.

Developing (2): Reflection is superficial or vague. Student acknowledges using AI but does not explain process or decision-making in detail.

Beginning (1): No meaningful reflection provided, or reflection suggests lack of awareness of the learning process.

Sample Student Work: Annotated Examples

To further operationalize these criteria, consider these abbreviated examples:

Example 1: Exemplary Emotional Fingerprint

The library robot reminded me of my yiayia’s old radio that only works if you tap it three times. Every morning I watched him wake up the hologram books

by singing to them in Greek; not the kind of Greek from textbooks, but the village dialect my grandfather uses when he tells stories about growing up without electricity.

Why Exemplary: Specific personal/cultural references (yiayia, village Greek), unique metaphor (library robot compared to grandmother’s radio), distinctive sensory detail and emotional connection that AI could not generate without this student’s particular experiences.

Example 2: Developing Emotional Fingerprint

The library was very big and beautiful. It had lots of books and computers. I felt happy when I walked inside because I love to read and learn new things.

Why Developing: Generic descriptions that could apply to anyone. No specific personal details, distinctive voice, or individual perspective.

These operational definitions and annotated examples transform the rubric from aspirational to implementable, giving teachers concrete guidance for reliable assessment of AI-assisted creative writing.

10. Conclusions and Recommendations

This conceptual paper has proposed a theoretical framework for understanding how Generative AI might function as “digital scaffolding” in secondary education creative writing, while explicitly attending to challenges of equity, access, and ethical implementation often overlooked in techno- optimistic narratives.

10.1 Key Theoretical Contributions

1. AI as Conditional Enhancer: This framework theorizes that AI can enhance rather than replace student authorship when specific pedagogical conditions are met: when AI is used as “digital scaffolding” it can free students from technical difficulties (spelling, structure), allowing them to focus on creative conception and discourse quality (Baidoo-Anu & Ansah, 2023). However, this enhancement is conditional upon deliberate cultivation of soft skills and critical AI literacy.

2. Soft Skills as Prerequisites, Not Consequences: A central theoretical proposition is that soft skills must be cultivated before, not after, AI integration. The shield against discourse homogenization and loss of originality is not technology prohibition, but cultivation of soft skills. Critical thinking, self-regulation, and ethical awareness transform students from passive

users to sovereign “architects” of their texts.

3. Voice as Emergent Through Process: Building on recent scholarship in digital writing studies, this framework challenges simplistic notions of voice protection, instead theorizing student voice as constituted through, rather than prior to, the writing process. This perspective shifts pedagogical focus from shielding a pre-existing voice to scaffolding the development of voice through guided, critical engagement with AI tools.

4. Process Over Product in Assessment: Assessment must shift from “what was written” to “how it was written”. Highlighting student voice and process is the only way to ensure authenticity in the age of Large Language Models (Perkins, 2023). The operational rubric provided makes this shift implementable rather than merely aspirational.

5. Equity and Ethics as Central, Not Peripheral: Unlike much existing literature, this framework explicitly addresses implementation variations for resource-constrained contexts and provides concrete strategies for developing critical AI literacy regarding algorithmic bias, positioning equity and ethics as central theoretical concerns rather than afterthoughts.

10.2 Recommendations for Educational Practice

Teacher Professional Development: Systematic education of teachers is necessary, not only in handling AI tools but primarily in AI Literacy, authentic assessment methodologies, and adaptation strategies for varying resource contexts. Professional development should model the same critical, reflective engagement with AI that we hope to cultivate in students.

Curriculum Integration: Creative writing with AI assistance should be organically integrated into language courses, with clear guidance for ethical and responsible use. Integration should be gradual, scaffolded, and explicitly linked to development of soft skills and digital literacy.

Creation of Learning Communities: Encouraging students to share their experiences with AI interaction, promoting collaborative knowledge construction (Yusof et al., 2022) and collective development of critical literacy practices.

Policy Development: Educational institutions should develop clear policies on AI use that balance innovation with academic integrity, explicitly address

equity considerations, and provide guidance for implementation in diverse resource contexts.

Resource Allocation: Schools and districts should attend to digital equity, ensuring that implementation of AI-enhanced pedagogy does not inadvertently widen existing achievement gaps based on access to technology and connectivity.

10.3 Limitations and Future Research Directions

This paper’s secondary limitation is its theoretical and conceptual nature. The three-stage pedagogical model, illustrative scenarios, and assessment framework require empirical validation through classroom-based research. Future research is urgently needed to:

- Empirically test the proposed three-stage model through classroom implementation studies, measuring impacts on both quality (structure, coherence, lexical richness) and originality (student voice, creative distinctiveness)
- Develop and validate standardized assessment rubrics that effectively and reliably measure AI literacy and collaborative writing skills across diverse student populations
- Investigate long-term effects of AI-assisted writing instruction on student creativity, critical thinking, and authorial development through longitudinal studies
- Explore how different AI tools and pedagogical approaches impact diverse student populations, including students with learning differences, multilingual learners, and students from varying socioeconomic contexts
- Examine the effectiveness of the proposed adaptation strategies for resource-constrained classrooms through comparative studies of different implementation models
- Investigate how students’ critical AI literacy develops over time and its relationship to their ability to use AI tools productively in creative writing
- Explore cultural variations in how students and teachers engage with AI-assisted writing, and how pedagogical approaches might need adaptation across different educational contexts

10.4 Concluding Reflection

In conclusion, the thoughtful integration of Generative AI into creative writing instruction represents not a threat to educational values but an opportunity to reimagine pedagogy for the 21st century, provided

such integration is grounded in robust theoretical frameworks, attentive to equity and ethics, and committed to empirical validation. By prioritizing process over product, soft skills over technical proficiency, and student voice over algorithmic perfection, educators can harness AI's potential while preserving and enhancing the uniquely human capacities that make creative writing a transformative educational experience. This framework offers not definitive answers but a conceptual foundation for continuing dialogue between educational theory, pedagogical practice, and the rapidly evolving landscape of AI technology.

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