

Research on English Creative Writing Based on Artificial Intelligence – Taking Deepseek as an Example

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Abstract

In the contemporary era, artificial intelligence has progressively permeated all facets of human existence. Its impact on the educational sector, in particular, is profound. Creative writing, as a conventional pedagogical approach in English instruction, is frequently employed to enhance students' linguistic competence and literary cultivation. Consequently, investigating the supportive role of artificial intelligence in English creative writing assumes significant importance. This study, based on the continuation exercises of endings for Langston Hughes' *Early Autumn* authored by both students and artificial intelligence, conducts a comparative evaluation of their respective merits and demerits across three dimensions: narrative design, diction and syntax, and descriptive techniques. The findings indicate that AI-generated texts demonstrate superior narrative construction, more precise diction, and a capacity to accurately emulate the original author's style through meticulous language use. In contrast, student compositions exhibit greater strengths in creativity and authenticity, often unconstrained by the source text and achieving effects that are "unexpected yet reasonable." Therefore, in future English pedagogy, artificial intelligence should be integrated into students' creative writing processes to optimize their expressive and rhetorical outcomes, while ensuring that students' autonomous creativity is not stifled.

Keywords

Artificial Intelligence; Creative Writing; *Early Autumn*

1. Introduction

1.1. The Rapid Advancement of Artificial Intelligence Technology and

Its Deep Integration with the Education Sector

In recent years, artificial intelligence technology has undergone exponential advancement globally, with its applications expanding from traditional industries and healthcare into the educational domain. Generative large language models, representative of contemporary AI, can emulate human linguistic logic, produce coherent texts, and even exhibit creative compositional faculties. According to a 2025 Stanford University study, the proportion of professional writing assisted by AI has reached as high as 24%, particularly in regions with lower educational attainment where usage rates are significantly elevated, illustrating the “balancing effect” of technological dissemination. Concurrently, alongside the rapid evolution of AI technology, its application within education is gradually shifting from instrumental assistance to creative exploration. In daily instructional practice, AI is utilized not only for fundamental writing correction but is also progressively permeating the more challenging domain of creative writing pedagogy. For instance, AI can analyze the structure and stylistic features of classic literary works to provide students with creative inspiration or personalized feedback, thereby mitigating issues inherent in traditional teaching models such as insufficient resources and delayed feedback.

1.2. The Current Situation and Challenges of Creative Writing Instruction in English

Within English language teaching, creative writing constitutes a crucial component. It serves not only to enhance students’ foundational literacy in literary reading but also to refine their compositional skills. Therefore, the deep integration of artificial intelligence into creative writing assumes particular criticality. In practice, while the application of AI in creative writing has yielded preliminary results, it also confronts substantial challenges. Firstly, significant disparities exist in students’ writing capabilities. Some students, due to weak linguistic foundations or rigid cognitive patterns, struggle to surmount creative impasses. Secondly, for educators, traditional instruction often relies on subjective teacher experience, making large-scale personalized guidance difficult to achieve. Furthermore, as the core of creative writing resides with the students themselves, cultivating students’ creative thinking poses a significant pedagogical challenge. Finally, regarding artificial intelligence itself, existing writing assistance tools predominantly focus on grammatical correction and lack support for deeper competencies such as creative generation and narrative logic. Simultaneously, AI-generated texts often lack emotional depth and originality, and prove inadequate in handling literary devices such as metaphor and symbolism.

1.3. Controversies Surrounding the Application of Artificial Intelligence and the Irreplaceability of Human Writing

Although artificial intelligence technology possesses considerable advantages, its limitations within the realm of creative writing have provoked extensive discourse. Primarily, constrained by database limitations and a lack of systematic training for large models, AI may lead to stylistic homogeneity in generated texts, consequently attenuating students' originality. For example, AI-generated texts frequently adhere to existing data patterns, lacking the unique emotional depth and capacity for cultural critique characteristic of human authorship. Secondly, the authenticity and ethical implications of AI-generated compositions warrant consideration. Completely AI-authored "hollow writing" risks reducing creativity to a mere technical adjunct, stripping it of its humanistic value. Thus, within an AI-assisted context, maintaining "human primacy" and utilizing AI as a tool for inspirational stimulation rather than as a substitute becomes particularly crucial. Thirdly, prolonged reliance on AI may potentially erode students' capacity for independent thought and linguistic refinement. Instructional design is therefore necessary to balance technological utilization with independent creation.

2. Literature review

Creative writing is a mode of expression that relies on imagination and creativity, emphasizing the reintegration and innovative articulation of existing knowledge, experiences, and emotions. It encourages students to break away from conventional thinking and cultivate unique perspectives and expressive styles. In contemporary higher education, creative writing has emerged as a significant pedagogical means to foster core literacy in college English. With the rapid advancement of artificial intelligence technology, the integration of AI tools into teaching practice has become a critical issue within the educational field (Guan, Zhu, 2024). In the era of large language models, it is widely acknowledged that artificial intelligence is profoundly involved in the developmental process of creative writing education, bringing forth new opportunities and clarifying developmental needs. Previous scholars have conducted considerable research on related issues. For instance, case studies by Lu and Zhu demonstrate that, empowered by large language models, students have made notable progress in creative conception and expressive ability, with their writing interest and creative potential being effectively stimulated (Lu, Zhu, 2025). Moreover, leveraging its robust natural language processing and machine learning capabilities, AI has optimized traditional manual editing approaches across multiple dimensions, including text proofreading, grammatical correction, sentence polishing, and rhetorical refinement (Luo, 2025). Thus, it is evident that AI holds substantial benefit for enhancing students' language application and cognitive stimulation. International scholars have also pointed out that educating students about artificial intelligence and its appropriate use can shift their perceptions regarding AI utilization, which largely involves reducing over-reliance on AI and strengthening their subjective agency in creative writing (Kristen, Gili, Thomas, 2025). However,

although numerous studies have addressed AI in the context of creative writing, there remains a scarcity of comparative textual analyses. This study, therefore, aims to address this research gap.

3. Comparative Analysis of Human and Machine Creative Writing

Following extensive analysis of numerous short stories, Langston Hughes' *Early Autumn* was selected as the experimental text. This work possesses two key applicable characteristics: Firstly, the original narrative concludes abruptly, affording ample scope for imaginative extension and creative exertion. Secondly, Langston Hughes' writing style is distinctive, characterized by concise yet vivid language. The artistic atmosphere is rendered naturally, and the textual content is highly representative, presenting a considerable challenge for both student authors and artificial intelligence.

3.1. Narrative Design

3.1.1. Comparison of Plot Construction

At the level of plot construction, the generative writing produced by AI and the student-authored continuation present markedly divergent narrative developments. In the student's composition, Mary and Bill encounter each other again, yet Mary once more fails to provide Bill with her address. This plot element effectively seizes upon the core aspect of the novel's ending for continuation: "She had forgotten to give him her address." This approach introduces a degree of dramatic conflict to the narrative, creating an effect imbued with absurdity and a hint of fatalism. Conversely, the AI-generated writing fails to grasp this focal point for continuation, emphasizing instead the depiction of Mary's reflections after Bill's departure and her circumstances upon returning home. This narrative development is relatively conventional, diminishing narrative tension, yet it demonstrates greater logical consistency and aligns with plausible plot progression. Evidently, the student's composition exhibits greater creativity, whereas the AI's generative writing prioritizes narrative plausibility.

3.1.2. Correlation with Original Context

Both the students and the AI accurately identified the most conspicuous instance of foreshadowing in the novel: "Bill." In the student's writing, the conclusion explicitly merges the Bill present before Mary, her son, with her former lover, blurring the boundaries between the two. The utterance "I love you, Bill." expresses both the child's gratitude for the birthday celebration and conveys genuine affection towards the former beloved. The drawback lies in the seemingly contrived nature of this plot setup, where emotional expression is overly explicit, appearing somewhat rigid. It merely satisfies the most basic level of plot correspondence. In contrast, the AI-generated writing demonstrates slight

superiority. Its text states: “Her youngest, Bill - named after a ghost, a feeling, a what-if.” This sentence carries significant rhetorical force. It not only adeptly reincorporates the novel’s most prominent foreshadowing but also imbues this name with profound emotional weight. At this juncture, the name transcends mere neglected notation, becoming instead a clandestine memorial to her deeply buried past affections.

3.1.3. Characterization

The student’s writing and the AI-generated text construct two entirely distinct portrayals of the protagonist, Mary. In the student’s composition, Mary continues to exhibit intense emotions towards Bill. While this plot element can, to some extent, reflect the vibrancy of Mary’s character, it only partially illustrates her lingering preoccupation with the past, lacking character development and multidimensional portrayal, that is, the characterization remains unidimensional and insufficiently complex. The AI, however, addresses this aspect, concluding the story thus: “The past was a country that could never be returned to.” Mary tidies the old belongings, symbolizing quiet acquiescence. This narrative choice does not negate the past but signifies a sense of resolution, marking character growth and rendering the characterization more nuanced.

3.2. Diction and Syntax

3.2.1. Lexical Choice

Regarding lexical choice, the AI holds an indisputable advantage. It is evident that the diction in AI-generated texts is more precise and literary. For instance, employing “a numb trance” to depict despondency possesses greater nuance than the simplistic “at a loss.” In handling conventional expressions, AI also demonstrates greater idiomaticity and accuracy; for example, “ran into an old friend” is superior to “met an old friend.” These qualities are largely absent in student writings. It appears that students endeavor to utilize idiomatic expressions and advanced vocabulary to enhance literary quality, but due to limitations in their own proficiency, the outcome often falls short. Furthermore, student compositions expose other typical issues: inaccurate language usage, prevalent Chinglish, such as “have a clear sight of” which should be amended to “see clearly”; inappropriate word selection, such as “the pumping heart mocking her silliness,” where “pumping heart” is overly physiological rather than literary.

3.2.2. Sentence Structure

The AI-generated text exhibits a rich variety of sentence structures, skillfully combining long and short sentences to apt effect. For example, “She saw again the polite smile, the quick frown, the outstretched hand that had so decisively vetoed her unspoken offer of a kiss.” This sentence depicts the image of Bill in Mary’s

mind, and the use of parallel structure underscores the depth and sincerity of her emotions. When conveying pivotal ideas or central themes, short sentences are employed, such as “The past was a country one could never return to,” achieving conciseness and impact. Simultaneously, AI effectively utilizes interjections to create pauses within sentences, allowing space for reader reflection. In contrast, student writings display a noticeable lack of syntactic variation. The majority of sentences are short, often commencing with “She” or “He,” resulting in monotony and a deficiency in rhythm and cadence.

3.2.3. Stylistic Consistency

Surprisingly, the AI demonstrated considerable accuracy in capturing the stylistic essence of Hughes’ novel. The AI’s composition generally leaned towards narrative restraint; emotional expression did not rely on direct and concise language but was instead reflected through indirect depiction of actions and environment. This aligned highly consistently with the original text’s style. Conversely, student continuations showed relative deficiency in grasping the novel’s overall style. This was primarily manifested in the incorporation of substantial explicit psychological description within the continuation, such as “She felt weary.” and “A sense of pain flooded into her mind.” These sentences, to some extent, disrupted the “subtle implications” that readers must discern in Hughes’ work, thereby diminishing the literary quality of the composition.

3.3. Descriptive Techniques

3.3.1. Rhetorical Devices

Both students and AI performed commendably regarding rhetorical devices. Each was able to appropriately employ fundamental rhetorical strategies such as metaphor and personification, significantly enhancing the literary quality of their texts. In the AI-generated text, the bus was metaphorically rendered as “a sealed capsule,” vividly linking the vehicle’s form with the concept of a time capsule and conveying deeper symbolic meaning, representing the permanent disappearance of the encounter and Mary’s feelings for Bill. In the student’s composition, it was written: “The sun merely peeked through the thick clouds and mercilessly drove them away.” This effectively employed personification, vividly depicting the dynamic interaction between sun and clouds. However, upon closer scrutiny, the rhetorical descriptions in the student’s writing primarily served the requirement for literary embellishment, creating beautiful and vivid sentences. The AI, building upon this, also considered narrative development and plausibility. Consequently, the student’s composition appeared somewhat artificial and formulaic by comparison.

3.3.2. Psychological Depiction

Both AI and students can employ psychological description reasonably to shape characters and their attributes. Nevertheless, significant differences exist in their specific methods of application. In the AI-generated continuations, psychological depiction is primarily conveyed through actions and sensory details as vehicles, rather than stated directly. For example, “dust motes dancing in the slanted light from the window.” This subtle sensory description establishes a serene atmosphere where time seems suspended and memories surge, precisely reflecting Mary’s inner turmoil and longing for Bill upon discovering the old photographs. Conversely, student writings frequently present psychological states through direct, explicit statement. Students often use phrases like “She felt” and “A sense of...”, which appear somewhat monotonous and straightforward. This approach directly informs the reader of the protagonist’s feelings rather than allowing readers to infer them through actions, dialogue, and perceptions, thereby lacking in literary subtlety and reader engagement to a certain degree.

3.3.3. Environmental Description

Similar to psychological depiction, both students and AI demonstrate proficiency in incorporating varied environmental descriptions within their continuations to establish specific atmospheres. Similarly, AI often transcends the superficial function of environmental description, emphasizing its additional roles, such as in the sentence: “The leaves had fallen, without wind, and that was all.” This line blends environmental and psychological description. The falling leaves are not merely scenic but symbolize the settling of matters and the return of all things to tranquility, mirroring Mary’s inner calm, acceptance of reality, and resignation. Environmental descriptions in student writings primarily serve to create atmosphere, for instance: “The withering wind stopped. As the last leaf fell, everything fell tranquil.” This deliberately constructs a desolate atmosphere; while slightly abrupt, it retains a degree of literary sensibility.

4. Conclusion

Through the aforementioned in-depth comparative analysis, it is evident that within the current evaluative framework, AI-generated texts significantly surpass student compositions in terms of narrative logic and depth, linguistic literary quality and accuracy, as well as the integration of descriptive techniques with thematic concerns. However, student compositions demonstrate clear superiority in creativity, which is an element indispensable to literary creation and often pivotal in determining a work’s quality. In this fast-paced era, fewer individuals possess the time and capacity to engage in sustained reading. If literary content lacks novelty, readers’ interest will undoubtedly diminish considerably. This observation also reflects, to some extent, the predominant importance of narrative innovation in contemporary creative works.

Nevertheless, it must be emphasized that the exceptional performance of AI is predicated upon the clear and high-quality task frameworks established by human researchers, encompassing the selection of benchmark texts, formulation of detailed instructions, and clear definition of evaluation dimensions. Therefore, the ultimate objective of this comparison is not to depreciate human creativity, but to reveal the potential of an efficient “human-AI collaborative paradigm” : humans assume responsibility for overarching design, directional guidance, and the exploration of emotional depth, while AI is tasked with the efficient and accurate execution and refinement of these creative directives. The synergy of both can maximize the efficacy of creative writing instruction and research.

Consequently, a human-AI collaborative paradigm should be implemented in creative writing pedagogy. AI should be utilized as a “senior literary assistant” for stylistic imitation exercises, lexical refinement, and the enhancement of rhetorical effects. Simultaneously, students should be guided to value and deepen their own life experiences and emotional authenticity, integrating AI’s “technical prowess” with their own “affective depth” to achieve transcendence, rather than replacement, in creative capability.

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