

IMPLEMENTATION STRATEGIES FOR INTEGRATING ARTIFICIAL INTELLIGENCE INTO APPLIED WRITING IN HIGHER VOCATIONAL EDUCATION

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ABSTRACT

Grounded in the talent cultivation requirements of higher vocational colleges, this paper explores the practical significance and pedagogical approaches of integrating Artificial Intelligence (AI) technology into practical writing courses. Beginning with the national digital education strategy, the study highlights how AI facilitates the reconstruction of teaching paradigms and the expansion of educational functions within vocational writing curricula. Subsequently, utilizing "invitation letter writing" as a representative case study, this paper systematically analyzes students' learning profiles, key and challenging teaching points, pedagogical objectives, and instructional strategies. It specifically demonstrates the classroom implementation process, which integrates task-driven methodology, situational simulation, and intelligent writing tools. Furthermore, the article reflects upon current practical challenges, including the superficial integration of professional contexts, teachers' inadequate capacities for human-machine collaborative instruction, and the deficient development of curriculum resources. Consequently, it proposes directions for improvement within the framework of curriculum ideology and politics, suggesting the optimization of teaching teams, the refinement of online and offline blended teaching models, and the construction of diversified intelligent writing platforms. Finally, it emphasizes that implementing a scientific teaching evaluation system alongside continuous process tracking can effectively enhance students' writing proficiency, technological literacy, and sense of professional responsibility, thereby realizing the synergistic development of knowledge, competencies, and values.

Keywords: Artificial Intelligence; Higher Vocational Education; Applied Writing;

1.0 INTRODUCTION

Against the backdrop of the global deepening of educational informatization, the integration of Artificial Intelligence (AI) technology into education has become a pivotal trend in pedagogical reform. Particularly in the field of Higher Vocational Education (HVE), there is an urgent need to leverage modern technology to drive curriculum development and instructional model innovation to address rapidly shifting social demands and technical standards. As a core course in HVE, Applied Writing faces challenges where traditional teaching methodologies struggle to meet the objectives of cultivating high-quality, application-oriented talents.

Therefore, this study aims to fundamentally optimize the applied writing curriculum system in vocational education by establishing a cyclic development model that combines AI technology with writing instruction. The goal is to enhance teaching efficiency and quality while providing

an extensible framework for pedagogical reform in higher vocational settings. Through precise feedback and guidance, intelligent educational systems assist students in achieving efficient learning and personalized developmental paths; simultaneously, they provide data-driven support and decision-making assistance for faculty teaching practices and research. Within this context, the pedagogical practice of applied writing must align with the wave of technological innovation, integrating AI and other advanced technologies to facilitate bidirectional interaction and incremental improvement in both teaching and learning.

2.0 LITERATURE REVIEW

The Opinions on Accelerating the Advancement of Education Digitalization issued by the Ministry of Education and eight other departments (2025) points out that it is necessary to "adhere to digital empowerment and promote the overall transformation of educational philosophy, teaching models, and education governance," integrating digital technology into all elements and the entire process of education and teaching, so as to drive systemic changes in classroom teaching forms and talent training models. Against this backdrop, higher vocational education, as a crucial arena for cultivating technical and skilled talent, urgently needs to respond to the practical proposition of "what kind of talent is needed in the digital age and how to cultivate them." With its advantages in data processing, language generation, and learning analytics, artificial intelligence technology is becoming a major driving force for reshaping curriculum ecology and teaching methods, providing new development opportunities for curriculum reform. The application of generative artificial intelligence in education is not simply a process of technology diffusion, but a complex social process in which multiple stakeholders continuously construct the functions and values of technology (Wu Yao et al., 2025).

In this context, introducing artificial intelligence technology into practical writing courses in higher vocational education is not only a realistic choice to conform to the trend of educational digital transformation, but also an important measure to enhance the quality of curriculum education. With its advantages in data processing, language generation, and learning analytics, artificial intelligence technology is becoming a major driving force for reshaping curriculum ecology and teaching methods, providing new development opportunities for curriculum reform. "Against the backdrop of the digital-intelligence era, artificial intelligence is exponentially impacting the developmental landscape of vocational education, becoming the core driving force for its high-quality development" (Yang Junfeng et al., 2026). The author's institution, guided by vocational competency training, actively promotes the integration and innovation of intelligent technology with curriculum teaching, and explores new teaching models characterized by data-driven and intelligent-assisted approaches. As a foundational course oriented toward occupational post demands, Practical Writing is usually offered at the beginning of students' enrollment. Its content closely revolves around workplace communication and practical affairs handling, emphasizing the cultivation of standardized expression and practical competencies. Relying on intelligent writing platforms, automated grading systems, and corpus analysis tools, teachers can provide personalized guidance more efficiently, while students can continuously optimize their writing quality through repeated practice.

At the same time, artificial intelligence education in higher vocational institutions should adhere to a people-oriented and AI-for-good principle, integrating professional ethics, responsibility awareness, and norm awareness into the entire process of technology application, and guiding students to uphold authenticity, compliance, and value bottom lines in information processing and textual expression (Zhang Huoping, 2026). By optimizing teaching content and evaluation mechanisms, a teaching system of "technology empowerment + competency orientation + value shaping" can be progressively constructed, effectively addressing issues such as delayed feedback and insufficient interaction in traditional writing instruction, further enhancing students' career adaptability and comprehensive literacy, and promoting the overall improvement of talent cultivation quality in higher vocational education.

3.0 METHODOLOGY

To investigate the practical implementation pathways of Artificial Intelligence (AI) technology within applied writing courses in higher vocational education, this study selects "Invitation Letter Writing" as a representative pedagogical case for analysis. As a common transactional document, invitation letters are extensively utilized in conference organization, business correspondence, and public activities, characterized by high levels of practicality and standardized formatting.

This case study is structured around a single instructional period and centers on the core theme of "Standardized Expression and Professional Responsibility." It aims to guide students in mastering writing skills while concurrently understanding the etiquette norms and professional requirements inherent in formal social interactions. Through the design of the instructional process, students are led to recognize that standardized communication is not merely a technical task but a reflection of personal cultivation and social responsibility. Consequently, the approach facilitates the synergistic advancement of competency development and value-oriented guidance.

3.1 Learner Analysis

Prior to the implementation of this case study, students possessed foundational writing competencies and were capable of completing basic information-sharing tasks. However, significant deficiencies persisted in the context of formal stylistic writing. Specifically, a segment of the student cohort demonstrated an imprecise understanding of the structural components of invitation letters, characterized by excessive informality in linguistic expression and a lack of normative awareness. In terms of content organization, issues such as flawed logical structures and incomplete information disclosure were prevalent. Furthermore, while students were familiar with everyday social interactions, they exhibited an insufficient grasp of communication etiquette for formal occasions and lacked a profound cognition of the professional standards and sense of responsibility inherent in such texts.

Additionally, with the proliferation of Artificial Intelligence (AI) tools, some students have developed an over-reliance on automated content generation. This dependency is coupled with a deficit in critical discernment and optimization skills, leading to a tendency to overlook the factual authenticity and situational appropriateness of the generated text. This suggests that the instructional process must transcend the mere enhancement of writing skills; it must also guide students toward the judicious understanding and utilization of intelligent tools, thereby

fostering their normative consciousness and professional judgment. Students with weaker self-regulation are particularly susceptible to the mechanical adoption of AI-generated suggestions, with their revisions remaining limited to the superficial linguistic level (Teng et al., 2025).

3.2 Analysis of Key and Difficult Teaching Points

In alignment with the course training objectives and the actual teaching content, the teaching focus of this case is: mastering the basic structure, commonly used expressions, and tone conventions of invitation letters, and understanding the writing requirements in different contexts. The teaching difficulty lies in: guiding students, in the process of AI-assisted writing, to effectively screen and revise texts so that the writing not only conforms to formal specifications but also conveys genuine intent; meanwhile, strengthening their sense of responsibility and etiquette awareness during writing, and achieving the integration of technology application and value guidance.

3.3 Teaching Objectives

The knowledge objective of this lesson is to enable students to systematically master the constituent elements, modes of expression, and common formats of invitation letters, and to understand the writing differences across various application scenarios. The skill objective is to be able to generate and optimize texts with AI tools in specific contexts, and to complete an invitation letter that is complete in content and appropriate in expression. The affective and value objective is to guide students in cultivating an awareness of standardized expression and professional responsibility, and to help them recognize that formal texts are not merely instruments of information transmission, but also important carriers that reflect personal cultivation and organizational image, thereby enhancing their comprehensive literacy.

3.4 Instructional Strategies

Oriented toward competency development, this case study integrates Artificial Intelligence (AI) technologies to construct a multi-dimensional pedagogical model. The specific strategies are as follows:

Integration of Task-Driven Methodology and Situational Simulation: Utilizing authentic event invitations as the contextual framework, this strategy guides students through writing practices within concrete tasks. Students leverage intelligent tools for initial draft generation, followed by iterative refinement and optimization.

Strengthening Process-Oriented Guidance: During instruction, the teacher focuses on students' mastery of textual structure, tonal propriety, and informational integrity. Emphasis is placed on guiding students to perform a critical analysis of AI-generated content.

Embedding Normative Awareness and Professional Literacy: By integrating standardization and professional ethics into the entire pedagogical process—using methods such as case comparisons and textual critiques—students are led to understand the etiquette norms and responsibility requirements inherent in formal documentation.

Constructing an Integrated Learning Model via Digital Platforms: Relying on online platforms and intelligent writing tools, the course establishes an integrated "Pre-class Preparation — In-class Practice — Post-class Optimization" model. This approach enhances both the specificity and the practical efficacy of the learning process.

3.5 Teaching Implementation Process

3.5.1 Pre-class

Before class, tasks are released via the online learning platform to guide students in understanding the basic types and application scenarios of invitation letters, with typical exemplars provided for analysis. Meanwhile, pre-class assignments are arranged, requiring students to attempt to generate a preliminary invitation letter text using AI tools and to reflect on its deficiencies in content and expression, so as to prepare for classroom learning.

3.5.2 In-class

Classroom instruction begins with situational lead-in, setting the specific task of “organizing a campus event and inviting guests” to introduce the lesson content. First, the texts generated by students before class are presented and critiqued, and common problems are summarized, such as non-standard formatting, inappropriate tone, and missing information. Subsequently, through group discussion and case analysis, students are guided to summarize the key elements of invitation letter writing.

In the practice session, students write again based on a given context and use AI tools for assisted generation and revision. The teacher focuses on guiding students on how to screen, restructure, and optimize the generated content to meet practical needs. Given that AI-generated writing often exhibits formulaic and imitative features, the classroom must emphasize manual revision and authentic expression (Gao & Ding, 2025). By comparing the texts before and after revision, students are helped to intuitively grasp the importance of standardized expression.

3.5.3 Post-class

After class, extended tasks are assigned, requiring students to complete diverse invitation letters for different contexts (e.g., academic events, business meetings, cultural exchanges) and to submit both the AI-generated version and the manually revised version for comparative analysis. At the same time, students are guided to reflect on how to strike a balance between technological dependence and autonomous expression in the writing process, thereby further enhancing their comprehensive writing competence.

3.5.4 Design of Extracurricular Autonomous Learning

In the extracurricular learning segment, various digital learning resources and intelligent writing platforms are leveraged to continuously provide students with writing practice and feedback support. Through a combination of autonomous exercises and real-time assessment, students are helped to gradually develop standardized writing habits. Meanwhile, students are encouraged to engage in practical application in real or simulated contexts, improving their

ability to express and their professional literacy through “learning by doing,” and achieving the integrated development of knowledge, skills, and values.

3.6 Assessment

In the teaching practice of integrating artificial intelligence into practical writing in higher vocational education, teaching evaluation should foreground the principle of “centering on talent cultivation and orienting toward competencies” and promote students’ continuous development through diversified and ongoing evaluation methods. Evaluation should not be confined to final examinations or single written assignments; rather, it should synthesize information from multiple dimensions, such as process-oriented learning data, work quality, reflection reports, and classroom participation, thereby constructing an evaluation system that integrates summative and formative assessment. On this basis, teachers can leverage intelligent platforms to record students’ learning trajectories across the stages of “pre-class preparation— in-class writing—post-class revision,” analyze the changes in their structural grasp, language conventions, and tool usage, and provide a basis for subsequent instructional adjustment.

In specific implementation, this case takes the process and outcomes of students’ invitation letter writing as important evaluation content, requiring that while students complete a formal invitation letter, they also submit an analysis and revision statement for the AI-generated text, elaborating on their reflections concerning standardized expression, courteous language use, and information selection. Teachers conduct comprehensive evaluation based on the quality of students’ texts and the depth of their reflections, and through a combination of individual feedback and collective commentary, help students identify directions for improvement. Meanwhile, students are encouraged to engage in peer evaluation activities, assessing their peers’ works from the perspectives of structural completeness, appropriateness of tone, and accuracy of information, so as to enhance their critical discernment skills and collaborative awareness.

In terms of curriculum ideological and political education evaluation, attention should focus on the growth of students’ responsibility awareness, professional literacy, and value identification, incorporating the effectiveness of talent cultivation into the core content of teaching evaluation. In the selection of invitation letter themes and the design of writing contexts, tasks oriented toward public welfare activities, campus culture development, or school-enterprise cooperation and exchange can be appropriately added, guiding students to consciously reflect on the social significance and value orientation behind the texts while writing. Teachers can use materials such as learning journals, classroom speaking records, and project summaries to understand changes in students’ value identification and behavioral habits, regarding these as an important component of teaching effectiveness.

4.0 FINDINGS

In the practical process of integrating Artificial Intelligence (AI) into applied writing courses within higher vocational education, it is essential to systematically examine the pedagogical design and implementation efficacy upon the conclusion of the instructional cycle. This evaluation should synthesize student performance, learning analytics data, questionnaire feedback, and teacher self-reflections. Taking the "Invitation Letter Writing" case study as an example, current practices reveal several areas necessitating improvement: First, the

integration between the curriculum and specific professional contexts remains insufficiently deep; the alignment between certain task scenarios and students' future vocational requirements requires further enhancement. Second, the depth of students' autonomous writing training utilizing AI tools outside the classroom is inadequate, characterized by low practice frequency and insufficient self-reflection. Third, a minority of instructors demonstrate a relatively singular conceptual approach when employing AI for instructional design. Their understanding of the human-machine collaborative teaching model lacks comprehensiveness, leaving room for improvement in the flexibility and innovativeness of pedagogical design. Finally, the structure of curriculum resources requires optimization. The self-developed repository of intelligent writing cases and the corpora of applied documents specifically related to vocational majors are currently insufficient in diversity and volume.

5.0 DISCUSSION

Based on the previous analysis, the following strategies are proposed to advance future pedagogical improvements:

5.1 Deepening the Educational Function of Writing within the Framework of Curriculum Ideology and Politics

In the overall instructional design, the educational positioning of the practical writing course should be further clarified. Values such as normative awareness, sense of responsibility, and professional ethics should be organically integrated into writing tasks. This ensures that Artificial Intelligence (AI) serves not merely as a technical tool but as a vehicle for achieving fundamental educational goals. During the revision of talent cultivation schemes and curriculum standards, experts in curriculum ideology and intelligent education can be invited to holistically design course objectives, content structures, practical components, and evaluation methods. Requirements such as "standardized expression, official document awareness, and professional commitment" should be embedded upfront in curriculum standards and learning outcome descriptions to fully leverage the role of practical writing in value-oriented guidance (Zeng et al., 2025).

5.2 Optimizing the Teaching Team for the Integration of Practical Writing and AI

At the teaching team level, systematic training and pedagogical research activities should be implemented to enhance instructors' understanding and application of AI writing tools, enabling them to better facilitate human-AI collaborative writing in the classroom. Teachers should be encouraged to apply for research projects, participate in teaching competitions, and develop demonstration classes focused on themes such as "AI-empowered Practical Writing" and "Integrating Curriculum Ideology into Writing Instruction." This practice-based approach will continuously update pedagogical philosophies and methods. Furthermore, labor should be divided based on individual strengths—with some focusing on writing norms and stylistic knowledge, while others specialize in intelligent tool application and data analysis—to build a well-structured teaching team with complementary advantages.

5.3 Refining the "Online + Offline" Blended Intelligent Teaching Model

Regarding instructional models, the current offline classroom lectures should be supplemented by an optimized "Pre-class — In-class — Post-class" integrated blended design. This model should fully utilize the advantages of intelligent platforms in resource delivery, process recording, and learning analytics. The online component should focus on providing diverse case repositories, writing templates, and intelligent grading feedback to support personalized practice. In contrast, offline classes should emphasize situational simulations, textual critiques, and discussions to highlight the cultivation of value guidance and normative awareness. Additionally, micro-lectures and micro-cases for practical writing should be progressively developed to construct a clearly structured and frequently updated digital resource library, providing students with accessible learning support.

5.4 Constructing Diversified Intelligent Writing Resources and Practice Platforms

To address the issue of singular resource structures, efforts should be directed toward building a repository of practical writing materials tailored to different professional fields. This repository should cover various genres—including notices, announcements, meeting minutes, research reports, letters of intent, and invitation letters—while utilizing AI technology to implement intelligent search, recommendation, and annotation functions. Simultaneously, the exploration of collaborative practice platforms with industry partners is encouraged. By introducing authentic or simulated writing tasks, the authenticity and specificity of student training can be improved, allowing them to continuously reinforce their professional situational awareness and sense of responsibility during task completion.

6.0 CONCLUSION

Overall, professional teachers should, while delivering writing knowledge and skills, strengthen value guidance and literacy cultivation, so that students can internalize standardized expression as professional competence and humanistic consciousness (Wu & Wang, 2025). Through diversified evaluation methods and continuous process tracking, it is possible to more effectively promote the synergistic enhancement of students' writing competence, technological literacy, and value concepts, enabling them to use intelligent tools rationally and assume due social responsibilities in their future study and work.

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