

THE INTEGRATION OF GENERATIVE ARTIFICIAL INTELLIGENCE INTO EFL WRITING INSTRUCTION IN CHINA

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Abstract: The integration of Generative Artificial Intelligence (GenAI) is reshaping English as a Foreign Language (EFL) writing instruction in China, offering a solution to long-standing challenges such as large class sizes, product-oriented pedagogy, and delayed feedback. By integrating GenAI into a structured pedagogical framework, spanning pre-class knowledge delivery, in-class knowledge internalization, and post-class knowledge expansion, this study demonstrates a shift toward a process-oriented, student-centered model. Using a cause-and-effect writing unit as an example, this model demonstrates how AI supports diagnostic analysis, interactive learning, and collaborative feedback, creating a continuous scaffold for writing development. The study highlights GenAI's role as a writing assistant, feedback provider, and motivational tool, while emphasizing the importance of pedagogical design and ethical implementation. The findings underscore GenAI's capacity to foster autonomous, confident writers, enabling a modernized, personalized EFL writing ecosystem that aligns with China's educational modernization goals.

Keywords: Generative Artificial Intelligence; English as a Foreign Language; Writing instruction

1 INTRODUCTION

The landscape of English as a Foreign Language (EFL) education in China is currently experiencing a profound transformation, propelled by the rapid integration of Generative Artificial Intelligence (GenAI). This shift is strategically aligned with national educational directives, notably the China Education Modernization 2035 policy, which calls for accelerating educational reform in the information age. The policy emphasizes the construction of smart campuses, the integration of intelligent teaching and management platforms, and the use of modern technology to revolutionize talent development models, thereby achieving a synergy between large-scale education and personalized learning. Furthermore, the Guide to College English Teaching (2020 Edition) underscores the imperative for educators to leverage modern information technology, promoting its deep integration into curriculum design and instructional practices.

For decades, EFL writing instruction in China has been constrained by systemic challenges, including large class sizes, examination-oriented pedagogies, and a scarcity of opportunities for individualized, process-focused instruction. The dominant product-based approach, which prioritizes the final draft and grammatical accuracy, has often resulted in student struggles with writer's block, limited lexical resources, and difficulties in constructing coherent and persuasive arguments. While technology has long been viewed as a potential lever for change, the advent of sophisticated large language models, such as ChatGPT and domestic equivalents like DeepSeek, represents not merely a technological upgrade but a fundamental paradigm shift. These tools offer unprecedented capabilities to support the intrinsic cognitive and creative processes involved in writing. Consequently, the trajectory for EFL writing instruction must evolve towards intelligent, diversified, personalized, and digitally-enabled methodologies. The traditional, teacher-centered, and monolithic model of EFL writing instruction is increasingly inadequate to meet the demands of the new information era, rendering pedagogical reform both urgent and inevitable. The application of GenAI in EFL writing classrooms thus emerges as a critical priority, promising to deliver scaffolded, immediate, and highly individualized support throughout the entire writing process.

GenAI, defined as artificial intelligence capable of producing novel text, code, and other media, has transitioned from a research frontier to a tangible educational resource in a remarkably short time. Platforms like ChatGPT and various domestic AI tools offer a suite of functions directly applicable to the EFL writing context. These capabilities include facilitating brainstorming sessions, generating and refining outlines, paraphrasing and translating text, providing context-aware vocabulary suggestions, and delivering formative feedback on elements ranging from sentence-level mechanics to overall discourse coherence. The potential of these tools to act as ever-available writing tutors, boundless sources of authentic linguistic input, and patient collaborative partners aligns powerfully with the principles of communicative language teaching and process-oriented writing approaches. These pedagogical models, though widely endorsed, have historically been difficult to implement effectively within the large-scale, resource-constrained contexts typical of many Chinese classrooms.

In essence, the integration of GenAI into EFL writing instruction signifies more than a mere technological adoption. It represents a strategic response to long-standing pedagogical gaps and a proactive step towards realizing the vision of a modernized, student-centered educational ecosystem. By harnessing the capabilities of GenAI, educators can transcend the limitations of traditional methods, fostering a more dynamic, interactive, and supportive learning environment that ultimately empowers students to become more proficient and confident writers in English.

2 LITERATURE REVIEW

The application of Artificial Intelligence (AI), particularly GenAI and large language models, has precipitated a transformative shift in the pedagogy and practice of EFL and English as a Second Language (ESL) writing. Current research has diversified into several key thematic areas, exploring the multifaceted roles AI plays in supporting learners and reshaping EFL writing instructional practices. These areas range from its function as a direct writing tool to its profound implications for educational ethics and curriculum design.

2.1 AI as a Writing Assistant

A primary research direction focuses on AI's role as an intelligent writing assistant that enhances fluency and linguistic quality. Studies investigate how AI tools can help learners overcome immediate writing hurdles, such as finding lexis, rephrasing sentences, and adapting tone. For instance, Zhao X, Sbaffi L, and Cox A explored how digital assistants like Wordtune, by suggesting alternative phrasings with different formality levels and lengths, help EFL writers maintain a continuous flow and acquire new expressions [1]. Similarly, Hwang W Y, Nurtantyana R, et al. developed the Smart RoamLingo app, which uses AI to provide contextually relevant sample sentences and personalized writing feedback, thereby facilitating meaningful content creation in authentic scenarios [2]. This body of work positions AI as an ever-available linguistic resource that reduces cognitive load and supports real-time language acquisition during the writing process.

2.2 AI-powered Feedback

The second research direction is dedicated to AI-powered Automated Writing Evaluation (AWE), rigorously comparing the efficacy and characteristics of AI-generated feedback against human feedback. The central aim is to validate the quality of AI feedback and delineate its appropriate role within educational assessment. A study by Steiss J, Tate T, et al. provided a nuanced comparison, concluding that while well-trained human raters generally delivered higher-quality feedback across most dimensions, ChatGPT still demonstrated considerable utility by offering timely and affordable support [3]. Escalante J, Pack A, and Barrett A found no significant difference in learning outcomes between students receiving AI feedback and those receiving human tutor feedback, with student preferences split between the two, highlighting their complementary strengths [4]. These findings suggest that the future lies not in replacement, but in the strategic integration of both feedback sources.

2.3 The Affective Impact of AI Tools on Learners

The third research strand examines the impact of AI tools on learners' affective domains, including motivation, self-efficacy, and engagement. This line of inquiry recognizes that the psychological experience of writing is crucial for long-term development. Research by He Y indicated that learners using an AWE system outperformed their peers in motivation, enjoyment, academic buoyancy, and writing success [5]. And Zare J, Al-Issa A, and Madiseh F R found that interacting with ChatGPT had a positive and lasting effect on L2 learners' task motivation for argumentative essay writing, with students perceiving the AI as a supportive tutor [6]. These studies underscore that the immediacy and non-judgmental nature of AI assistance can alleviate writing anxiety and foster a more positive and motivating learning environment.

2.4 Ethical Dilemmas in AI-Mediated Writing

The fourth research theme addresses the ethical and practical dilemmas introduced by sophisticated AI writing tools. Tsai C Y, Lin Y T, and Brown I K demonstrated that ChatGPT-assisted revisions led to significantly higher scores, with the most substantial gains among lower-proficiency students, thereby raising serious concerns about fairness in evaluation [7]. From a socio-critical perspective, Higgs J M and Stornaiuolo A investigated young people's ethical concerns about AI, emphasizing the urgent need for educational practices that foster critical AI literacy to prevent over-reliance and the erosion of authorial voice and independent thought [8]. This research emphasizes the necessity for revised assessment paradigms and a strong emphasis on ethical reasoning in AI-mediated writing instruction.

2.5 AI-Integrated Curriculum Design

A growing body of literature addresses the pivotal issue of pedagogical integration, exploring how to integrate AI into specific instructional frameworks and curriculum designs to maximize learning outcomes. This research focuses on creating effective, theory-driven models for AI implementation. For example, Yang Y K, Huang L Y, et al. designed a generative AI-based virtual teacher within a Co-Regulated Learning (CoRL) framework, finding it more effective than standard AI support in enhancing undergraduate writing outcomes [9]. Liu C C, Hou J R, et al. proposed a reflective thinking-promoting mechanism within an AI-supported writing environment, which successfully improved students' writing performance, self-efficacy, and self-regulated learning [10]. These studies highlight that the effective use of AI is highly dependent on sound pedagogical design, transforming the teacher's role from a knowledge transmitter to a designer of AI-enhanced learning experiences and a guide for its critical use.

3 STATUS QUO OF EFL WRITING INSTRUCTION IN CHINA

The landscape of EFL writing instruction in China is shaped by a unique set of pedagogical, cultural, and systemic factors. Despite ongoing reforms, the current paradigm is largely characterized by several interconnected challenges that hinder the development of students' authentic writing proficiency. A detailed examination reveals persistent issues in class size, pedagogical focus, teacher-student dynamics, task authenticity, assessment methods, and the critical issue of feedback timeliness.

3.1 Large Class Sizes

With classrooms often containing 50 to 60 students or more, the capacity for individualized instruction is severely limited. The sheer volume of papers to grade forces instructors to prioritize efficiency over depth, resulting in feedback that is often brief, standardized, and focused on surface-level errors. This environment makes the process of drafting and revision—a cornerstone of writing development—impractical to implement effectively, ultimately restricting the amount of sustained writing practice each student receives.

3.2 Lack of Timely Writing Feedback

Due to large class sizes that results in the overwhelming grading burden, there is typically a significant delay—often one to two weeks—between a student submitting a draft and receiving the teacher's corrections. This delay breaks the critical link between the act of writing and the learning feedback. By the time the essay is returned, the student's cognitive engagement with the specific writing task has faded, making the feedback less meaningful and less likely to be internalized and applied to future work. This feedback loop is too slow to support the formative, iterative nature of writing skill development.

3.3 The Predominance of the Product-Oriented Teaching Approach

The dominant pedagogical framework for EFL writing instruction in China is the Product-Oriented Teaching Approach. This method prioritizes the final written text, focusing on grammatical accuracy, vocabulary usage, and adherence to formulaic structures, such as the classic three-part essay. Instruction often revolves around the analysis and emulation of model essays, training students to reproduce safe, exam-ready texts. Consequently, the cognitive and strategic processes of writing—including brainstorming, outlining, drafting, and revision—are frequently neglected, stifling creativity and critical thinking.

3.4 Teacher-centered Instruction Model

In Chinese EFL writing classrooms, teachers act as the sole knowledge authority, responsible for presenting models, assigning topics, and delivering corrective feedback. Student passivity is often reinforced, with minimal opportunity for collaborative learning, peer review, or classroom dialogue about writing choices. This model fosters a dependency on the teacher for validation and correction, hindering the development of learner autonomy and self-editing skills.

3.5 Lack of Authentic Writing Situations

Writing tasks are predominantly designed as decontextualized exercises for examination preparation, such as for National College Entrance Examination (NCEE) or College English Tests (CET) in Chinese EFL writing classrooms. Prompts are often abstract and disconnected from real-world communicative needs. This absence of a genuine purpose results in writing that is mechanical and disengaged, as students are motivated by grades rather than by a desire to communicate ideas effectively.

3.6 Examination-focused Evaluation System

The evaluation system often used in Chinese EFL writing classes is examination-focused. Teacher feedback is overwhelmingly concentrated on grammar and spelling, at the expense of thesis clarity, logical flow, and argument strength. The evaluation criteria are directly tied to standardized exam rubrics, creating a powerful "washback effect" that dictates teaching content and methodology. This reinforces the focus on error avoidance and formulaic writing, further discouraging pedagogical innovation in student writing.

Therefore, the status quo of EFL writing instruction in China is a vicious cycle where large classes lead to delayed and limited feedback, which necessitates efficient but limited teaching methods, all of which are reinforced by high-stakes testing. This system, while effective in training for exam performance, often fails to cultivate confident, proficient, and autonomous learners capable of using English for genuine, meaningful communication. It is within this context that GenAI emerges as a potentially transformative tool to address these deep-rooted challenges.

4 THE INTEGRATION OF GENAI INTO EFL WRITING INSTRUCTION IN CHINA

The integration of GenAI into EFL writing instruction in China represents a paradigm shift from a traditional,

product-oriented approach to a dynamic, process-oriented, and highly personalized learning experience. Its application can be systematically examined across three critical pedagogical stages: pre-class, in-class, and post-class. This approach ensures that AI serves as a continuous scaffold, supporting both students and teachers throughout the entire writing cycle. The chapter “Development by Cause and Effect” will be taken as an example to elaborate the instruction process specifically.

4.1 Pre-Class

The pre-class stage is systematically designed for knowledge delivery through a structured four-step process. It begins with comprehensive AI training for teachers and students, proceeds to an AI-driven diagnostic analysis of students' writing, continues with AI-assisted lesson preparation, and concludes with MOOC learning, which collectively prepares students for in-class activities.

Step 1: AI Training for Teachers and Students

The training on the application of relevant AI technologies is conducted for both teachers and students through lectures and hands-on practice, laying the solid foundation for the smooth implementation of this teaching model.

Step 2: AI-driven Learning Analysis

Teachers assign students to complete a writing task (Version 1.0) titled "Are Lies Necessary in Our Life? Why or why not?" on the MOOC platform. Using AI grading, the students' mastery of writing skills and their deficiencies are diagnosed and analyzed, providing precise data for teachers' lesson preparation.

Step 3: AI-assisted Lesson Preparation

Teachers utilize AI models, such as ChatGPT, Deepseek, iFlytek, to help identify teaching resources suited to students' needs, develop lesson plans, conduct instructional design, create Powerpoint, and generate necessary audio and video materials in preparation for classroom teaching.

Step 4: MOOC Learning

Students engage in self-paced learning of the "Development by cause and effect" chapter on the MOOC platform, which enables them to acquire core conceptual knowledge beforehand, thereby fostering their autonomy and preparing them for in-depth application.

4.2 In-Class

The in-class stage is dedicated to internalizing knowledge through smart classroom interaction. Teachers employ AI interactive programs within Rain Classroom and structured scaffolding to facilitate student-centered activities and exercises focused on the key dimensions of writing—structure, language, and content—thereby practicing essential and complex writing skills.

Step 1: Enabling structure

To master the structure of cause-and-effect English essays, teachers adopt a scaffolded task progression to ensure students' advance from comprehension to application. It begins with a summary of cause-and-effect essay structures, submitted via Rain Classroom for AI and teacher review, reinforcing core concepts. Students then progress to outlining an essay using one structure, enabling them to immediately apply the summarized techniques and receive targeted feedback on their practical skills. This process reinforces their schema for essay structure and builds a practical structural scaffold for subsequent writing.

Task 1: What are the methods of development for cause and effect? And how many methods are there?

Three methods of development for structuring cause & effect: 1) the single-effect-and-multiple-cause pattern; 2) the single-cause-and-multiple-effect pattern; 3) the multiple-cause-and-multiple-effect pattern.

Task 2: Please write an outline of causes or/and effects based on one of the following pictures by using one of the methods of development.

Step 2: Enabling language

To systematically build their repertoire of cohesive devices, students first are required to use AI assistants to search for cause-and-effect transitional words and phrases. They then contribute their findings to a collective word cloud in Rain Classroom, making the vocabulary visually salient. Teachers provide immediate feedback on the results, guiding students to internalize these essential linguistic tools for crafting well-connected and logical essays.

Task: Please find out the linking expressions for cause and effect as much as possible with the help of AI assistants.

Possible answers: because, since, for, owing to, due to, thanks to, as a result of, on account of, result in, result from, lead to, attribute to, etc.

Step 3: Enabling content

To stimulate critical thinking and generate diverse perspectives for the writing task, students are randomly assigned into groups via Rain Classroom to discuss the topic "Are Lies Necessary in Life?". Each group then delivers a report, receiving a combination of AI-generated comments and immediate teacher feedback. This collaborative, technology-enhanced process effectively enriches the content and depth of their subsequent writing.

Task: Please discuss in groups, list and report the key points about the topic “Are Lies Necessary in Our Life? Why or why not?”

Step 4: AI-generated knowledge graph

A concise summary of the key content is generated using a knowledge graph with the help of AI, providing a visual map

to help students achieve a systematic and holistic understanding of the class.

4.3 Post-Class

The post-class stage is designed to systematically expand and consolidate students' writing capabilities through a fully integrated AI-supported ecosystem. This phase enables personalized and continuous development by employing four key steps: AI-assisted knowledge expansion to deepen conceptual understanding, a multi-layered human-AI feedback mechanism for writing refinement, an AI-driven knowledge base for immediate query resolution, and an AI teaching assistant that provides companion-like learning support. These steps form a coherent digital learning environment that extends learning beyond the classroom, ensuring students systematically enhance their analytical and writing skills through resource, tool, and evaluation synergies.

Step 1: AI-assisted knowledge expansion

With the goal of deepening and expanding their grasp of cause-and-effect writing concepts, students use AI models, such as ChatGPT, Deepseek and iFlytek, to discover supplementary examples and explanations that explore diverse perspectives and contextual applications of their knowledge.

Step 2: Human-AI collaborative feedback

To holistically improve their writing, students complete the "Are Lies Necessary in Our Life? Why or why not?" (Version 2.0). They then refine their drafts through a multi-layered feedback process involving AI-assisted assessment, peer review, and teacher evaluation, before producing a final polished essay based on the insights gained.

Step 3: AI-driven knowledge base for learning support

To ensure timely learning support, students can pose post-class questions in the digital question bank, where the AI delivers immediate, knowledge-based responses, effectively acting as a learning support to consolidate understanding and address doubts as they arise.

Step 4: AI teaching assistant for learning companion

AI teaching assistant offers tailored guidance on writing difficulties and provides immediate, personalized feedback on specific writing challenges, preventing the reinforcement of errors and accelerating skill acquisition.

5 CONCLUSION

The integration of GenAI into EFL writing instruction in China represents a pivotal and timely evolution, addressing long-standing pedagogical constraints while aligning with national educational modernization goals. GenAI tools, such as ChatGPT and domestic platforms like DeepSeek, offer transformative potential by enabling a shift from a rigid, product-oriented approach to a dynamic, process-focused, and student-centered learning model. This integration not only mitigates challenges such as large class sizes, delayed feedback, and examination-centric practices but also fosters greater learner autonomy, critical thinking, and writing motivation. Through structured application across pre-class, in-class, and post-class stages, as exemplified in the chapter "Development by cause and effect", GenAI facilitates personalized scaffolding, timely feedback, collaborative learning, and continuous skill development. GenAI serves as a catalyst for creating a more responsive, interactive, and effective EFL writing ecosystem that empowers students to become proficient, confident, and autonomous writers capable of meaningful communication in English. The future of EFL writing instruction in China lies in the strategic, reflective, and ethically informed adoption of AI technologies, guided by sound pedagogy and a commitment to holistic student development.

COMPETING INTERESTS

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