

Integrating ChatGPT into Junior High School English Writing Instruction: An Empirical Study

Wenxin Chen^a, Wen Gong^{b,*}

School of Foreign Studies, Lingnan Normal University, Zhanjiang, China

^aChen1875108126@163.com, ^b403312677@qq.com

**Corresponding author*

Abstract: *This study explores the feasibility and effectiveness of using ChatGPT for providing feedback on junior high school English writing in Chinese EFL context. While existing research on AI in education mainly focuses on correcting writing, little is known about ChatGPT's practicality and students' attitudes towards it. Through empirical analysis of feedback on content, organization, language, grammar, and comparison forms, the study found that ChatGPT significantly improved feedback quality and expanded metalinguistic resources. Over 76% of students adapted to ChatGPT, with more than 70% reporting improved writing, and nearly 66% preferring combined AI and teacher feedback. These findings highlight strong student acceptance and suggest that integrating ChatGPT with human feedback offers promising directions for enhancing second language writing instruction.*

Keywords: *ChatGPT; Artificial Intelligence; Large Language Model; English Writing; Feedback*

1. Introduction

1.1 Research Background

AI has been an evolving discipline since the mid-20th century. In the 21st century, rapid advancements in computers, Internet and related technologies have accelerated its development. The introduction of deep learning in 2006 is widely seen as a turning point, marking the start of AI's rapid progress. In fields such as image recognition, AI's error rate fell below those of humans within just a few years of technology iteration^[1]. As a result, essential educational needs, such as teaching and evaluating writing English, have largely been addressed. The release of OpenAI's ChatGPT in 2022, marked a significant milestone, profoundly impacting various industries, including education. AI now plays an important role in writing instruction by providing feedback and corrections, with most AI writing system relying on corpora, cloud computing, and natural language processing technologies^[2].

With the advent of computers, "computer aided teaching"(CAT) experiment began in the United States, giving rise to "computer aided language teaching" (CALT) as a significant research area within computer-assisted learning. The integration of language teaching and AI has played a crucial role in modernizing language education^[3]. Educational AI centers on the integration of AI and education to assist in achieving educational objectives and foster educational growth^[4]. Policy document, such as the "Opinions on comprehensively deepening the reform of teacher construction in the new era" issued by the State Council, urged teachers to take the initiative to incorporate AI into their teaching and also inspired them to be innovative in the educational field^[5].

1.2 The Need for AI-Assisted English Composition Correction

English writing is one of the most important output methods of English, therefore, under the background of "Internet+Education", how to apply AI to English writing teaching has long become a top priority in today's English development. In middle school English teaching, writing teaching activities are often neglected by English teachers due to its subjectivity, long time-consuming, low feedback. Automated essay feedback and assessment systems are an economical and efficient alternative to teacher feedback. It is a cost-effective and efficient alternative to teacher feedback, providing feedback on content, chapter structure, writing details, writing details^[6]. AI-based feedback helps students to identify linguistic errors and guides them to further correct problems and help students identify linguistic errors and guide them to correct further problems and avoid them in future

writing^[7]. Therefore, the introduction of AI automatic composition scoring system into middle school English writing teaching to increase the number of students' composition practice, timely access to the feedback of compositions, and learners' active and independent practice will be of great practical value to change the current middle school English writing teaching mode^[8]. Although the AI automatic composition scoring system has been tried in some colleges and universities and the basic education stage, the results of the attempts are not satisfactory. It has not been used on a large scale for a long period of time, and the popularization effect is not good.

1.3 Research Objectives

This study aims to investigate the possibility, feasibility, and effectiveness of using ChatGPT for junior high school English writing feedback through empirical research. By addressing gaps in existing literature, it seeks to provide theoretical and practical guidance for the intelligent transformation of English writing instruction. Additionally, the study expands understanding of AI's integration into education, clarifies the unique value and challenges of ChatGPT, and offers insights that can inform both future research and the broader application of AI-assisted teaching.

2. Theoretical Framework and Literature Review

2.1 Definition of ChatGPT

Since 1956, Artificial Intelligence (AI) has never had a unified definition. Some define AI as a discipline concerning knowledge^[8]. Some regard it as a branch of computer science, and others consider AI as enabling computers to perform tasks typically done by humans^[9]. Generally, AI education refers to the education of AI knowledge and skills, where AI is the subject of learning. In contrast, education AI uses AI as a means to promote innovative development in education. Intelligent education usually has dual attributes: from an educational perspective, its goal is to nurture individuals; from an informatization perspective, it refers to the technology used for nurturing individuals. ChatGPT is a sophisticated AI chatbot developed by OpenAI which employs transformer-based technology and a large-scale dataset to generate human-like replies and at the same time was engaged in conversations and produced texts for diverse purposes such as writing articles, making up stories and generating code fragments and was a potent tool for communication, education and creativity due to its capacity to comprehend context and generate coherent, relevant answers and showed great adaptability and flexibility by using deep learning algorithms.

2.2 Theoretical Framework

Constructivism sprang up from Piaget's study regarding children's cognition, stressing that knowledge is not passively received by learners but rather students incessantly restructured their cognition via interacting with the environment and the function of teachers had shifted from being knowledge conveyors to learning directors who furnished professional assistance at crucial times.

2.3 Literature Review

The integration of AI with English language teaching has a long history, closely tied to the evolution of computer technology. Early explorations by scholars such as Turing and Chomsky established foundational links between language and computers. Chomsky's work defined language in mathematical terms and explored formal grammar, concepts which underpin both natural and artificial languages^{[2][3]}. Their insights paved the way for the application of AI in language learning. Over the past two decades, intelligent tools for English teaching have advanced significantly. Systems such as Alhabbash et al.'s intelligent tutoring platform help learners master grammar, while ETS's Speech Rater system offers automated, comprehensive evaluations for tests like TOEFL, assessing pronunciation, fluency, vocabulary, and grammar^[7].

The earliest research in China on combining AI with English language teaching dates back to the 1970s. Yang's Computerized Corpus of Scientific and Technological English (JDEST), marked a milestone, supporting lesson preparation, machine translation and natural language processing^[16]. Early computer-assisted language learning (CALL) tools and methods were relatively simple. The ETRA system developed by East China Normal University was a system that could be used in English classroom teaching. The ETRA system was a teaching software that could serve as an assistant to

English teachers^[18]. With the deepening application of technology, classroom English teaching in the context of AI is quietly undergoing changes^[10]. Cheng summarized the application of AI technology in English teaching into three teaching modes, pointing out that flexible use of these modes could improve the quality of English teaching. The application of these modes is greatly beneficial to enhancing the quality of English teaching^[19]. Luan believed that AI would change classroom formats, instructional design, and teacher-student relationships in English teaching^[20]. Zhao analyzed English teaching in the field of AI and pointed out its development direction. Recent research emphasizes teacher feedback in English writing, focusing on focus, strategies, and effectiveness^[21]. Studies have explored diverse approaches—such as error analysis, teacher-written feedback, peer-review models, and AI-driven feedback systems—to improve writing instruction^[11]. While these strategies have benefited classroom teaching by improving feedback effectiveness, challenges remain regarding the reliability and impact of feedback on student learning outcomes.

Although some research have conducted AI-aided writing feedback^{[12][13]}, most of the extant studies mainly concentrate on the technical abilities of AI models such as ChatGPT in rectifying grammatical mistakes and offering general writing advice, but there exists a substantial deficiency in comprehending how students view and engage with ChatGPT's feedback in contrast to traditional teacher-given feedback^[14], even though some research has probed into the efficacy of automated writing feedback systems, there is not much work done on the function of ChatGPT in L2 writing among junior high school students. To address the gap, this study proposes the following research questions:

- 1) What is the students' perception of ChatGPT feedback and teacher feedback?
- 2) How does ChatGPT feedback influence students' writing performance and motivation compared to teacher feedback?
- 3) What are the students' preferences for feedback types (ChatGPT vs. teacher feedback) and why?
- 4) How can ChatGPT feedback be integrated into the English writing instruction?

3. Methodology

3.1 Subjects

In this study, two classes, Class 1 and Class 7 of a high school, were selected as the subjects of the study. Class 1, with a total of 52 students, served as the control class and continued to follow the traditional teaching mode; Class 7, with a total of 50 students, served as the experimental class and adopted the teaching mode constructed to carry out the ChatGPT-assisted writing instruction.

3.2 Instruments

3.2.1 Interview

There were six student interviewees from the experimental class, with each from the lower, middle and upper middle levels. According to the results of the interviews, all six students affirmed the teaching experiment, believing that the use of human-computer collaborative correction of essays can enhance the learning mood and improve the writing ability. Compared with the traditional model, the new teaching model is more efficient and practical.

3.2.2 Questionnaire

The questionnaire was designed in terms of seven dimensions: attitudes toward AI use, supportive conditions for using AI, adapting to AI feedback and willingness to use it in the future, satisfaction with feedback to the teacher as well as to the AI, preference for feedback to both, quality of feedback, and effect of feedback, and in this way, it was used to consider the students' all-round assessment of the experience of using AI and the effect of feedback. The questionnaire included 23 questions, of which 3-4 questions examined attitudes toward the use of AI, 6 questions examined supportive conditions, 7-8 questions examined adaptation and willingness, 9-10 questions examined feedback satisfaction, and 12-14 questions examined feedback preference. Questions 15-20 examined the quality of feedback and questions 17-23 examined the effectiveness of feedback.

4. Data Analysis

4.1 Data Analysis of the Interviews

The interviews conducted among the six students from the experimental class have yielded insightful results regarding their perception of AI-assisted essay feedback in comparison to traditional teacher feedback. Participants universally endorsed a synergistic model combining “teacher-led emotional support” and “AI-powered technical assistance”. The students expressed their expectations for future AI systems to integrate emotional understanding (Student A) and creative suggestions (Student B). This complementarity can best be expressed by student B: “The combination of the subjectivity of teachers and the objectivity of AI can provide more comprehensive support.” The students also pointed out the limitations of AI: emotional alienated feedback (Student A), potential semantic misunderstandings (Students A, B), and excessive reliance on electronic devices (Student A). It was worth mentioning that student A with high-level skills criticized the “lack of sufficient knowledge base” in AI, whereas student C with lower skills laid greater stress on its practical aspects, these distinctions showed the necessity for a step-by-step feedback system according to the requirements of diverse learners, in any case, AI had built a practical basis as a tool for writing instruction but its growth still needed progress in emotion computation and semantic comprehension, future English writing education should set up a cooperative framework for technology-based diagnosis led by AI.

4.2 Data Analysis of the Questionnaire

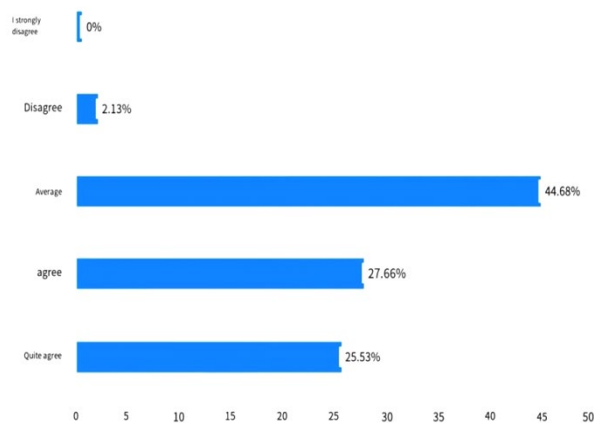


Figure 1: Students' views on the use of Generative AI in English writing to improve learning results

Figure 1 indicates that a majority of students (70%) believe that the use of educational AI in English writing can enhance the learning process. This suggests that ChatGPT has the potential to be applied to English writing feedback in middle school. Concurrently, no students selected “strongly disagree”, which further emphasizes the potential value of ChatGPT in the field of second language education.

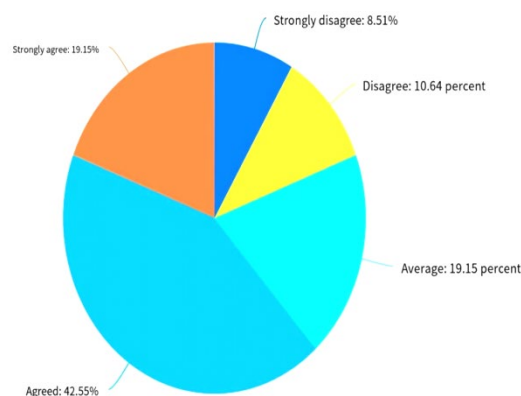


Figure 2: Students' perception of the ease of using generative AI in English Writing

Data in Figure 2 show that students have a high acceptance of the ease of use of ChatGPT in English writing, with over 60% of respondents choosing “agree” or “strongly agree” on the ease of use scale. The data also indicates that as long as ChatGPT can be easily used by students, it has the potential to become a valuable tool in English writing teaching.

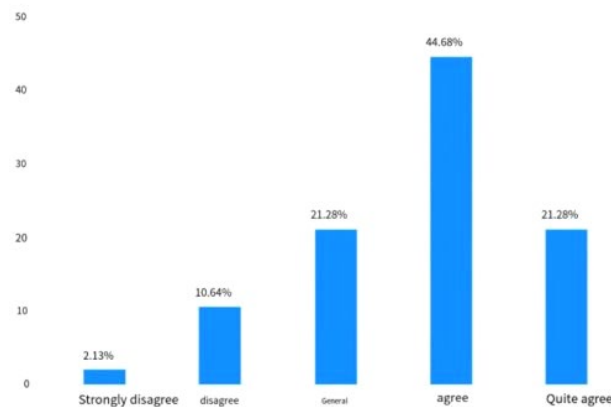


Figure 3: Student Perceptions of the Ongoing Utilization of the AI Feedback in English Writing

The Figure 3 indicates that nearly two-thirds (66%) of students expressed their willingness to continue using AI-assisted English writing, suggesting that the majority of learners have clearly reaped the benefits of intelligent feedback. This positive feedback is undoubtedly good news for the sustainable development of educational AI. However, approximately 13% of the students voted against it. Although this proportion is small, it cannot be ignored. Perhaps they are more accustomed to the traditional way of teachers' corrections, or perhaps they are skeptical about the accuracy of machine comments. Preferences for learning methods often vary from person to person. It is actually an important reminder for educators: AI-assisted teaching cannot be adopted in a one-size-fits-all manner. The ideal approach might be to retain the advantages of traditional correction and make AI an “intelligent assistant” for teachers rather than a complete replacement.

I am satisfied with the feedback provided by the teacher in this assignment.

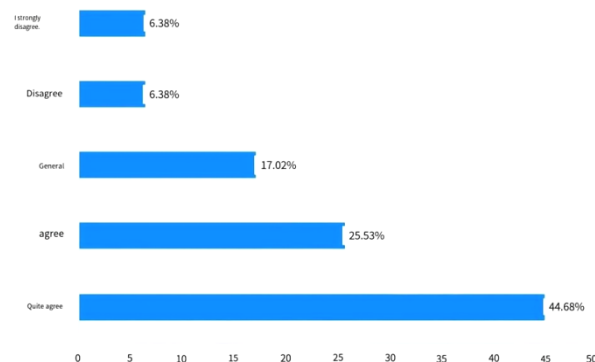


Figure 4: Level of Agreement among Students Regarding Satisfaction with Instructor Feedback

The Figure 4 shows that teacher feedback still holds an important position in English writing teaching. Approximately 70% of the students expressed their approval of the teacher's feedback, among which 44.68% held a “strongly agreed” attitude and 25.53% chose “agreed”. This result highlights the unique value of teacher feedback-its advantages are mainly reflected in three aspects: professional judgment, personalized guidance, and full-process attention to students' learning process. Remarkably, educators are able to offer individualized assistance suited to the writing traits of diverse students and this student - centered feedback method frequently precisely grasps students' personalized issues regarding aspects like vocabulary application and sentence structure thus furnishing more helpful advice for modification but the data also show certain areas that desperately require enhancement as 17.02% of the students gave it just a “fairly satisfied” rating and another 12.76% explicitly stated their dissatisfaction and further examination discloses that these adverse evaluations primarily concentrate on three aspects namely the promptness of feedback (for instance an excessively long correction

period), the concreteness (excessively vague suggestions), and the relevance (failing to fulfill the actual requirements of students).

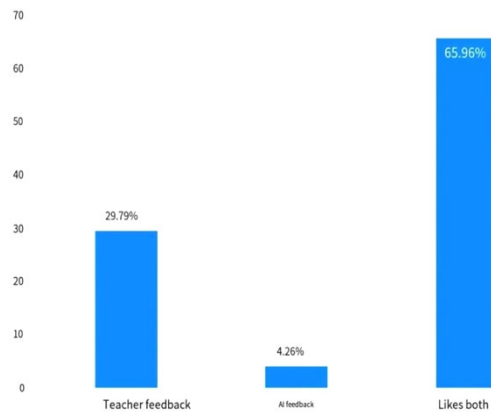


Figure 5: Which type of feedback students would prefer to select in the future

Students had diverse attitudes towards AI feedback. Figure 5 indicates that 44.68% of them openly supported the utilization of AI feedback, 25.53% were indifferent. When required to choose, 65.96% desired to get feedback from both teachers and AI at the same time which showed that they had a comprehensive requirement for both types of feedback methods. In-depth analysis reveals that among the students who chose the single feedback method, 29.79% preferred teacher feedback, mainly valuing its humanistic care and in-depth guidance. Students who choose AI feedback pay more attention to its immediacy and accuracy. This difference reflects the individualized needs of different learners. Data shows that AI feedback has established its teaching value, but the best way to apply it is to complement teacher feedback. As one interviewee put it, “AI is good at basic error correction, and teachers understand my thoughts better.” This synergy effect may become the development direction of English writing teaching in the future.

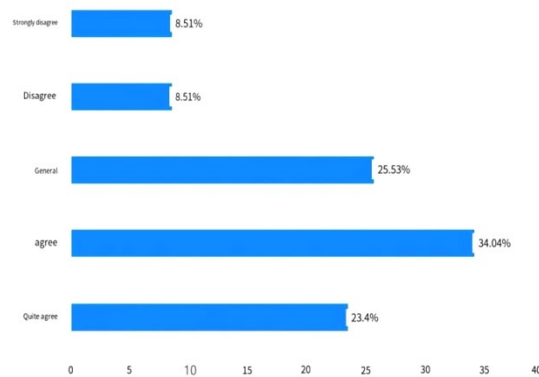


Figure 6: Student agreement that AI feedback has helped improve their writing skills

Figure 6 reveals an encouraging phenomenon: AI feedback is demonstrating its unique teaching value. More than half of the students (34% in favor and 23.4% strongly in favor) have personally felt the improvement effect of AI feedback on their writing skills. Firstly, promptness. Students can immediately receive correction suggestions after submitting their compositions, eliminating the waiting time of traditional marking. Secondly, accuracy. The system was able to smartly recognize the writing traits of every student and an example was given by one student who said, “AI constantly spots my issue of overusing conjunctions, something I had never noticed on my own,” and this instant and accurate feedback method formed a cycle: writing-feedback-revisions- feedback again, especially for fundamental writing skills that demanded a great deal of practice.

Nevertheless, it was essential to recognize the differences between AI-generated feedback and conventional teacher feedback as the data shown in the chart indicated that concerning teacher feedback. 40.43% of the students firmly believed that it aided in their writing development which was higher than the percentage of those who strongly concurred with AI feedback and this result implied that although AI feedback had remarkable advantages, teacher feedback held an essential position in

students' viewpoints.

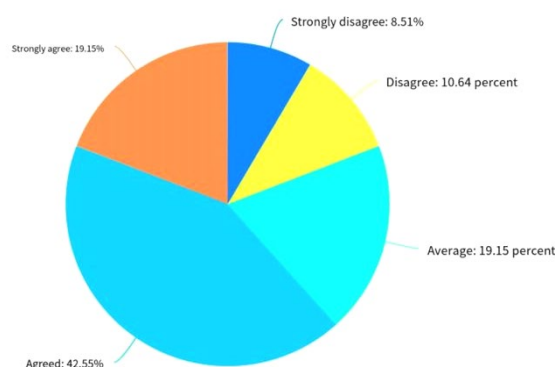


Figure 7: Level of Agreement on Student Motivation to Continue Enhancing Writing Skills

Figure 7 shows how teacher and AI feedback differently motivate students to write within the field of educational psychology. Teacher feedback, valued by 38.3% of students for its warmth and encouragement, helps restore writing confidence and is strongly recognized by 31.91%. AI feedback, while rated highest by 19.15%, still earned a 42.55% approval rate, mainly for fostering self-discipline through real-time correction. Both methods offer unique benefits: teachers inspire creativity, while AI builds writing habits, together forming a complementary “dual-engine” model for effective writing instruction.

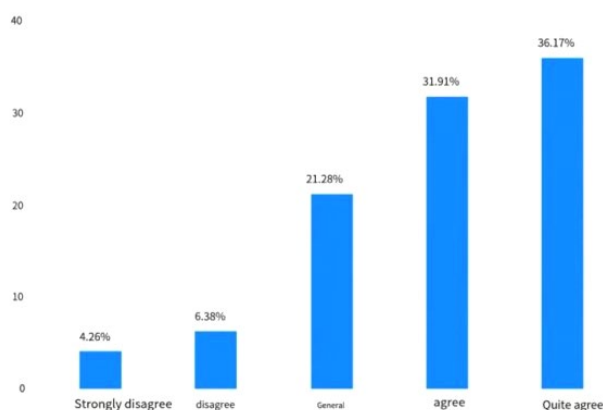


Figure 8: Student agreement on whether AI-supported learning increases enthusiasm and interest in independent English writing

Figure 8 explores the role of AI learning in stimulating students' enthusiasm and interest in independent learning of English writing. The data show that 36.17% of the students hold a highly favorable attitude towards AI learning, believing that it can significantly enhance their own enthusiasm for independent learning. At the same time, 31.91% of the students also agree with it. This discovery was quite important as it showed not just that students positively embraced new technology and new ways of learning, but also underlined the crucial part that AI-based learning played in spurring students' interest in self-directed learning and boosting their eagerness to study. These research results had given us a fresh perspective from which to comprehend how educational technology reformulates learning psychology. AI technology offered not merely a collection of tools, but also a new learning option, designing individualized learning routes for every student. However, technology has always been a tool rather than an objective and the essence of education remained in arousing students' inner drive. The worth of AI lies in its ability to utilize accurate data analysis and instant feedback.

4.3 Differences between ChatGPT feedback and teacher feedback

In the data analysis, the authors analyze the respective strengths and limitations of the ChatGPT critique model and the teacher critique model. These two modes show significant differences in multiple dimensions such as data processing, depth of analysis, and personalized instruction, which together constitute a multifaceted ecology of middle school English writing feedback. With its efficient and comprehensive data processing ability, the ChatGPT critique mode has emerged as a method in

English writing feedback. When analyzing the impact of teacher feedback and AI feedback on students' motivation to write, ChatGPT is able to keenly capture the positive effects of both in motivating students and compare the differences, providing educators with forward-looking suggestions for educational and teaching strategies. This efficient and intelligent analyzing ability makes ChatGPT have a broad application prospect in junior high school English writing teaching in the era of big data.

However, ChatGPT has shortcomings in providing personalized guidance. Teachers can combine their rich teaching experience and students' actual situations to provide students with more detailed and personalized guidance. This personalized teaching method not only helps to stimulate students' interest and motivation in learning, but also promotes their all-round development. In addition, teachers also pay attention to interaction and feedback with students in the correction process. Through face-to-face communication, teachers can intuitively understand students' learning status and confusion so as to provide more specific and targeted guidance.

5. Discussion

5.1 Major Findings

It is evident that more than 70% of students believe that the use of generative AI (e.g. ChatGPT) in English writing enhances learning, and more than 60% of students find this tool easy to use. This showed that the user-friendliness and efficacy of ChatGPT were extensively acknowledged among students, which established a firm base for its utilization in English composition proofreading, indicated that the feedback offered by ChatGPT had satisfied the requirements regarding efficiency and precision, precisely speaking, feedback functioned as a type of motivating information aimed at prompting students' self-reflection and improvement so that they could reach the desired goal of writing and enhancing their writing abilities^[6]. Students' positive attitudes toward ChatGPT reflect their willingness to adapt to and try this new learning tool, which offers the possibility of intelligent transformation of English writing teaching. In terms of social support, we found that the social environment played a positive role in promoting students' acceptance and use of AI tools for English learning. Jia et al believe that the application of AI technology in the field of education has a positive impact^{[14][17]}. More than 76% of the students indicated that they could adapt to the ChatGPT essay feedback mode, further showing that the student group had great tolerance for AI technology. This adaptability established a firm basis for the successful application of ChatGPT in English writing correction. It was necessary to find a means to utilize the efficiency and promptness of AI feedback while maintaining the personalized and detailed characteristics of teacher feedback.

5.2 Pedagogical Implications

The path for ChatGPT to empower English composition criticism mainly includes: the ease of use and effectiveness of AI technology to enhance students' writing learning experience; creating a good atmosphere for AI education with the help of the positive driving force of the social environment. Relying on the existing technological infrastructure and institutional environment to provide a strong safeguard for the implementation of AI. It is undeniable that with the integration of AI and education, AI has gradually achieved, to some extent, the simulation, extension, and even substitution of teachers' work. The trend for future education development lies in human-AI collaboration. Teachers should proactively adapt to their role transformation as guides and mentors in the era of AI^[15]. To actively adapt to teaching in the AI era, teachers should first establish an education concept centered on learners, and take the initiative to enhance their own competencies in intelligent education. AI can enhance teachers' teaching efficiency. Teachers must actively adapt and fully prepare to address the challenges brought by AI and adapt to the future direction of human-machine collaborative education.

6. Conclusion

6.1 Summary

Data show students hold a positive attitude toward ChatGPT, supporting its long-term integration into English writing instruction. High student satisfaction with ChatGPT's feedback highlights its strengths in content, structure, language, and grammar. Teachers can enhance instruction by combining ChatGPT's preliminary feedback with their own clarifications and emotional support, while also

guiding students to critically assess and effectively use AI feedback. This approach not only improves learning outcomes but also fosters students' independent learning and critical thinking skills.

6.2 Limitations

The sample size selected for this experiment is relatively small, which limits the generalizability and reliability of the results to a certain extent. The smaller sample size may not be able to fully reflect the actual performance of Chat GPT among different groups of students, nor can it fully verify its wide applicability in junior high school English composition teaching. The relatively short duration of this experiment and the lack of a pre-and-post-test design make it difficult to accurately assess the long-term impact of ChatGPT on students' English writing ability. This experiment mainly focuses on the effects of ChatGPT on students' English writing proficiency in the short term, but lacks a follow-up assessment of students' long-term learning outcomes. In order to have a more comprehensive understanding of the actual effects of ChatGPT in junior high school English composition teaching.

6.3 Further Research

It is necessary to expand the sample size in order to more comprehensively assess the teaching effect of ChatGPT and explore its differential application in different student groups. To solve this problem, subsequent research should explore more efficient and accurate ways of submitting essays, such as directly uploading electronic documents or using specialized essay input interfaces, so as to improve the recognition accuracy and correction effect of AI. Besides, subsequent studies need to adopt a longitudinal research method to track the changes in students' writing level and learning ability in the long term, in order to assess the sustained teaching effects and potential impacts of ChatGPT. In order to gain a deeper understanding of the actual effects of ChatGPT in junior high school English composition teaching, the follow-up study needs to adopt a longitudinal research method to track the changes in students' writing level and learning ability over time.

References

- [1] Turing, A.M. On Computable Numbers with An Application to the Entscheidungs problem [J]. *Proceedings of the London Mathematical Society*, 1936, 42:230-265.
- [2] Dodigovic, M. *Artificial Intelligence in Second Language Learning: Raising Error Awareness*. [M]. *Language Learning*, 2023, 0-53.
- [3] Gaskell D, Cobb T. Can Learners Use Concordance Feedback for Writing Errors[J]. *System*, 2004, 301-319.
- [4] Ministry of Education. *Opinions on Comprehensively Deepening the Reform of Teacher Team Building in the New Era*[EB/OL]. 2018-1-20. https://www.gov.cn/gongbao/content/2018/content_5266234.htm
- [5] Ministry of Education. *Education Informatization 2.0 Action Plan*[EB/OL]. 2018-04-13. http://www.moe.gov.cn/srcsite/A16/s3342/201804/t20180425_334188.html
- [6] Neumann, M.M. Social Robots and Young Children's Early Language and Literacy Learning[J]. *Early Childhood Education Journal*. 2019, 213-220.
- [7] Alhabass, M.I, Mahdl, A.O. & S.S.A. An Intelligent Tutoring System for Teaching [J]. *European Academic Research*, 2016, 7743-7757.
- [8] Zou Bin, Wang Mingjie. *Artificial Intelligence Technology and English Teaching: Status and Prospects* [J]. *Foreign Language Literature*, 2021, 37(03):124-130.
- [9] Penny, U. A. *Course in Language Teaching: Practice and Theory*[M]. Cambridge: Cambridge University Press, 1996, 170-173.
- [10] Yang Xiaoqiong, Dai Yuncai. An Empirical Study on College English Autonomous Writing Teaching Model Based on Pigaiwang [J]. *Computer-assisted Foreign Language Education*, 2015(02):17-23.
- [11] Zhang Kunying, Zhang Jianian. New Areas, Misconceptions, Blind Spots, and Forbidden Zones in AI Educational Applications and Research [J]. *Distance Education Journal*, 2017, 35(05):54-63.
- [12] Hu Jiasheng, Jin Yan. Theoretical and Empirical Studies on the Integration of Educational Technology and Foreign Language Curriculum [J]. *China Educational Technology*, 2015(04):114-120.
- [13] Hu Yanling. *The Perfect Integration of Artificial Intelligence and Language Teaching—Tennessee State University, USA* [J]. *Education and Vocation*, 2014(04):96-97.
- [14] Jia Tongxing. *Artificial Intelligence and Information Retrieval* [M]. Beijing: Beijing Library Press,

1997, 15-103.

[15] Hu Qin. Overview of Artificial Intelligence[J]. *Computer Knowledge and Technology*, 2010, 06(13):3507-3509.

[16] Yang Huizhong, Huang Renjie. JDEST: Computerized Corpus of Scientific and Technological English [J]. *Foreign Language Teaching and Research*, 1982(04):60-62.

[17] Jia Jiyou, Yan Zezhong, Zhang Zhiyong, et al. Intelligent Empowerment in Basic Education: Pathways and Practices [J]. *Digital Education*, 2020, 6(01):1-8.

[18] Cheng Hongmei. Research on Reform of English Teaching Models in the Context of Artificial Intelligence [J]. *Journal of Hubei Open Vocational College*, 2021, 34.

[19] Luan Aichun. English Teaching in the Perspective of Artificial Intelligence: Development Trends and Coping Strategies [J]. *In-Service Teacher Training in Primary and Secondary Schools*, 2019(01): 60-63.

[20] Niu Ruiying, Zhang Rui. A Case Study on the Focus, Strategies, and Effectiveness of Written Feedback Provided by Second Language Writing Teachers [J]. *Journal of PLA University of Foreign Languages*, 2018, 41(3):91-99; 160.

[21] Lin Shippei. Research on Feedback in High School English Writing from the Perspective of Diversified Evaluation Agents: A Status Survey Based on Feedback Recipients' Recognition [J]. *Educational Reference*, 2022(3):70-79.