

Revolutionizing College English Reading with ChatGPT: Current Predicaments and Future Directions

Wanfen Li¹, Yaru Tang^{2, *} and Siyu Wang³

¹Jinjiang City Teacher Li Education Consultation Co., Ltd., Jinjiang, China

²School of English Studies, Xi'an International Studies University, Xi'an, China

³School of Education, Nanchang Institute of Science and Technology, Nanchang, China

*Corresponding author: 107242021000481@stu.xisu.edu.cn

Abstract. With the acceleration of globalization, foreign language education in colleges and universities has been paid more and more attention. Combined with the development of artificial intelligence, ChatGPT is also widely used in the educational sector. In the future of technology-facilitated education, it will be more closely integrated with foreign language education to create better teaching activities for teachers and students. This paper aims to analyze the necessity of ChatGPT joining the college English reading teaching module through the shortage of educational resources and the dilemma of teaching mode. This paper also clarifies its possible advantages and disadvantages, as well as the corresponding use of various characteristics of the teaching scene. It examines the relationship between this artificial intelligence tool and the two parties, namely teachers and students, and the definition of their roles. The final conclusion of this paper is expected to lead the public to have a deeper understanding of ChatGPT, or to alert users to cautiously and correctly view the role of AI tools in the teaching and learning domain.

Keywords: ChatGPT; digital education; language education; English reading.

1. Introduction

In the era of rapid development of science and technology, artificial intelligence has gradually integrated into people's everyday lives and had a great impact on education. The quick expansion of ChatGPT has aroused deep thinking in educators around the world. They have begun to analyze the opportunities and challenges brought by ChatGPT in teaching. In May 2023, the Ministry of Education of the People's Republic of China issued General Guidelines of Deepen the Reform on Basic Education Curriculum, which emphasizes the digital development of education and promotes digitalization in education [1]. This means English teaching needs to be combined with ChatGPT and build up a new type of teaching ways of human-machine collaboration [2]. In the field of English education, a lot of research on the application of ChatGPT in basic language ability has been published. However, most researchers just focus on the impact of using ChatGPT, and the exploration of how ChatGPT can be applied in teaching reading ability is not comprehensive enough. Compared to primary and secondary school, classes at university are freer and more flexible without lots of stress, which is suitable for developing and testing a new teaching pattern. Therefore, this study will discuss the basic features of ChatGPT and the necessity of applying ChatGPT in college English reading teaching, and then delve into ChatGPT's functions and ways of using it in college English reading teaching.

At present, the research on ChatGPT and English reading teaching can be mainly divided into two aspects: the empirical research on using ChatGPT in English reading teaching and the review and analysis of applying ChatGPT in English reading teaching.

In the empirical research on the combination of ChatGPT and English reading teaching, the research mainly focuses on the quality of reading articles generated by ChatGPT and the effect of reading ChatGPT-generated articles. Research has shown that ChatGPT can produce high-quality and personalized reading materials for students, and the reading questions are at the same level as those

written by teachers [3,4]. These articles can be used in English reading courses and may have a positive effect. For example, researchers such as Zhuo Wang and Yangzhen Ma have found that ChatGPT-based reading platforms can significantly enhance the ability to explore and express the opinions of graduate students [5]. Moreover, some researchers have conducted questionnaire surveys of language teaching teachers. In this article, more than 50% of respondents thought that ChatGPT could help them to improve their teaching efficiency [6]. ChatGPT can serve as an assistant for teachers and students in the process of English reading courses.

In the review and analysis of applying ChatGPT in English reading teaching, researchers mainly discuss the impact of ChatGPT on English teaching from both positive and negative perspectives. As Zhiyu Zhao believes, ChatGPT can improve students' ability of recognition, comprehension, imagination, and appreciation, thereby enhancing their reading ability [7]. On the other hand, Jiemei Huang points out that generative artificial intelligence such as ChatGPT may weaken the antagonism between people and the text of reading, and then lead to the degradation of thinking and knowledge [8]. ChatGPT has a dual impact on English reading teaching. Consequently, it needs to be used reasonably to overcome its negative effects.

The previous research has proved that ChatGPT can be applied to English reading teaching courses and discussed its impact, but failed to talk about the necessity and the ways of using it in college English reading teaching. As a result, this study will focus on college English reading teaching courses, exploring the necessity of using ChatGPT, ChatGPT's function, and ways of applying ChatGPT in college English reading teaching.

2. The Necessity of Applying ChatGPT in College English Reading Teaching

2.1. ChatGPT in Providing Teaching Resources with ChatGPT

It has always been difficult for educators and students in the English major field to address the challenge of reusing outdated reading materials, getting large samples of multiple, quantitatively customized, high-quality English reading exercises can be a daunting task. From interviews with many experienced English teachers in Beijing, creating appropriate practice questions based on textual material is still not easy, even for experienced teachers, and there is a dearth of high-quality reading materials available for instructional use [3].

2.2. ChatGPT in Changing the Traditional Model of Reading Instruction

Teacher's role in College English Reading Teaching changes from a central dominant to a supportive one. In traditional reading instruction, the teacher has been dominant from lesson planning to lesson delivery to the end of the lesson. For example, collecting reading materials, setting the content of teaching, planning the steps of the lesson, and assigning after-lesson tasks. This makes the quality of teaching extremely variable depending on the level of teachers.

ChatGPT is able to provide students with a personalized reading and learning platform to increase their opportunities for independent learning. In the traditional teacher-student reading teaching model, students can only read and translate according to the vocabulary and grammar provided by the teacher, which makes it difficult for them to deeply understand the text. Not only that but in the traditional reading classroom, problems that are instantly generated by students are not easy to be solved, affecting the effectiveness of the reading programme.

3. The Functions of ChatGPT in College English Reading Teaching

3.1. Positive Functions

ChatGPT has a powerful database and the flexibility to generate personalized reading passages and high-quality questions at any time with professional prompting from the teacher, enriching teaching

resources [3]. From a personalized perspective, teachers can use ChatGPT to design the most appropriate lessons according to the needs and interests of different students, increasing the effectiveness of teaching and students' motivation and participation [9].

Additionally, ChatGPT can take the lead in the college English reading teaching classroom, and the teacher becomes a supportive person. Teachers provide more specific requirements and instructions for ChatGPT to design the course, add videos and other types of learning resources to the course, clarify the content and steps of the curriculum, reduce the quality gap between different classrooms, improve classroom standards, and also benefit students' reading levels. For example, in task-based learning pedagogy, ChatGPT can provide a topic for the instructor in the task session based on his or her specific requirements for the course instructional design.

Moreover, ChatGPT helps students independently extract core concepts from reading materials. ChatGPT can also provide the relevant background of the essay, overall framework, characterization, narrative logic, etc. of the article. Students can use ChatGPT to gain a deeper understanding of the article, enhance the motivation and effectiveness of independent learning, and further improve their logical thinking skills by learning the process of analyzing the article with ChatGPT.

3.2. Negative Functions

The generative and efficient nature of ChatGPT may lead to over-reliance on ChatGPT by teachers and students in the teaching and learning process, blunting independent thinking skills and hindering the development of critical thinking. Teachers and students who are faced with pedagogical problems can be answered directly by ChatGPT, but this is only what ChatGPT thinks is the optimal answer, which may lack cultural literacy and humanistic care. Teachers and students who rely on ChatGPT to answer questions in the long run, without independent thinking, lack of good self-control as well as a clear understanding of it, will blunt their independent thinking ability to a certain extent, hindering their critical thinking development [10].

The content provided by ChatGPT may be too templated and not vivid enough. ChatGPT, due to its generative AI characteristics, does not have a human mindset, and its operation is supported by a set of programming modes. In the face of the user's needs, the content provided will inevitably have the templated and formatting characteristics, and will not be able to reach the vivid level of human-authored content.

In addition, ChatGPT has the risk of providing one-sided or wrong information. ChatGPT was developed by OpenAI in the United States, and its training language is mainly English. The training data mainly includes website data in Common Crawl, two internet-based books corpora, and English-language Wikipedia [11]. ChatGPT trains a large amount of Internet information without distinguishing the true from the false and unifying quality. Due to this reason, ChatGPT will inevitably output information containing bias, stereotypes, and other wrong messages. Therefore, the reading materials generated by ChatGPT may have problems that are not suitable for college students such as being biased and incorrect. In addition, ChatGPT which is based on English language training lacks the cultural and language awareness that teachers have. And the generated reading texts may also have differences in culture and use of language. If these one-sided, erroneous, and culturally different passages are used without distinction, understanding, and analysis, they will have a negative influence on students' vocabulary, grammar, and cultural understanding. The reading texts generated by ChatGPT need to be carefully distinguished by teachers and students before using them, which brings risks and burdens to college English reading teaching.

4. Ways to Apply ChatGPT in College English Reading Teaching

4.1. Assisting Teachers in Preparing Course Materials

College English reading courses not only include the reading process but also the background and the cultural connotations of the article. These materials broaden the cultural views of college students

and prepare them for a comprehensive understanding of the reading article. In the process of course preparation, teachers need to search and select appropriate pre-class materials and supplementary readings of cultural background to help students grasp the central idea of the text. While it is time- and energy-consuming work for teachers to search and identify these materials on the Internet. The huge database of ChatGPT can help teachers find corresponding cultural knowledge and background information by searching keywords. It saves teachers time and improves the efficiency of course preparation so that teachers have more time to explore their teaching methods, class design, and other teaching processes.

4.2. Helping Teachers in Course Design

During the whole course, teachers need to consider how to create a conducive teaching environment for students, design appropriate teaching processes, and prepare suitable questions and interactions according to the reading text content. When teachers have some problems with course design, ChatGPT can help them. Teachers can get new ideas for course design by asking ChatGPT about specific topics [12]. In the case of urgent, ChatGPT can provide teachers with a new, accurate, and comprehensive teaching process directly. ChatGPT can also help teachers further innovate and improve the old, outdated, and imperfect course design. ChatGPT can not only help teachers solve the difficulty of course design and increase the efficiency of preparation but also enable students to have a new learning process that is different from teachers' minds and show more interest and participation in the course.

4.3. Supporting Teachers in Evaluating Students' Learning Outcome

Teachers' evaluation of students is an important part of teaching. Based on the original teacher evaluation, ChatGPT can assist teachers and generate more targeted and comprehensive evaluations for students. ChatGPT can record the learning process of students, analyze their performance, and produce automated feedback. Teachers can grasp the learning results of each student at each learning stage and their strengths and weaknesses according to ChatGPT, and then provide in-time and accurate evaluations to students. Through these evaluations and feedback, teachers can teach students in a personalized way, providing support for students.

4.4. Providing Personalized Teaching Assistance to Students

ChatGPT, as an assistant for students, can provide learning guidance at any time. Whether in class or out of class, students can get answers from ChatGPT. This personalized teaching makes up for the shortcomings of teachers who need to consider all students in class. Students can also use ChatGPT to create customized reading exercises based on their weaknesses to improve corresponding abilities. ChatGPT's function of memory can also remember students' learning characteristics and the progress of learning. It can grasp students' learning paces and styles, which is helpful for them to have more targeted reading materials [13].

5. Conclusion

To sum up, in today's increasingly fierce competition in education and the increasingly heavy burden on teachers and students, it is necessary to introduce ChatGPT into the college English reading teaching scene and the advantages outweigh the disadvantages. Through the massive database of ChatGPT, the supply and demand of teaching resources can be balanced, and even the resources can be enriched and recreated. Using its flexibility and strong language logic ability, teachers can appropriately share the time cost of basic modules in lesson preparation, or expand the operating space of personalized teaching for students, so that teachers can withdraw and make progress in more difficult teaching fields; In the end, when ChatGPT becomes the leader of the curriculum, it can eliminate the differences in teaching quality caused by the differences in teachers' level and empower English teaching activities to develop more continuously and stably. On the other hand, the influence

of the negative part can be avoided by making objective articles of association and establishing subjective consciousness.

It can be expected that in the subsequent stage when ChatGPT is formally put into practice in college English teaching, problems will gradually emerge in many subjects and fields, such as schools, teachers, students and society, which is the only link for any emerging technology to be put into use. What all walks of life can and should do is constantly improve the normative system and standard mode of artificial intelligence application in educational scenes in the process of discovering and solving problems, grasping the opportunities of the times, overcoming ethical contradictions, and turning challenges into a ladder of innovation and progress. The shortcomings of the traditional education model cannot be ignored, let alone the inevitable trend that the natural language processing model is widely used in foreign language teaching. ChatGPT will promote the reform of education mode and achieve a win-win situation. It is worth noting that both teachers and students should be wary of over-reliance on ChatGPT and all kinds of artificial intelligence, regardless of college English reading teaching or other subject areas. Independent thinking ability should not conflict with pure tools. Even if ChatGPT becomes dominant in the course, its role is always a basic tool rather than an experiential subject. Teachers and students must maintain their own independence and critical thinking in it, and use AI tools rigorously and prudently.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

References

- [1] The Ministry of Education of the People's Republic of China. Notice of the General Office of the Ministry of Education on Issuing the General Guidelines of Deepen the Reform on Basic Education Curriculum. 2023, http://www.moe.gov.cn/srcsite/A26/jcj_kcjcgh/202306/t20230601_1062380.html.
- [2] Fan L., Li X. ChatGPT Empowers English Teaching: "Difficulty" Reflection and "Ability" Construction. *Research on Classroom Teaching in Primary and Secondary Schools*, 2023, 12: 75-79
- [3] Xiao C., Xu S. X., Zhang K., Wang Y., & Xia L. Evaluating Reading Comprehension Exercises Generated by LLMs: A Showcase of ChatGPT in Education Applications. In *Proceedings of the 18th Workshop on Innovative Use of NLP for Building Educational Applications (BEA 2023)*, Toronto, Canada. Association for Computational Linguistics, 2023.
- [4] Duenas G, Jimenez S, Mateus Ferro G. You've Got a Friend in ... a Language Model? A Comparison of Explanations of Multiple-Choice Items of Reading Comprehension between ChatGPT and Humans. In *Proceedings of the 18th Workshop on Innovative Use of NLP for Building Educational Applications (BEA 2023)*, Toronto, Canada. Association for Computational Linguistics, 2023.
- [5] Wang Z., Ma Y., Yang X., et al. Impact of ChatGPT-Based Reading Platforms on the Academic Reading Ability of Graduate Students. *Open Education Research*, 2023, 29(06): 60-68.
- [6] Widianingtyas N., Mukti T. W. P., Silalahi R. M. P. ChatGPT in Language Education: Perceptions of Teachers - A Beneficial Tool or Potential Threat?. *VELES (Voices of English Language Education Society)*, 2023, 7(2): 279-290.
- [7] Zhao Z. The Impact of the Birth of ChatGPT on the Reading Ecology of Middle Schools. *Anhui Education Research*, 2023, 17: 1-3+12.
- [8] Huang J. "Adversarial" Weakening: Generative AI Reading Interaction and the Weakening of Human Thinking. *Intelligence Exploration*, 2023, 12: 44-50.
- [9] Baskara R., Mukarto M. Exploring the Implications of ChatGPT for Language Learning in Higher Education. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 2023, 7(2): 343-358.
- [10] Zhou L., Bao F. Opportunities, Challenges and Coping Strategies of Foreign Language Writing Teaching with the Aid of ChatGPT. *Popular Literature*, 2023, 23: 118-120.
- [11] Brown T. B., Mann B., Ryder N., et al. Language Models are Few-Shot Learners. *arXiv.org*, 2020.
- [12] Zhang Z., Hong H. ChatGPT-Supported Foreign Language Teaching: Empowerment, Problems and Strategies. *Foreign Language Community*, 2023, 2: 38-44.
- [13] Jia Z., Yu G. ChatGPT for Personalised Education: Potentials and Limitations. *Zhengzhou Normal Education*, 2023, 12 (06): 41-47.