

CURRENT SURVEY OF CHATGPT EMPOWERING FOREIGN LANGUAGE EDUCATION

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Abstract: Through questionnaire surveys and interviews, we aim to understand the current application status of ChatGPT in foreign language education, in order to enable foreign language students and teachers to have a correct understanding of ChatGPT, scientifically and effectively utilize it, and empower foreign language education. The results showed that the use of ChatGPT to empower foreign language learning among foreign language majors in ordinary universities has not yet become widespread. Most students are willing to try it as an auxiliary tool for foreign language learning to improve the effectiveness of foreign language learning; ChatGPT, as an auxiliary teaching tool, will not affect the classroom subjectivity of foreign language teachers; The main potential problem that ChatGPT brings to foreign language education is that it weakens real-life communication and interaction between people, as well as hinders the development of critical thinking abilities. Foreign language teachers and students should reduce the negative impact of ChatGPT, fully leverage its intelligent role, and promote the transformation of foreign language education in the era of smart education.

Keywords: ChatGPT; Foreign Language Education; Current Survey; Artificial Intelligence

1. Introduction

ChatGPT (Chat Generative Pre trained Transformer) is an artificial intelligence (AI) chatbot launched by the US artificial intelligence research laboratory OpenAI in November 2022. It uses deep learning to generate language models similar to human text, working by analyzing large text datasets and learning patterns and relationships between words and phrases. ChatGPT can generate natural and diverse responses in conversations based on contextual information, and output feedback similar to human text. As a globally popular AI chatbot, ChatGPT provides foreign language educators with a new way of intelligent foreign language education[1]. The shift from digital education to smart education has become an inevitable trend in the development of global education. ChatGPT, as a task that artificial intelligence can perform, is a manifestation of the intelligence of foreign language education.

There are currently few research achievements on the application of ChatGPT in foreign language intelligent education. The existing research mainly involves the following four aspects: the impact of ChatGPT on foreign language education [2-3]; Foreign language teaching supported by ChatGPT [4-5]; ChatGPT empowers teacher professional development [6-7]; Empirical study on ChatGPT teaching ability [8]. Hu Jiasheng's views on the impact of ChatGPT on foreign language education are quite representative. He pointed out that while ChatGPT

brings challenges to the field of foreign language education, it also brings opportunities for language teaching. The attitude of foreign language learners should be to actively embrace and adapt. Hu Zhuanglin studied and explored the application of ChatGPT in foreign language teaching, and proposed potential issues of ChatGPT in the field of foreign language teaching. Wu Junqi and others conducted in-depth research from the perspective of ChatGPT empowering the professional development of foreign language teachers. In addition, He Liang and others organized a diagnostic study on ChatGPT's teaching ability and found that ChatGPT currently does not have the ability to independently guide students, but can serve as a good assistant for teachers to improve their daily work abilities.

The above research explores the issue of ChatGPT empowering foreign language education from different perspectives, enriching the theoretical system of ChatGPT's application in the field of foreign language education and laying the foundation for further theoretical research and practical exploration.

However, most of the research content is too macro level and the depth of research is insufficient; There are many overview papers and less data analysis; Although empirical research has emerged, it is still lacking, and the operability of guiding the practice of foreign language intelligent education is not strong. Based on the reference and reflection of previous research results, this article explores the application of ChatGPT in the field of foreign language education, with a focus on investigating the current situation of ChatGPT empowering foreign language education, laying the foundation for exploring the development of foreign language smart education in the ChatGPT technology environment.

2. Survey Objects and Methods of ChatGPT Empowering Foreign Language Education

In order to comprehensively understand the current situation of ChatGPT empowering foreign language education, the author conducted a sampling survey of foreign language majors in a university in Liaoning Province from September 2023 to October 2023. The main content of the survey involves: ChatGPT empowers foreign language learning; ChatGPT empowers foreign language teaching work; The potential problems that ChatGPT brings to foreign language education.

The subjects of this survey are 108 students majoring in foreign languages at a certain college of the university, including 63 freshmen, 33 sophomores, 5 juniors, 1 senior, and 6 graduate students. Among all the surveyed subjects, there were 13 males (accounting for 12%) and 95 females (accounting for 88%). The survey collected data using questionnaire and interview methods. The survey questionnaire is divided into 19 closed ended questions and 3 additional open-ended interview questions as useful supplements to the questionnaire survey. The survey ultimately collected 108 valid questionnaires and conducted open-ended interviews with 10 students. The interview questions included: What impact do you think the development of ChatGPT has on foreign language learning? Do you have any concerns about the application of ChatGPT in the field of foreign language learning? What are your expectations for the future development of ChatGPT and artificial intelligence?

3. Survey Results and Analysis of the Current Situation of ChatGPT Empowering Foreign Language Education

This study takes understanding the basic understanding of ChatGPT among foreign language majors as the starting point, and further investigates the empowerment of foreign language learning and teaching by ChatGPT, as well as the potential problems that ChatGPT brings to foreign language education.

3.1 Basic Understanding of ChatGPT

The survey data shows that 59 students, accounting for 55%, have a basic understanding of ChatGPT, their channels of understanding, and how they perceive ChatGPT; There are 37 students who have heard of but are not familiar with it, accounting for 34%; Only 3 students, accounting for 3%, have a very good understanding. It can be seen that most survey respondents have limited understanding of ChatGPT. 49 students, accounting for 45%, understand that ChatGPT's channels come from news or social media. 78 students are curious about ChatGPT, accounting for 72%. Student Wang stated that he has not yet used it, but is willing to try it as a tool for learning a foreign language.

3.2 ChatGPT Empowers Foreign Language Learning

ChatGPT empowers students in foreign language learning, reshapes learning spaces, processes, and methods, helps stimulate learning motivation and interest, and gives students greater autonomy and choice [9]. The survey data is as follows: for the frequency of using ChatGPT to assist foreign language learning, there were 3 students who "frequently use", 14 students who "occasionally use", 18 students who "rarely use", and 73 students who "have not used". This proportion is the highest, reaching 67%, indicating that the use of ChatGPT to assist foreign language learning by students is still far from widespread. For the purpose of using ChatGPT, 42 people generate language text based on prompt words, accounting for 39%; 28 people, accounting for 26%, engaged in oral interaction and feedback; 12 people, accounting for 11%, seek knowledge of language rules and cultural information; 26 people, accounting for 24%, sought help with translation and explanation functions, indicating that students want to use ChatGPT to provide assistance in different aspects of foreign language learning. Regarding whether using ChatGPT is beneficial for enhancing foreign language communication skills, 76 people chose "beneficial", accounting for 70%. Regarding the impact of using ChatGPT on improving foreign language learning efficiency, 70 people chose "helpful", accounting for 65%.

3.3 ChatGPT Empowers Foreign Language Teaching Work

ChatGPT provides foreign language teachers with a new knowledge tool and curriculum design resource library, empowering them with artificial intelligence technology for teaching innovation and enhancing teaching effectiveness. Regarding the question of whether the powerful features of ChatGPT will affect the subjectivity of teachers in foreign language education, the survey data is as follows: 65% of students choose to have a relatively small impact. Regarding how to view the use of ChatGPT as an auxiliary teaching tool in the classroom and how to expect teachers to use it, 91% of students believe it is "worth trying, but not relying on", and 75% of students choose "ChatGPT as a classroom interactive tool to assist teaching". It can be seen that the majority of students have a positive attitude towards the teacher's subjectivity, believing that teachers can try to use ChatGPT as an auxiliary teaching tool to assist traditional teaching. But we cannot rely entirely on it. This is consistent with He Liang's view that although ChatGPT currently does not have the ability to independently tutor students, it can serve as a good assistant for teachers to improve their daily work abilities. 49% of students hope to strengthen the integration of technology and education in their expectations for future foreign language education models. In the in-depth interview, student Li also mentioned strengthening the integration of artificial intelligence technology and education, and hoped to establish an independent section for foreign language education to promote its development. Due to space constraints, the question "What is the biggest challenge of ChatGPT development to

modern foreign language education?" is not shown in the table. The most common choices for this question are that 46% of students believe that "excessive reliance on intelligent technology will blur the meaning of education itself", and 32% of students believe that "foreign language teachers need to continue learning, update knowledge, and improve digital competence".

3.4 The Potential Problems that ChatGPT Brings to Foreign Language Education

While ChatGPT brings opportunities and convenience to foreign language teaching, its own shortcomings also bring many potential problems to foreign language teaching. The survey data is as follows: "Weakening real-life communication and interaction between people" ranks first, with 45 people, accounting for 42%; Then there were 36 people, accounting for 33%, who hindered the development of critical thinking; 20 students, accounting for 19%, chose "affecting fairness and integrity in foreign language learning", and 7 students, accounting for 6%, chose "reducing cross-cultural communication skills". In an in-depth interview, student Wang said, "ChatGPT may reduce communication between people, believing that communication with AI is different from offline communication with real people." For the questions "Positive evaluation that most approves of ChatGPT" and "Negative evaluation that most approves of ChatGPT", the largest proportions are: 60% of students believe that "ChatGPT provides more learning and information retrieval channels for foreign language learning", and 58% of students believe that "ChatGPT reduces students' writing ability, independent thinking ability, and critical thinking ability". This indicates that students are able to rationally view the positive and negative impacts of ChatGPT. In order to effectively encourage students to use ChatGPT in academic research in an honest manner (due to length reasons, this question is not presented in the table), up to 63% of students believe that schools should strengthen academic integrity education and guide students to exercise self-discipline; Regarding whether ChatGPT should be subject to school regulation in academia, 87% of students insist that it should be appropriately regulated, indicating a desire for fairness and justice in the application of ChatGPT in academia.

3.5 Finding

This article provides an in-depth understanding of the current situation of ChatGPT empowering foreign language education through questionnaire surveys and interviews. It is found that although ChatGPT has been widely accepted and applied, the use of ChatGPT empowering foreign language learning by foreign language majors in ordinary universities has not yet become widespread. Most students are curious and willing to try it out, using it as an auxiliary tool for foreign language learning. In terms of "purpose of use", more students aim to "generate language texts based on prompt words", thereby improving the efficiency of foreign language learning. Students believe that ChatGPT is beneficial for enhancing their foreign language communication skills and are eager to use it to make oral expression more fluent and authentic. The survey also found that most students believe that ChatGPT is just an auxiliary teaching tool and will not affect the classroom subjectivity of foreign language teachers. Students hope that teachers can strengthen the integration of intelligent technology and foreign language education, enrich teaching methods, and improve teaching effectiveness. Regarding the potential issues that ChatGPT brings to foreign language education, the number of options ranked from highest to lowest is that ChatGPT weakens real-life communication and interaction between people, hinders the development of critical thinking, affects educational fairness and integrity, and reduces cross-cultural communication skills. Reducing students' writing and independent thinking abilities is the most recognized negative evaluation of ChatGPT among

students. Students are able to objectively and rationally view ChatGPT, which is the prerequisite and foundation for the scientific and rational use of ChatGPT.

4. Strategies for Foreign Language Education in the Context of ChatGPT

ChatGPT has brought change and innovation to foreign language education. On the one hand, ChatGPT can improve the efficiency of teacher lesson preparation and student learning, making literature search and information retrieval more convenient and fast, saving manpower and time; On the other hand, it places higher demands on the digital competence of teachers, and the impact of ChatGPT on students' ability to discern and think independently cannot be ignored. ChatGPT is a double-edged sword. It is a concept that foreign language teachers and foreign language students need to adhere to, which is to scientifically and reasonably utilize its functions and objectively deal with its shortcomings.

4.1 Embrace Opportunities and Fully Leverage the Positive Role of ChatGPT

Intelligent tools are driving the transformation of teaching models from a "teacher student" binary structure to a "teacher machine student" ternary structure. This structural change drives the transformation of teaching from "teaching centered" to "learning centered", and the paradigm of education from supply driven to demand driven, reshaping and updating the role, function, and ability requirements of teachers [10]. Relying on the Internet and application platform, ChatGPT can quickly generate knowledge content and understand the natural language and context of human expression through its powerful computing power. It has become a super intermediary connecting the human world and the digital world, playing a role as a participant in education and teaching activities, enabling foreign language teaching and learning. It not only helps foreign language teachers reduce the repetitive and heavy workload, makes teachers return to the main job of educating people, but also provides students with a more professional, standard and personalized platform for independent learning, and promotes the change of learning methods.

4.2 Updating Knowledge and Continuously Improving the Digital Competence of Foreign Language Teachers

In the era of intelligent education, on the one hand, foreign language teachers can always understand cutting-edge teaching theories, master the latest and most comprehensive teaching resources, promote ChatGPT to empower the professional development of foreign language teachers, reduce costs and increase efficiency in teacher training, and adapt to the needs of foreign language teachers of different languages. On the other hand, foreign language teachers should strengthen their learning of digital technology knowledge and skills, possess good selection strategies and proficient usage skills for digital technology resources, and continuously improve their digital competence. In addition, foreign language teachers need to be more familiar with language learning mechanisms and laws, possess stronger critical thinking abilities, persist in reflecting on teaching practices, and through continuous teaching reflection, value reflection, and academic reflection, make ChatGPT more effective in its use, continuously improve teaching quality and effectiveness.

4.3 Recognizing Defects and Effectively Utilizing ChatGPT to Assist Foreign Language Teaching

Although ChatGPT is powerful, its own shortcomings and limitations have been widely criticized since its inception. Students may use ChatGPT to plagiarize and fabricate, which can affect issues such as educational equity and integrity, and has received widespread attention in the education industry. It is undeniable that new

technologies bring both opportunities and challenges to education. As foreign language educators, being brave enough to face challenges and actively responding to them is the correct attitude we should adopt towards technological innovation. Therefore, on the basis of guiding students to recognize the shortcomings of ChatGPT, teachers should guide students to update their foreign language learning concepts, fully utilize the new generation of artificial intelligence technology, empower foreign language learning, and promote foreign language intelligent education from theoretical conception to reality.

5. Conclusions

The arrival of artificial intelligence technologies such as ChatGPT has enabled foreign language education to be fully supported by informatization and intelligence, providing technical support for achieving smart foreign language education. ChatGPT empowers smart foreign language education, not only helping learners develop learning plans, provide learning resources and guide skill training, but also helping teachers reduce tedious and repetitive daily work, enabling them to focus more on improving their teaching activities, better design teaching links to cultivate critical thinking abilities of foreign language learners, and enhance the educational effectiveness of teaching. Faced with the new challenges brought by ChatGPT to foreign language education, foreign language teachers and students should use new technologies in a scientific, standardized, and innovative manner to empower foreign language education, turn challenges into opportunities, and promote the transformation of foreign language education in the era of smart education.

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References

- Z. Y. Zhang, H. Q. Hong. ChatGPT and foreign language teaching: Empowerment, issues and strategies[J]. Foreign Language World, 2023, 43(02): 38-44.
- J. S. Hu, Y. J. Qi. When Confronted with ChatGPT, How will China's Foreign Language Education Policy React: Seeking Changes and Adaption[J]. Technology Enhanced Foreign Language Education, 2023, 45(01): 3-6+105.
- W. W. Li. Ai-enabled foreign Language Education reform: Idea innovation and action logic [J]. China Higher Education, 2023, 59(09): 49-52.
- Z. L. Hu. ChatGPT's Talk about Foreign Language Education [J]. Foreign Languages in China, 2023, 20(03): 1+12-15.
- Y. Qin. Exploration of Foreign Language Education Methods in the Context of Human-Machine Symbiosis: A Case Study on ChatGPT[J]. Technology Enhanced Foreign Language Education, 2023, 45(02): 24-29+108.

- J. Q. Wu, F. Y. Wu, S. J. Wen, et al. Teacher Professional Development Empowered by ChatGPT: Opportunities, Challenges and Path [J]. *China Educational Technology*, 2023, 30(05): 15-23+3.
- H. Song, M. Lin. The Transformation of Teachers' Work in the Era of ChatGPT/AIGC: Opportunities, Challenges, and Responses [J]. *Journal of East China Normal University (Educational Sciences)*, 2023, 41(07): 78-90.
- L. He, Z. Y. Ying, Y. Y. Wang, et al. ChatGPT in Education: A Diagnostic Study of Teaching Ability [J]. *Journal of East China Normal University (Educational Sciences)*, 2023, 41(07): 162-176.
- Z. K. Yang. Exploring the Impact of ChatGPT/AIGC on Education and Strategies for Response [J]. *Journal of East China Normal University (Educational Sciences)*, 2023, 41(07): 26-35.
- Z. T. Zhu, L. Dai. Digital Transformation of Education Driven by Design Wisdom: The Goal Orientation, Guiding Principles and Practical Approaches [J]. *Journal of East China Normal University (Educational Sciences)*, 2023, 41(03): 12-24.