Changes In English Language Education And Strategies For Coping Against Chat GPT's Effects

Qi Wei

Communication University of Zhejiang, Hangzhou,310018,China

Abstract. The intelligent chatbot model known as Chat GPT has made a significant impact on English language education, and since its introduction, both students' and teachers' behavior has changed. At the same time, it has brought up issues and queries that have never before been present in modern English education. This paper analyzes the changes brought about by Chat GPT to English language education and the challenges it caused from the perspectives of Chinese university teachers and students, respectively. It then proposes countermeasures that can be applied in the face of the impact of Chat GPT from the perspective of English language education, in anticipation of promoting the proper development of student-teacher relationships and providing reference for the digital development of English language education.

Keywords: English Language Education; Chat GPT; Education.

1. Introduction

Almost every few decades, there is an innovation that completely changes the world. Artificial Intelligence (AI) has significantly impacted organisations, societies, and individuals (Dwivedi, Y. K.,2023). In November 2022, Open AI released Chat GPT, and by January 2023 it had reached nearly 600 million users, making it the fastest-growing consumer app of the century and a global sensation(Xu, Ling-Cheng, Guan, Le-Ning & Shan, Zhi-Guang. ,2023). Chat GPT is so developed in its intelligence that its social reach is unprecedentedly broad. In recent years, the rapid development of artificial intelligence technology has revolutionized various fields, including English education. The emergence of this technology creates both discussions and problems to mitigate its effects while also offering possibilities and chances for English language education. Chat GPT has brought many changes to English language education. It offers learners the opportunity to interact with natural language processing technology. Students can now make conversations with Chat GPT and receive instant support for grammar correction, writing suggestions, and vocabulary expansion. This is one of the popular things for Chinese university students to use Chat GPT to learn English language. However, in a relatively relaxed and free learning environment like university, it is difficult for teachers to find out if they are using Chat GPT correctly, which leads to some unprecedented challenges and issues for English language education. As a result, English language education must devise appropriate tactics and approaches to deal with the effects of Chat GPT. Based on previous academic studies and interviews with Chinese university students who need to learn English and university in-service English language teachers who are also Chat GPT users, this paper will summarize the changes and actionable countermeasures that Chat GPT has brought to English language education.

2. Literature Review

Large-scale language modeling tools have been included into education for the first time with the introduction of Chat GPT. As Chat GPT develops or new technologies are developed from it, newly formed opportunities and problems will inevitably arise for education teaching. The effects of Chat GPT on schooling might be extensive. The Atlantic wrote that Chat GPT is part of "the generative-AI eruption" that "may change our mind about how we work, how we think, and what human creativity really is" (Thompson, 2022). Scholars such as Xu Lingzheng believe that AI applications represented by Chat GPT can mimic the decision-making ability of the human brain and provide effective knowledge feedback in a timely and rapid manner, which greatly improves the rate of

knowledge acquisition, improves learning methods, and promotes "efficiency leap" and "spatiotemporal unlocking"(Xu, Ling-Cheng, Guan, Le-Ning & Shan, Zhi-Guang. ,2023) Education is progressively moving from a one-size-fits-all approach to precision education or personalized learning (Lu et al., 2018; Tsai et al., 2020). Researcher John Shang points out that Chat GPT is beneficial for personalized, adaptive learning; it can help teachers search for resources during lesson preparation, reduce their stress and burden, and improve their work efficiency (Wang, P., Peng, L. & Jin, H..,2023). In addition, with ChatGPT, teachers can easily create customized lessons, quizzes and other learning materials using natural language, significantly improving the effectiveness and efficiency of their teaching (Pfeffer et al., 2023) . It has been shown that generative-based conversational agents can provide effective support for students to learn a second language and thus improve their expressive language skills (Chang et al., 2022). ChatGPT can assist teachers in generating personalized instructional assessment items to bring equity to instructional assessment. For example, one study developed an assessment task related to secondary school students' life phenomena to assess students' learning performance through Chat GPT, including headings, directions, and assessment criteria, and the validity of this assessment item was verified by means of an empirical study (Zhai, 2023). Nevertheless, some scholars have expressed concerns about the use of chat gpt in education. Alshater (2022) argues that ChatGPT has certain limitations, including dependence on the quality of data, limited knowledge domain, ethical issues, and over-reliance on technology with the possibility of misuse.ChatGPT can help students complete learning tasks in multiple subjects and improve the sense of completion and creativity of teaching and learning outcomes, but with this comes concerns from scholars about students' academic integrity. Some researchers have suggested that ChatGPT may help students commit cheating, unbalancing educational assessment mechanisms and leading to educational inequity (Cotton et al., 2023；Ventayen, 2023). In some cases, faculty also reported difficulty distinguishing between student and ChatGPT-generated writing content, and when students used ChatGPT to answer questions, it is difficult for faculty to adequately assess students' true level of understanding. As a result, this may lead to the failure of existing educational assessment mechanisms (Cotton et al.,2023). According to the study mentioned above, Chat GPT can enhance the way people now learn, increase learning effectiveness, tailor instruction and help students learn English more effectively. It may additionally help teachers in teaching English more effectively. But on the other hand, it can also raise some academic questions.

In this essay, the term "English language education" refers to Chinese students studying the language at the university level. With China joining the WTO in 2001, all walks of life in China are facing unprecedented challenges in the international economic environment, which shows great demand for advanced talents with adequate command of English. Higher education, which is a crucial component of global competition, has the greatest responsibility for developing top-notch talent that can meet the demands of diverse societal sectors (Liu Cheng and Tan Yuguang .,2003). Therefore, the Chinese government has started numerous rounds of changes to rebuild its English educational system at the tertiary level in order to be a better player in the international arena. University English is a compulsory basic course for Chinese university students and an important way to cultivate English talents, aiming to cultivate students' comprehensive English application ability so that they can use English for effective communication; at the same time, improve their comprehensive cultural literacy to meet the needs of China's social development and foreign exchange.After the foundation of New China in 1949, English education had achieved rapid development with its prominent features of large educational scale, high teaching quality, fast improvement in English teaching theories and research methodology. Since the reform and opening up, foreign language education in China has also developed significantly. In order to control the content and ensure the quality of teaching and learning the central government implemented a strong policy of centralization. This policy was most evident in the introduction of a uniform curriculum, syllabus, and textbooks for all school subjects (including English) throughout the country (Zhao, Hongxia.,2006) . In addition to this, the Ministry of Education established a design team for the CET-4/6 standardized test in 1985 to assess the English

proficiency of college students. The CET-4 and CET-6 were implemented in 1986 and 1989, respectively, and became the largest tests in China (Yang, Huizhong., 2003). As a result, many colleges and universities began to require the development of English language instruction by way of CET-4 graduation.The above study shows that firstly, the Chinese government attaches great importance to students' English language education, and there is a unified set of test standards and learning materials, which in summary is more inclined to test-based education. The combination of Chat GPT and English language education can help students get a more suitable learning experience for themselves and make it easier for teachers to teach them, as they can grasp the learning content according to each individual's learning level.

Looking for previous literature, we found that there is little literature exploring the use of Chat GPT in elementary, middle and high school, and now the problem exists mainly at the university level. Current university English language education in China suffers from standardization and a lack of personalized forms of learning. chat gpt has provided a change in education with precision and has made teaching and learning more efficient, but there is also an unprecedented crisis of academic misconduct. Few studies have explored the specific changes and impacts of Chat GPT in China on university students and university teachers in English learning and teaching, and thus suggest strategies to address them. This study will build on the literature review and combine data from interviews to focus the research questions on the changes in English language education and learning influenced by Chat GPT and ways to respond to them.

3. Method

The research topic was examined and practiced offline using the method of interviews with educated and experienced educators who use Chat GPT in the field of English education. Asking open-ended questions provided insight into their perceptions and experiences of the changes in English language education and the impact of Chat GPT. The study set up 16 interviewers, including 8 educated and 8 educators, and label them as student interviewees 1 to 8 and teacher interviewees 1 to 8 respectively. There are two ways to look at university English educators: broadly and specifically. University English teachers, broadly speaking, are all professors who instruct English courses at the university, including professors who instruct English majors, professors who instruct non-majors in public English, and professors of foreign languages. University English instructors are, in a strict sense, English instructors who instruct general English courses to non-English majors. The time and place of the interviews are variable and depend on each interviewee's situation. To ensure data confidentiality, each interviewee was given a number in order from 1-8. Our interviews were semi-structured, with the following four dimensions: usage, attitude, effectiveness, and confusion in the process of usage. Each interviewee received one interview, which lasted approximately 30 to 60 minutes. A one-time telephone interview with each interviewee was also prepared in order to add any deficiencies or ambiguities. After the interviews were completed, the content of the conversations was organized and later analyzed. Initially, a detailed transcription of the recorded interviews was created, followed by a thorough reading of the original data. The content was then summarized using an arrangement that highlighted categories of key concepts or themes, and the content was organized for analysis. The language of the interviewees was preserved in the presentation of the data, allowing the researcher to comprehend their sentiments and perceptions in context.

TABLE 1. Information for Respondents				
Interviewees	Contents	Gender	Age	Educational level
Student Interviewees	Student 1	F	22	Senior
	Student 2	M	20	Sophomore
	Student 3	F	20	Sophomore
	Student 4	F	19	Freshman
	Student 5	M	21	Junior
	Student 6	M	18	Freshman

	Student 7	M	21	Senior
	Student 8	F	21	Junior
Teacher Interviewees	Teacher 1	M	45	Lecturer
	Teacher 2	F	42	Lecturer
	Teacher 3	F	38	Lecturer
	Teacher 4	M	50	Associate Professor
	Teacher 5	F	49	Lecturer
	Teacher 6	M	53	Professor
	Teacher 7	M	50	Lecturer
	Teacher 8	F	53	Associate Professor

4. Changes In English Education under the Impact of Chat GPT

This study sums up the changes in English education caused by the emergence of Chat GPT from the perspectives of students and teachers, using a combination of a literature review and interviews.

4.1 For Students

4.1.1 The way of learning has changed.

Chat GPT can answer students' questions more quickly than teachers, and students can face Chat GPT without carrying any anxiety. Student 1, 4, and 5 indicated that they used to ask their teachers about English homework difficulties they didn't understand, but now they prefer to enter their inquiries on Chat GPT. They got different reasons. The reason why respondent 1 chose Chat GPT is that if people ask a teacher a question after class through online chat software, the teacher will probably not be able to reply as quickly as Chat GPT; the explanation for respondent 4 is that when she ask the teacher a question, she was worried that she would leave a bad impression on the teacher due to her inquiry, by contrast asking Chat GPT, which would not have any emotion for her, but just help her directly and quickly; respondent 5 stated that he frequently uses Chat GPT to correct his essays in his English studies, and it helps him to correct every mistake in his essays very often, but he cannot ask his teacher so frequently, he cannot ask his teacher a dozen times in an hour what he should do next in his essays, but he can do so with Chat GPT.

Chat GPT also can provide inspiration for students to complete their assignments. Student interviewees 2 and 7 mentioned that in their English studies, they are frequently faced with writing speeches, essays, slide outlines, and other English articles, but they often lack inspiration or ideas when they look at the requests made by their teachers, so they would go to Chat GPT to input instructions at this time. The primary consideration influencing respondents 2 and 7 to choose Chat GPT was its ability to help them save a significant amount of time. Within them, interviewee 2 reported that when writing English articles, he used to need to search a lot of information that matched the topic in Baidu, Google, Bing, and other browsers, and it took a long time and was very exhausting to retrieve the information, but if he asked Chat GPT directly, he only needed to input his needs into the chat box and then waited for less than 1min; while interviewee 7 believed that Chat GPT could spare him from having to think so much, he preferred to use it write 300 words for him rather than writing a 300-word article on his own.

In brief, Chat GPT has altered how students learn since it can rapidly and appropriately comprehend and respond to students' input instructions, freeing them from waiting and from having to think through. To assist students in fixing grammatical mistakes, enhancing their writing abilities, etc., Chat GPT may offer rapid feedback and assessment. The students themselves are not mentally burdened by Chat GPT because it is not human and has no feelings whatsoever, therefore students who use it won't just be concerned about making mistakes.

4.1.2 Learning philosophy has changed

Chat GPT can facilitate students with many forms of one-on-one instruction outside of the classroom.Both Student 3 and 8 noted that they needed to learn English outside of the classroom for their own learning plans, something that Chat GPT could assist them with but which the school teachers were unable to do. Respondent 3 stated that the Chat GPT was similar to a "one-on-one" online English teacher since she could input all of his specifications into the instruction box and get exactly what she wanted. Respondent 8 claimed that in addition to helping her with the challenge of learning English in the conventional sense, Chat GPT also allows her to play games that will help her improve   English in daily life, such as words solitaire games.

To sum up, Chat GPT expands learning beyond the foundational education level and makes interactive learning more individualized, precise, immersive, enjoyable, and stimulating in interactive learning. Students can engage in conversations with Chat GPT to expand their writing ideas and creativity by triggering inspiration, getting advice, etc. Chat GPT can provide a large number of English learning resources, including articles, course materials, practice questions,and so forth. Students can access these resources according to their interests and need to broader their knowledge and improve their English skills.

4.1.3 The cost of learning money changed

Chat GPT's free feature allows students to save on learning costs in multiple categories. Student respondent 6 remarked that he picked Chat GPT because it is typically free to ask questions there. He also catches up on English material outside of the classroom, much like student interviewee 3 did. Before Chat GPT, he had been learning by enrolling in extracurricular English learning institutes and paying for it, according to the interview content. He described the expense of education in extracurricular institutions as being extremely high and unproductive, and the teaching skills of the teachers as being unpredictable. But despite the significant financial outlay, he had always learned to use this approach because there was no other option. But once Chat GPT became available, he realized it was the ideal solution for his extracurricular English-learning requirements. Chat GPT assisted him in making his essays more accurate and fluent, and more like those of a native speaker. On top of that, Chat GPT can help himself practice speaking and rectify his speech patterns by installing additional plugins. In this aspect of speaking learning, however, he explained that Chat GPT cannot correct his accent; it can only transform what is said into text, revise it as if it were a composition, and then provide feedback.

As summarized by student respondent 6, Chat GPT enables students to reduce their financial requirements for English study. Chat GPT is capable of simulating practical realities of conversational situations and providing opportunities for speaking practice. By engaging in conversations with Chat GPT, students can strengthen their oral expression and communication skills. However, Chat GPT does not meet the complete spectrum of English learning demands, such as its inability to correct students' spoken pronunciation like a human teacher and its classification of some normal pauses and repetitions as grammatical errors.

4.2 For Teachers

4.2.1 Study integrity is tested like never before

Students can use Chat GPT to aid in their studies, but once they rely on it too much, it raises questions about academic integrity.The issue of study credibility was brought up by all eight teachers who responded, noting that in the process of approving assignments, they encountered many that were written wholly in Chat GPT, which they considered to be very intrusive and equivalent to plagiarism. Teacher interviewee 5, an English writing teacher, emphasized that in the final papers submitted by students each semester, she found several papers that were clearly written by Chat GPT, especially in the literature review section. It was obvious to the teacher that the literature summaries generated by Chat GPT were fabricated because Chat GPT only generates content that people think is correct, and that the research results and research ideas of the scholars written by Chat GPT were

not retrieved at all. Teacher respondent 8 noted that she would use sites such as zerogpt and gptkit to detect the ai level of student work if time allowed, but the accuracy of these sites' detection is not very clear and sometimes identifies human-written content as ai-generated; for example, some students would write their own work and then hand it to Chat GPT or other English revision sites for grammatical corrections and language embellishments, which can result in their writing being detected as ai-generated. This, in turn, poses an unprecedented threat to the trust between teachers and students, and it is unfair to students who do their own writing but do not have the same quality as the content generated directly by Chat GPT if teachers trust 100% in the independent completion of students' work.

4.2.2 Teaching quality may be questioned more than before.

The popularity of Chat GPT has brought instructor's teaching ability into doubt by students.Teacher interviewee 1 had mentioned that he had been asked by a student to doubt that the syllabus and teaching plan were written in Chat GPT, and the student had spread the speculation to social media platforms. Since the majority of individuals lack critical thinking, most internet users believed the student's speculation. As a result, their teaching standards and attitudes were challenged as never before, and the school director discussed the matter with him. Teacher Interviewee 6 stated in conversation that he believed Chat GPT would radically alter the teaching process. As a teacher, using Chat GPT to facilitate instruction is also a practice consistent with the times, for instance, he frequently uses Chat GPT to revise students' English assignments, but he is aware that students resent teachers who use Chat GPT for educational purposes, viewing it as a form of laziness and therefore questioning the teachers' teaching ability. Because there are numerous controversies about language use and numerous possibilities for teaching English, there often exist variances between the results of manual marking and Chat GPT branding, and when students encounter such circumstances, they tend to be more biased and trust the Chat GPT results. Even if that teacher has more than ten years of experience in the educational setting. Given that students believe that humans are not superior to artificial intelligence, there is a possibility that humans will commit errors, but AI will not.

5. Strategies for Coping with Chat GPT's Effects

5.1 Balancing technology and human interaction

English language education can use Chat GPT as a supplementary tool for providing personalized learning support and timely feedback. Students will have a need to learn English language outside the textbook at the university stage, so using Chat GPT with some plug-ins will allow students to learn English language anytime, anywhere. However, students should understand that Chat GPT is only a tool and cannot completely replace humans, and students need to have a proper understanding of the positioning of artificial intelligence as an aid.

In a manner other than this, English education should encourage students to adhere to moral and ethical standards when using Chat GPT, which is effective in providing conceptual explanations and applications but may have inaccuracies in language comprehension and grammatical correction, as well as lacking the emotional support and flexibility of human teachers, according to the issues of academic integrity mentioned by the teachers when interviewed. It is worth reminding that teachers should pay attention to the student's mental state while learning, which was one of the issues mentioned by the students in the interviews. Teachers should be aware of their attitude towards students and not make them afraid to ask themselves questions to alleviate their language learning anxiety. In order to improve educational outcomes, it is important to use Chat GPT for learning English in addition to traditional teaching methods, taking into account both its advantages and disadvantages.

5.2 Strengthen the development of students' critical thinking skills

When interviewing students and teachers, a common issue they mentioned was the tendency of students to completely trust the output of chat gpt, due to the lack of critical thinking skills. Critical thinking includes the component skills of analyzing arguments, making inferences using inductive or deductive reasoning, judging or evaluating, and making decisions or solving problems (Lai, E. R.,2011) . In the face of the emergence of technologies such as Chat GPT, students require critical thinking skills when learning English in order to properly evaluate and apply the information provided by these tools. This capability is especially important in English language education because humans will deny, but artificial intelligence will not. Artificial intelligence follows the given data to deliver a predetermined answer, and in this sense, negativity is the most crucial human creation. The most prominent aspect of denial in education is critical thinking, but the current critical awareness of students is not optimal.

In terms of this, teachers need to guide students to understand the reliability of different sources, the truthfulness of information, and the possibility of bias and misinformation; iinstruct students to learn to identify logical gaps, bias, and incomplete arguments in English texts; and students improve critical thinking skills through communication and dialogue with peers or mentors, while understanding the differences in different perspectives and opinions. Especially in the area of English syntax, students should be oriented to accept the possibility that multiple answers exist, while at the same time keeping students skeptical about ai and not letting it solidify their thinking. All of this helps students achieve information literacy and critical thinking skills.

5.3 Reinforcing students' writing skills and creative thinking

Although Chat GPT can inspire students, especially in English writing, students may lack creativity if they use Chat GPT for a long time. Creativity is a complex construct and is most commonly expressed through a broad range of intelligences including linguistic, musical, mathematical, spatial, kinesthetic, interpersonal, and perhaps even intrapersonal (Gardner, 1985). Confronted with the emergence of Chat GPT, English education should pay attention to the cultivation of students' writing skills and the development of creative thinking. Writing is one of the core elements of English education; it is not only a tool for conveying messages, but also an important way to express ideas, develop logical thinking and organize opinions. With the rise of technologies such as Chat GPT, students need solid writing skills and the ability to use these skills to differentiate themselves from machine-generated texts. Despite Chat GPT's ability to assist with writing, students still need to acquire the ability to think individually and write creatively.

Tutors should encourage students to engage in independent writing to develop their creative thinking and unique ways of expression. For example, teachers can emphasize the planning, drafting, and revising stages of the writing process to encourage students to reflect and revise. By providing feedback and guidance, students can improve their writing skills and enhance the quality of their creative work; teachers can stimulate students' creativity and imagination through activities such as open-ended discussions, creative writing tasks, and mind mapping. In this way, students can then employ creative thinking to produce original viewpoints and ideas during the writing process. Teachers can also utilize the texts produced by Chat GPT as writing assignments for their students to debate and analyze in order to help them grasp language structure and style.

6. Conclusion

The arrival of Chat GPT heralds the beginning of the integration of large-scale language modeling tools with English education. As Chat GPT continues to improve or as new technologies derived from it develop, education and teaching are bound to see more opportunities and challenges. For students Chat GPT has led to significant changes in the way students learn English, their learning philosophy and the cost of learning. From the teachers' perspective, the emergence of Chat GPT has brought their teaching standards into question. It has also created a crisis of trust between teachers and students.

These are the changes and impacts summarized from the interviews.In connection with these, we propose the following strategies: First, the English education business needs to balance the interaction between the two roles of human and artificial intelligence; second, to strengthen students' critical thinking skills; and finally, to improve students' creative thinking development. These three approaches are used wisely to counter the impacting influence of Chat GPT." Artificial intelligence education" is a topic that needs to be explored in depth over time, and professionals in the field of English education need to look at technology and science calmly and objectively, and use them in a disciplined manner so that the upgrade of English education is in line with developmental requirements.

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