

# The Impacts and Challenges of ChatGPT on Translation Teaching in Universities

Yihan Ma \*

School of Foreign Languages, Changchun Normal University, Changchun, Jilin, China

\* Corresponding Author Email: 20231198711@stu.blcu.edu.cn

**Abstract.** ChatGPT, as an artificial intelligence tool, has played an important role in various fields, especially in the field of education. However, there are still shortcomings in translation teaching in universities. This paper analyzes firstly the impacts and challenges of ChatGPT in translation teaching in universities and concludes that ChatGPT can help reduce teachers' teaching burden, provide a rich corpus, and improve translation efficiency. But at the same time, this paper also finds out that the abuse of ChatGPT will bring certain risks, such as causing alienation of the relationship between teaching subjects, and students' excessive reliance on it is not conducive to the cultivation of innovative and critical consciousness, ChatGPT will also lead to academic misconduct such as cheating and plagiarism. Based on this, this paper puts forward the following suggestions: Establish two correct tripartite relationships, cultivate students' innovative consciousness, and formulate more perfect laws and regulations to regulate the use of ChatGPT.

**Keywords:** ChatGPT, Translation Teaching, Impact of Translation Technology, Countermeasures to Challenges.

## 1. Introduction

ChatGPT, a chatbot developed by OpenAI, has attracted much attention since its inception. It is a natural language processing tool driven by artificial intelligence technology, which can use specific patterns and statistical laws to generate answers, in addition to chatting like humans, it can even complete the writing of papers, foreign language translation, and so on. Because of its many novel and convenient features, ChatGPT is increasingly used in the field of education and has great prospects, especially in the field of translation. The earliest translation activities in China can be traced back to the Xia and Shang Dynasties. According to the definition of translation teaching proposed by Canadian scholar Jane Delisle, translation teaching is the process of implanting knowledge, skills, and abilities of translation to students [1]. But at the same time, the advent of the ChatGPT era is also a double-edged sword, and the disadvantages of using ChatGPT for translation teaching also come with it. Several universities have claimed to limit the excessive use of ChatGPT by students, with the University of Hong Kong stating that ChatGPT and other AI tools are prohibited in classes, assignments, and assessments [2]. It is enough to show that ChatGPT's entry into translation teaching not only brings opportunities but also new challenges to translation education and translation research [3]. As one of the important ways to train translation talents, university education should pay more attention to the cultivation of efficient students' translation abilities [4]. Based on this, from the perspective of ChatGPT's impact on translation teaching in universities and its challenges, this paper studies measures to deal with the challenges, to promote the long-term development of translation teaching in universities.

## 2. Method

### 2.1. Context

According to the results of a Study.com survey on the use of ChatGPT by students, more than 89% of students have used ChatGPT to help with homework, 48% of students admit to using ChatGPT for tests, and about 53% of students use it to write papers [5]. Such a large usage base of ChatGPT confirms that it is necessary to investigate the application of ChatGPT. As the main force of ChatGPT

users, university students have always maintained a high interest in artificial intelligence products and their willingness to use them [6]. General data can be obtained through a questionnaire survey, which makes this study more representative. This study uses a questionnaire survey with 150 valid samples, aiming to investigate the use and experience of ChatGPT among university students who are learning a foreign language. Through the investigation, it can be concluded that ChatGPT promotes translation learning and brings adverse effects. Finally, according to the results of the investigation, feasible measures are proposed to solve the existing problems of ChatGPT in the field of translation teaching.

## 2.2. Content

This questionnaire will be designed mainly around the following aspects: age and gender of the respondents, frequency of using ChatGPT for translation learning, feelings on the use of ChatGPT, influence and challenges encountered when using ChatGPT for translation learning, and views on the development trend of ChatGPT in translation learning in the future. After the questionnaire is collected, a pie chart is generated using the Questionnaire Star Applet. Based on the data analysis, the relevant measures could be taken to deal with the impacts and challenges of ChatGPT on translation teaching in universities.

## 3. Results

### 3.1. The Values of ChatGPT in Translation Teaching

Data show that 30.67% of learners often use ChatGPT for translation learning, 40.67% of learners believe ChatGPT's accuracy in translation learning, and nearly half of them are willing to accept ChatGPT and use it for related learning. This shows that the application of ChatGPT in the field of translation teaching provides users with convenience.

#### 3.1.1. Reduction of teacher's teaching burden

According to the results of the survey, 72% mentioned that ChatGPT can reduce the teaching burden of teachers. Before ChatGPT and other artificial intelligence software appeared, teachers often needed to spend a lot of time on lesson preparation, such as the design of lesson plans, the arrangement of teaching activities, etc., and the energy and time to concentrate on teaching content became very limited. ChatGPT has a large number of teaching resources and can use mature templates and appropriate methods to help teachers design a variety of teaching activities that match learners' abilities, which not only reduces the teaching burden of teachers but also reserves sufficient time for teachers to carry out other teaching and research activities [7]. Through ChatGPT, teachers can also search literature in related fields, learn about the latest scientific research results, and provide scientific research ideas and guidance, thus improving teachers' scientific research level, further promoting the development of translation education, and improving the quality of translation education [7].

#### 3.1.2. Provision of a variety of translation corpus

Secondly, 70.76% of the students believe that ChatGPT can provide translation researchers with a variety of translation corpus. Compared with general translation software, ChatGPT can provide multiple translations at the same time according to the needs of users, which is significantly better than other translation software in terms of interaction and coherence [8]. In other words, users can get more satisfactory translations by changing the instructions several times, and the intervention of ChatGPT makes translation manuscripts more diversified. According to the current development trend of translation teaching and research, massive corpus storage, retrieval technology, and data statistical advantages are essential services [1]. According to statistics, the training data of the 2021 version of ChatGPT has reached 300 billion words, 3.1 billion web content, and 320TB of text information [7]. Such a huge amount of information reserve provides the basis for multiple translation

versions of ChatGPT. In the information age, with the improvement of translation requirements and the continuous upgrading of artificial intelligence, it is obvious that traditional translation teaching can no longer keep pace with the development of the scientific and technological era. Translation teaching is bound to innovate with new technologies, new resources, and new models. Only by combining corpora with modern educational technology and translation technology can many potential functions and values be spawned [1].

### **3.1.3. Improvement of translation efficiency**

In addition, 68.67% of the study participants believed that ChatGPT could improve translation efficiency. Translation course is a necessary course for foreign language learners, and translation skills are also the basic skills they should master. In today's era of rapid information development, a large number of translation tasks come one after another, which requires translators to translate as quickly and accurately as possible in an effective time. In traditional translation courses, teachers usually teach students some translation theories and skills [9]. In the process of practice, students can only use paper dictionaries to look up the meaning of a word they need, and then check the reference answers or teachers' corrections for errors, which is of little help to the translation work and even greatly prolongs the translation time. ChatGPT supports the translation of whole paragraphs or even whole texts, which greatly shortens the translation time, improves the efficiency and quality of translation, and enables students to learn in a relaxed atmosphere without teacher supervision and better master translation skills [10].

## **3.2. The Challenges to Translation Teaching**

Even though ChatGPT's entry into the classroom of translation education is an inevitable trend, 38.67% of the respondents still hold a negative attitude towards the impacts of ChatGPT on translation learning. Hong Wilson also claims that ChatGPT is a great disruptor in the field of education, and it poses some challenges to the teaching of translation in universities [7].

### **3.2.1. Change of teaching subject relation**

73.33% of learners believe that ChatGPT will gradually replace the status of teachers, resulting in changes in the relationship between teaching subjects. In previous translation classes, teachers played a dominant role in guiding students to learn translation methods and cultivate their translation thinking. Students, as subjects of study, carried out translation practice under the guidance of teachers. However, ChatGPT's intervention in teaching may fundamentally change the ecology of education and teaching, weaken the relationship between teachers and students, and cause an imbalance between teaching subjects. If teachers and students do not take reasonable measures to face the new changes in education and teaching ecology, they may face the risk of alienation from teaching subject relationships [11]. When the convenience of ChatGPT outweighs the guidance of the teacher, students will be more inclined to use the ChatGPT that is readily available, and the teacher will no longer play a leading role. When teachers' teaching rights are gradually replaced by artificial intelligence, students' dependence on artificial intelligence is gradually strengthened, and the communication between teachers and students gradually turns to human-machine communication, finally forming an abnormal teaching relationship. When the degree of human-computer communication exceeds the intimacy of teacher-student communication, the teacher-student emotion will be affected. Students no longer regard teachers as the authority, so the status of teachers in the minds of students continues to decline, which will increase the difficulty of teachers' work to discipline students. School rules and regulations have also lost their deterrent effect on students, which in turn leads to more serious social problems.

### **3.2.2. Overdependence on ChatGPT**

Excessive use of ChatGPT can lead to dependence and reduce learning motivation, which is also one of the views of 70.67% of respondents. The basic aim and purpose of translation education is to cultivate the creativity of translation learners [12]. Thanks to ChatGPT's powerful language

processing capabilities and ease of use, students tend to overuse ChatGPT, which in the long run will form lazy thinking, that is, too lazy to use their brains, too lazy to distinguish between true and false, and directly copy and paste. This concise and efficient translation method can easily meet the requirements of students, and the reduction of students' brain opportunities will lead to the beginning of the decline of curiosity. In the process of learning with ChatGPT, students' learning motivation will change from active knowledge learning to passive task completion, and gradually lose their interest in translation learning. Students' ability to think critically would be adversely affected by over-reliance on ChatGPT [13]. A spokesman for the New York Department of Education has also criticized the harm such tools can do to students' minds, she considered that lifelong learning skills such as problem-solving and critical thinking will not be developed [14]. However, excellent translation ability cannot be rapidly improved by relying on external tools, but can only be gradually improved through continuous practice, reflection, correction, and polishing day after day, and long-term training can develop authentic foreign language thinking.

### 3.2.3. Academic misconduct

67.33% cited academic misconduct as another challenge posed by ChatGPT to translation teaching. "Academic misconduct" refers to the behavior of violating academic norms and using other people's achievements or auxiliary tools for academic cheating. It is generally accepted internationally that data fabrication, data tampering, and plagiarism are the three major behaviors of academic misconduct, but academic misconduct is not limited to these three behaviors. The biggest features of ChatGPT are openness, ease of use, and intelligence, which means that students can easily use it for their services, and it is not uncommon for students to use ChatGPT to complete their papers. The ownership and originality of scholarly works ghostwritten by ChatGPT or adapted from the information provided by ChatGPT is highly controversial [15]. First of all, it is difficult to define whether the students' ideas in the paper are their original ideas, that is to say, the source of the ideas cannot be traced back, and once the language expression is changed, it cannot be distinguished by the re-checking tool. The text content generated by ChatGPT is also unrecognizable by various detection software nowadays. Secondly, if ChatGPT is used in daily translation assignments and tests, it will not be able to show their real learning level and expose problems in the learning process. It will also disturb teachers' assessment of students' mastery of translation learning, increase the difficulty of teachers' teaching reflection, and lead to the failure of students' learning assessment system based on traditional translation teaching mode. This will then affect the quality of translation teaching and hinder the development of translation teaching [11].

## 4. Suggestions

In the following question "Do you think ChatGPT can replace traditional translation teaching?", 38.67% of students think that it cannot be done, 36% of people are not sure whether traditional translation teaching can be replaced, and only 25.33% of people hold a positive attitude. However, 68.67% of them believe that ChatGPT should be integrated and innovative with existing teaching models in translation learning. Given the above challenges, it is necessary to take relevant measures to deal with the risk of fermentation in the later stage.

### 4.1. Correct Construction of Tripartite Relations

In the process of teaching mode integration and innovation, two tripartite relationships are the cornerstone. Teachers, students, and ChatGPT are the core of building the right tripartite relationship, and the tripartite relationship between teachers, schools, and ChatGPT suppliers is the guarantee of maintaining this network. In the first tripartite relationship, teachers should always play a leading role in teaching, making it clear that students are the subject of learning, and ChatGPT can only be used as an auxiliary tool for learning, which is the most basic teaching relationship. In the second tripartite relationship, teachers, as one of the guarantees, should realize that they are the helmsman and the leader of technology application [16]. Since the pace of ChatGPT's development is unstoppable,

people can use its advantages to promote the deep integration of traditional teaching and educational technology. Teachers should first sum up their teaching work, insight into students' learning loopholes, and pay attention to students' learning needs. Secondly, teachers should take the initiative to learn emerging artificial intelligence technologies and tools to better and more skillfully apply such teaching aids to actual teaching links. Finally, ChatGPT was used to design a teaching plan more in line with the human-computer interaction background, and a learning plan suitable for each student was formulated to adapt to the differentiated development of different subjects. As the second guarantee, schools should invest more educational investment costs in ChatGPT-related equipment. As a place for students to learn, schools are the basic external factors for students to learn translation courses well and provide hardware support for teachers to change their teaching ideas and innovate teaching methods. As the third most important guarantee in this link, ChatGPT developers should constantly test the quality of their products, optimize the products in time, and focus the research and development of functions on the needs of educators, which is more conducive to the development of education. Teachers should also maintain good communication and contact with ChatGPT suppliers, raise the problems encountered in the practical application process, and exert the greater value of ChatGPT in the field of education. No matter how to change the teaching idea, only by working together can people create a good education and teaching environment and provide support for the change of teaching mode.

#### **4.2. Development of Critical Thinking and Creativity**

Several universities have restricted ChatGPT use in the classroom to reduce the frequency of its use on students and their dependence on it. In addition, it can provide the students with training sessions on critical thinking skills and problem-solving abilities, fundamentally enabling students to realize that ChatGPT cannot be used as the main source of information for learning, and it will also have errors [13]. During the process of using ChatGPT, they should establish a correct knowledge view, exert their subjective initiative, and selectively select the correct content that meets their needs. It is also very important to point out that translation is not a simple conversion between languages, accuracy and smoothness are only the basic requirements of translation, and how to translate content as authentic and beautiful as possible is a higher requirement. Therefore, translation teaching should not stop at basic translation skills, and the cultivation of students' creative ability plays a role in promoting the progress of translation teaching. Teachers can carry out a variety of teaching activities, such as organizing group discussions, debating on a topic, etc., in such activities, students share ideas, brainstorm, and constantly stimulate new ideas, and creativity can be cultivated.

#### **4.3. Specification on the Use of ChatGPT**

To prevent academic misconduct from having a more serious impact on translation teaching, relevant policies are needed for guidance and supervision. The government can formulate relevant policies and regulations for the use of ChatGPT in the field of education to clarify the scope of the use of ChatGPT [16]. The regulatory authorities should also set up special teams to monitor the use of ChatGPT, and these regulations and management standards should be constantly adjusted according to the problems arising from actual use. The most effective measure is the change of personal thought. Universities can add integrity education in ideological and political courses, so that students can realize that relying on ChatGPT is a trivial matter, and forming bad habits such as plagiarism and fabrication is difficult to correct, and even the more serious impact caused by academic misconduct may be recorded in their files [17]. Although the existing academic detection software can not completely detect plagiarism and other content, it can still help detect certain academic fraud components, which limits the students' unrestrained use of ChatGPT to a certain extent, and reduces the difficulty of teachers to distinguish students' mastery of translation skills.

## 5. Conclusion

The progress of science and technology promotes the development of education, so it is urgent to combine foreign language translation teaching with modern scientific and technological means under the background of the trend of educational informatization. Artificial intelligence tools like ChatGPT do play a commendable role in translation education and play a positive role in promoting translation teaching and translation research, but it is always just a learning aid machine, that cannot be fully trusted to play a role in education, and should also be alert to the problems that have appeared and may occur in the process of use. By studying the impacts and challenges of ChatGPT on translation teaching in universities, this paper finds that ChatGPT can reduce the teaching burden of teachers, provide a rich corpus for translation learners and researchers, and improve translation efficiency. However, there are also some problems, such as the teacher-student relationship being challenged due to the intervention of ChatGPT, students' dependence on ChatGPT gradually increasing, and academic integrity problems caused by ChatGPT. To deal with the above challenges, this paper also puts forward the measures that can be taken. It is not only necessary to rebuild the correct two-party relationship, and cultivate students' innovative awareness and critical ability, but also to formulate relevant regulatory policies. It is hoped that the content of this study can provide some help for translation teaching and translation research practitioners, and bring certain reference significance for the in-depth study of ChatGPT in the field of education.

## References

- [1] Hu Z Y, Zhu S S. Quantitative analysis of translation teaching research in China (1998-2020): An application of SWOT model. *Journal of Minzu Normal University of Xingyi*, 2023, (06): 33 - 41.
- [2] Zhao Q, Liu Y W. ChatGPT research cannot replace human beings. *Chinese Journal of Social Science*, 2023 - 02 - 24 (003).
- [3] Wang H S, Xie Y. Development of translation technology in ChatGPT era and its implications. *Foreign Languages and Cultures*, 2019, 7 (04): 80 - 89.
- [4] Ding D Q, Yang S Y. Challenges and countermeasures brought by Artificial Intelligence to translation teaching. *Journal of Yichun University*, 2022, 44(04): 89-93.
- [5] Study.com. Productive teaching tool or innovative cheating? 2023. Retrieved from <https://study.com/resources/perceptions-of-chatgpt-in-schools>.
- [6] Fan P, Gong H, Gong X. The application of ChatGPT in translation teaching: Changes, challenges, and responses. *International Journal of Education and Humanities*, 2023, 11 (2): 49 - 52.
- [7] Zhao J. The impact of ChatGPT on foreign language education in China: Opportunities and challenges. *College English*, 2024, (03): 10 - 12.
- [8] Du A. Value space of human translation and transformation of translation education in ChatGPT era. *Foreign Languages and Cultures*, 2019, 7 (04): 90 - 103.
- [9] Guo W J. Dilemmas, countermeasures and implications of ChatGPT in English translation courses. *Journal of Guizhou Normal University*, 2019, 40 (03): 26 - 32.
- [10] Jiang X F, Lai W B. A study on the "ABC" approach of translation teaching in the age of digital intelligence. *Shanghai Translation*, 2024, (01): 63 - 67.
- [11] Zhou Z L. Application of ChatGPT in translation teaching: Changes, challenges, and responses. *Journal of Beijing International Studies University*, 2019, 45 (05): 134 - 146.
- [12] Zhang C Z, Zhang C L. From interpersonal ethics to man-machine ethics: A study on translation ethics in the ChatGPT era. *Foreign Languages and Cultures*, 2019, 7 (04): 104 - 112.
- [13] Victor D. Factors and impacts of ChatGPT adoption for academic purposes in higher learning institutions: Students' perspectives. Available at SSRN 4791569, 2024.
- [14] Al-Zubaidi K, Jaafari M, Touzani F Z. Impact of ChatGPT on academic writing at Moroccan Universities. *Arab World English Journal (AWEJ) Special Issue on ChatGPT*, 2024.

- [15] Liu S M, Fang F. ChatGPT empowering higher education: Opportunities, challenges, and effective responses. *Education and Examination*, 2023, (03): 74 - 81.
- [16] Ying Y H, Chen J L, Huang B J. Ecological remaking of education: Potential, risk and governance of ChatGPT. *Continuing Education Research*, 2024, (05): 56 - 61.
- [17] Gong S H. Inspiration and reflection on ChatGPT technology in college English teaching. *Journal of Jining Normal University*, 2019, 46 (01): 70 - 73.