Article

Exploring the Use of ChatGPT in Chinese Language Classrooms

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Abstract

This paper investigates ChatGPT's application as an instructional tool in three Chinese language courses and reports on the feedback from the instructors. ChatGPT, an AI chatbot built upon OpenAI's GPT language model, emulates human-like conversational interactions and has been integrated into classroom settings. This report delves into the ways ChatGPT enhances the learning experience across varying levels of Chinese language proficiency. In the development of learning activities with ChatGPT, we adhered to institutional AI guidelines and employed a backward design approach. The instructional activities include: 1) Intermediate Low Chinese class: ChatGPT assists students in independently learning grammar and engages in conversational exchanges centered around lessonrelated cultural insights. 2) Intermediate High Chinese class: Students utilize ChatGPT to compare their initial drafts with ChatGPT's revised versions to assist them in ultimately composing narrative short texts with accurate time connectors, coherent sentences, clear logic, and smooth expression. 3) Academic Chinese Writing class: Students input assignment grading criteria into ChatGPT, which subsequently evaluates initial drafts, offering constructive revision recommendations. Students critically reflect on ChatGPT's initial draft evaluations and revise accordingly. The instructors highlight ChatGPT's attributes, such as flexibility, real-time responsiveness, and access to a wealth of information, which substantially enrich the learning experience. Importantly, ChatGPT does not assume an authoritarian role in the classroom; rather, it functions as a peer, providing students with a reference point and a platform for discussion. Students actively engage in critical thinking, discussion, reflection, and autonomously seek improved writing outcomes through dialogue with ChatGPT. The introduction of ChatGPT as a peer-assisted teaching tool allows us to leverage its strengths while mitigating its limitations.

Keywords

ChatGPT, AI in language learning, Chinese language education, academic Chinese writing

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1. Introduction

Since its debut in the autumn of 2022, ChatGPT, a generative artificial intelligence (AI, henceforth) model, has made a profound impact on our education and learning experiences. ChatGPT is an advanced language model developed by the United States-based startup OpenAI, designed to understand and generate human-like text. It can be used for a wide range of natural language processing tasks, such as answering questions, generating text, providing explanations, and engaging in text-based conversations with users (OpenAI, 2022). Due to these capabilities, ChatGPT may offer both advantages and challenges in how educators and students approach learning, similar to other chatbots discussed in Huang et al. (2022).

In the context of language teaching and learning, ChatGPT has proven advantageous for educators. Teaching practitioners can employ ChatGPT to create course materials that support language learning on a broader scale, as well as customized instruction tailored to individual needs (Cai, 2023b). For learners, chatbots like ChatGPT can serve various roles in enhancing language learning (Huang et al, 2022). As a teaching assistant, ChatGPT can offer personalized guidance tailored to individual needs, address questions, and offer feedback anytime anywhere. In the role of a peer, it can provide learners with a reference point and a platform for discussion without assuming an authoritarian role in the classroom, unlike a traditional teacher. However, ChatGPT is not without its limitations. ChatGPT may not be able to provide the desired results as instructed, and errors can even occur (Cai, 2023a). Learners may lack motivation to interact with chatbots like ChatGPT since it cannot engage in authentic human-like communication (Huang et al, 2022).

Similar to other teaching aids, when incorporating ChatGPT into the classroom, it is crucial not only to understand its advantages and disadvantages but also to assess its alignment with the learning objectives of specific classes. Additionally, it is essential to proactively investigate whether educational institutions have established any relevant policies or recommendations for the utilization of ChatGPT. In this paper, we examine how ChatGPT enhances the learning experience across three levels of Chinese language proficiency: intermediate-low and intermediate-high Chinese language classes for second language learners, and Academic Chinese Writing class for native speakers of Chinese. In the following sections, we first present the background of this study. It is followed by the curriculum design of the three Chinese language classes.

2. Background

2.1 Chatbots and language learning

Prior to the arrival of ChatGPT, researchers have begun exploring the potential of using computers as aids for language learning (Hubbard, 2022). The earliest chatbots relied on simple rules to simulate conversations, often based on grammar and vocabulary knowledge. These chatbots could answer basic questions but struggled with complex dialogues and nuanced language expressions (Hubbard, 2022). With advancements in AI technology, chatbots have improved, incorporating natural language processing and machine learning techniques to mimic human conversations more accurately. These chatbots, such as ChatGPT, now excel at understanding and responding to natural language input, enabling more sophisticated conversational capabilities. These technological advancements have paved the way for chatbots' applications in language learning (Fryer et al., 2019; Kuhail et al., 2023).

Researchers have identified various ways in which chatbots can assist in second-language classrooms. In a meta-analysis of 25 empirical studies on the use of chatbots in language learning, Huang et al. (2022) found that chatbots can provide valuable support in technology, teaching, and social communication aspects, but it also comes with certain limitations. In the realm of technology, chatbots

offer three key advantages: the ability to provide instant responses, user-friendliness, and personalized learning experiences. In terms of teaching, chatbots can serve as conversation partners for students, create simulated real-world contexts, offer educational materials, provide consultation services, and offer guidance. Lastly, regarding social interaction, students can engage in conversations with chatbots much like they would with other humans. For instance, students can express personal feelings they might not share in a classroom setting, engage in open and free-flowing communication, and even exchange greetings. However, it's important to note that chatbots have their limitations as well. First of all, on the technical front, chatbots may struggle to communicate effectively when students input incorrect language. Additionally, as chatbots may lack a natural human-like voice, facial expressions, and emotions, students' interest may wane over time. Additionally, while students' motivation to learn may initially increase due to curiosity about chatbots, this motivation might not be sustained over the long term (known as the novelty effect). Lastly, using chatbots may impose cognitive load on students, especially those with lower language proficiency, affecting their working memory resources.

The chatbots mentioned earlier were primarily employed for oral interactions. However, ChatGPT, the focal point of the present study, is exclusively designed for written communication. In the following section, we will discuss its functionalities in language classrooms.

2.2 Utilize ChatGPT in the Chinese language classroom

According to Cai (2023b), ChatGPT presents several features aligned with second language (L2) acquisition theories. First of all, ChatGPT boasts an extensive knowledge base and effectively retrieves relevant information to comprehend user inputs, enabling it to generate coherent responses. When provided with suitable prompts, ChatGPT can offer comprehensible input tailored to the learner's proficiency level. Second, by engaging with ChatGPT, L2 learners can engage in meaning negotiation, receive clarifications, and identify discrepancies between their L2 and L1 (first language). Third, ChatGPT can provide a variety of feedback types in response to learner prompts, including explicit and corrective feedback. Fourth, ChatGPT can facilitate input enhancement by incorporating frequent use of target vocabulary or structures, thereby heightening L2 learners' awareness of language forms and supporting L2 acquisition. Lastly, ChatGPT creates an ideal environment for L2 learners to generate a substantial volume of output through interactive exchanges and feedback loops.

In the context of the three Chinese language classes under examination, we encounter specific challenges when crafting classroom activities to align with our learning objectives. First, there is a notable disparity in writing proficiency levels among the students in these classes. On one hand, we have heritage students who exhibit a strong command of conversational language but struggle with structuring their thoughts into coherent written expressions. On the other hand, our second language learners require both vocabulary and grammar expansion beyond the classroom curriculum, as well as increased opportunities to actively engage with the target language. As discussed earlier, ChatGPT can provide comprehensible input tailored to the learner's proficiency level with appropriate prompts. When students have the option to receive personalized instructions, it can also serve as a motivating factor for their learning.

The second challenge our classroom faces revolves around providing various forms of feedback and ensuring its immediacy, particularly in larger class settings. Undoubtedly, ChatGPT can offer feedback at any time and in any location as long as internet service is accessible. Regarding the types of feedback, ChatGPT can tailor the feedback according to the prompts given. Learners have the option to request ChatGPT to review their target language and provide explanations for their mistakes. For more advanced learners, they can engage in discussions with ChatGPT about the feedback, employing high-order thinking skills such as analyzing and evaluating in the target language. When offering feedback, ChatGPT adopts a non-authoritative role, which learners may find more conducive to engaging in

back-and-forth discussions about their mistakes compared to their instructors. The classroom activities of providing personalized instructions and feedback will be demonstrated in the curriculum design section.

Similar to other teaching aids, when incorporating ChatGPT into the classroom, it is crucial not only to understand its advantages and disadvantages but also to assess its alignment with the class's learning objectives. Additionally, it is essential to proactively investigate whether educational institutions have established any relevant policies or recommendations for the utilization of ChatGPT. We will discuss these points below.

2.3 Institutional guidelines for using AI in the classroom

For the application of artificial intelligence in the classroom, our institution offers several recommendations. First, the use of artificial intelligence in the classroom should align with the learning objectives of the course. Second, course instructors may consider utilizing AI to assist students in engaging in deeper thinking, such as problem-solving, creativity, reflection, originality, and the application of advanced thinking skills like analysis and evaluation. Finally, course instructors should establish relevant regulations for the use of artificial intelligence (University of Toronto, 2023, Generative Artificial Intelligence in the Classroom). These recommendations echo the core idea mentioned in the introduction of this paper that, regardless of the technology employed, curriculum design should remain central to teaching.

Next, we will provide a brief description of a design concept that permeates these three Chinese courses: backward design.

2.4 Backward design

Backward design, proposed by Wiggins and McTighe (2005), is a teaching approach that focuses on goal-oriented curriculum and instruction, working backward to determine the necessary steps to achieve these goals. The three stages of backward design include:

- 1. Establishing Expected Learning Outcomes: Identifying specific learning objectives and purposes that students are expected to achieve.
- 2. Confirming Acceptable Evidence: Teachers must determine how they will assess students' understanding and mastery of the learning objectives.
- 3. Designing Learning Experiences and Teaching Activities: Designing specific activities, courses, and teaching strategies to help students achieve the established learning objectives.

As an example in this context, when considering the use of ChatGPT as an instructional aide, we first examine the learning objectives of the course, such as students in an intermediate Chinese class being able to engage in written communication or discussions using the vocabulary, grammar points, and topics covered in class. Next is the design of assessment methods and content that allow students to demonstrate their achievement of these learning objectives. Continuing with the example, this assessment could be an extension of the course topics, with written discussions taking place between students or comments posted on websites with relevant topics. Finally, the design of activities that will help students achieve the learning objectives, such as designing a series of scaffolding activities that allow students to engage in several rounds of conversation and discussion with ChatGPT using the predetermined vocabulary, grammar points, and topics, followed by feedback from the teacher after the activity is completed.

In the upcoming sections, we will outline the curriculum design for the three language classes, taking into account the characteristics of ChatGPT discussed earlier, the institutional guidelines for AI usage in educational settings, and the principles of backward design.

3. Applying ChatGPT in an Intermediate-Low Chinese Class

3.1 Background

3.1.1 Course overview

This Chinese class is designed for students at the intermediate-low level of Chinese proficiency. The textbook currently in use is *Modern Mandarin Chinese: The Routledge Course* (Ross, He, Chen, and Yeh, 2022) Volume Two published by Routledge. This course aims to further build upon the foundation of vocabulary and grammar, enabling students to engage in authentic oral and written communication based on specific real-life scenarios. The course spans 12 weeks, with classes held twice a week, each lasting for two hours. The curriculum covers lessons 20 to 25. The main topics covered include seeking medical treatment, changes in weather and climate, engaging in physical exercise, shopping, and bargaining, and celebrating the Spring Festival.

3.1.2 Learning needs of intermediate-low learners

The class has a total of 13 students, including 10 Chinese descent students, among whom 5 have a Cantonese background. There are 3 non-Chinese descent students, mainly from South Korea, Indonesia, and Pakistan. Due to differences in family cultural backgrounds and learning experiences, the students' proficiency levels vary in listening, speaking, reading, and writing. According to the American Council on the Teaching of Foreign Languages Proficiency Guidelines 2012 (ACTFL, 2012), students at the intermediate-low level are able to generate language in simple social contexts, effectively handling a limited number of uncomplicated communication tasks. Communication is restricted to specific conversations necessary for survival and foreseeable topics.

In terms of vocabulary, intermediate-low Chinese proficiency students already possess a certain vocabulary reserve, but their breadth is still limited. When learning new vocabulary, the textbook provides a somewhat restricted list, leaving students with a sense of wanting to use words they lack. In regard to grammar, students have a basic proficiency. However, there is still a need for further expansion and reinforcement, especially in dealing with problematic words and question types. In terms of cultural understanding, students at the elementary level have begun to be exposed to cultural awareness. By the intermediate-low stage, students show a great interest in wanting to delve deeper and gain a more comprehensive understanding of Chinese culture. Therefore, the accumulation of vocabulary, grammar, and cultural awareness is the requirement for low intermediate proficiency students, and the ability to proficiently apply these in real-life situations is an urgent necessity.

3.2 Motivation for using ChatGPT

There is no doubt that one of the goals of second language learning in Chinese is to apply learned vocabulary, grammar, and cultural understanding in practical communication. Effectively practicing in the classroom or outside is crucial. Dialogues are a widely used and effective means of both oral and written communication. In the past, teachers typically engaged with students in a fragmented manner, conducting dialogues by first asking student A a question, and then moving on to student B to complete the conversation on the same topic. Conducting complete dialogue practice with each student would consume a significant amount of class time. Additionally, in terms of cultural application, many times students lack real-life experiences.

However, ChatGPT has a natural advantage in personalized and differentiated learning. On one hand, it has the ability to rapidly generate information and possesses powerful human-computer dialogue capabilities. Using it for one-on-one interaction enables personalized learning and practice for each

student simultaneously, thereby achieving classroom efficiency. On the other hand, using ChatGPT as a resource for collecting language and cultural information and as a conversation partner allows students to engage in differentiated learning based on their specific needs in vocabulary, grammar proficiency, and depth of cultural understanding, providing valuable support to the teacher.

Next, following the backward design approach, we will use lesson twenty-four as an example to report on the potential assistance provided by ChatGPT in three aspects: teaching objectives, teaching assessment, and learning activities.

3.3 Curriculum design

3.3.1 Learning outcomes

The theme of lesson twenty-four is bargaining in a clothing store. There are four teaching objectives:

- 1. Acquire new key vocabulary based on individual needs.
- 2. Strengthen the application of different question words, question sentence structures, and new grammar in dialogues.
- 3. Understand discounts and be able to bargain in real-life situations.
- 4. Explore cultural information related to bargaining in China.

3.3.2 Assessments

Assessing dialogue communication in second language Chinese is a time-consuming aspect of teaching. Although ChatGPT is currently limited in its ability to handle voice, it can still participate in written assessments as a conversation partner. It can also serve as a written assistant for oral assessment preparation, followed by actual oral interaction with the teacher or classmates. The assessment objective is to evaluate students' ability in dialogue communication and demonstrate their understanding and application of vocabulary, grammar, and bargaining.

The following are the specific steps for ChatGPT to directly participate in written assessments as a conversation partner:

- 1. Scenario Explanation: The students will choose a specific date (such as Singles' Day), a local store in China, and an item to purchase (e.g., a dress or a pair of pants). They will need to interact with a salesperson, inquiring about the price, size, and color of the chosen item. Additionally, they will utilize bargaining techniques to obtain a lower price.
- 2. Assessment Procedure: Each student will engage in an interaction with ChatGPT. The student will take on the role of the customer, using various types of questions (yes-no questions, multiple-choice questions, questions with interrogatives, tag questions) to inquire about specific clothing items, request size and color preferences, and employ the grammar points listed in this lesson for bargaining. Each student is expected to complete at least 5 rounds of questioning and answering. The goal is to secure a discount of at least 30%. Afterward, the student will capture screenshots of the dialogues.
- 3. Self-Assessment: Following the dialogue, students will reflect on their performance and compare it to the assessment criteria. They will identify their strengths and areas for improvement. Subsequently, they will submit the dialogue screenshots along with their self-assessment.

In the above teaching assessment, students are expected to type Chinese. Using ChatGPT as an auxiliary tool demonstrated several advantages:

1. Personalized Assessment: ChatGPT allows each student to have a unique interaction and receive tailored responses.

- 2. Real-time Feedback: Students receive immediate feedback during the conversation, enhancing their learning experience and allowing them to make corrections in real-time.
- 3. Low-pressure Environment: Compared to traditional assessments with teachers, interacting with ChatGPT may make students feel more comfortable, thereby reducing anxiety and achieving a more effective assessment.
- 4. Cultural Enrichment: This lesson involves the cultural phenomenon of bargaining. Since some students may lack practical experience in this area, utilizing ChatGPT can collect valuable information to help students understand this unique cultural practice.

It's important to note that while students primarily learn spoken communication, there may be occasional instances of written language appearing during interactions with ChatGPT in Chinese characters. However, this does not directly impact the communication of the dialogue or the assessment.

3.3.3 Learning activities

This lesson includes four teaching activities designed to align with the teaching objectives and adequately prepare for the teaching assessment:

- 1. Vocabulary Brainstorming: Building on students' pre-class vocabulary preparation, the theme of clothing is chosen. Students take turns listing vocabulary related to different types of clothing, such as pants, jackets, and so forth. Then, each student consults ChatGPT to inquire about at least two words related to clothing that they find interesting but were not covered in the textbook, thereby expanding and enriching their vocabulary.
- 2. Bargaining Sentence Structure Study: Firstly, students learn the sample dialogues provided in the textbook. Then, they are divided into groups. Each group uses ChatGPT to discover phrases and expressions for bargaining that are not covered in the textbook. They compile a list and record key considerations for bargaining, then share their findings with other groups.
- 3. Dialogue Practice: With a foundation in vocabulary and grammar, each student engages in a conversation with ChatGPT centered around purchasing clothing. They discuss aspects such as the size, color, and price of the clothing. This task can be completed individually or as a whole class. During the conversation, they have the option to request ChatGPT to provide pinyin and English meaning as a reference. (Appendix 1)
- 4. Cultural Understanding: Students inquire ChatGPT about information regarding popular shopping festivals in China, traditional bargaining customs, or famous markets where people often seek discounts. This helps students gain a deeper understanding of the cultural background related to bargaining in China, broadening their knowledge base and enabling them to better apply this understanding in language communication.

3.4 Reflection

3.4.1 Student reflection

The benefits that students gain through these activities are:

- 1. Learn some new vocabulary; help with character recognition and increase reading speed; improve reading comprehension.
- 2. Review previously learned problematic words and question sentence structures; master new interrogative words; deepen understanding of language knowledge points while applying new grammar.
- 3. Gain more confidence in written communication.

- 4. Practice how to bargain through conversation with a seller.
- 5. Engage in conversations with ChatGPT exercised various critical thinking abilities.

Engaging with ChatGPT in the above activities also presented challenges, 1) While having English translations, the use of new vocabulary, advanced grammar, and complex sentence structures in ChatGPT's responses impacted reading and comprehension to varying degrees. 2) It was difficult to continue new conversations as ChatGPT often repeated similar responses. 3) Judging potentially incorrect answers or responses from ChatGPT was sometimes challenging.

3.4.2 Teacher reflection

In these activities, ChatGPT serves as both a source of information and a conversation partner. Students not only consolidate their language knowledge through practice but also experience the enjoyment of bargaining. Additionally, the responses provided by ChatGPT can serve as additional reading materials for students with different language proficiency levels. It is worth noting that in practical implementation, providing specific and clear instructions is crucial for achieving the best activity outcomes. Students may also need to be patient and make multiple attempts to achieve mastery.

Of course, the biggest question here is whether conversations with ChatGPT can be as engaging as conversations with real people. We acknowledge that ChatGPT has not yet reached the level of flexibility in human interaction. However, as a conversation partner, it already serves a purpose in written dialogue communication for intermediate-low Chinese learners, effectively fulfilling its training objectives.

ChatGPT, as an auxiliary tool, provides a platform for students to access language and cultural knowledge beyond the textbook. It serves as a conversation partner for students, assisting in personalized and differentiated learning in the classroom, and even aids in teacher assessments. It reinforces written dialogue practice, ultimately enhancing classroom efficiency. Therefore, the application of ChatGPT holds practical significance in 21st-century Chinese language learning classrooms.

4. Applying ChatGPT in an Intermediate-High Chinese Class

4.1 Background

4.1.1 Course overview

This Chinese Intermediate High course is designed for learners of Chinese Mandarin as a second language, based on the ACTFL Proficiency Guidelines 2012 (2012), specifically targeting the Intermediate-High level. This course utilizes the Chinese textbook Expressive Chinese: Culture and Communication in a Changing China (Gao & Sun, 2021) published by Cheng & Tsui Company in Boston. The course is designed for a duration of 12 weeks, meeting once a week for three hours each session. Its primary goal is to assist students in enhancing and developing their language abilities in the interpretive, interpersonal, presentational, and intercultural domains, progressing from intermediate to intermediate-high proficiency. Upon successful completion of this course, students are expected to improve their listening and speaking skills in everyday life and social situations, enhance their reading and writing abilities for everyday topics, and foster cultural awareness for effective cross-cultural communication.

4.1.2 Characteristics of ACTFL intermediate-high Chinese writing proficiency

According to the ACTFL Proficiency Guidelines 2012 (2012), students at the Intermediate-High level possess the ability to meet the demands of all practical writing tasks at the intermediate level. They can

narrate and describe events in different time frames related to everyday life and situations, with these narratives and descriptions often but not always forming paragraphs. To provide a clear illustration of this proficiency level, ACTFL writing guidelines (2012) offer a detailed explanation. In their written work, students may not consistently employ appropriate primary temporal connectors, leading to occasional ambiguity. Students can also formulate written responses to simple questions and pose queries themselves, utilizing vocabulary, grammar, and a style that closely resembles spoken language. While there may be several noticeable errors, their writing is typically comprehensible to native speakers, albeit with occasional comprehension gaps. Upon successful completion of the Chinese Intermediate High course, students are expected to meet the aforementioned objectives described in the ACTFL.

4.1.3 Characteristics of the class

This class comprises seven students, each with varying language proficiency levels and language usage backgrounds. Two students come from Mandarin-speaking families in Canada, three students have Chinese-speaking backgrounds with different dialects from various countries and regions, and two students are from Thailand and South Korea. Students from both Mandarin-speaking and Chinese dialect-speaking backgrounds have directly enrolled in this course, while the other two students, who do not have a Chinese language background, have completed prerequisite courses for this class. They represent diverse majors, ranging from first-year to fourth-year students at our university.

4.2 Motivation for using ChatGPT

Based on the description of Intermediate-High writing proficiency according to ACTFL guidelines 2012 (ACTFL, 2012), students often construct paragraphs by loosely stringing together sentences. Students in the class, especially those without a Chinese-speaking background, exhibit this characteristic. Therefore, extensive writing practice is essential. However, the teacher's guidance time is limited and often cannot provide timely feedback and guidance. ChatGPT, as a widely used and powerful AI tool, offers students the opportunity to ask questions at any time and receive immediate feedback and suggestions. Furthermore, the information provided by ChatGPT is based on real text data, making it reasonably reliable. Additionally, ChatGPT excels at addressing common sentence structuring issues among students, effectively correcting vocabulary, basic grammar, and expression problems. It is particularly skilled at helping students organize scattered sentences, practice constructing sentences, and use connecting words to form paragraphs, thereby improving the logic and coherence of their writing. For students in the class, this is crucial for enhancing their writing skills and progressing from Intermediate-High to Advanced levels. Furthermore, ChatGPT can play the role of a partner, providing assistance at all times without feeling fatigued or imposing teacher authority. Therefore, ChatGPT is considered the preferred auxiliary tool for this class.

4.3 Curriculum design

4.3.1 Learning outcomes

In assessing students' writing according to ACTFL Intermediate-High guidelines, it is observed that students face certain issues in their writing, including loose sentence structures, disjointed paragraphs, lack of time cohesive devices, and informality in vocabulary and style. Consequently, after studying the seventh lesson, *Music Time Machine*, a narrative text with a primary focus on chronological order, I will specifically address these aspects in the narrative writing practice, tailoring instruction to develop students' writing skills.

The writing tasks at the Intermediate-High level aim to cultivate students' transition from sentence to paragraph construction, with connecting words playing a crucial role in ensuring smooth transitions

between sentences and making paragraphs logical, clear, and cohesive. Therefore, the development of connecting words is also an essential component of this lesson's teaching objectives. The specific teaching objectives include:

- 1. Assisting students in transitioning from colloquial vocabulary to more formal vocabulary and style.
- 2. Cultivating students' ability to accurately use time cohesive devices to link sentences, enhancing the logical structure of time narratives and the clarity of paragraph organization, resulting in more fluent expressions.
- 3. Developing students' capacity to write narratives and descriptions at the Intermediate-High level.
- 4. Encouraging the development of students' critical thinking.

4.3.2 Assessments

Assessment is an effective means of determining whether learning activities have achieved the intended objectives. In assessing whether students can achieve the expected teaching objectives through this course's activities, ChatGPT serves as a helpful assistant to provide substantial support.

- 1. Task-Based Assessment: Teachers can design topics related to real-life scenarios, requiring students to write a short narrative essay. For example, students can be asked to introduce their growth experiences under the theme My Growth Journey, with a focus on assessing whether they can accurately use time cohesive devices to logically connect sentences into paragraphs. After completing the initial draft, students can input ACTFL Intermediate-High writing guidelines and the course's learning objectives into ChatGPT for assessment criteria and then input their drafts to receive immediate feedback.
- 2. ChatGPT Assessment: ChatGPT can automatically evaluate students' initial drafts, including vocabulary, grammar, the use of time cohesive devices, and the logical relationships between sentences.
- 3. Practice Assessment: Teachers can ask ChatGPT to generate a short narrative primarily focused on chronological order at the Intermediate-High level. Subsequently, teachers can split sentences related to chronological order in the text and shuffle their order, requiring students to rearrange these sentences. This exercise can assess whether students can proficiently master time cohesive devices.

4.3.3 Learning activities

The main text of Lesson 7, *Music Time Machine*, is an article that narrates how music has accompanied the author throughout their life, structured around a clear chronological order. After studying this lesson, the teaching activity aims to allow students to practice temporal connectors and narrative descriptive styles by writing a short essay on the topic of *High School Life*. The specific steps are as follows:

- 1. Students create an initial draft around the given theme.
- 2. Subsequently, they input the initial draft into ChatGPT to receive a modified version and suggestions.
- 3. Students perform a comparative analysis between their initial draft and the ChatGPT version, considering differences in vocabulary, grammar, time connectors, language structure, and fluency. They must determine which version is superior, whether it is ChatGPT's or their own, and explain the reasons.
- 4. Students can further interact with ChatGPT, asking more questions, particularly regarding temporal connectors. They can inquire about the presence of time connectives, which time

connectives were used, and whether using these connectors improved the coherence between sentences, and how did they improve the coherence. They can also inquire about why ChatGPT selected a particular word and whether using that word benefits the essay.

- 5. Reconsider ChatGPT's explanations and decide whether to accept ChatGPT's suggestions.
- 6. Finally, engage in reflection and produce their own final drafts.

4.4 Reflection

Throughout the entire activity, ChatGPT functions as an enthusiastic peer for students, offering feedback and clarification whenever needed, and providing opportunities for thought and inspiration for students' critical thinking development. In this writing class, ChatGPT also plays the role of a teacher's assistant by offering suggestions for students' essays, helping them gain a clearer understanding of vocabulary, grammar, and especially the use of time-cohesive devices in sentence and paragraph construction.

As an auxiliary learning tool, students in this Intermediate-High class recognize ChatGPT's valuable contribution to their acquisition of specific writing skills and objectives. However, some students have expressed concerns that they might rely too heavily on ChatGPT for direct writing assistance, rather than independently generating their own content. Therefore, while guiding students in using ChatGPT to enhance their writing skills, teachers should provide clear instructions on its proper and effective use, while also emphasizing what students should avoid. For instance, students should refrain from requesting ChatGPT to write initial drafts or provide direct answers without engaging in critical thinking first when comparing their initial versions with ChatGPT's suggestions.

5. Applying ChatGPT in Chinese for Academic Purposes

5.1 Background

5.1.1 Course overview

Chinese for Academic Purposes is a course designed for native or near-native speakers of Mandarin Chinese. It consists of two stages: the first stage focuses on descriptive, narrative, expository, and persuasive writing, while the second stage concentrates on academic writing in Chinese. Each stage of the course consists of a total of 12 sessions, each spanning 3 hours and conducted on a weekly basis.

5.1.2 Characteristics of the class

In this course, there is a cohort of 30 students, all of whom are native Chinese speakers hailing from China. Their Chinese language proficiency, overall, exhibits characteristics of being relatively low and diverse in nature. This variance can be attributed to the fact that these students arrived in Canada at various stages of their primary and secondary education. Subsequently, they have had limited exposure to formal Chinese language education, resulting in their Chinese language proficiency largely remaining at the level it was when they first arrived in Canada.

5.1.3 Learning needs of academic Chinese class

As a course aimed at improving students' Chinese academic writing abilities, its notable characteristic is its practical application and autonomous learning. In other words, the challenges of the course do not solely involve delivering class content, writing conventions and techniques, as these aspects are relatively straightforward to grasp. Instead, the emphasis is on tailoring the content to each student, enabling them

to autonomously apply the acquired knowledge according to their specific requirements and address their weaknesses in writing.

One way to assist students in becoming autonomous learners is by practicing metacognitive writing strategies. As advised by Wang (2017), successful students incorporate planning, monitoring, evaluating, and cognitive control into their writing process. Therefore, students should seize the opportunity presented by multiple-draft writing to apply these metacognitive skills to the progression of their texts (Wu, 2004, as cited in Lv & Chen, 2010). However, it is not feasible to assign only one instructor to achieve such a high frequency of interaction in a class of 30 students.

5.2 Motivation for using ChatGPT

In light of the challenges posed by the *Chinese for Academic Purposes* course, ChatGPT emerges as a valuable solution. As a generative pre-trained transformer, ChatGPT can leverage its vast database of information to provide immediate feedback without any limitations on frequency. These advantages make ChatGPT an ideal assistant, aiding students in self-directed learning and enabling them to continually adapt their learning goals and methods as they progress. The subsequent sections will explore the role of ChatGPT as a facilitator in the *Chinese for Academic Purposes* course, adhering to the structure and conventions of the backward design curriculum (Wiggins and McTighe, 2005), which emphasizes creating assessments and learning activities based on the initial goal and learning outcomes.

5.3 Curriculum design

5.3.1 Learning outcomes

ChatGPT's support for establishing learning outcomes primarily centers on personalized learning objectives and pace setting.

In teacher-centered learning environments, students frequently exhibit reduced motivation and tend to remain reticent. Within the context of a writing course, a highly effective approach to enhancing writing skills involves the continual adaptation of writing plans, enabling students to autonomously determine their own learning pace (Tuvachit and Soontornwipast, 2018). ChatGPT can contribute to this regard. It can assist each student in recognizing their own knowledge background, writing skills and critical thinking abilities. By analyzing the gap between their current Chinese writing proficiency and the desired end goal, ChatGPT can provide suggestions to each student for scientifically allocating the workload and time for each session. The specific approach is outlined as follows:

- 1. Establish course and unit learning outcomes by the instructor.
- 2. Create self-diagnostic test aligned with course outcomes and unit objectives.
- 3. These tests can be developed by the instructor as a standardized, non-graded assessment, or personalized writing skill estimation tools can be generated by ChatGPT based on individual student characteristics.
- 4. Prior to classes, students complete the self-diagnostic test.
- 5. ChatGPT rates and delivers a comprehensive evaluation, analysis, and recommendations based on each student's test results, aligning them with the course learning outcomes.
- 6. Through discussions with ChatGPT, students gain a clear understanding of their writing strengths and weaknesses, enabling them to allocate their efforts and time effectively, identify areas of focus for learning, and determine the most effective strategies to achieve their goals.

Through these steps, students will have the opportunity to develop personalized learning approaches. However, why should ChatGPT be responsible for completing this task instead of the instructors? There are two main reasons. Firstly, this step needs to be completed before the course begins, which imposes

significant time constraints. With its ability to provide immediate responses, ChatGPT can avoid the delays often associated with human-generated feedback. Secondly, ChatGPT offers highly detailed evaluation and analysis. This unique advantage allows students to engage in extensive and iterative conversations with ChatGPT, thereby enhancing their understanding of their areas of improvement and facilitating discussions on personalized learning methods.

5.3.2 Assessments

ChatGPT excels in confirming acceptable evidence through its progressive and dynamic assessment.

Instructors typically provide assessments once assignments are completed, which means students rarely receive one-on-one feedback and analysis from the instructor during the assignment process. This approach has a drawback as it does not allow students to recognize which aspects of their writing meet the guidelines and which ones require improvement. This is where ChatGPT can play a crucial role in assessing and offering suggestions. ChatGPT can provide indispensable feedback at this stage, helping students become aware of the strengths and weaknesses in their essays. To illustrate this, researchers designed an assessment workshop wherein ChatGPT provided reviews and assessments for students' work. The specific process unfolded as follows:

- 1. Students submitted their essay titles, introductions, and outline drafts for initial evaluation by the instructor.
- 2. Classmates extended reviews and evaluations of students' essay titles, introductions, and outlines, utilizing a set of 11 assessment questions devised by the instructor.
- 3. In parallel, ChatGPT delivered reviews and evaluations of students' essay titles, introductions, and outlines, employing the identical set of 11 assessment questions.
- 4. Students engaged in a comprehensive assessment, selection, and modification process for their essays, leveraging the feedback provided by both classmates and ChatGPT (Appendix 2).
- 5. Students embarked on a self-assessment, summarizing the improvements observed in their writing by comparing the initial draft with the final version. Furthermore, they engaged in reflective analysis, outlining the strategies that facilitated their improvement. Subsequently, both the initial draft and the final draft were submitted together.

The instructor conducted a comprehensive evaluation of the final drafts.

Within the aforementioned workshop, ChatGPT played an active role in assessing students' essays and offering modification suggestions. This twofold engagement allowed students to gain an external perspective on their essays, receiving constructive advice to enhance their writing. Furthermore, students had the opportunity to critically evaluate ChatGPT's suggestions and assessments, drawing comparisons with classmates' assessments and recommendations. In this manner, they refrained from passively relying on ChatGPT, thereby elevating the precision and reliability of the assessment process.

Simultaneously, the results of this activity underscore that ChatGPT's provision of reviews and assessments to students consistently excels in terms of both comprehensiveness and accuracy when compared to classmates' reviews (Appendix 3). In fact, in terms of both depth and breadth, ChatGPT's feedback occasionally surpasses that of the instructor. This phenomenon is primarily attributed to the logistical and temporal constraints associated with expecting an instructor to conduct a detailed assessment of essay titles, introductions, and outline drafts for all 30 students using the set of 11 assessment questions.

5.3.3 Learning activities

When it comes to learning activities, ChatGPT provides extensive and comprehensive support for both in-class and post-class learning.

During class sessions, instructors can integrate ChatGPT into various activities to foster an engaging learning environment and guide students on effective utilization of ChatGPT. Also, students can personally request specialized writing training from ChatGPT after class, tailoring their learning methods to their individual writing abilities, learning objectives, preferences, and academic disciplines. There are two groups of activities. The first group targets Chinese writing knowledge and skill:

- 1. Refining knowledge: Students list the key features of a particular genre or academic writing style covered in the course and explore additional insights from ChatGPT to fill in any gaps. Through reflection and evaluation, students enhance their retention and comprehension of Chinese writing knowledge.
- 2. Analogical Learning: Students seek additional examples from ChatGPT to deepen their understanding of a specific genre or academic writing style that they may have struggled to grasp. This activity broadens their reading scope and deepens their understanding of different writing styles.
- 3. Practical reinforcement: ChatGPT provides students with a variety of works in different genres. Students read and analyze these texts, apply their knowledge of writing genres to identify their classifications, and outline criteria for evaluation. Subsequently, they can engage in discussions with ChatGPT to validate their judgments and enhance their ability to discern genres.

The second group focuses on general writing skills:

- 1. Ideation support: Students discuss with ChatGPT in generating extra materials and ideas for their writing, thereby aiding them in enhancing the structure and design of their articles.
- 2. Pursuing excellence: Building upon their initial drafts, students request ChatGPT to generate multiple revised versions or showcase works by esteemed authors on the same topic. By comparing and evaluating elements of writing such as word choice, sentence structure, and paragraph organization, students enhance their own writing through observation and reflection, striving for excellence.
- 3. Writing Style Identification Game: ChatGPT presents a paragraph written by a renowned author, and students engage in a fun test to determine if it was indeed authored by the specified writer based on their distinctive writing style. However, at times, ChatGPT may provide misleading information, offering a paragraph that is not actually written by the designated author. In such cases, students need to verify the authenticity of the paragraph through other means and then they can either commend or question ChatGPT's judgment. This interactive activity strengthens students' understanding of various writing styles.

In the mentioned learning activities, ChatGPT consistently offers students a wealth of information and advice that often surpasses the capacity of teachers. Given the wide range of student writing topics and academic research directions, instructors have limited access to knowledge reserves, whereas ChatGPT, with its ability to search the entirety of the Internet, possesses extensive knowledge. However, it is crucial for students to maintain constant vigilance and exercise critical thinking to evaluate the accuracy of the information provided by ChatGPT.

5.4 Reflection

One of the primary considerations when utilizing ChatGPT as an auxiliary teaching tool in Chinese academic writing is its level of Chinese proficiency in guiding students' writing. Although ChatGPT generated content may not be flawless, it does not impede its integration into the learning process. This is because ChatGPT is not employed in a didactic manner to dictate student writing; rather, it assumes the role of a peer, offering a point of reference, a platform for discussion. Students do not blindly follow ChatGPT's suggestions; instead, they engage in dialogue, approach it critically, discuss its recommendations, reflect on them, and strive for improvement.

In the preceding assessments section, reference was made to a workshop activity, exemplified by the student worksheet responses provided in Appendix 3. It is noteworthy that, in evaluating ChatGPT's suggestions and assessments, students did not adopt a passive stance but rather engaged in critical reflection. For instance, in second reviewing question, ChatGPT suggested that the student narrow down their essay's title from Analysis of Fragmented Information Dissemination in the Fast-Food Era: A Case Study of Short Videos to The Impact of Short Videos on Fragmented Information Dissemination: A Case Study of TikTok. However, after critical thinking, the student decided to reject ChatGPT's recommendation, stating I find the suggestions provided by AI worth considering because using a specific platform as an example would offer more targeted insights. However, I am also contemplating that since short videos constitute a broad category and fragmented dissemination is a common characteristic among them, narrowing it down to a single platform might impose certain limitations. From this perspective, ChatGPT functions as a peer-assistive tool, promoting independent thinking among students, while instructors can effectively capitalize on its strengths while mitigating its limitations.

The applications of ChatGPT in *Chinese for Academic Writing* only scratch the surface of its functionalities that are customized to suit the specific characteristics of the course. They primarily revolve around personalized learning outcomes, timely and comprehensive dynamic assessment feedback, and flexible and targeted learning activities. In fact, instructors can harness the advantages of ChatGPT based on the specific characteristics of different courses and seamlessly integrate it into the learning process as a versatile tool. By doing so, ChatGPT has the potential to become an exceptionally engaging and invaluable assistant, greatly enhancing the overall learning experience.

6. Conclusion

The integration of ChatGPT into Chinese language classrooms has shown promise in enhancing the learning experience across different proficiency levels. In this study, we explored its application in three Chinese language courses: Intermediate Low Chinese, Intermediate High Chinese, and Academic Chinese Writing. Using a backward design approach and adhering to institutional AI guidelines, we leveraged ChatGPT to support teaching objectives, assessment, and learning activities.

In the Intermediate Low Chinese class, ChatGPT served as a personalized conversation partner and cultural resource, improving classroom efficiency, and offering students opportunities to practice dialogue communication. In the Intermediate High Chinese class, ChatGPT proved valuable for improving students' writing skills. It provided timely feedback and guidance, helping students refine their narrative writing skills. In the Academic Chinese Writing class, ChatGPT played a pivotal role in providing personalized analysis, dynamic assessment, and flexible learning activities, empowering students to take control of their learning journey. Throughout these applications, ChatGPT functioned as a peer-assisting tool, fostering critical thinking and reflection, although it has limitations in human-like communication.

In conclusion, ChatGPT's integration into Chinese language classrooms has showcased its potential as a versatile instructional tool. By aligning its use with specific course objectives and leveraging its capabilities, educators can enhance language learning and provide valuable support to students at various proficiency levels. The introduction of ChatGPT as a peer-assisting tool allows us to capitalize on its strengths, contributing to more effective language education in the future.

Appendix 1

Intermediate-low Class Dialogue Practice Example

我: "您好! 欢迎来我的店。你想买什么衣服?"

Nín hǎo! Huānyíng lái wǒ de diàn. Nǐ xiǎng mǎi shénme yīfu?

"Hello! Welcome to my store. What kind of clothes would you like to buy?"

R 你好。我想买一条裙子。



我: "好的, 我们这里有许多不同款式的裙子。您喜欢什么样的颜色和长度?"

Hǎo de, wǒmen zhèlǐ yǒu xǔduō bùtóng kuǎnshì de qúnzi. Nín xǐhuān shénme yàng de yánsè hé chángdù?

"Alright, we have many different styles of skirts here. What color and length do you prefer?"

R 我喜欢白色。你有没有长裙?



我: "当然有,我们这里有许多白色的长裙可供选择。您想要什么样的款式呢?"
Dāngrán yǒu, wǒmen zhèlǐ yǒu xǔduō báisè de chángqún kě gōng xuǎnzé. Nín xiǎng yào shénme yàng de kuǎnshì ne?

"Of course, we have many white long skirts to choose from. What style are you looking for?"

R 我想要白色的长裙。你有中号吗?



我: "当然有了,我们有白色长裙的中号尺寸。请跟我来,我会带您去看看。"

Dāngrán yǒu le, wǒmen yǒu báisè chángqún de zhōng hào chǐcù. Qǐng gēn wǒ lái, wǒ huì dài nín qù kànkan.

"Of course, we have the medium size for white long skirts. Please follow me, I will take you to have a look."

Appendix 2

Chinese for Academic Purposes Assessment Worksheet

论文选题与构架再确认: ChatGPT Review and Peer Review

我最初的论文题目、前言和大纲

满分 5 分. Quercus 中老师给我的本次作业评分是: 分。

同学的 ChatGPT 我的思考和取舍(哪 给 同 学 给 ChatGPT 改进后的文 Review 的 Review 一个 Review 更加 Review Review 打分, 本是什么? 评述和 评述和建 中肯或者更富创见, 打分, 每 每项10分 为什么这么 我会接受谁的建议, 项 10 分 建议 改?对比原 还是原文更好)。 文有哪些提

为什么?

高? 改进后题

- 1) 题目是否适合学院报告?研究题目的答 案是否值得花时间去探索?为什么?
- 2) 题目范围是否合适?
- 3) 题目是否表明作者的立场?
- 4) 身为一个读者, 这个题目是否能引起 你的兴趣? 为什么?
- 5) 前言结构是否清楚? 你是否能清楚看 到研究动机、问题意识以及分析步 骤?

6) 前言的内容是否吸引你, 让你想阅读 他/她的报告?为什么?

7) 大纲有没有把前言中预告的问题和思 考步骤妥切地呈现在大纲标题中?

- 8) 大纲对读者的引导是否明确?
- 9) 大纲能不能表明作者的立场?
- 10) 大纲标题/副标题文字是否符合要求: 不是句子、没有错字、语义不清
- 11) 请补充任何你觉得可以帮助这位同学 改善他/她的题目、前言和大纲的建 议,以及你觉得这份论文大纲的优点。 请计算同学 Review 总分 (满分 110), 并简要评价同学评论给你的帮助 请计算 ChatGPT Review 总分 (满分 110),并简要评价 ChatGPT 给你的 帮助
- 12) ChatGPT, 请根据你给我的一系列建 议, 重新生成题目、前言和大纲

改进后前

言:

目:

改进后的

大纲:

满分5分, 我给 ChatGPT 这份作业 的评分是: 分。

13) 根据同学和 ChatGPT 的评论和建议, 我改进后的题目、前言和大纲 满分 5 分,我觉得我改进后的作业应得 分。

- 14) 相比上次使用 ChatGPT 修改前言, 你觉得这次使用的感受如何? 上一次重点是行文语调, 本次重点 是整篇论文的构架合理性与逻辑 性, ChatGPT 更擅长哪一项? 你对 ChatGPT 上次使用和本次使用的评分 分别是多少(满分10分)
- 15) 你觉得 ChatGPT 对你的论文写作能力提高有帮助吗? 这种帮助是如何实现的?

Appendix 3

Chinese for Academic Purposes Assessment Worksheet Example

同学的 Review	ChatGPT 的 Review 评述和建议	我的思考和	给同学	给	改进后
评述和建议		取舍 (哪一个	Review	ChatGPT	的文本是
		Review更加中	打分, 每	Review 打	什么?为
		肯或者更富创	项10分	分, 每项	什么这么
		见, 我会接		10分	改?对比
		受谁的建议,			原文有哪
		还是原文更			些提高?
		好)。为什么?			
1) 题目 本文题目适合学院报	您的论文主题非常适合学院报告, 因为研	此问题两者间	10	10	改进后题
是否适告。题目以短视频为	究碎片化信息的传播方式和影响是当前社	回答的差距不			目:
合 学 院 例研究碎片化信息的	会中非常重要的问题。此外, 您的论文主	大, 基本让			快餐时代
报告? 研 传播,说明了将以事	题涉及到短视频在当下社会中的影响, 这	我确认了此次			下碎片化
究 题 目 实逻辑为依据进行研	是一个非常流行的媒介形式,因此您的研	选题是可以			信息传播
的答案 究,表达相关知识,	究题目值得花时间去探索。	继续进行下去			分析-以
是否值 符合学院报告的标	您的论文大纲非常清晰明确, 涉及到了短	的。			短视频为
得花时 准。此外, 题目研	视频的兴起原因和特点、碎片化信息的定				例
间去探 究碎片化信息,符合	义和信息化时代的背景等内容, 并分析了				
索?为什 当下热点,具有现实	碎片化信息对个人和社会的影响。您提出				
么? 的需要, 因此研究题	了很多有见地的观点,并给出了合理的建				
目的答案值得花时间	议和结论, 可以对读者产生较大的启发和				
去探索。	思考。				
	总之, 您的研究题目和论文大纲都非常有				
	价值,值得花时间去探索和研究。				

9

题 题目范围合适。信息 根据您提供的论文主题和大纲, 似乎您 原本的题目我 9 2) 目范围 化传播分析概念较 的题目范围是合适的, 因为您在文章中着 已经在老师 是否合广,但是这位同学加重研究了短视频在碎片化信息传播中的作的建议下进行 入了"碎片化"这个 用和影响,并探究了碎片化信息对个人和 了修改,进 限定词,缩小了范围, 社会的影响。同时, 您也在文章中提到了 行了第一次的 同时以"短视频"为 信息化时代的背景和碎片化信息的定义等 缩 小, ai 所 例,聚焦相关问题,相关内容,这些内容可以为您的研究提供 给出的建议我 具有针对性。 必要的背景和支持。 觉得也可以考 如果您认为研究的范围过大或过小, 可以 虑, 因为用一 根据您的具体研究目的和时间限制进行适 个具体的平 当调整。例如,如果您想更深入地探究碎 台为例会更有 片化信息的影响, 可以将重点放在具体的 明确的针对 案例研究或实证研究上, 从而更深入地了 性。 但是我 解碎片化信息对个人和社会的影响。相反, 也在思考因为 如果您想将研究范围缩小, 可以将重点放 短视频是一 在短视频对碎片化信息传播的影响上, 从 个大的集合, 而更深入地了解短视频的传播方式和作用。 碎片化传播是 请给我一个缩小范围以后的题目 他们的共同特 根据您的研究兴趣和论文大纲, 我可以为 点, 所以细 您提供一个缩小范围后的题目:《短视频对 化到一个平台 碎片化信息传播的影响:以抖音为例》在 反而会有些局 这个题目中, 您可以将重点放在短视频在 限性。 碎片化信息传播中的作用和影响上, 通过 抖音这个典型的短视频平台进行具体分 析。您可以探究抖音作为一种新兴的媒体 形式,对碎片化信息的传播和使用产生的 影响,同时也可以深入研究抖音用户的行 为和心态等相关问题, 从而更全面地了解

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ChatGPT 在中文课堂中的应用

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摘要

本文探索 ChatGPT 作为教学工具在三门中文课程中的应用,并报告教师的反馈意见。ChatGPT 是一种人工智能(AI)聊天机器人,由 OpenAI 于 2018 年提出的 GPT 语言模型,利用 AI 模拟与用户进行类似于人类的对话的软件应用程序。本报告探讨了 ChatGPT 如何在不同水平的中文语言课程中提升学习体验。在设计 ChatGPT 支持的学习活动时,我们参考本校在课堂中使用人工智能的建议,并采用反向设计法 (backward design)。教学活动包括: 1)中级低级中文课程: ChatGPT 协助学生独立学习语法,并参与围绕课程相关文化见解的对话交流。2)中级高级中文课程: 学生利用 ChatGPT 获取背景信息,批判性评估内容,并要求对其文章进行语法审查。3)学术中文写作课程: 学生将作业评分标准输入 ChatGPT,ChatGPT 随后评估初稿并提供建设性的修订建议。学生对 ChatGPT 的初稿评估进行批判性反思并进行相应的修订。授课教师认为 ChatGPT 因其灵活、及时和大信息量等优势,丰富了学习体验。ChatGPT 不在课堂中扮演权威角色,而是作为同侪,为学生提供参考和讨论的平台。学生积极参与批判性思考、讨论、反思,并通过与 ChatGPT 的对话自主寻求改进写作结果。从同侪的角度引入 ChatGPT 辅助教学,使我们能够充分利用其优势,同时克服其局限性。

关键词

ChatGPT; 语言学习中的人工智能; 中文语言教育; 学术中文写作

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