

IELTS Listening Teaching Empowered by Artificial Intelligence

Qinqin Wei¹

¹ Wuhan Textile University, Wuhan 430073, China

ABSTRACT

The national strategy of building a strong an education powerhouse urges the academic community to accelerate the deep integration of artificial intelligence (AI) and higher education. AI technologies can help resolve long-standing dilemma in IELTS listening instruction. After analysing the specific difficulties of teaching IELTS listening in the Chinese learning context, this paper reports on classroom practices empowered by AI. It claims that AI promotes personalised learning, delivers large-scale differentiated instruction, and raises teaching efficiency. Enhancing university teachers' AI literacy is therefore identified as the key to realizing the digital transformation of education.

Keywords: *Being empowered by artificial intelligence, IELTS listening, Personalized learning, AI literacy.*

1. INTRODUCTION: BACKGROUND AND LITERATURE

To promote the modernization of education and build an education powerhouse, China officially launched the "Strategy Action on Digitalization of Education" in 2022, and the in-depth integration of digital technology into education thus entered a stage of full implementation. In March 2025, at the Strategy Action on Digitalization of Education deployment meeting themed "Artificial Intelligence and Educational Transformation," Minister Huai Jinpeng emphasized that "schools at all levels and of all types should guide teachers and students to use intelligent tools correctly"[1] and to cultivate talents with digital literacy for the nation. In August of the same year, the State Council issued the "Opinions on Deeply Implementing the 'AI Plus' Initiative ", which put forward higher requirements for the digital transformation of education driven by artificial intelligence. The "Opinions" clearly required that artificial intelligence should be integrated into teaching and education at all levels and throughout the entire process, models of cultivating talents be innovated to focus on capability enhancement, and large-scale personalized teaching be achieved[2].

With the internationalization of higher education, there is an increasing demand to study abroad on the part of Chinese college students. At the same time, a number of universities in China are launching cooperative programs with their foreign counterparts. These groups of learners have an urgent need for the IELTS exam, so IELTS teaching has become a part of college English courses in some universities. However, in the Chinese learning context, IELTS listening teaching encounters many difficulties. In terms of question types, IELTS listening includes blank-filling questions, multiple-choice questions, map questions, matching questions, etc., which comprehensively examine skills such as listening, spelling, paraphrasing, and note-taking. The spoken language materials, vocabulary structures, and discourses are significantly different from those of China's conventional English exams, such as CET-6. Therefore, IELTS listening is closer to real-life language communication [3] and focuses more on examining learners' language communication competence. From the perspective of IELTS listening teachers, they face great challenges in preparing lessons and teaching, which is time-consuming and labor-intensive. For example, in intensive listening, in addition to understanding the general idea of the audio material, teachers need to

pay attention to the detailed information in the materials, such as phonetic phenomena like intonation, linking, and weak sounds, as well as sentence structures and grammatical features. Mastering these details is the key to finding correct answers to questions. In order to help learners understand and comprehend listening materials, teachers need to segment the listening audio to help students understand and master specific skills, such as grasping key information, judging the speaker's attitude, and inferring intentions. From the learners' point of view, personalized learning is missing. Whether in class or out of class, learners need materials that match their levels and diagnostic materials that target their weaknesses, so as to allow teachers to adjust the learning difficulty in time and improve learning efficiency. These teaching dilemmas need to be addressed urgently.

In the current era of booming artificial intelligence, AI technologies are applied in various teaching scenarios, including foreign language listening. Automatic Speech Recognition (ASR), Text-to-Speech (TTS), and Natural Language Processing (NLP, which can be used for paraphrasing and extracting key words) are becoming increasingly mature and are being widely applied in language listening instruction. There is good reason to believe that artificial intelligence can play a role in IELTS listening instruction by improving teaching efficiency and achieving personalized teaching.

Currently, the research and discussion on the integration of artificial intelligence into foreign language teaching in China are in full swing. Many studies focus on enhancing teachers' digital literacy [4-6], advocating that foreign language teachers should actively embrace artificial intelligence and learn to use it to assist language teaching. There are also articles that look into the application of artificial intelligence in specific foreign language teaching scenarios. For example, Lu Xiaofei reported the practical use of artificial intelligence agents in foreign language speaking [7] and looked forward to the future assistance of robots in the teaching of Spoken English. Wang Boran compared the content validity of CET - 4 translation questions with those generated by ChatGPT, and explored the possibility of using generative artificial intelligence to empower foreign language testing[8]. A review of the literature also finds that scholars have touched on the "double-edged sword effect" of artificial intelligence. They believe that while artificial intelligence brings convenience to foreign language teaching, it also inevitably exerts some

negative impacts, such as academic ethical risks [9] and the undermining of equality of foreign language learning [10]. In the practice of IELTS listening teaching, the author has found that using artificial intelligence technologies such as text-to-speech (TTS) and paraphrasing (NLP) tend to produce solutions to teaching dilemma and improve teaching efficiency. This paper aims to report how artificial intelligence empowers IELTS listening teaching, analyze the problems faced in the teaching process, and attempt to propose possible solutions, providing references for the reform of foreign language listening teaching in the context of artificial intelligence.

2. IELTS LISTENING INSTRUCTION EMPOWERED BY ARTIFICIAL INTELLIGENCE

The IELTS listening test differs from China's English listening tests in terms of test purposes, question types, and testing methods. Students accustomed to Chinese - style English listening tests may feel at a loss when facing the IELTS listening test, which poses many obstacles for teachers in listening instruction. With the characteristics of the IELTS listening test and students' weaknesses in mind, teachers use various artificial intelligence technologies to create relevant audio materials, providing timely supplements to in-class instruction and out-of-class learning, thus improving the efficiency of listening instruction.

2.1 Text-to-Speech (TTS) Technology Helps Learners Build Listening Vocabulary and Effectively Realizes Large-scale Personalized Teaching

For foreign language learners, one of the difficulties in understanding listening is the inability to segment each word or fixed phrase from a continuous stream of spoken language. When reading a text, the reader sees words with spatial intervals that form phrases and then paragraphs. However, in the context of foreign language listening, learners hear only a continuous stream of speech, instead of individually bounded words. At this point, the ability to correctly segment each word is the first step in good listening comprehension. However, due to the traditional focus on reading and writing and a neglect of listening and speaking in China's English education, Chinese English learners' listening and speaking abilities lag behind their reading and writing

abilities. The most obvious example is that students can recognize a word when they see it, but may not be able to identify it when it is spoken, let alone when the word is mentioned in a continuous stream of speech, as in the IELTS listening test. This phenomenon indicates that building a sufficient listening vocabulary ^[1] is fundamental in dealing with listening difficulties. It is in this context that Text-to-Speech (TTS) technology comes into play. When preparing lessons, teachers extract key words or phrases from the listening text and first use KIMI (KIMI is a large language model in China that can have intelligent conversations with customers) to generate English sentences or paragraphs for all the words. At this point, the teacher has established three types of texts based on the target vocabulary item: a single word, a single sentence with target word, and a single paragraph with the target word. Then, TTSMaker is used to convert the three types of texts into speech. TTSMaker is an AI tool that provides text-to-speech synthesis services, capable of converting text into speech in over 50 languages and also offering a multi-person dialogue mode. Through artificial intelligence tools, teachers obtain three listening vocabulary databases with different levels of difficulties: a speech with only the pronunciation of individual target words (Level A); a speech with sentences containing the target words (Level B); and a speech with paragraphs containing the target words (Level C). Teachers publish the three types of audio materials on the Online learning platform and inform students to choose the audio materials suitable to their own proficiency as pre-class listening practice. Thanks to various artificial intelligence technologies, teachers are able to adopt creative teaching methods instead of the traditional "one-size-fits-all" methodology, pay more attention to the needs of individual learners, and assign learning resources of different levels of difficulty, making large-scale personalized teaching and learning in a class possible.

2.2 Conversation Generators Provide Personalized Learning Materials

In China, the College English Test (CET) mainly consists of monologue-style materials in Section A and Section C, except for Section B, which includes two long dialogues. In contrast, the IELTS listening test is predominantly based on conversations where two or more speakers interact with each other. Additionally, IELTS listening mainly covers "survival English" and "academic English." The former aims to help international

students master basic everyday English to adapt to daily life in English - speaking countries, while the latter prepares them for university studies in English - speaking countries, focusing on campus - related topics such as teacher - student consultations and student presentations. In addition, the CET covers a wide range of topics, including politics, economy, history, and culture, with limited overlap with IELTS topics. Moreover, the two tests differ significantly in terms of question types and test purposes. These factors make it extremely difficult for IELTS learners to find suitable listening materials. To address this predicament, teachers use an AI conversation-generating system to create audio materials similar to IELTS listening tests to supplement students' after-class practice.

The following is an example to illustrate the above-mentioned process. The most common IELTS listening topic is "renting a flat", which mainly appears in Part 1 of the listening test, usually in the form of a table-filling exercise. It includes noting down personal information such as name, contact details, and place of origin, as well as requirements and notes from the landlord. Teachers first use the AI tool KIMI to create a dialogue script between a landlord and a potential tenant. Then, by converting the text into speech using TTSMaker or the Qwen online voice synthesis platform, they can obtain listening resources that meet the teaching objectives and are matched with the students' current listening levels, thus making up for the shortage of after - class listening supplements.

Conversation voice generators can also create diagnostic listening recordings. For example, if a teacher wants to focus on practicing the word "deposit," they can use artificial intelligence tools to generate different texts on the theme of "deposit" and then convert them into audio materials. During the text-to-speech conversion process, parameters such as accent, speed, volume, and pitch can be adjusted to produce audio materials with varying levels of difficulty, thereby highlighting personalized listening instruction.

2.3 Natural Language Processing (NLP) Generates Listening Materials Aimed at Mastering the Technique of Paraphrasing

Paraphrasing is a core method used in designing IELTS listening test questions in all four sections of the test. In fact, paraphrasing is also a main strategy for solving IELTS listening questions. The original words in the recording will not appear in the

question stem or options, but in the question stem or options of the test they will be paraphrased one way or another through synonyms, antonyms, active-passive voice transformation, and hypernym-hyponym transformation. The solution is to listen for a word, a phrase or a clause that expresses roughly the original word in the recording, listeners tend to choose the correct answer. Learners who are new to IELTS listening questions are not yet accustomed to such test-taking routines. Therefore, teachers can use artificial intelligence to design relevant exercises as supplementary materials outside the classroom. Some examples from the author's teaching practice are excerpted below to illustrate how teachers use artificial intelligence to generate diagnostic listening training materials focusing on the technique of paraphrasing.

After teaching the test strategy of using a synonym to identify an answer in class, the teacher needs to supplement similar exercises as assignments. The teacher targets high-frequency words in IELTS listening materials, such as "approximately," uses KIMI to generate different synonyms for this word, and creates a short paragraph centered on the target words, and designs a summary fill-in-the-blank question based on the created paragraph. Then the short English paragraph is converted into speech.

The created text is as follows:

The party would be held as scheduled. Organizers had expected 100 guests, but there were about 50 people at the event, filling the small hall with low chatter and the clatter of chairs.

The blank-filling question based on the paragraph is as follows:

Approximately _____ individuals attended the gathering.

Supplementary listening exercises targeting at the techniques of active-passive voice transformation and hypernym - hyponym transformation can also be generated in the same way. The following is an example to identify an answer by the means of hypernym-hyponym transformation.

John loves every corner of his garden, especially the bowl - shaped lotus flowers that open at sunrise and scent the whole yard. He can spend hours admiring roses, lilies and sunflowers, but the moment ants march across the stone path, mosquitoes buzz near his ears or flies land on the lemonade glass, he becomes irritated and

he reaches instantly for the insect spray hidden behind the watering can.

The question based on the above audio is:

What does John dislike about his garden?

A. sunrise

B. insects

C. flowers

From what is discussed above, artificial intelligence can produce targeted and sufficient listening materials, which not only aids teachers to improve teaching efficiency but also empowers students to make up for their weaknesses.

3. REFLECTIONS

Artificial intelligence is still a novelty, and its integration with teaching and education is still in the experimental stage. It is inevitable that some problems will arise when using artificial intelligence to serve teaching. For listening teachers, the most commonly used AI tool is text-to-speech system. However, currently, whether in a monologue or in a dialogue, the generated speech is still relatively rigid and not natural enough. It cannot imitate real-life conversations, nor can it convey the speaker's attitude and views through intonation and tone. In contrast, IELTS listening pursues authenticity and communicativeness through varying tones and intonations. Moreover, the "paraphrased" texts generated by artificial intelligence platforms are sometimes too formal, which contradicts the colloquial nature of IELTS listening materials. Therefore, when using artificial intelligence, teachers pay due attention to its shortcomings.

Teachers are always the key element in teaching and education. In the digitalization of China's education, the level of teachers' artificial intelligence literacy plays a key role. The author believes that teachers should take the initiative to enhance their digital awareness, and actively explore ways to improve their personal digital capabilities.

Participation in relevant forums and conferences is the fundamental means to keep oneself well-informed of the latest development of artificial intelligence. Ever since China put forward the *Strategy Action on Digitalization of Education*, the higher education community in the country has carried out a vigorous discussion and exploration on the topic of "Artificial Intelligence + Higher

Education.” It was found through DEEPSEEK search that from 2022 to 2025, the education community in the country held many academic forums on “Artificial Intelligence + Higher Education,” exploring the path construction of deep integration of artificial intelligence and higher education, and showcasing relevant research results. For example, the "World Artificial Intelligence Conference (WAIC) Education Summit" focused on topics such as AI-empowered transformation of higher education and the construction of intelligent education platforms; the “AI & Education Digitalization Forum of China Higher Education Expo (CHEE)” discussed the construction of intelligent teaching scenarios and the improvement of teachers' digital literacy; the "Mogan Mountain Forum on AI Talent & Technology in Chinese Universities" emphasized the reform of how universities turn out useful graduates and promoted the training of interdisciplinary students with AI literacy. Universities have also actively held academic conferences or forums to explore the practical application of AI technology in educational scenarios, analyze the current teaching predicaments, and try to propose solutions. For example, the "Intelligent Empowerment of Education · Interdisciplinary Innovation" forum held by South China Normal University, the "International Academic Forum on Artificial Intelligence and Higher Education" held by Communication University of China, the "Research on the Impact of New-Generation Artificial Intelligence on Education" doctoral student academic forum held by Peking University, and the "AI Deep Empowerment of University Teaching Digital Transformation (Season 3) - 'GAI + Curriculum Construction' and 'Large-Model + Curriculum Teaching' Reform Seminar" held by Harbin Institute of Technology have led the trend of digital transformation of teaching and education. It can be seen that in China, artificial intelligence is profoundly influencing and driving the transformation of education and teachers are encouraged to keep track of latest AI developments.

Second, it is of significance for teachers to be proficient in the working procedures of common artificial intelligence tools, such as TTSMaker, Qwen and KIMI, to create learning materials that match the current level of learners, and to support teaching. In addition, teachers should learn to integrate artificial intelligence technology into teaching design and processes, analyzing students' learning behaviors, developing multimodal teaching resources.

What's more, while using artificial intelligence, teachers should consistently adhere to digital ethics principles. For instance, to prevent students from using AI to write essays or complete homework, teachers should set scoring standards in advance and inform students to highlight any AI-generated content, otherwise it will be considered academic misconduct. At the same time, it is also necessary to guard against cognitive dependence. If students over-use artificial intelligence to assist in reading, their ability to think independently or critically will be weakened. Therefore, teachers should be vigilant in this regard and limit students' excessive use of artificial intelligence.

4. CONCLUSION

In the context of China's accelerated advancement of educational digitalization, teachers are the main force in integrating artificial intelligence into teaching. They should actively embrace digital intelligence, master AI technologies, and apply them to teaching practice. At the same time, teachers must also fully recognize the merits and demerits of artificial intelligence, consciously adhere to the ethics of "AI + Higher Education," maintain a scientific and rational attitude towards the use of AI in the teaching process, and fully utilize the role of artificial intelligence in higher education.

REFERENCES

- [1] Ministry of Education of the People's Republic of China
http://www.moe.gov.cn/jyb_xwfb/gzdt_gzdt/moe_1485/202503/t20250328_1185222.html
- [2] State Council of the People's Republic of China. Opinions on Deeply Implementing the 'AI Plus' Initiative. www.gov.cn. 2025. 8
- [3] Hui Yu. Discourse variation between Chinese and international English listening tests and implications for foreign language teaching. [J] *Research in Teaching*, 2019(5): 47-55.
- [4] Ni Qin. Research on AI Literacy of Foreign Language Teachers from an International Perspective: Comparative Analysis and Pathways for Enhancement. [J] *Foreign Language World*, 2025(04): 81-87.
- [5] Jiang Xia. Research on the Components, Factors, and Development Pathways of AI-PCK among University Foreign-Language

- Teachers. [J] Foreign Language World, 2025(04): 88-96.
- [6] Zhong Weihe. Reconstructing and Enhancing the Digital Literacy of Foreign Language Teachers in the Context of Generative Artificial Intelligence. [J] Journal Of Zhejiang International Studies University, 2025(04): 1-8.
- [7] Lu Xiaofei. Current Status and Future Prospects of Educational Robots in Foreign-Language Oral Instruction. [J] Foreign Language World, 2021(01):11-19.
- [8] Huang Boran. A Comparative Study of Content Validity of CET-4 Translation Tests and ChatGPT Generated Translation Tests. [J] Foreign Language Education & Research, 2025(03): 1-8.
- [9] Gao Jie. The Double-Edged Sword of Generative Artificial Intelligence: Analyzing DeepSeek's Advantages and Potential Risks in Foreign-Language Education. [J] Contemporary Foreign Language Studies, 2025(03): 140-151.
- [10] Zhang Zhen. ChatGPT-Supported Foreign Language Teaching: Affordances, Issues, and Strategies. [J] Foreign Language World, 2023(02): 38-44.
- [11] Gary Buck. Assessing Listening. [M] Foreign Language Teaching and Research Press, Cambridge University Press. 2017.