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A STUDY ON INTERACTIVE MODELS FOR CHINESE LISTENING CLASSES UTILTXING DOMESTIC ARTIFICIAL INTELLIGENCE ASSISTANTS -AN EXAMPLE OF THE TEACHING OF HSK LEVEL 3 STUDENTS

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This study utilizes three domestic Artificial Intelligence assistants as primary interactive tools. By integrating resources such as the BLCU-International Chinese Smart Teaching System, Mandarin Mind AI, Padlet, and ChinesePlus, it establishes an interactive listening classroom model tailored for Level 3 students in China. A semester-long teaching experiment was conducted in classes with 20–30 students. The findings suggest that Artificial Intelligence assistants effectively tackled challenges in traditional listening classes, including limited interactive formats and insufficient individual feedback, through scenario-based dialogue generation, real-time speech evaluation, and gamified training.

Keywords: Artificial Intelligence assistant; Chinese listening comprehension; classroom interaction; Deepseek; HSK 3.

ИССЛЕДОВАНИЕ ИНТЕРАКТИВНЫХ МОДЕЛЕЙ ДЛЯ ЗАНЯТИЙ ПО АУДИРОВАНИЮ НА КИТАЙСКОМ ЯЗЫКЕ С ИСПОЛЬЗОВАНИЕМ ОТЕЧЕСТВЕННЫХ ПОМОЩНИКОВ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА (НА ПРИМЕРЕ ОБУЧЕНИЯ HSK СТУДЕНТОВ 3 КУРСА)

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В данном исследовании в качестве основных интерактивных инструментов используются три отечественных ресурса: BLCU-International Chinese Smart Teaching System, Mandarin Mind AI, Padlet и ChinesePlus, на основе которых создается интерактивная модель обучения аудированию, адаптированная для студентов 3 курса в Китае. Результаты исследования показывают, что помощники на основе искусственного интеллекта эффективно справлялись с проблемами традиционных уроков аудирования, включая ограниченные интерактивные форматы и недостаточную индивидуальную обратную связь, посредством генерации диалогов на основе сценариев, оценки речи в реальном времени и игрового обучения.

Ключевые слова: помощник на основе искусственного интеллекта; понимание китайской речи на слух; взаимодействие в классе; Deepseek; HSK 3.

With the help of artificial intelligence technology, the application of Artificial Intelligence technology in international Chinese education has become one of the key topics discussed in today's academic discourse. Numerous experts and scholars in the field of Chinese language pedagogy are exploring ways to utilize Artificial Intelligence to assist teaching efforts and enhance students' knowledge acquisition. Meanwhile, domestic Artificial Intelligence assistants have emerged as a significant driving force in the digital transformation of international Chinese language education [1].

In recent years, the Center for Chinese Language Exchange and Cooperation has continuously advanced the digitalization of international Chinese education. Collaborating with partners worldwide, it has developed digital products and platforms. Through Artificial Intelligence systems that assist learning, teaching, and research, it addresses diverse Chinese learning needs globally, fostering a new ecosystem for international Chinese education that integrates online and offline approaches. During the global celebrations for the 16th Chinese Language Day in May 2025, the United Nations' «Digital Innovation in Chinese Language Learning and Teaching» video exhibition showcased the latest outstanding achievements in integrating Chinese education with digital technology. Among these, Beijing Language and Culture University's «International Chinese Smart Teaching System» received high industry recognition. It embodies the latest trends in Chinese education digitization and aligns closely with the five pillars of transformation advocated by «UN 2.0»: innovation, data, digitalization, foresight, and behavioral science. During the September ASEAN Expo, iFlytek launched its Chinese Smart Teaching System (ASEAN Edition) powered by its professional Chinese education large model technology. This initiative enhances the efficiency, precision, and engagement of Chinese instruction in ASEAN countries, further demonstrating the industry trend toward leveraging digital and intelligent technologies to boost learning efficiency, effectiveness, and personalized education. Meanwhile, domestic universities are delving deeper into pathways for Artificial Intelligence technology to provide customized support for teaching and research. For instance, Central China Normal University leverages the full-capacity DeepSeek R1 to support complex academic problem analysis and long-text processing, while Zhejiang University launched the deeply integrated intelligent agent «Mr. Zhejiang University». Additionally, Hainan University launched «Xiao Hai», a campus AI agent powered by DeepSeek R1, offering Artificial Intelligence assisted learning, management, and research services to all faculty and students. This effectively stimulates learners' intrinsic motivation and interest, injecting new vitality into teaching.

Based on emerging industry trends, this paper examines teaching design and practice using the example of the Level 3 Chinese Listening course for the 2024-2025 academic year within our institution's Chinese language program. Typically, international students at Level 3 have mastered approximately 600

common vocabulary words and can handle basic daily communication tasks. However, their listening comprehension still faces challenges, such as difficulty adapting to normal speaking speeds, insufficient recognition of connected speech and tone sandhi, and limited understanding of cultural connotations. The HSK New Standard course 3 covers 15 daily life topics, including shopping, transportation, medical care, and entertainment. This paper explores the role of mainstream domestic Artificial Intelligence assistants in enhancing interactive effectiveness in Chinese listening classrooms. It should be noted that domestic Artificial Intelligence assistants like Deepseek [3], Doubao [4], and Tencent Yuanbao [5] offer unprecedented possibilities for interactive listening classes through their exceptional Chinese comprehension, convenient access, and zero technical barriers. Integrating Artificial Intelligence technology with smart teaching platforms, this study constructs an interactive listening classroom model suitable for large-class teaching. Empirical research validates its effectiveness in enhancing students' listening proficiency and promoting teacher-student interaction.

I. Building a Multi-Platform Collaborative Interactive Ecosystem.

Based on the analysis of Artificial Intelligence assistant features, this study constructs a multi-platform collaborative interactive ecosystem for listening classrooms, centered around three core Artificial Intelligence assistants.

Content Generation Layer: Deepseek, Doubao, and Tencent Yuanbao generate personalized interactive content;

Resource Integration Layer: The BLCU systems provide standardized teaching materials, while the Chinese Language Alliance supplements cultural context knowledge;

Outcome Presentation Layer: Mandarin Mind Ai enables student individual creations, while Padlet constructs collaborative display spaces.

II. Functional Positioning of Domestic Artificial Intelligence Assistants in Listening Classrooms.

1. Deepseek scenario dialogue generation and logic training. With its good long text comprehension ability and sentence logic, it is deeply focused on the «the HSK standard course» [3] automatically generate multiple rounds of dialogue close to the real context on different topics, and design reasoning questions based on the content of the dialogue, and adjust the length and difficulty of the dialogue appropriately according to the specific performance of the students.

Doubao has the ability to «real-time voice interaction function».

According to the characters designed interactively, in the real scene set up by Doubao for listening training, in the input letter to the student While carrying out intelligent speech recognition and feedback, it focuses on correcting the pronunciation of error-prone words in English, and naturally introduces more food culture knowledge through Artificial Intelligence question-and-answer, so that students can truly immerse themselves in the process of voice interaction.

Tencent Yuanbao gamified listening training. Tencent Yuanbao's «gamified design capabilities» transform traditional listening exercises into fun challenges. Students design independently Web games such as «Urban Traffic Adventure» and «New Word Spot Check» series of levels not only increase class interaction, increase students' average participation time to 2.3 times that of traditional classrooms, but also improve students' learning motivation.

III. Implementation of a Comprehensive Interactive Process for HSK3 Chinese Listening Classes with Artificial Intelligence Assistant-Based Multi-Platform Collaboration.

Using Lesson 2 «When Will He Return?» from the HSK textbook as an example, analyze teaching content and develop Artificial Intelligence projects.

1. Pre-class Preparation. Teachers use Deepseek/Doubao to generate scenario dialogues about «Xiao Ming's New Semester Plans», importing them into the BLCU system as warm-up materials. Simultaneously, create a «My Favorite Club Activities» theme wall on Padlet where students upload images and brief descriptions.

2. In-class Implementation. Oral Training (20 minutes): Students practice language expressions for scenarios like online inquiries, hailing taxis, and sports activities using the system.

Simultaneously complete classroom games like «Spot the Difference/Quick Q&A» designed with Tencent Yuanbao to reinforce key word recognition.

Require students to generate personalized texts about «Xiao Ming's New Semester Plan» via the International Chinese Artificial Intelligence Teaching Platform (www.mxmind.ai) and create daily vocabulary cards.

Game Reinforcement (10 min): Use Doubao to create a Zhouyi divination game, designing exercises that transform yes/no questions into rhetorical questions. E.g., «Can I lose weight to 50 kilo?» and “How couldn’t get weight on by eating so much?” Students practice oral expression using learned vocabulary, each for 3-5 sentences. The teacher provides guidance and feedback, correcting pronunciation and grammatical errors.

Thought Organization (10 min): Review classroom exercises, summarize key information from listening materials, and explain/review important vocabulary.Create Weekly vocabulary cards using Padlet, covering terms like «health, body, exercise, habits, soccer», and complete individual presentations.

3. Post-Lesson Extension. Share «My Weekend Activities» on Padlet for peer review. Simultaneously, watch traditional Chinese cultural program videos on the Chinese Alliance platform and complete cultural comprehension tasks.

Finally, teaching reflections and optimization suggestions.

1. Practical Outcomes. Through Artificial Intelligence teaching assistants, «personalized interaction» was achieved in one-to-many classrooms. In classes of 20 – 30 students, each learner had ample practice opportunities, significantly enhancing interaction efficiency. The platform empowered teachers to

implement «data-driven teaching», using metrics to guide instruction and learning processes. Artificial Intelligence's outputs demonstrated strong cultural depth, embedding Chinese cultural elements more profoundly into videos to foster international students' «cross-cultural communication skills».

2. Challenges Faced. Technical unreliability and excessive gamification may distract students, causing them to overlook the practical significance of language. Limited attention is given to individual student differences. While the system offers some personalized assignment capabilities, it struggles to provide effective emotional feedback to students. The role of teachers has shifted from «knowledge disseminators» to «activity designers», presenting challenges for some educators [6].

3. Optimization Recommendations. Maintain a balance between technology, human-centered approaches, and personal warmth; sustain in-depth face-to-face interactions both online and offline; utilize Artificial Intelligence to support and enhance classroom teaching rather than replace teachers; increase Artificial Intelligence literacy training for educators and conduct application workshops for Artificial Intelligence tools to diversify activity design methods; create blended interactive models to identify optimal engagement formats for each teaching segment, thereby leveraging the complementary strengths of various approaches.

Conclusion. Domestic Artificial Intelligence assistants and diverse intelligent teaching platforms have injected new vitality into three categories of Chinese listening classroom interactions. Through scenario-based dialogue generation, multimodal voice interaction, and gamified training, they have effectively addressed longstanding issues in large-class listening instruction, such as insufficient individual attention and limited interactive formats. Future research should focus on exploring their «affective computing capabilities». By enhancing these capabilities, we can improve their understanding and feedback regarding learners' emotional states, propelling international Chinese education toward greater intelligence and humanization.

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