Journal of Language, Culture and Education；Vol.2, No.3; 2025
E-ISSN: 3006-3213 P-ISSN：3006-3205
DOI: https://doi.org/10.70267/jlce.2025.v2n3.2734
Published by: Zeus Press

Research on AI-Assisted Task-based Teaching Method in the Design of International Chinese Digital Teaching Centered on Verbal Communication

Ziman Su*

School of Chinese Language and Culture, Sichuan International Studies University, Chongqing, China

**Corresponding author: Ziman Su.*

Abstract

This paper, with reference to the International Standards for Chinese Language Proficiency (2021), and in combination with the definitions of the three evaluation dimensions of verbal communication ability, topic task content and language quantification indicators in the standards, explores the teaching effectiveness and evaluation system of the task-based teaching method oriented by the "verbal communication" evaluation dimension, An analysis of the challenges and operational difficulties faced by task-based teaching methods in teaching practice. While affirming the enhancement of learners' verbal communication skills by the task-based teaching method, this paper proposes task-based teaching solution strategies and operational processes based on AI artificial intelligence and big data analysis technology, that is, the cutting-edge technical methods of applying artificial intelligence to language teaching. Such as natural language processing, automatic speech recognition, machine learning, large language models and computer vision graphs, etc. Typical application scenarios of AI digital instructional design include automatic question answering and chatbots, interlanguage corpus data analysis, Chinese intelligent guidance and Chinese intelligent assessment, etc. It is hoped that this article will provide useful teaching references for international Chinese language educators, promote the effective application of AI-enabled task-based teaching methods in international Chinese language education, and improve teaching quality.

Keywords

verbal communication, task-based teaching, international standards for Chinese language proficiency in Chinese, AI teaching technology

1. Introduction

As the global "Chinese language fever" continues to rise, international Chinese language education is experiencing a period of vigorous development. The "International Chinese Language Education Chinese Proficiency Standards" list verbal communication ability as a core evaluation dimension, promoting the shift of teaching focus to practical communication, and task-based teaching method is the key means to achieve international Chinese language education centered on verbal communication. However, Peng (2022) pointed out that the traditional task-based teaching model faces a series of problems. This paper focuses on the real predicaments such as the disconnection between textbook task design and the real context, the insufficient ability of teachers to design tasks and provide dynamic guidance, the individual differences among students

and the limitations of the teaching feedback mechanism. In this context, Xu and Li (2024) propose a new digital approach to English teaching and learning for college students in China. This paper suggests that for international Chinese education, AI and big data technologies also provide new ways for educational transformation. International Chinese teachers can apply technologies such as natural language processing and intelligent assessment to reshape teaching scenarios, which offer the possibility of breaking through task-based teaching bottlenecks. Based on the intersection of the "Chinese language fever" and the AI era, this paper explores the optimization path of AI-enabled task-based teaching, aiming to provide practical references for improving the quality of international Chinese language teaching and respond to the demand for digital transformation of international Chinese language education in the new era.

2. The Empowerment Path of Traditional Task-Based Teaching for International Chinese Language Education Classrooms Centered on Verbal Communication

2.1 The Establishment of the Core Position of Communicative Competence in the "Grading Standards"

The Grading Standards shift the core of international Chinese education from stereotyped training in vocabulary and grammar to a three-dimensional teaching evaluation system centered on verbal communication. The "three grades and nine levels" form an advanced evaluation standard system from basic communication to professional communication system (Ministry of Education of the People's Republic of China Government, 2021). For a considerable period of time in the past, the evaluation system represented by the "Outline of Vocabulary and Chinese Character Levels for the Chinese Proficiency Test" (1992) focused on the quantitative assessment of grammar rules and vocabulary, resulting in a large number of learners having "high scores but low abilities". Research by scholars from the Institute of Language and Character Application of the Ministry of Education shows that among learners who passed the HSK Level 4, 32 percent were unable to complete coherent communication[4] in actual daily shopping scenarios. The emergence of the "Grading Standards" (2021) has completely changed this situation, placing "verbal communication ability" at the core of the evaluation system for the first time and constructing a "three-level nine-level" ability framework. Long (1985) proposed the "interaction hypothesis", emphasizing that language interaction in real contexts is the key mechanism of language acquisition and is the solid theoretical basis for establishing the core position of verbal communication ability in the "Grading Standards".[5]

2.2 The Enabling Path of Task-Based Instruction

The task-based teaching method, through the model of "task design - execution - evaluation", sets up communication scenarios that fit the content of the topic tasks and precisely aligns with the three evaluation dimensions of the "Grading Standards", especially the core dimension of verbal communication. In terms of task design, the "Grading Standard" sets 12 major thematic areas and 62 types of tasks such as "daily life" and "career development". "Task-based teaching can be based on these themes to design teaching tasks that are close to real-world scenarios" (Wu, 2023). For example, for the middle level 3 "social culture" theme, the task of "planning a Chinese traditional festival culture exhibition and giving an English explanation" directly corresponds to the standard requirement of "being able to conduct comparative analysis of cultural phenomena", opening up an effective path for improving learners' verbal communication skills. In the process of implementation, task-based teaching emphasizes "meaning first", which prompts learners to naturally apply communicative strategies in the process of solving problems. According to research data from scholars at Beijing Language and Culture University, in the "Simulated International Conference" task, students used an average of 12.6 communication strategies per class, such as clarification, negotiation, restatement, etc., 2.3 times more than traditional dialogue practice, significantly enhancing learners' verbal communication skills (Wu & Wang, 2025). Ultimately, multi-dimensional evaluations were conducted through students' self-reflection, peer collaboration, and teachers' summary and comments.

3. Analysis of the Practical Predicaments of Task-Based Teaching in International Chinese Language Education Practice

3.1 The Design of Textbook Tasks is Disconnected from the Real Context

In the practice of international Chinese language education, task-based teaching faces the realistic predicament of a serious disconnection between the design of textbook tasks and the real context, which restricts its teaching effectiveness. Textbooks such as “New Practical Chinese Textbook” and “Contemporary Chinese”, which were introduced from China and widely used in Ukraine, are systematic and rich in content, but they are not precise enough in controlling the language difficulty. Some of the content is too complex for Ukrainian students to understand, causing learning difficulties and dampening their enthusiasm for learning (Halyna, 2019). The content of these textbooks is updated slowly and fails to present the changes in contemporary Chinese society and the latest usage (Wang & Zhou, 2020) of the language in a timely manner. For example, in terms of introducing modern Chinese technology and the Internet, the content is scarce and fails to meet the needs of students to understand contemporary China, resulting in a disconnection between the knowledge learned and practical application.

3.2 Teachers Lack the Ability to Design Tasks and Provide Dynamic Guidance

At the teacher level, the lack of task design and dynamic guidance is a key factor restricting the development of task-based teaching. According to data from the National Chinese Language Teacher Training Center (2023), 37% of teachers have difficulty accurately grasping the difficulty gradient of tasks, and 28% of tasks have the problem [10] of “disconnection between goals and activities”, making it difficult to make precise task adjustments based on immediate feedback from students when performing tasks in the classroom, with insufficient (Liang, 2011) dynamic guidance ability. Take a basic course of teaching Chinese as a foreign language at a Confucius Institute overseas as an example. The course was taught by Mr. Li to 27 local high school students aged 15-20 who were just beginning to learn Chinese. The teaching objective is to enable students to master basic greetings and simple self-introductions in Chinese and be able to apply them in real-world situations. In terms of the difficulty gradient of the task, Mr. Li did not fully consider the students' level of zero foundation. At the beginning of the course, a more complex greeting and self-introduction sentence pattern was directly introduced, “Nice to meet you. My name is [name] and I come from [country/city],” and then students were asked to practice a pair of conversations. For students with no foundation in Chinese, the vocabulary, pronunciation and grammatical structure in these sentences are extremely challenging. During the class, when students made frequent pronunciation and grammar mistakes in the dialogue practice, such as saying “hello” as “mud mark” and “I'm from America” as “I'm coming to America”, Mr. Li did not help students correct their pronunciation; Nor did he identify confusing grammar points to reinforce students' understanding. Students continued to repeat the same mistakes in subsequent exercises. Mr. Li did not make precise adjustments to the difficulty of the task based on students' immediate feedback and lacked the ability to provide dynamic guidance. The teaching effect was severely affected.

3.3 Individual Differences Among Students and Limitations of the Teaching Feedback Mechanism

From the perspective of students, individual differences affect the participation and effectiveness of task-based teaching. Traditional task-based teaching methods are difficult to achieve “one-on-one” personalized feedback teaching. Chen (2023), based on an analysis of classroom recordings of 500 learners, found that students with weak foundations spoke up only 47% (Chen, 2023) more frequently in complex tasks than high-level students. The uneven language foundation among students makes it difficult for those with a weaker foundation to keep up with the pace, engage less and gain less in the same task. For example, when designing the task of “Discussing the influence of traditional Chinese culture on modern society”, students with a good language foundation and rich knowledge reserves were able to quote extensively and speak fluently; Students with a weak foundation have difficulty even in basic expression and cannot effectively participate in the discussion. The individual differences greatly affect the participation and effectiveness of task-based teaching. In addition, the quality of task completion in groups with insufficient learning motivation is lower than the average. Students with insufficient motivation tend to be perfunctory in task execution and have difficulty fully engaging, which hinders the achievement of teaching objectives.

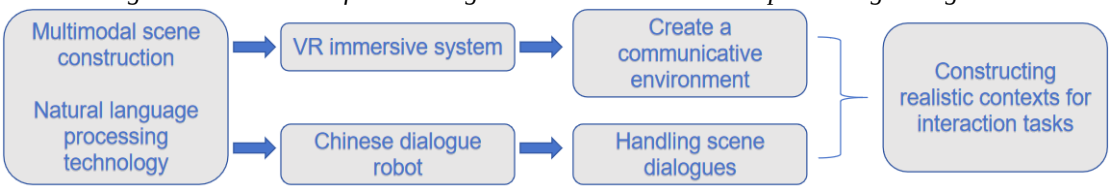
From the perspective of teaching feedback mechanisms, even if traditional task-based teaching classrooms are student-centered, it is difficult to achieve “one-to-one” targeted and personalized feedback teaching. In the case of large classes with a large number of students, LoCastro (1989) found through questionnaires and interviews that large class sizes make it difficult for teachers to carry out teaching activities efficiently, monitor teaching progress at any time, and provide timely feedback on students' learning situations, all of which lead to a decrease[14] in the effectiveness of task-based teaching. Todd (2006) also classified the problems of large class teaching. The “feedback and evaluation” problem he proposed, similar to the teaching-related problems in LoCastro's classification, also reflects the hindrances of teachers in providing timely feedback to students and paying attention to individual learning needs in large class teaching. Teachers cannot track the task completion of each student in real time. As a result, language errors cannot be corrected in a timely manner and individual learning needs are ignored[15]. Teachers have problems with difficulty gradient in task design, disconnection between goals and activities, and lack of effective individual feedback and dynamic guidance, which have restricted the development of task-based teaching and the cultivation of students' verbal communication skills.

4. Teaching Plan Design Based on the Shortcomings of Task-Based Teaching in AI Artificial Intelligence and Big Data

4.1 AI Technology Empowering Task-Based Teaching: Textbook-Based, Context-Oriented, Communication-Oriented Scene Construction and Task Design

To address the disconnection between textbook task design and the real context, AI technology can rely on textbook content and achieve deep coupling between teaching content and the real context through multimodal scene construction and dynamic task generation. Natural language processing technology, based on semantic parsing and dialogue management, drives automatic question answering and chatbots to complete interaction tasks in complex contexts through word vector representation and context-aware models. For example, the VR vegetable market system built by Beijing Language and Culture University can construct an actual communicative context. The system extracts speech features through MEL frequency cepstral coefficients (MFCC) and combines a Chinese tone model to reproduce the dialect variations and speech flow variations of real markets, enabling learners to have real and effective voice interactions (Huang, 2025) with virtual vendors; The Chinese dialogue robot developed by iFLYtek is fine-tuned based on the BERT pre-trained model and can handle scene dialogues with implicit pragmatics. When learners make bargaining expressions such as “Can this fruit be cheaper?”, the system can generate responses (Wang et al., 2024) that conform to market communication habits based on preset pragmatic rules, demonstrating significant performance in virtual scene voice interactions.

Figure 1: Flowchart of AI building multimodal scenarios and processing dialogue tasks

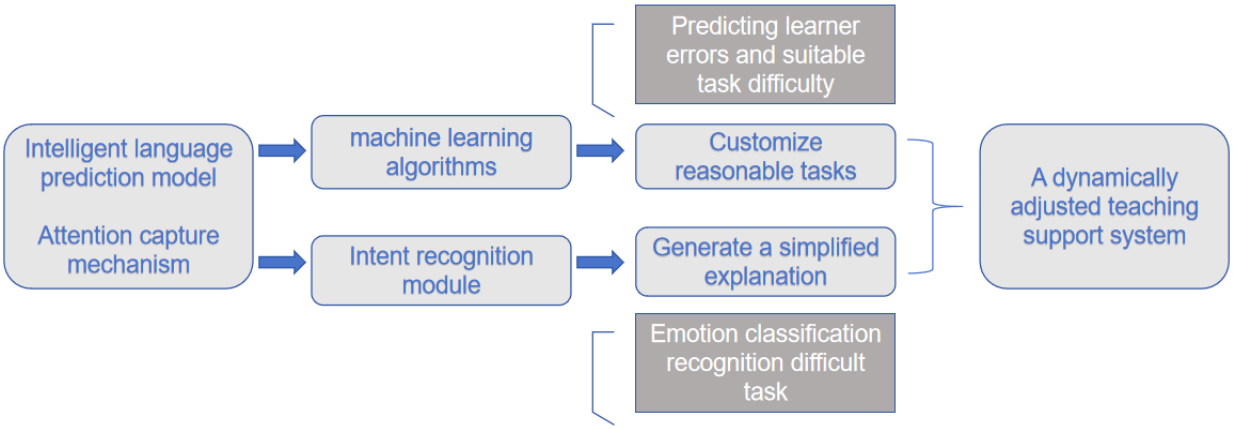


4.2 Big Data and AI-Driven Implementation of Class Hour Task Schemes and Dynamic Guidance System for Assisting Teachers in Teaching

Big data and AI technologies can form a closed-loop teaching support system through intelligent task planning and real-time classroom intervention to address the insufficiency of teachers' task design and dynamic guidance capabilities. Machine learning algorithms use a combination of supervised learning and reinforcement learning to mine error patterns in the interlanguage corpus and construct task difficulty prediction models. Trained on 500,000 pieces of HSK test-takers' writing materials, the model can automatically generate task gradients that conform to the “grading Standards”, improving the matching degree between the tasks designed by teachers and the learners' levels by 47% (Zheng, 2021). The intent

recognition module in natural language processing technology, based on the Transformer architecture, captures dialogue topic features through the attention mechanism, combines computer vision graph technology to extract facial expressions and body movement features of learners using convolutional neural networks (CNNS), and identifies confused states through sentiment classification models such as the VGG16 transfer learning model. When behaviors such as frowning and lowering the head are detected in the learner, a simplified version of the task instruction is automatically generated and sent to the learner (Wang & Wang, 2025).

Figure 2: Flowchart of the AI Dynamic Processing Teaching Support system



4.3 Dynamic guidance of AI Technology for Individual Differences and Feedback Mechanism for International Chinese Language Education Based on Big Data Analysis

In response to individual differences among students and the limitations of the teaching feedback mechanism, AI technology can achieve precise teaching intervention through personalized learning path planning and multi-dimensional intelligent assessment. Large language models (such as the fine-tuned version of GPT-4 in Chinese) based on the self-attention mechanism of the Transformer architecture, by analyzing data such as learners' HSK scores and the frequency of classroom interaction, construct knowledge acquisition graphs (Li, 2025) in the constructed real dialogue scenarios, For HSK Level 3 learners, assign the basic task of “ordering food from a restaurant” (limiting the SVO syntactic structure), and for HSK Level 5 learners, unlock the training of pragmatic variants of “put” sentences (such as the euphemistic expression of “please pass me the menu”) to enhance the personalization fit (Guan, 2024) of the task. In the Chinese intelligent assessment section, the automatic speech recognition technology corrects the learner's speech errors one by one at the phoneme level through acoustic feature extraction and language model decoding to achieve quantification of pronunciation accuracy; The dependency syntactic analysis module of natural language processing technology can automatically identify grammatical errors such as the misuse of the word “by” in sentences, combined with machine learning knowledge tracing algorithms (such as IRT models), Automatically generate a three-dimensional assessment report that includes fluency (speed ≥120 words per minute), accuracy (grammatical accuracy ≥85%), and appropriateness (pragmatic appropriateness ≥90%). The report is visualized through a competency radar chart, allowing teachers to design remedial tasks specifically (Yang, 2025).

Figure 3: Flowchart of AI implementing teaching intervention and its teaching feedback mechanism

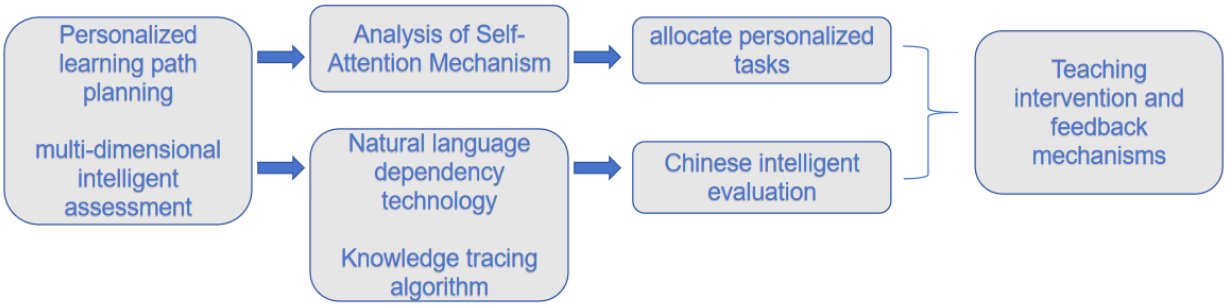


Table 1: Application scenarios and problems solved by AI technology in the teaching process

Teaching phase	AI Empowerment	Technology	Applications	Solve the problem
Before class	Scene construction and task design	Natural language processing techniques Automatic speech recognition technology	Automatic question answering/chatbots VR virtual scene construction	The textbook is disconnected from the real context
Class hours	Task implementation and dynamic guidance	Machine learning algorithms Natural language processing techniques Computer Vision Atlas	Capture interlanguage errors, student expressions, etc. to predict the difficulty of tasks that can be completed, so as to achieve precise push	Insufficient personalization of tasks
After-class	Personalized guidance and feedback	Large language models Automatic speech recognition technology Natural language processing technology Knowledge tracing algorithms	Automatically identify practice errors batch grade assignments Generate 3D assessment reports present visualization capability Radar charts	The feedback mechanism is not personalized and long-lasting enough

5. Conclusion

This paper, set against the backdrop of the convergence of the "Chinese fever" and the AI era, first elaborates on the empowerment path of traditional task-based teaching for the international Chinese language education classroom centered on verbal communication and clarifies its convergence point with the "Grading Standards", and then analyzes the three major practical dilemmas faced by traditional task-based teaching methods; Finally, a targeted teaching plan based on AI and big data is proposed. The research found that although the traditional task-based teaching method can meet the requirements for the development of verbal communication skills in the "Grading Standards", it is constrained by factors such as the disconnection of teaching materials, the insufficiency of teachers' capabilities, and the limitations of feedback mechanisms, and it is difficult to fully exert its effectiveness. However, AI technology can effectively make up for these

shortcomings through paths such as scene construction, dynamic guidance, and personalized feedback. It provides a feasible solution for the digital transformation of international Chinese language education. This study theoretically constructs a logical framework for AI-enabled task-based instruction, enriches research on the application of technology in international Chinese language education, and provides teachers with specific guidelines for the application of AI tools in practice, which helps improve teaching quality. However, there are still shortcomings in the study, such as the lack of tracking of the long-term effects of AI technology application, and the fact that the implementation of some AI solutions relies on hardware equipment, and the applicability in resource-limited areas needs to be verified. In the future, more in-depth empirical research can be carried out in combination with cross-cultural scenarios.

References

Chen, L. (2023). Information technology classroom based on individual differences. *Liberal Arts and Sciences Navigation (Lower Edition)*, (1), 49-51.

Guan, K. (2024). *Research and application of knowledge tracing model based on attention mechanism* [Unpublished master's thesis, Shenyang Aerospace University]. Shenyang.

Halyna, P. (2019). *Investigation on the current situation of Chinese language teaching in Ukrainian universities* [Unpublished master's thesis, Qingdao University]. Qingdao.

Huang, F. (2025). Research on intelligent dialogue systems based on natural language processing. *Information and Computer, 37*(4), 38-40.

Li, K. (2025). Research on the application of artificial intelligence technology based on computer vision in intelligent monitoring systems. *China Equipment Engineering*, (13), 41-43.

Liang, B. (2011). Research on the dilemmas and countermeasures of task-driven teaching method in secretary training teaching. *Journal of Hubei Adult Education College, 17*(6), 119-141. https://doi.org/10.16019/j.cnki.cn42-1578/g4.2011.06.045

Ministry of Education of the People's Republic of China Government. (2021). *The person in charge of the center for language education and research of the Ministry of Education answered questions from reporters on the "international Chinese language education Chinese proficiency standards"*. http://www.moe.gov.cn/jyb_xwfb/s271/202104/t20210402_524194.html

Peng, Y. (2021). Unexamined tasks are not worth completing: Rational thoughts on the craze for task-based teaching. *Chinese Language Construction*, (3), 70-72. https://doi.org/10.16412/j.cnki.1001-8476.2021.03.018

Wang, S., Liang, S., Chen, Z., & Zou, J. (2024). A brief discussion on oral learning of minor languages in virtual teaching settings. *Korean Language Teaching and Research*, (4), 98-102.

Wang, X., & Zhou, M. (2025). Foreign language textbook compilation in colleges and universities from the perspective of new quality productivity: Challenges and approaches. *Journal of Beijing International Studies University, 47*(2), 116-127.

Wang, Y., & Wang, Z. (2025). Fine-grained sentiment analysis based on text simplification of large language models. *Computer Science*, (5), 1-11.

Wu, J. (2023). *Research on the application of task-based teaching method in cultural courses of international Chinese language education* [Unpublished master's thesis, Chongqing Normal University]. Chongqing.

Wu, Y., & Wang, L. (2025). Research on the strategies and causes of opinion expression by international Chinese language teachers in cross-cultural communication situations. *Journal of Qinghai Minzu University (Social Sciences Edition), 51*(2), 157-163.

Xu, J., & Li, J. (2024). Research prospects of task-based language teaching from the perspective of intelligence. *Foreign Language Audio-visual Teaching*, (4), 74-78.

Yang, P. (2025). Big data-driven strategies for evaluating and constructing feedback mechanisms in ideological and political education. *Journal of Harbin Institute of Technology*, (3), 96-98. https://doi.org/10.16145/j.cnki.cn23-1531/z.2025.03.004

Zheng, Y. (2021). Research on multimedia and corpus-driven Chinese language teaching. *Studies of Teaching Chinese as a Foreign Language*, (2), 106.

Zhou, T. (2017). A brief discussion on the teaching of greetings in Chinese as a foreign language. *Knowledge Library*, (1), 148.

Ma,L.(2023).Reflections on the Transformation and Existing Issues in the Cultivation of International Education Talents in Chinese Language [J]. International Public Relations.

Funding

This research received no external funding.

Conflicts of Interest

The authors declare no conflict of interest.

Acknowledgment

This paper is an output of the science project.

Copyrights