

# The Application of Linguistics on International Chinese Education Supported by Information Technology

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**Abstract.** This paper takes the international Chinese education courses in language programs at universities as the research object, exploring how language teaching practices in international Chinese education can integrate new content, adopt new methods, and guide various aspects of teaching and learning in the post-pandemic era. Firstly, it explains the main methods of this teaching practices study in international Chinese education in the post-pandemic era. Then, it designs targeted courses with precise grading based on the education objects. Finally, it discusses the practical situation. The paper finds that in the context of globalization of information and the new situation after the covid-19 pandemic, blended learning combining online and offline modes has become a major trend in international Chinese education. Integrating language teaching with linguistics knowledge can enhance students' interests and efficiency in learning, but it requires precise grading of linguistics knowledge and course types. In addition, information technology is also a powerful tool for supporting language teaching.

**Keywords:** international Chinese education; linguistics; information technology.

## 1. Introduction

With the accelerated process of globalization, the demand for international Chinese teaching is increasing day by day. Language theory plays an important role in international Chinese teaching and is also one of the important ways to apply theory to practice. In recent years, language theory has often been applied in the "non-teaching stage" of international Chinese teaching. On the one hand, in the preparation stage, teachers use theoretical knowledge to assist in the teaching of vocabulary and grammar, such as vocabulary teaching, the types of errors in second language acquisition, and teaching strategies [1-3]. On the other hand, in the reflection stage after teaching, language theory is often applied to error analysis or interlanguage research, in order to establish better teaching strategies, such as discussing how universal grammar reflected in interlanguage can assist teaching [4], and studying the application of interlanguage teaching and research methods [5]. However, there are not many specific studies on the practice of integrating language theory into teaching.

With the accelerated process of global informatization, university language learners' understanding of the Chinese language and culture is gradually deepening. Due to their high cognitive level and knowledge level, they also have a strong desire to understand the underlying theories reflected in the language while acquiring language skills. Especially with the appearance of various epidemics in recent years and the formation of a new normal situation of global epidemic prevention, the "post-pandemic era" has arrived, and international Chinese teaching has mostly shifted to online and offline hybrid modes. In terms of teaching methods, new information technology teaching methods that are not limited by fixed teaching time and location need to be explored. Jinghan Zeng (2021) used information technology to establish an interactive experiential classroom for university humanities courses [6], and Yanqun Zheng (2013a, 2013b, 2015) discussed the exploration of online Chinese teaching [7-9]. However, in terms of teaching content, the application-oriented knowledge of Chinese language ontology needs to be expanded in Chinese characteristic teaching, and it needs to be organically combined with information technology teaching. This article will explore how language ontology theory can be effectively integrated into Chinese as a second language teaching classrooms in the new hybrid online and offline teaching mode.

## 2. Objects of Practical Exploration and General Methodology

We take the intermediate and advanced Chinese intensive reading and spoken Chinese classes offered by the College of Liberal Arts of Beijing Normal University between 2019–2023, as well as the language theory classes with international students (e.g., Modern Chinese and Modern Chinese Grammar) as the scope of practice to explore how new technological tools and linguistic theories can be effectively integrated into the teaching in actual online teaching and online–offline blended teaching. The language acquisition courses discussed in this paper are part of the joint training program jointly hosted by the College of Liberal Arts of Beijing Normal University and Cardiff University in the United Kingdom, and the target students are middle and senior students majoring in Chinese and culture at Cardiff University. The language theory courses are undergraduate courses offered by the College of Liberal Arts at Beijing Normal University and are taught to both Chinese and international students. This study explores new modes and methods of international Chinese education in the post-epidemic era in actual frontline teaching research by creating a new type of special Chinese classroom that is more suitable for an online and offline mixed teaching approach.

First, to address the dilemma of teaching methods in the post-epidemic era, we explore the new modes of online teaching with an upgraded sense of interaction–experience and online–offline hybrid teaching. Owing to the emergence, spread, and disappearance of various epidemics around the world, international exchanges have been restricted. Especially during the active period of epidemics, it is inconvenient for students to come to China and for teachers to leave the country. Accordingly, a large number of offline courses in international Chinese education have shifted to online or online-offline hybrid teaching formats. In particular, online teaching, which is not restricted by time or place, has been gradually highlighted for its convenience, making it an option that increasingly more international Chinese teachers and students are willing to try in the post-epidemic era. However, the teaching methods of teacher-student and student-student face-to-face communication, real-time question-and-answer interaction, and display of physical teaching aids in offline teaching cannot easily be employed in online teaching, and students' learning experience is poor, which directly affects the teaching effect. At the same time, in the environment of global epidemic prevention, online and offline Chinese courses do not have to rely entirely on the physical teaching environment and induce better communication and interaction and immersive experiences.

Second, we address the issue regarding teaching content and methods to cultivate students' Chinese learning and application ability. Previous research on informatized teaching mainly explores the combination of offline teaching and information technology means, which is difficult to adapt to the new changes in international Chinese education. Meanwhile, most of the informatized multimedia teaching methods in traditional Chinese education rely on fixed equipment, and teaching requires uniform classroom and time arrangements. Additionally, even if students can learn offline in the post-epidemic era, they have still become accustomed to the online mode of learning in recent years, which has meant no restrictions on the time difference and location. Therefore, the traditional information technology means applicable to offline teaching are insufficient to cope with the new needs of teachers and students. In the past, most international Chinese education classrooms over-emphasized language application and drilling while ignoring the connection between language acquisition and a series of ontological knowledge (e.g., cognition, syntax, semantics), which made language learning mechanized, boring, tedious, and ultimately affected students' improvement in Chinese proficiency. Most target students of international Chinese education are adults with a high level of literacy who are interested in the language. Simply teaching and practicing language usage cannot fully stimulate students' desire for exploration and is not enough to fully demonstrate the deep heritage and charm of Chinese, resulting in an undesirable teaching outcome. Therefore, in the implementation of this study, knowledge of Chinese linguistics is used to promote students' understanding of the rationale of words, phrases, and grammar; to demonstrate the deep cultural heritage of Chinese; and to enhance students' interest in learning and

desire for exploration. Simultaneously, with language application as the core, multi-dimensional informatized audio-visual resources are used to assist in teaching and enhance students' literacy, output, and other aspects of language application.

Third, to resolve the problems of single learning resources and boring materials, the exploration of online resources can establish a library of online model lessons and informatization resources that can be shared and circulated easily. Through the integration of traditional multimedia resources and the discovery of new types of informatization resources suitable for international Chinese education in colleges and universities, coupled with the establishment and production of easy-to-apply resource libraries and instructions for use, we can realize the convenient sharing of resources for international Chinese teachers and students. At the same time, we can create a Chinese education curriculum with rich and detailed materials and scientific and rigorous assessment, which will improve the design of the curriculum and provide sample curriculum records.

### 3. Precise Grading and Implementation: Creating Personalized and Informationized Courses

Through practical research, we have found that conducting in-depth grading of the language proficiency, cultural level, cognitive abilities, and knowledge background of the teaching objects is an important step in creating targeted, innovative, and personalized courses. In general, students in the same grade and course are equivalent in terms of Chinese proficiency and cultural level (e.g., the same HSK grading and academic grade). However, there are bound to be differences in the subtle language skills (e.g., listening, speaking, reading, and writing) and cognitive abilities of different individuals. In practice, we accomplished the re-conceptualization of the target audience by creating special designs for the first lesson and the first month of lessons. Among them, the language output task in the first lesson can examine students' listening and speaking skills and comprehensive language level, the language game can examine students' cognitive level and points of interest, and the questionnaire survey in the classroom and the real-time text chat after the classroom activity can be used to obtain information about students' expectations of the course as well as various aspects of reading and writing.

Take the first lesson on oral and written output as an example. In speaking, students' pronunciation, vocabulary, and grammar are assessed through their self-introductions. Students were shown a self-introduction template during the lesson and asked to use it as a basis for expanding and completing a self-introduction of more than three minutes. In practicing of written language, students' perceptions and expectations of the course were investigated and their ability to use the language was assessed through a reading-writing-speaking output task. Figures 1 and 2 present the oral output assessment template and examples of written and oral output questions, respectively.

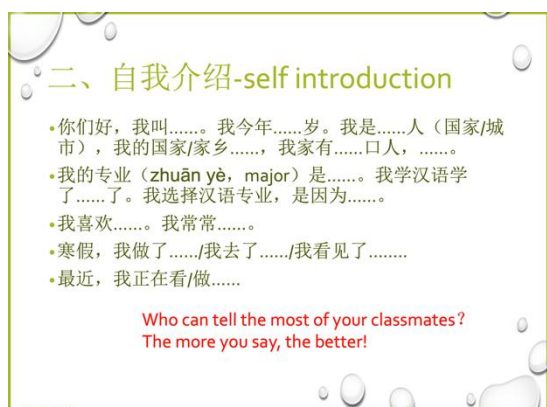


Fig. 1 Oral assessment - self-introduction template



Fig. 2 Examples of written and spoken output assessment question

Based on an in-depth understanding of the students, the types of courses taught are precisely positioned and combined with students' personality traits to lay the foundation for the introduction of technological means and linguistic knowledge. The practical courses in this study include intermediate and advanced Chinese culture courses and language acquisition and language research courses, with the majority being language courses. According to the course content and type, we further classify the courses and carefully analyze the mode of delivery and interactive features. For example, language acquisition classes focus on teaching, acquiring, and practicing language knowledge, and the ratio of teacher lecture to student output practice is equal concerning basic Chinese characters, intensive reading of Chinese, and Chinese listening. Language practice classes focus on language output, supplemented by the teacher's lecturing, and students are stimulated to open their mouths and move their hands in the form of interactions in the learning of Putonghua phonetics, advanced Chinese writing, business Chinese, and spoken Chinese. Language knowledge transfer and research classes focus on teaching and researching language, and the mode of teaching and interaction is analyzed in detail. Teaching and research courses mainly center on language knowledge and student research, and the target students are mostly international students with higher levels of language proficiency. Teachers give most of the lectures (e.g., modern Chinese for international students). In culture and communication courses, students participate in the discussion in an interactive form to explore topics such as Chinese network culture and Chinese–Western cultural exchanges and comparisons.

#### **4. Application: The Integration of Informatization and Linguistry in Teaching and Learning Practices**

Through frontline teaching practice, we have found that online-offline hybrid teaching and the integration of information technology and linguistry have significant positive effects in all aspects of international Chinese education in the post-epidemic era.

First, in terms of international communication, it can highlight the charm of Chinese and facilitate the international dissemination of Chinese. Although Chinese is an ancient language, it remains full of vitality and vigor. In international Chinese education, the use of emerging technologies to analyze and teach Chinese reduces the communication restrictions caused by epidemics and facilitates the learning and use of Chinese for students. At the same time, the knowledge of both traditional ancient and modern Chinese is appropriately integrated into teaching, which reveals the deep cultural heritage and realistic charm of Chinese and contributes to the promotion of its international dissemination and exchange.

Second, in terms of teachers' instruction, it can break down time and space barriers, create shared resources, and enhance teaching outcomes from multiple perspectives. In view of the teaching dilemma in the post-epidemic era, we should explore how to best use IT to strengthen teacher-student interactions in online and online–offline mixed teaching modes so that teacher–student, and student-student exchanges are no longer bound by time and place and real-time learning and feedback can even be realized, thus significantly improving teaching efficiency. Meanwhile, we should explore the organic combination of language use and theory in teaching and create a new type of teaching resource library that can be shared among peers to enrich teaching content and help teachers improve teaching outcomes from various perspectives.

Third, in terms of student learning, multi-dimensional teaching resources can be explored to enhance students' language acquisition experience. With the goal of creating a more vivid Chinese classroom, we have introduced multimedia resources that are interesting to young people, easy to grasp, and suitable for second language acquisition. This has enabled us to enhance students' listening, speaking, reading, and writing skills from multiple perspectives and made learning more efficient. At the same time, we can make learning more fun by increasing the interest and self-confidence of Chinese learners so that they can have fun and be consistently motivated to learn.

Fourth, in terms of textbook writing, exploring the integration of theoretical knowledge of language and language application can provide new ideas. On the basis of improving students' language application ability, we can provide new concepts, perspectives, and materials for the development of Chinese as a foreign language teaching materials by introducing theoretical knowledge of language that can help students understand and memorize word shapes, lexical meanings, and grammatical justifications.

## 5. Conclusion

This paper discusses new models and methods for effective language teaching in the post-pandemic era, based on a study of language courses in international Chinese teaching over the past four years. Firstly, in terms of teaching methods, language theory can be taught as supplementary content and integrated into teaching through the use of information technology. Secondly, integrating language theory into language teaching requires accurate grading of the language level, comprehension ability, and knowledge level of the students, in order to design targeted courses and ensure effective teaching. Thirdly, we have found through practice that introducing linguistic theory into various language courses such as listening, speaking, reading, and writing can enhance students' interest in Chinese and deepen their understanding of Chinese pronunciation, characters, vocabulary, grammar, and culture, thereby improving their language proficiency. Fourthly, integrating language theory into language teaching with the assistance of information technology not only contributes to international communication and enhances the effectiveness of international Chinese education, but also provides materials for textbook development. Language theory is no longer just background knowledge for teachers' lesson preparation, but becomes foreground content and an auxiliary tool for international students to learn language and understand the target language.

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