

Research on the Compilation of International Chinese Textbooks for Children and the Construction of Related Digital Resources

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Abstract: *In view of the trend of younger Chinese learners around the world, the international Chinese textbooks for children on the current market mainly exist in paper form, while the three-dimensional and digital teaching materials are relatively scarce. In addition, the existing textbooks lack of in-depth research and application in the two core dimensions of interest and localization. At the same time, the construction of Chinese digital resources for children has significant deficiencies in network platform, sharing technology, quantity and quality of course content, resource classification and evaluation standards. Coping strategies: First, By introducing thematic teaching methods and diversified intelligent activities, Enhance the interest of the teaching materials; next, Adjust the annotation language, human name illustrations, new words and other elements of the textbook, Localize it; once more, Further improve the Chinese teaching resource database for children, Ensure that in the three stages of before, during and after class, as well as both teaching and learning, the selection of resources can reflect the interactivity, autonomy, convenience and timeliness; besides, Scientific and detailed classification of the content of the resource database; last, The design and construction of intuitive, diversified, convenient and shared information technology for the resource database, And through the "Internet + AI" repository testing and use, Ensure its stable operation, Content practical, Effective sharing, Towards the network, digital intelligence, ubiquitous, To promote the sustainable development of international Chinese language education.*

Keywords: International Chinese textbooks for children, Digital resource construction, Multiple intelligence activities, Localization strategy, Information technology.

1. Introduction

In the field of international education in the past two decades, the multi-polarization of the global political pattern, the globalization of economic activities and the in-depth development of cultural diversity have led to the continuous growth of interest and demand for Chinese learning in countries around the world. According to relevant statistics, the number of people learning and using Chinese around the world has exceeded the 100 million mark. More and more countries have begun to incorporate Chinese into their national education system, and have opened Chinese courses in primary and secondary schools, which makes the international Chinese education show an obvious trend of "younger age". At present, the phenomenon of younger overseas Chinese learning is widespread, and the trend of younger Chinese learning is developing rapidly [1].

At the same time, the number of students taking the Chinese YCT (Youth Chinese test) is also rising, reaching new highs. Especially in North America, France, Australia, New Zealand and other countries, the number of children learning Chinese has surged by dozens of times in recent years, and primary and middle school students have gradually become the main force of Chinese learning. In North America, for example, the number of Chinese students in primary and secondary schools has reached about 400,000, accounting for two-thirds of all Chinese learners in North America. In the UK, 12 0,000. primary and secondary students learn Chinese, accounting for 60 percent of the total Chinese learners [2].

Under the current international education background, it is particularly urgent to compile and publish international

Chinese textbooks for children. At the same time, the construction of digital resource database also needs to be started urgently. These textbooks and resource databases will provide richer and more diversified learning materials for global Chinese language teaching, help the younger generation to master the Chinese language, enhance the understanding of Chinese culture, and thus promote international cultural exchanges and mutual understanding.

To meet this need, education experts and linguists are actively developing Chinese textbooks suitable for students of different ages. These textbooks not only attach importance to the teaching of language knowledge, but also incorporate rich cultural elements, such as the Chinese traditional festivals, customs, historical stories, etc., aiming to stimulate students interest in learning. In addition, the construction of the digital resource library will cover the interactive learning platform, online courses, virtual reality experience and other forms, so that students can learn Chinese in a more vivid and interesting way.

In North America, the education department has begun to work with Chinese educational institutions to jointly develop Chinese courses suitable for local students. Such cooperation not only helps to improve the quality of teaching, but also promotes cultural exchanges and mutual understanding between the two countries. In France, the government has listed Chinese as one of the top foreign languages and promoted Chinese language education programs in several cities. Educational institutions in Australia and New Zealand are also actively seeking to cooperate with Chinese universities to introduce high-quality Chinese teaching resources.

With the strengthening of the global trend of younger Chinese learning, the international demand for high-quality Chinese teaching materials and digital resources continues to grow. This not only brings new development opportunities for the language education industry, but also builds a broader platform for cross-cultural exchanges. In this context, the compilation of children's international Chinese textbooks and the construction of digital resource database for children need to be started.

2. Analysis of the Current Situation of International Chinese Textbooks for Children and Their Digital Resources Construction

According to the Modern Chinese Dictionary (seventh edition), the term "juvenile" refers to individuals between 10 and 15 or 16 years old, while "child" refers to younger minor individuals. The term "children" covers teenagers and children. This study focuses on Chinese learners of non-Chinese adolescent children around the world, including overseas and domestic preschool children, primary, middle school students and senior high school students, that is, Chinese learners aged 3 to 18.

Reviewing the history of the development of international Chinese textbooks for children in the 20th century, the earliest representative textbook is the Ten Lessons of Primary Chinese compiled by Ye Deming in 1982. Later, in 1988 also became an important work in this field. For quite a long period of time, there is a lack of representative international Chinese textbooks specifically designed for children in China. Until 1999, the China Institute of Curriculum and Teaching Materials launched the national "Eighth Five-Year" teaching material construction project and compiled the Standard Chinese, which became one of the key projects in this period.

Since the beginning of the 21st century, the development of international Chinese textbooks for children has been significantly accelerated. According to the statistics of the global Chinese textbook database, a total of 3,225 Chinese textbooks for children after the 21st century, accounting for 50.68% of the total textbooks, and their proportion has surpassed that of adult Chinese textbooks [3]. In order to promote the learning of non-Chinese students, the Institute of Language Application of the Ministry of Education (formerly Hanban, China) launched the International Chinese proficiency standardization test for primary and secondary school students in 2004, and further developed a new YCT in 2009. In the past 20 years of the 21st century, the promulgation of the old and new YCT exams has become a significant watershed for the change of children's Chinese textbooks.

In the first decade of the 21st century (2000-2010), the state uniformly planned and published a large number of Chinese textbooks for children, which marked that the publishing industry of Chinese textbooks for children has entered a small peak. During this period, the Institute of Language Application of the Ministry of Education has planned and published a series of representative Chinese textbooks for children, such as Happy Chinese (2003), Learning Chinese

from Me (2004) and Chinese Paradise (2006). In the second decade of the 21st century (2011-2021), while the number of Chinese Chinese textbooks continues to grow, the content and forms tend to be three-dimensional and diversified. During this period, a series of innovative textbooks have been published, such as Sunshine Chinese Textbook 4B (2015), New Children Chinese (2015), Easy Learning Chinese (2016) and Yeah! Chinese(2016). In addition, around the new YCT test and the Chinese teaching for children, publishing houses, schools and institutions at home and abroad have also developed several sets of Chinese teaching materials for children and teenagers, among which the most representative ones are such as YCT Standard Course published in 2016.

This study through comprehensive analysis of the major press, network platform application, China network related academic papers and Dangdang, amazon network bookstore, determine the widely used at home and abroad many Chinese teaching materials for children, including "Chinese paradise", "easily learn Chinese" "happy Chinese" learn Chinese with me, etc. The results show that there are significant differences in the internal structure of children, and their teaching philosophy, content and structure vary according to the age level of the teaching object and the language policy of the country. In order to explore the applicability of the textbook, this study makes a detailed analysis from the dimensions of the age level of the textbook, the language policy, writing principles, text content, illustration design, word selection, the arrangement of language points, the integration of cultural content, the design of exercises and the arrangement of classroom activities. In view of the current "trend of younger age" in international Chinese education, this study further discusses whether these teaching materials can meet this emerging demand.

In view of the publication of international Chinese textbooks for children in the early 21st century, it can be observed that with the development of The Times, the teaching materials in this field are constantly coming forth the new and actively adapt to the learning needs of overseas children. During this period, the number of Chinese textbooks published for children increased significantly, and their development speed far exceeded that of other types of Chinese textbooks. With the increase in publication volume, the use of these textbooks has also been expanded. Although the textbooks compiled by local Chinese experts still dominate the market, the textbooks compiled by overseas countries are gradually showing their influence. According to relevant statistics, up to 86.7 percent of the Chinese language textbooks are tailored for overseas primary and secondary school and kindergarten learners. Therefore, editing and publishing teaching materials for Chinese learners has become one of the core tasks of publishing teaching materials for Chinese at present and even in the future [4]. Based on this, it can be asserted that the market of international Chinese textbooks for children is booming, with huge market potential and broad development prospects.

Given significant differences from adults at the psychological and physiological levels, children exhibit unique characteristics during second language acquisition. Therefore, the compilation and publication of international Chinese textbooks for children should be different from adult

textbooks in order to meet the needs of children's mental development. However, the international Chinese textbooks for children on the market are generally faced with problems such as lack of interest and lack of localization characteristics.

The international Chinese textbooks for children referred to above are mainly in paper form. In recent years, children international Chinese digital resources can be roughly divided into three categories:

2.1 Online Course Resources

It covers large-scale online courses (MOOC), small-scale online courses (SPOC), and online courses based on the B2C model. In terms of MOOC, YCT standard courses 1 and 2 provided by online Confucius Institute are representative; in SPOC, including various online courses offered by five universities such as Xiamen University and Chongqing University; regular courses and Chinese examination courses introduced by E-Chinese Learning in B2C mode; dialogue courses, reading courses and advanced courses of Yangyang Chinese textbooks provided by Yangyang Chinese (children); YCT personalized courses offered by LingoAce; and interesting special courses of Wukong Chinese are all representative courses in this field.

2.2 Online Teaching Assistance Resources

Covering micro-course teaching video, digital textbooks, teaching courseware and test bank and other resources. The micro-course teaching video resources include the content provided by Chinese blog, online Confucius Institute and other platforms; the digital textbook resources involve multiple sets of electronic teaching materials and Great Wall Chinese series published by Beijing Language and Culture University Press. In terms of teaching courseware, Learn Chinese easily and Chinese Paradise are etc. The test bank resources include the YCT exam introduction manual, exam outline, sample questions and real questions over the years provided by the Chinese test service network.

2.3 Students Extracurricular Online Learning Resources

Covering learning applications, electronic dictionaries and animation resources. Learning applications include M Mandarin, Easy Chinese, global Chinese learning platform, Wutong Chinese, etc., electronic dictionary covers Chinese Pod, Hanping Pro, Pleco, and film animation resources include Mulan, Kung Fu Panda, Home with Children, and Legend of the Demon Cat, etc.

The survey found that the shortage of the above children Chinese and international digital resources mainly has the following three aspects [5]:

First, online course field: At present, the number of higher education institutions participating in the construction of Chinese International Education MOOC (Massive Open Online Course, large-scale open online courses) is relatively limited, leading to an imbalance in the construction of the main course types of Chinese MOOC. Specifically, some course types have abundant resources, while others are relatively scarce. In addition, the lack of Chinese SPOC

(Synchronous and Interactive Classroom Online) courses on the representative platform also constitutes a problem. Chinese online courses based on B2C (Business-to-Consumer, enterprise-to-consumer) model have defects in the improvement of the teacher supply mechanism and promotion mechanism, which restricts the improvement of the popularity and quality of the courses.

Secondly, in the field of construction of network teaching auxiliary resources: At present, the classification criteria and evaluation system of teaching auxiliary resources have not been unified, and this phenomenon causes the disordered state and evaluation problems of resources. At the same time, the digital form of various teaching auxiliary resources urgently needs to be further diversified and optimized to meet the needs of different learners. For example, existing resources are mainly text and images, while video, audio, and interactive learning materials are relatively scarce.

Thirdly, In the field of students extracurricular learning resources construction: At present, there is a lack of an efficient resource sharing and co-construction mechanism, which seriously restricts the popularization and application of high-quality learning resources. At the same time, the lack of cutting-edge technology support also constitutes a key problem, which leads to the difficulty of learning resources to synchronize with the technological progress, and the inability to make full use of advanced technology means to enhance the learning effectiveness. For example, the application of virtual reality (VR) and augmented reality (AR) technology in extracurricular learning resources is still in its infancy.

The comprehensive analysis shows that with the decrease of overseas Chinese learners, the international Chinese teaching material market for children shows a rapid development trend. The year 2000 marked an important turning point in the publication of international Chinese textbooks for children. Following the launch of YCT in 2004 and the new version of YCT in 2009, the publication of international Chinese textbooks for children has shown a boom. However, by looking at the international Chinese textbooks for children in the current market, we can find that paper teaching textbooks occupy a dominant position, while three-dimensional and digital teaching materials are relatively scarce. Textbooks compiled by domestic experts are widely published overseas, while relatively few textbooks are jointly compiled, published and published at home and abroad. In addition, for children's international Chinese textbooks, the two core issues of interest and localization have not been fully emphasized and in-depth discussion. From the perspective of time and space ductility, although the construction of international Chinese digital resources for children has included online courses, online teaching auxiliary materials and students extracurricular online resources, but in the platform building, sharing technology, curriculum quality and quantity and related resources classification and evaluation criteria there are still significant deficiencies, urgent need for in-depth thinking and positive exploration.

3. Strategies for the Compilation of International Chinese Textbooks for

Children and the Construction of Digital Resource Database

In the future process of compiling international Chinese textbooks for children, interest and localization will become two core topics. The research of pedagogy and psychology shows that compared with adult Chinese textbooks, the biggest characteristic of Chinese textbooks for children lies in their interest. Therefore, in order to adapt to the cognitive level of non-native Chinese children in the world, the compilation of teaching materials should not only meet the basic attributes such as science, pertinence and practicability necessary for the general Chinese teaching materials, but also put special emphasis on the interest of the teaching materials. In Chinese textbooks for children, fun can not only stimulate learners interest in learning, but also promote their cognitive development and emotional growth. Therefore, in the process of compiling international Chinese textbooks for children, interest must be taken as the primary factor, and vivid and interesting text content, diversified practice forms and creative teaching activities are designed to attract learners attention and improve their learning enthusiasm. At the same time, the localization problem is also can not be ignored. In the context of globalization, international Chinese teaching materials need to better adapt to the cultural background and social needs of different countries and regions. This requires us to deeply study the local cultural background, living habits and language habits when compiling international Chinese textbooks for children, so as to ensure that the content of the textbooks coincides with the local actual situation. Only in this way can learners gradually enter the optimal state of learning Chinese within their familiar local cultural environment, thereby cultivating their intercultural communication skills.

3.1 The Introduction of Thematic Teaching Method and the Integration of Diversified Intelligent Activities Aim to Enhance the Interest of International Chinese Textbooks for Children

According to the German poet Schiller in his Brief Book of Aesthetic Education, children can fully show their "self" and experience freedom only in game activities [6]. This study believes that the interest of Chinese textbooks for children is a concentrated reflection of children's mastery of Chinese in the process of gamification learning. The interest of Chinese teaching materials for children is mainly reflected in the content and form, and the interest in the teaching process is the concentrated display of their interest. The interest of the content mainly refers to the attraction and practicability of the teaching content, while the interest of the form emphasizes the aesthetics and applicability of the form. Specifically, for example:

When compiling the international Chinese textbook for children "Chinese Learning", the researcher adheres to the teaching concept: Chinese is easy to learn, Chinese is full of fun, through situational simulation, activity participation and interest-driven learning. The textbook reflects the interest of teaching, the interest of practice and the integration of cultural elements in many aspects. The specific performance is as follows:

- A) Text content: import physical objects, pictures, dialogues, activities, games, etc.
- B) Word game: use various skills such as listening, speaking, reading, writing, painting and other skills;
- C) sentence pattern game: text performance, pictures, discussion, speech, dialogue;
- D) Practice form: Use more illustrations to improve students interest in doing exercises; look at the map, read the clock, read the park sign, look at the calendar, read the pictures, say sentences, know animals, look at the pictures, look at the pictures and fill in the blanks;
- E) Cultural experience: making teachers Day greeting cards, Dragon Boat Festival sachets, business cards of Chinese tourist attractions, Spring Festival newspaper, etc.

The textbook adopts a thematic teaching method, including the following topics: numbers, body parts, basic movements, family names, fruits and vegetables, food, taste, animals, colors, nature, daily necessities, currency. The relevant teaching activities are designed as follows:

- Game teaching — count fingers, count students, queue to quote the number, number song
- Game teaching — reach out his hand to point to facial features, eyes touch nose game
- Game teaching — I said you do action, happy clap hands song, jump jump kick kick
- Cognitive teaching — look at the family photo said family relatives
- Physical teaching — to identify fruits and vegetables
- Smell teaching — taste the taste
- Hearing and touch teaching — guess animals
- Painting teaching — small hand painting Peking Opera facial makeup: recognize the color
- Paper-cut teaching — Small hands cut out of nature: sun, moon and mountains, flowers and trees, birds, animals, insects and fish
- Picture teaching — recognize money
- Physical teaching — identify daily supplies
- Communication teaching — Use money to buy and sell daily supplies

Studies have found that children prefer multiple intelligent activities, such as illustrations, storytelling, humorous language, and dynamic games. Howard Gardner, an American educational psychologist, proposed the theory of multiple intelligences in his book *The Structure of Intelligence* [7]. The theory advocates that human thinking and cognitive patterns are diverse, at least covering linguistic intelligence, logical-mathematical intelligence, spatial intelligence, music intelligence, body movement intelligence, self-cognitive intelligence and interpersonal intelligence. These intelligence can stimulate children's interest in learning Chinese, and promote the all-round development of various skills of "listening, speaking, reading and writing" in Chinese teaching. Through the comprehensive use of vision, hearing, touch, smell and other senses, we can exercise students various abilities. At the same time, through the integration of literature, art, physical education, psychology and other disciplines, we can cultivate students sentiment. In this process, encouraging students to express, promote full communication, and establish an interactive and friendly environment, which is the embodiment of the integration of

intelligent education concept of Chinese teaching.

3.2 Adjust the Annotation Language, Name Illustrations, New Words and Other Elements to Realize the Localization Adaptation of International Chinese Textbooks for Children

The construction of localized teaching materials means that the content of the teaching materials should fully consider and reflect the specific national conditions of the country where the learners live, including social system, cultural customs, thinking mode and characteristics of mother tongue. The design of teaching materials should be based on the characteristics and difficulties of learners, and the teaching content and order, teaching methods and practice activities should be reasonably arranged, so as to improve the teaching effect, reduce cultural conflicts, and adapt to the teaching and learning needs of foreign languages in specific areas [8]. Localized teaching materials specifically refer to the Chinese language teaching materials compiled for students in specific countries or regions, which should not only take into account the individual characteristics of learners, but also adapt to the local language teaching environment [9]. On the basis of pedagogy "first organizer" theory, localization of teaching material can make Chinese learners found in the process of learning related to their own previous learning and life experience of "leading organizer" (i. e., knowledge skills), with the help of the familiar "first organizer" as a guide, help learners in the future study and explore the positive migration of language knowledge, skills and culture. Therefore, the localization strategy of international Chinese textbooks for children should be devoted to the realization of the above goals.

In terms of the implementation strategy of localization of international Chinese textbooks for children, the Chinese Hanan International Chinese Teaching Resources Fund project "Happy Chinese" (2013-2018) led by the researcher has been successfully concluded. The results of the project, six volumes of Happy Chinese, have been published by Peoples Education Press from 2014 to 2017 [10]. Based on the practical experience of Thai localization adaptation of Happy Chinese, this study proposes the following specific localization measures: A. localization of annotated language: change the original English notes into Thai; B. localization of the names of characters: the names of the most common children in Thailand, Ganya, plain post, etc. C. localization of portrait illustration: the four middle school students are Thai learners with dark hair and dark wheat skin; D. localization of new words.

(1) Localization of national name: In addition to "Britain" and "America", the Thai version also chooses some countries familiar to Thais in the world, such as "Japan", "Vietnam" and "Malaysia".

(2) Localization of place names: The English version of "Happy Chinese" contains the words "London" in the British capital and "New York" in the American capital. Thailand replaces it with "Bangkok", the capital of Thailand, and "Hanoi", the capital of neighboring Vietnam.

(3) Language localization: The English version of Happy

Chinese is the mother tongue of English as the protagonist, and the Thai version of Happy Chinese is replaced by "Thai". In addition, French is the first foreign language of the English version of Happy Chinese, so "French" in the Thai version of "Happy Chinese". The German language is the second foreign language of the English version of Happy Chinese, while the Thai version of Happy Chinese is replaced by "Japanese".

(4) Currency localization: English version of "Happy Chinese", Thai version of "Happy Chinese" replaced by "Thai baht".

(5) Food localization: "beef" and "mutton" appear in the English version of Happy Chinese, while in the Thai version of Happy Chinese, "beef" is changed to "chicken" and "mutton" is deleted.

After systematic research, the local adaptation of the Thai version of Happy Chinese has the following characteristics:

A) Name, name, portrait illustrations and other strong sense of substitution

"Happy Chinese" designs the images of Thai students such as Ganya, Dan, Supo and Tong, and the text follows a series of communication activities between the four of them and the four Chinese students. The place names in the text, such as "Bangkok", are also very familiar to Thai students. The local adaptation of the names and portrait illustrations in the textbook makes Thai primary and middle school students have a strong sense of substitution, which can make Thai children quickly integrated into the textbook.

B) multifaceted notes of students native Thai

In addition to the title, sentence pattern and text of each lesson, the local adaptation of Thailand is all Thai, meeting the basic requirements of "Thai version". Students mother tongue annotation can improve the learning efficiency of primary and middle school students, and effectively help learners to fully understand the content of the textbook.

C) People, vocabulary, notes and others are integrated into the local Thai culture

The characters and food vocabulary are adapted into the local Thai culture. In the textbook, the portraits of four Thai primary and middle school students are illustrated, and the costumes reflect the Thai costume culture. For example, the introduction of the "Song Gan Festival" was added to effectively enhance the local cultural identity of Thai students.

The above Thai language adaptation of Happy Chinese may be an example of the localization adaptation of international Chinese textbooks for children.

3.3 Material Selection, Classification, Construction, Design and Test Application of International Chinese Teaching Resource Database for Children

3.3.1 Material selection principles: covering three stages before, during and after class, to ensure interaction, autonomy,

convenience and timeliness

This study mainly considers the selection of teaching resources from the following four dimensions: the diversity of content and form, the autonomy of both sides, the convenience of resource utilization and the timeliness of support services. The construction of resource database aims to meet the needs of teachers in pre-class preparation, in-class implementation and after-class evaluation. Under the teaching section, the resource database is subdivided into four sub-sections: micro-course teaching video, digital three-dimensional teaching materials, courseware, and test question bank. The development of micro-course resources should consider the development subject, course classification method, teaching objectives, learning evaluation and interactive function. Digital teaching materials need to be considered from the platform support, classification system, digital presentation form and other aspects. The construction of courseware resources should be combined with the corresponding teaching materials, and the quantity, update maintenance, interactivity and resource sharing should be considered. The construction of the test question bank should pay attention to the platform support, the content and the type of test questions. Under the learning section, the resource database is also subdivided into four sub-sections: learning platform, electronic dictionary, extracurricular digital reading materials, film and animation resources.

3.3.2 Scientific subdivision of the content of the teaching resource database: combine dynamic and static materials to ensure authenticity, interest and effectiveness

According to the framework of children's international regular Chinese language teaching content, integrating the contents of several published international Chinese language teaching materials for children, and making full use of Chinese language teaching resources for children provided by "Network Confucius Institute", this study has scientifically and systematically classified the database of Chinese language teaching resources for children. The classification work aims to ensure that the selected content is scientific and systematic, while realizing the organic combination of dynamic and static materials, to ensure the authenticity and reliability of the content, as well as fun and practical. The sections include micro-course teaching videos, digital three-dimensional textbooks, courseware, test question bank, learning platform, electronic dictionary, extracurricular digital reading books and film and television animation resources. For example, digital stereoscopic textbooks are subdivided into subcategories such as text, illustrations, animation, and extended vocabulary; extracurricular digital textbooks are subdivided into subcategories such as microfiction, prose, poetry, story, etc.

3.3.3 Build a resource database based on information technology: realize intuition, diversification, convenience and sharing

With multimedia computer and network as the core, this research discusses the design, construction and operation of the resource database from the four dimensions of scientific structure, interesting content, systematic knowledge and timeliness of the platform. The research emphasizes that the

construction of resource database should meet at least five basic conditions: the necessity of content, the suitability of difficulty, the rationality of structure, the appropriateness of media and the clarity of navigation. Through these measures, the aim is to make the various sections covered by the resource library more intuitive, more diversified content, more convenient operation, and more shared content.

3.3.4 Experimental application of "Internet + AI" resource database: digitalization, networking, intelligence and ubiquitous

"Internet + AI" resource database refers to the organic integration of intelligent technology and language teaching, relying on exquisite and interesting teaching resources, and with the support of mobile Internet and artificial intelligence technology. The experimental application of the resource database aims to detect its operation stability, ensure the practicability of the content, and ensure the effective sharing of resources, so as to greatly expand the boundary of space and time, and promote the development of international Chinese teaching to the direction of digital, network and intelligent.

In international Chinese teaching resource database for children, digital teaching resources mainly include text, digital video, digital audio, animation, multimedia courseware, online communication discussion area and E-mail, etc. Based on "Internet +AI" international Chinese teaching resource database for children, with the design concept of "ubiquitous learning", it pursues the richness of resources, practicability of content, friendliness of interface and convenience of interaction, and meets the needs of international Chinese teachers and learners to easily obtain a variety of information inside and outside the course.

4. Conclusion

This paper discusses the current situation and challenges of the compilation of international Chinese textbooks and the construction of digital resources for children, and puts forward the corresponding countermeasures. Through analysis, we find that when facing the trend of younger Chinese learners in the world, although the overall development momentum is rapid, there are problems such as the majority of paper textbooks, scarce digital textbooks, lack of interest and insufficient attention to localization. At the same time, digital resource construction also has deficiencies in network platform construction, shared technology, course quality and quantity, resource classification and evaluation standards.

To address these challenges, The coping strategies proposed in this paper include: introducing thematic teaching method and diversified intelligent activities to enhance the interest of the textbook, To stimulate children's interest in learning Chinese, Promote the comprehensive development of their language skills; The localization strategy of international Chinese textbooks for children should fully consider the specific conditions of the country, Including the social system, cultural customs, thinking patterns and the characteristics of the mother tongue, Adjust the annotation language, human name illustrations, new words and other content to enhance

the localization of the textbook, To reduce the cultural conflict, Improve the teaching effect; And the further construction of Chinese teaching resource database for children, Focus on interactivity, autonomy, convenience, timeliness, And to classify the content of the resource library scientifically and carefully, To realize the intuitive, diversified, convenient and shared design and construction of information technology. In addition, it is also suggested to test and use the "Internet +AI" resource database to promote the digital, networked, intelligent and ubiquitous development of children's international Chinese teaching.

Future research directions or possible development trends may include further exploring how to combine AI technology with Chinese teaching for children to improve teaching efficiency and learning experience; how to optimize teaching content and teaching methods through big data analysis to better meet the learning needs of children in different countries and regions; and how to establish a better resource sharing mechanism to promote the construction and sharing of international Chinese education resources.

To sum up, the Compilation of International Chinese Textbooks for Children and the Construction of Relate Digital Resources is a complex and important field, need education workers, textbook writers, technology developers, constantly explore and innovate, to adapt to the global Chinese learners younger trend, meet their learning needs, promote the sustainable development of international Chinese education.

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