

# Research on the Chinese Characters in Cross-strait Chinese Textbooks — Through Comparing of the Unified Edition and Hanlin Edition Chinese Textbooks for Elementary Education

Yanmei Zhang<sup>1</sup> Jiali Chi<sup>2</sup> Zhan Lv<sup>3</sup> Lingzhi Zhang<sup>4</sup> Qi Yi<sup>5</sup> Mengru Tang<sup>6</sup> Yang Yu<sup>7</sup> Qian Hu<sup>8</sup> Yuxin Hong<sup>9</sup> Zhuojun Xiang<sup>10</sup> Ruichi Zheng<sup>11</sup>

<sup>1,2,5,6,7,8,9,10,11</sup> Wuhan Institute of Technology, Wuhan, Hubei 430205, China

<sup>3</sup> Jinan University, Guangzhou, Guangdong 510610, China

<sup>4</sup> Xiamen University, Xiamen, Fujian 361005, China

<sup>4</sup> Corresponding author.

## ABSTRACT

Comparative analysis of Chinese textbooks used in elementary education across the Straits has always been a hot topic in the academic community. In this context, this essay investigates the characters in Chinese textbooks across the Straits by comparing the Unified edition and the Hanlin edition. The investigation reveals that the total number of characters and the number of character types used in the Unified edition textbooks are more than those in the Hanlin edition textbooks. Therefore, students who study the Unified edition textbooks are required to have higher reading and literacy skills. The high-frequency characters of the two textbooks are very similar, with a large number of common characters. Therefore, it is greatly beneficial for educational exchanges between the mainland and Taiwan.

**Keywords:** *Commonly used characters, Quantitative analysis, Unified Edition Chinese Textbooks, Hanlin Edition Chinese Textbooks, Character types.*

## 1. INTRODUCTION

The texts and characters used in basic Chinese textbooks on both sides of the Straits have always been an important issue concerned by the academic community. Since 2019, the Unified edition of Chinese textbooks for primary schools has covered the whole mainland, gradually replacing regional textbooks, including the textbooks of the Human Education edition, the Guangdong Education edition, the Suzhou Education edition, and the Beijing edition. So, what are the differences between the Unified edition and Hanlin edition? What is the difference in their characters? To solve this problem, this paper makes a comparative analysis of the characters used in the Unified edition textbooks and the Hanlin edition textbooks.

*The Chinese Language Curriculum Standards for Compulsory Education (2022 Edition)* issued by

the Ministry of Education of China on March 25, 2022, categorize the primary school Chinese textbooks (Unified edition) into three stages: the first stage (grades 1-2), the second stage (grades 3-4), and the third stage (grades 5-6). Correspondingly, Hanlin edition textbooks are also divided by us into three levels: the first level (grades 1-2), the second level (grades 3-4), and the third level (grades 5-6). The investigation excludes additional information such as prefaces and postscripts.

## 2. RESEARCH ON THE NUMBER OF CHARACTERS USED IN CROSS-STRAIT CHINESE TEXTBOOKS FOR PRIMARY SCHOOL

The number of characters used in textbooks is a direct reflection of students' reading volume. It not only indicates reading ability required for students,

but also impacts the improvement of their literacy skills. The character counts of the Chinese textbooks for primary school in the Unified edition and the Hanlin edition are as follows.

## **2.1 Research on the Number of Characters Used in the Unified Chinese Textbooks for Primary School**

### **2.1.1 Research on the First Stage of Chinese Textbooks in the Unified Edition**

The research found that the overall number of characters exhibited a consistent growth trend, escalating from 6,091 characters to 18,266 characters in the second volume of second grade. This represents a total increment of 11,365 characters and an average increase of 3,788 characters per volume. These findings also indicate a steady augmentation in reading capacity among primary school students at this stage.

### **2.1.2 Research on the Second Stage of Chinese Textbooks in the Unified Edition**

The research found that there is a significant increase in the number of characters in the first volume of third grade, surpassing the second volume of second grade by 6,449 characters. Furthermore, there is a consistent growth in overall character usage from 24,715 characters in the initial volume of third grade to 36,959 characters in the subsequent volume of fourth grade. This represents a total increment of 12,244 characters and an average increase of 4,081 characters per volume. These findings substantiate that character usage within this stage escalates alongside students' progression through grades.

### **2.1.3 Research on the Third Stage Of Chinese Textbooks In the Unified Edition**

The research found that there is a relatively modest increase in the number of characters utilized within the third learning section, with an overall stable trend observed. The total character counts increased from 38,680 characters in the first volume of fifth grade to 41,689 characters in the second volume of sixth grade - representing a net gain of 3,009 characters or an average increase of 1,003 words per volume. While there was a slight

decrease of 143 characters between the first and second volumes of sixth grade, it is worth noting that both volumes contained similar articles and only the former included a literacy table.

### **2.1.4 The Overall Situation of the Characters Used in the Unified Edition Textbook from the First to Third Stages**

It is summarized that the total amount of characters in these 12 books generally presents a stable growth trend. It increased from 6901 characters in the first-grade book to 41689 characters in the sixth-grade book, with a total increase of 34788 characters, and an average increase of 3162 characters per book. Therefore, in terms of the number of characters, the arrangement of the textbooks from the first to the third stage is more reasonable, which is in line with the development characteristics of primary school students' physical and mental growth.

## **2.2 Research on the Number of Characters Used in the Hanlin Chinese Textbooks for Primary School**

### **2.2.1 Research on the First Stage of Textbooks in the Hanlin Edition**

The research found that the overall number of characters in the textbooks of the first stage exhibits a steady increase. From 727 characters in the first-grade volume to 2,961 characters in the second-grade volume, there is a total increase of 2,234 characters, with an average growth of 744 characters per volume. This reflects the rapid enhancement of elementary school students' reading abilities during this stage.

### **2.2.2 Research on the Second Stage of Textbooks in the Hanlin Edition**

The research found that the number of characters in the this stage exhibits a fluctuating growth trend. From 6,427 characters in the third-grade volume to 9,025 characters in the fourth-grade volume, there is a total increase of 2,598 characters, with an average growth of 866 characters per volume. In comparison between the first and second stage, there is not a significant difference in the growth of character usage, but the increase in character usage between segments is not pronounced.

### 2.2.3 *Research on the Third Stage of Textbooks in the Hanlin Edition*

The research found that the number of characters in the third segment exhibits a trend of initial increase followed by a decrease. From 9,705 characters in the fifth-grade volume to 10,157 characters in the sixth-grade volume, there is a total increase of 4,949 characters, with an average growth of 1,649 characters per volume. The character number in the sixth-grade volume decreases by 4,497 characters compared to the fifth-grade volume, showing a significant difference in character usage between these two volumes. The character number in all four volumes of this segment is relatively small, with fewer texts.

### 2.2.4 *The Overall Situation of the Characters Used in the Hanlin Edition Textbook from the First to Third Stages*

It is summarized that the character usage in the twelve volumes of the Hanlin Textbooks exhibits an overall trend of fluctuating growth. From 727 characters in the first-grade volume to the maximum character usage of 14,654 characters in the sixth-grade volume, there is a total increase of 13927 characters, with an average growth of 1,392 characters per volume. Therefore, in terms of character usage, the overall character number in the first three stages of the Hanlin Textbooks is not extensive. There are some fluctuations in arrangement of characters.

### 2.3 *Comparison of the Number of Characters in the Unified Edition And the Hanlin Edition Textbooks from Stage 1 to 3*

By comparison, it is found that the character number in the Unified edition is significantly higher than that in the Hanlin edition. The difference in character usage between the two editions is most pronounced in the first-grade volume: the 727 characters in the Hanlin edition constitute only about 10.53% of the 6,901 characters in the Unified edition. The 14,654 characters in the sixth-grade volume of the Hanlin version account for approximately 35.03% of the 41,832 characters in the sixth-grade volume of the Unified edition.

## 3. RESEARCH ON THE NUMBER OF CHARACTER TYPES USED IN CHINESE TEXTBOOKS FOR PRIMARY SCHOOL ON BOTH SIDES OF THE STRAITS

According to the *Language Monitoring Related Terms in the Language Situation in China: 2013* released by the National Language Resource Monitoring and Research Center, the types of characters refer to the Chinese characters with different glyphs in the investigated language materials. Therefore, investigating the types of characters used in textbooks is equivalent to investigating which characters are used in the textbooks.

### 3.1 *Research on the Number of Character Types Used in the Unified Edition Textbooks*

#### 3.1.1 *Research on the Amount of Character Types Used in the First Stage of the Unified Edition*

The research found that the number of character types used in the first-stage textbooks generally increases gradually. The number of character types used in the first grade of the first volume is 879, and it increases to 1,678 in the second grade, the second volume, with a total increase of 799 characters. On average, there is an increase of 266 character types each time. The overall increase in the number of character types used in the first-stage textbooks is reasonable, as it gradually increases with the students' reading volume and corresponds to the learning characteristics of students in this age group.

#### 3.1.2 *Research on the Amount of Character Types Used in the Second Stage of the Unified Edition*

The research found that the number of character types used in the first-stage textbooks increases relatively little. From 1,882 character types in the third grade, the first volume to 2,308 character types in the fourth grade, fourth volume, there is a total increase of 426 character types, with an average increase of 142 character types per volume. There are 250 new characters and 250 writing characters in each volume, indicating a greater need for new characters. However, the growth of character types in the main texts is not significant,

which indirectly reflects a lower usage rate of new characters in character glossaries to be learned and to be written.

### *3.1.3 Research on the Amount of Character Types Used in the Third Stage of the Unified Edition*

The research found that the number of character types used in the third-stage textbooks is relatively stable, with a slight fluctuation in the increase of new characters. From 2,258 character types in the fifth grade, first volume to 2,412 character types in the sixth grade, fourth volume, there is a total increase of 154 character types, with an average increase of about 51 character types per volume. The number of character types in the fifth grade, first volume, and sixth grade, the fourth volume shows a decreasing trend. It shows that there are not many new characters introduced in this stage.

### *3.1.4 The Overall Situation of the Character Types Number in the Unified Edition Textbooks from the First to Third Stages*

It is summarized that the total number of characters used in the Unified Chinese language textbooks for the first to third stages shows a steady increase trend overall: the number of characters used from grade one to grade six increased from 879 to 2,412, a total increase of 1,533 characters, with an average increase of 139 characters. Considering that the first to sixth grades are a period of rapid improvement in students' reading ability, only by gradually increasing the number of characters can students' vocabulary be expanded and their ability to use characters and words be better developed. Therefore, combined with the statistical results, it can be concluded that the number of characters used in the first and third stages is relatively reasonable, while the second stage has a small growth in the number of characters, which is not enough for the reproduction rate of new characters in previous textbooks.

## **3.2 Research on the Number of Character Types Used in the Hanlin Textbooks**

### *3.2.1 Research on the Amount of Character Types Used in the First Stage in the Hanlin Edition*

The research found that the number of character types used in the first stage of the textbook has gradually increased, from 247 character types in the first grade to 617 character types in the second grade, an increase of 370 character types, with an average increase of 123 character types. The Hanlin edition of the first stage of the textbook has a reasonable selection of character types, reflecting the gradual increase in the arrangement of new characters as students' academic age increases.

### *3.2.2 Research on the Amount of Character Types Used in the Second Stage of the Hanlin Edition*

The research found that the number of character types used in the third grade, first semester, increased significantly. However, the overall increase in the number of character types used in the second stage of the textbook was tortuous. From 946 character types used in the third grade, first semester, to 1,309 character types used in the fourth grade, second semester, an increase of 363 character types, with an average increase of 121 character types per time. The increase in character types in this stage was slower than in the first stage.

### *3.2.3 Research on the Amount of Character Types Used in the Third Stage of the Hanlin Edition*

The research found that the number of character types used in the third stage of the textbooks showed a tortuous growth trend overall. From 1,333 character types used in the fifth grade, first semester, to 1,779 character types used in the sixth grade, first semester, an increase of 446 character types, with an average increase of 223 character types per time. The increase in character types in this stage was higher than in the second stage. However, the number of character types used in the sixth grade, second semester, dropped sharply, with 349 fewer character types than in the first semester and 166 fewer character types than in the fifth grade, second semester.

### 3.2.4 *The Overall Situation of the Character Types Number in the Hanlin Chinese Textbooks from the First to Third Stages*

It is summarized that the number of character types used in the Hanlin edition from the first to third stage shows an overall trend of first increasing and then decreasing. The number of character types used increased from 247 in the first grade, first semester, to 1779 in the sixth grade, first semester, an increase of 1532 character types, with an average increase of 153 character types per time. The number of character types used in the sixth grade, second semester, dropped sharply, with 349 fewer character types than in the first semester. The use of character types in the Hanlin edition generally adhered to the principle of gradual progression, but the selection of character types in some grade-level textbooks was not very reasonable. The whole primary school stage is a period of rapid growth in students' reading ability, and the selection of character types in textbooks should follow the stable growth of character types between segments.

### 3.3 *Comparison of the Character Types Number in the Unified Edition and the Hanlin Edition from Stages 1-3*

By comparison, it is found that the number of character types used in the textbooks of the Unified edition is much greater than that used in the Hanlin Edition, resulting in a higher level of reading difficulty. For example, in the textbooks of the second grade, The Unified edition uses 1029 more character types than the Hanlin edition.

However, the growth of character types in the Hanlin edition is not significantly different from that in the Unified edition. The number of character types used in both editions shows a decreasing trend in the lower grades of the sixth grade. Therefore, the increase in the number of character types between the two editions from the first grade to the sixth grade is not significantly different. The Unified Edition textbooks increased by an average of 159 characters, or 159 new characters, per volume, while the Hanlin Edition textbooks increased by an average of 153 characters, or 153 new characters, per volume.

Therefore, based on the above investigation, the conclusion is that the Unified edition textbooks have higher requirements for students' reading and

character recognition than the Hanlin edition textbooks, but the difference in the number of new characters in the two textbooks is not significant.

## 4. THE RESEARCH ON THE COVERAGE RATE OF CHINESE CHARACTERS AND THE NUMBER OF CHARACTER TYPES IN TEXTBOOKS OF TWO EDITIONS

According to the *Language Monitoring Related Terms* in the *Language Situation in China: 2013* released by the National Language Resource Monitoring and Research Center, coverage refers to the percentage of the designated investigated subjects in the investigated corpus relative to the total number of investigated subjects. The coverage rate reflects how well Chinese characters cover the text, showing how often they're used. This indicates whether they're common and high-frequency characters. This article analyzes the coverage and variety of Chinese characters in mainland and Taiwan region's Chinese textbooks, aiming to investigate the frequency of the selected Chinese characters in these two versions of Chinese textbooks.

### 4.1 *Research on the Coverage Rate of Chinese Characters and the Number of Character Types in the Unified Edition Textbooks*

#### 4.1.1 *Research on the Coverages of Chinese Characters and the Number of Character Types Used in the First Stage of the Unified Edition Textbooks*

The total number of characters in the first stage of the Unified edition textbooks is 46,325, with 2,138 different character types. The Chinese character coverage and the number of character types are as follows:

The research found that the proportion of high-frequency Chinese character types used in the first stage of the Unified edition textbooks is not significant. Specifically, 210 character types account for 60% of the linguistic materials, 531 character types cover 80%, 904 character types make up 90%, and 1,772 character types represent 99%. From this, it can be inferred that approximately 1,700 character types are used frequently in the first stage of the Unified edition

textbooks, while the remaining roughly 400 character types only comprise 1% of the linguistic data.

#### 4.1.2 *Research on the Coverage Rate of Chinese Characters and the Amount of Character Types Used in the Second Stage of the Unified Edition Textbooks*

The total number of characters in the second stage of the Unified edition textbooks is 109,228, with 3,085 different characters. The situation of Chinese character coverage and the number of character types is as follows:

The research found that the number of high-frequency character types used in the second stage of the Unified edition textbooks is not high: 216 character types can cover 60% of the language material; 600 character types can cover 80%; 1,082 character types can cover 90%; and 2,399 characters can cover 99%. It can be inferred from this that the number of high-frequency characters used in the second stage of the Unified edition textbooks is only around 2,400, with the remaining approximately 600 character types covering only 1% of the data.

#### 4.1.3 *Research on the Coverage Rate of Chinese Characters and the Number of Character Types Used in the Third Stage of the Unified Edition Textbooks*

The total number of characters in the third stage of the Unified edition elementary Chinese language textbooks is 148,351, with 3,395 character types. The situation of Chinese character coverage and the number of character types is as follows:

The research found that the frequency of high-frequency characters utilized in the second stage of the Unified edition textbooks is relatively low. Specifically, 216 characters suffice to cover 60% of the language material; 600 character types account for 80%; 1,082 character types comprise 90%; and 2,399 characters represent 99%. From this, it can be inferred that approximately 2,400 characters are frequently used in the second stage of the Unified edition textbooks, while the remaining roughly 600 characters only cover 1% of the data.

#### 4.1.4 *The Overall Situation of the Coverage Rate of Chinese Characters and the Character Types Used in the Hanlin Textbooks from the First to Third Stage*

The Unified edition for stages 1-3 contains a total of 303,904 characters and 3,837 character types. The coverage rate of Chinese characters and the number of character types are shown in the "Table 1".

Table 1. Statistics of Chinese character fraction of coverage and number of character types in the first stage of the Unified Edition Elementary Chinese language textbooks

Coverage rate(%)	Chinese Character Types Count	Proportion of character types(%)
10	5	0.13
20	18	0.47
30	40	1.04
40	76	1.98
50	134	3.49
60	226	5.89
70	371	9.67
80	627	16.34
90	1141	29.74
91	1224	31.9
92	1318	34.35
93	1425	37.14
94	1546	40.29
95	1686	43.94
96	1853	48.29
97	2060	53.69
98	2328	60.67
99	2710	70.63

According to the "Table 1", it can be observed that the number of high-frequency character types used in the three stages of the Unified edition textbooks is not high: 226 characters can cover 60% of the linguistic data; 627 character types can cover 80%; 1,141 characters can cover 90%; and 2,710 characters can cover 99%. It can be inferred from this that the number of high-frequency character types used in the three stages of the Unified edition textbooks is only around 2,700,

with the remaining approximately 1,100 character types covering only 1% of the language material.

#### **4.2 Research on the Coverage Rate of Chinese Characters and the Number of Character Types in the Hanlin Edition Textbooks**

##### *4.2.1 Research on the Coverages of Chinese Characters and the Number Of Character Types Used in the First Stage of the Hanlin Edition Textbooks*

The Hanlin edition textbooks contain a total of 7,438 characters in the first stage, with 887 character types. The coverage of Chinese characters and the distribution of character types are as follows:

The research found that the Hanlin edition textbooks for the first stage employs a limited number of high-frequency character types: specifically, 118 character types suffice to represent 60% of the language material; while 281 character types cover 80%; 441 character types account for 90%; and 812 characters encompass 99%. Consequently, approximately 800 high-frequency character types are utilized in these textbooks for the stage.

##### *4.2.2 Research on the Coverages of Chinese Characters and the Number of Character Types Used in the Second Stage of the Hanlin Edition Textbooks*

The Hanlin edition textbooks contain a total of 17,316 characters in the first stage, with 1,423 character types. The coverage of Chinese characters and the distribution of character types are as follows:

The research found that the Hanlin edition textbooks for the first stage employs a limited number of high-frequency character types: specifically, 159 character types suffice to represent 60% of the language material; while 379 character types cover 80%; 614 character types account for 90%; and 1,249 character types encompass 99%. Consequently, approximately 1,200 high-frequency character types are utilized in these textbooks for the stage, with the remaining approximately 200 character types covering only 1% of the language material.

##### *4.2.3 Research on the Coverages of Chinese Characters and the Number of Character Types Used in the Third Stage of the Hanlin Edition Textbooks*

The Hanlin edition textbooks contain a total of 46,177 characters in the first stage, with 2,511 character types. The coverage of Chinese characters and the distribution of character types are as follows:

The research found that the Hanlin edition textbooks for the third stage employs a limited number of high-frequency character types: specifically, 221 character types suffice to represent 60% of the language material; while 553 character types cover 80%; 940 character types account for 90%; and 2,049 character types encompass 99%. Consequently, approximately 2,000 high-frequency character types are utilized in these textbooks for the stage, with the remaining approximately 500 character types covering only 1% of the language material.

##### *4.2.4 The Overall Situation of the Coverages of Chinese Characters and the Character Types Used in the Hanlin Edition Textbooks from the First to Third Stages*

The Hanlin edition textbooks contain a total of 70,931 characters in the first stage, with 2,646 character types. The coverage of Chinese characters and the distribution of character types are presented in “Table 2” below:

Table 2. Statistics of Chinese character fraction of coverage and number of character types in Hanlin edition textbook from first to third semester

Coverage rate(%)	Chinese Character Types Count	Proportion of character types(%)
10	4	0.15
20	16	0.6
30	36	1.36
40	71	2.68
50	126	4.76
60	204	7.71
70	325	12.28
80	527	19.92
90	899	33.98
91	957	36.17
92	1023	38.66
93	1097	41.46
94	1181	44.63

Coverage rate(%)	Chinese Character Types Count	Proportion of character types(%)
95	1279	48.34
96	1399	52.87
97	1550	58.58
98	1758	66.44
99	2061	77.89

According to the “Table 2”, the Hanlin edition of primary school Chinese textbooks for the third stage employs a limited number of high-frequency character types: specifically, 204 character types suffice to represent 60% of the language material; while 527 character types cover 80%; 899 character types account for 90%; and 2,061 character types encompass 99%. Consequently, approximately 2,000 high-frequency character types are utilized in these textbooks for the stage, with the remaining approximately 600 character types covering only 1% of the language material.

### 4.3 Comparison of the Coverage Rate of Chinese Characters and the Character Types Used in the Unified Edition and the Hanlin Edition Textbooks for Stages 1-3

According to the investigation, it can be observed that the number of high-frequency character types used in the three stages of the Unified edition and Hanlin edition textbooks are not high. The Unified edition textbooks for stages 1-3 contains about 2,700 high-frequency character types and high-frequency character types is around 2,000 in the Hanlin edition textbooks for three stages. The comparison of the coverage rate of Chinese characters and the character types used in the Unified edition and the Hanlin edition textbooks for stages 1-3 are shown in the “Table 3”.

Table 3. Comparison of Chinese character fraction of coverage and number of character types in the Unified edition and Hanlin edition textbooks (first to third semesters)

Coverage rate(%)	Chinese Character Types Count(Unified edition)	proportion of character types	Chinese Character Types Count(Hanlin edition)	proportion of character types
10	4	0.15	5	0.13
20	16	0.6	18	0.47
30	36	1.36	40	1.04
40	71	2.68	76	1.98
50	126	4.76	134	3.49
60	204	7.71	226	5.89
70	325	12.28	371	9.67
80	527	19.92	627	16.34
90	899	33.98	1141	29.74
91	957	36.17	1224	31.9
92	1023	38.66	1318	34.35
93	1097	41.46	1425	37.14
94	1181	44.63	1546	40.29
95	1279	48.34	1686	43.94
96	1399	52.87	1853	48.29
97	1550	58.58	2060	53.69
98	1758	66.44	2328	60.67
99	2061	77.89	2710	70.63

Based on the above, this article takes the number of characters required for a 99% coverage rate as the standard, selects 2,710 high-frequency characters used in stages one to three of textbooks, and compares them with 2,061 high-frequency characters used in the same stage of another textbook series. It is found that there are a large

number of shared characters between the two. The Hanlin edition textbooks for the first to third stage only uses 2,061 characters, of which 1,892 are the same as the unified edition textbooks for the first to third stage, and are shared by both editions. The remaining 169 words are exclusive to the Hanlin edition textbooks. Because the Unified edition



textbooks from the first to the third stage use a larger number of characters, 2,710, there are 818 exclusive characters.

## 5. CONCLUSION

In conclusion, this study found that the total number of characters and the character types used in the Unified edition textbooks are both more than those in the Hanlin edition textbooks. The Unified edition textbooks have a higher requirement for reading and vocabulary recognition. At the same time, through various comparisons of characters situation between the Unified and Hanlin editions of primary school Chinese textbooks, it was found that the two editions of textbooks show remarkable similarity in terms of the introduction of new characters and the selection of high-frequency Chinese characters: the average increase in new characters per textbook from the first to the sixth grade is approximately 150, and the choice of high-frequency Chinese characters across the twelve textbooks from the first to the sixth grade is highly similar, with a large number of shared characters. This indicates that, despite differences in textbook reading volume, there is a strong similarity in the choice and utilization of characters between the two editions of primary school Chinese textbooks, which is immensely beneficial for cross-Strait educational cooperation.

## ACKNOWLEDGMENTS

This study is funded by the following projects.

1. 2020 Project funded by the Hubei Provincial Philosophy and Social Science Research Major Project (Hubei Provincial Philosophy and Social Science Fund Preliminary Funding Project) named "Research on the Integration of Excellent Chinese Character Culture into Primary and Secondary School Education" (20ZD049).

2. 2022 Joint Chinese and foreign special project on international Chinese language education research organized by the Centre for Sino-foreign Language Exchange and Cooperation of the Ministry of Education, "A graded Chinese character book 'Chinese Characters Can Talk' based on the *Standard for Chinese Proficiency in International Chinese Language Education*. (22YH29ZW).

3. 2021 Hubei Higher Education Teaching Research Project "Interesting Stories of Chinese Characters - Construction of First-class Curriculum

for Social Practice of "Chinese Characters and Culture" (2021323).

4. "Research on the Integration of Excellent Chinese Character Culture into Hubei Higher Education", Intramural Education Reform Program of Wuhan Institute of Technology (X2018049)

5. Humanities and Social Sciences Foundation of Wuhan Institute of Technology, Research on Collaborative Innovation of Chinese and Foreign Languages and Cultures" (R202107).

6. The 14th Postgraduate Education Innovation Fund of Wuhan Engineering University: "Foreign translation of Chinese academic achievements: the example of the translation of "Chinese Character Study" by teachers and students" (CX2022496).

7. "Survey and Research on Chinese Character Usage in the Era of Big Data and Cloud Computing", Provincial Project of National Innovation and Entrepreneurship Training Program for College Students, 2022 (S202210490068)

8. The 14th Postgraduate Education Innovation Fund Grant Project of Wuhan Engineering University "English Translation of Li Shoukui's One Hundred and Fifty Lectures on Explaining and Interpreting Chinese Characters" (CX2022497).

9. 2022 "National Student Innovation and Entrepreneurship Training Program" provincial project in Hubei Province, "HanXing Ink Spot—A "micro" classroom dedicated to the teaching of Chinese character calligraphy" (S202210490069X).

10 2022 National Project of "the silk road to study wisdoms ":"Volunteer services for children with language difficulties" (202210490022).

11. 2023 the principal fund program "Based on graded reading material Chinese Characters Can Talk—the research of 900 stories concerning inscriptions on bones or tortoise shells of the Shang Dynasty".(XZJJ2023045) .

12. 2023 "National Student Innovation and Entrepreneurship Training Program" provincial project in Hubei Province Funded by Wuhan Institute of Technology, Ancient Chinese Character Evolution Animation —Creating a Chinese Character IP Project for Foreign Education with 900 Commonly Used Character Animations.). (S202310490056) .

13. 2023 "National Student Innovation and Entrepreneurship Training Program" provincial project in Hubei Province Funded by Wuhan Institute of Technology , Cultural and Creative

Ancient Chinese Characters — A Project Using Chinese Characters as a Medium to Appreciate the Happiness of Life(S202310490057).

14. 2023 "National Student Innovation and Entrepreneurship Training Program" provincial project in Hubei Province Funded by Wuhan Institute of Technology , Short Videos of Ancient Chinese Characters - An Innovative Training Project for Short Videos of Chinese Characters(S202310490063).

15. 2023 "National Student Innovation and Entrepreneurship Training Program" provincial project in Hubei Province Funded by Wuhan Institute of Technology, "Enjoying Chinese and Foreign Drama" — An immersive, scene based script for teaching Chinese as a foreign language through a murder mystery game(S202310490072X).

16. 2023 "National Student Innovation and Entrepreneurship Training Program" provincial project in Hubei Province Funded by Wuhan Institute of Technology, Healer — An innovative training project to build a platform for psychological healing services. (S202310490074).

I would like to express my gratitude.

## REFERENCES

- [1] SU Peicheng. Outline of Modern Chinese Character Studies [M]. The Commercial Press, 2014.
- [2] WANG Wenxin. Research on Graded Vocabulary for Elementary School [M]. Minzhi Bookstore Publishing House, 1930.
- [3] ZHANG Yanmei.LV Zhan. Thoughts on Adjustments of the “Commonly Used Modern Chinese Characters”: Proof from the Research of Currently Used Chinese Characters. [J]. The teaching and research of Chinese language. 2022,(4): 44-55. DOI:10.16131/j.cnki.cn44-1669/g4.2022.04.010
- [4] ZHANG Linzhi. YE Hu. ZHANG Yanmei. Methodology Construction of Discourse Analysis of China’s Image in Foreign Textbook [J]. Course. Textbook. Teaching method. 2023, 43(5): 26-32+63. DOI:10.19877/j.cnki.kejcfj.2023.05.006
- [5] LIU Hua, A Survey of the Usage of Chinese Characters of the Main Chinese Media in Southeast Asia [J]. The teaching and research of Chinese language, 2010(1): 16-23. DOI:10.16131/j.cnki.cn44-1669/g4.2010.01.014.
- [6] YU Long. TAO Benyi. The Problems and Countermeasures of Literacy Teaching—A Study on the Words Used in Elementary Chinese Language Textbooks Based on Corpus Analysis [J]. Journal of Language and Linguistic Applications, 2010(01): 114-124. DOI:10.16499/j.cnki.1003-5397.2010.01.019.
- [7] ZHANG Weilong. Research on the Use of Words in Elementary Chinese Language Textbooks [J].Education Research, 2015(03):55-59.
- [8] BAI Yaguang. Research on the Primary Literacy Textbooks with the Word Arrangement — People’s Education press [D]. Northeast Normal University, 2015.
- [9] WANG Xiaoxia. How Far Are the Types and Quantities of New Words in Chinese Language Textbooks for Primary Schools in China from the Requirements of the Curriculum Standards?—Based on Textual Investigations of Three Mainstream Textbooks[J]. Educational Science Research, 2015(03): 55-59.
- [10] ZHOU Meiling.SU Xinchun. An Investigation and Reflection on the Vocabulary Situation in Four Sets of Basic Education Chinese Language Textbooks — Based on Textbooks from People's Education Press, Jiangsu Education Press, Beijing Normal University Press, and Language Version Press [J].Shanghai Educational Research, 2008(03): 47-53.
- [11] CAO Jianzhao. TAO Benyi. A Study on the Vocabulary of Chinese Language Textbooks for Lower Grades in Primary School—Taking the Textbooks of People's Education Press, Jiangsu Education Press, and Shanghai Education Press as the Research Object[J]. Journal of Education, 2008(03): 47-53.
- [12] YANG Tao. ZHENG Guo-min. CHEN Shuang-xin.The Study of Character Species and Quantities in the Primary School's Beginning Character Teaching[J].Journal of Hebei University (Philosophy and Social Sciences), 2005(01): 99-102.