

The Evaluation System of Digital Textbooks on College Russian

Yao Bo

Chengdu Institute Sichuan International Studies University, Chengdu, China

Abstract: *The reform of college Russian teaching has brought new topics and challenges to the construction of textbooks, and the establishment of a set of digital textbooks evaluation system will promote the compilation and production of college Russian textbooks in the new era, and promote the development of college Russian teaching. On the basis of previous studies, this paper briefly introduces the development process of the establishment of the evaluation system of digital textbooks at home and abroad, establishes the theoretical basis for the establishment of digital college Russian textbooks, takes the construction of the school digital loose leaf textbooks of Chinese Culture (Russian Version) as a sample, tracing back a series of teaching experiments and questionnaire surveys conducted for the establishment of the evaluation system of this book, and conducts in-depth analysis and discussion on the survey data. On this basis, a textbook evaluation index system guided by students' opinions is established.*

Keywords: *College Russian, Digital textbooks, questionnaires, evaluation index system*

1. Introduction

Based on the survey results of the application of digital handouts of Chinese Culture (Russian version), the author attempts to establish an evaluation system for digital college Russian textbooks from the perspectives of digital textbooks' design ideas, presentation forms, content arrangement, matching degree with traditional textbooks, and their application in class, students' expectations and use feelings, etc. This paper hope to provide reference for the following theoretical research and scientific practice of textbook development and evaluation.

2. An overview of the theoretical basis and methods of the evaluation system of digital college Russian textbooks

2.1 Theoretical Basis

According to the results of quantitative and qualitative demand analysis, an evaluation index system of digital college Russian textbooks is formulated. The establishment of the whole system is mainly based on the following theories and principles:

- (1) Constructivist Learning Theory.
- (2) Humanistic Learning Theory.

Based on the Constructivist and Humanistic Learning Theories, this study chooses college English learners as the main subjects of investigation. Through in-depth analysis of learners' expectations and evaluation of digital textbooks, this study constructs the evaluation index system of digital textbooks, which provides theoretical support and practical basis for the establishment of the evaluation system of digital textbooks of college Russian. [1-3]

2.2 Establishment methods

The purpose of establishing the evaluation system is to provide an objective, measurable and practical judgment basis and standard for the evaluation of the digital loose leaf textbook "Chinese Culture (Russian Version)". Li Kedong (1992) once proposed that the establishment of the indicator system should go through the following steps: (1) Determine the overall goal; (2) Decompose the overall objectives into Level I, Level II and Level III indicators, etc.; (3) Establish evaluation criteria;

(4) Weighting all indicators; (5) Finally, the general table of the evaluation index system is formed. "There are two important links in the process of establishing a digital evaluation system, one is the establishment of indicators at all levels, and the other is the comprehensive weighting of indicators to determine the proportion and scoring standard of indicators." [4]

In order to establish indicators at all levels, we collect data by means of teaching experiments and questionnaires. In the process of teaching experiment, the digital handout of Chinese Culture (Russian Version) in our school is used as the main tool of digital classroom teaching. Based on the traditional textbooks, with the premise that the teaching content is fully structured, and realizes the "granular" decomposition of all teaching links through technical means, this handout forming a textbook system that includes fixed textbook knowledge, loose leaf textbooks, and digital teaching resource package.

According to the students' different acceptance of the handout and the effect of using it while teaching, we design two questionnaires. First, this research conducts an evaluation survey on the students' impression of the digital handout of Chinese Culture (Russian Version), with semi open questions; then, based on the collected data analysis results, this research designs a questionnaire for in-depth evaluation of the digital handouts of Chinese Culture (Russian Version). By refining the indicators, students' views and attitudes towards the digital handouts of Chinese Culture (Russian) from four dimensions of presentation form, structure design, content arrangement and teaching interaction are collected (Zhang Lingran&Bian Jie, 2017) [5-6].

Next, we analyze the results data of the two surveys, and then refer to some relatively mature mainstream indicator systems at home and abroad to establish three-level indicators and indicator descriptions, establish the score and evaluation criteria of each indicator, and form a complete student oriented evaluation system for the Chinese Culture (Russian version) digital loose leaf textbook.

3. Statistical Analysis and Practice of the Evaluation of Digital College Russian Textbooks

Table 1: Summary of survey data on impression evaluation of digital handouts of Chinese Culture (Russian Version)

	Topic introduction (%)	Format(%)	MOOC(%)	Task design(%)	Others
1	19	9	38	11	0
2	20	12	19	17	0
3	25	13	16	29	0
4	22	24	14	23	3
5	11	41	13	18	7
6	3	1	0	2	

In this study, a total of 127 students in 4 classes were investigated, 120 valid questionnaires were collected, and SPSS software is used to make statistics, analysis and induction of students' answers.

After numbering, inputting and sorting out 120 questionnaires, we made statistics and analysis on the data results, and summarized the results into Table 1 and Table 2.

It can be seen from Table 1 that when the interviewees were asked to evaluate the impression of the digital handout of Chinese Culture (Russian Version), they were asked to prioritize the four aspects of the digital handout (topic introduction, MOOC materials, format, and task design), and other aspects of attention could be added [7-8]. After sorting out the answers to the semi open questions one by one and summarizing the data, we find that, in terms of the weight of several aspects, MOOC materials have an absolute advantage in ranking first, and 78% of the respondents mainly learn the theoretical knowledge of Chinese culture through MOOC materials. 32% of the students thought that the loose leaf task list was the second thing they would pay attention to, far ahead of other items. Students were interested in the interactive links based on the teaching content, including video production and display, group discussion, group report and other forms. Introduction to the topics of each chapter, including the explanation of main ideas and key words and sentences of the original Russian text, as well as Chinese supplementary materials, and this part ranked third among students' attention. Finally, the students' attention to the format was 10%, and the format of the topic introduction was relatively unconcerned by the students. It can also be seen that today's information communication mode was mainly by videos, in order to achieve a short, smooth and quick reading effect. Audience's short attention span and love of video images has lead to the popularity of visual reading materials. Therefore, the digital textbooks

mainly in the form of video is probably the mainstream products of foreign language textbooks in the context of micro media. For foreign language textbooks, they can include both the focus of language teaching in the text version and the teaching videos that are more targeted after editing the existing online video resources (Zhang Qingmei, 2015). Therefore, special attention should be paid to the content and design of MOOC video resources.

Table 2: Summary of the survey data of the evaluation of digital college Russian textbooks

1	I like MOOC videos within 10-20 minutes.	SD(%)	D(%)	N(%)	A(%)	SA(%)
2	I like MOOC videos within 10 minutes.	6	11	16	48	19
3	I like MOOC videos that are cheerful.	19	23	22	25	11
4	I like MOOC videos full of ancient Chinese styles.	4	6	12	57	21
5	I like expository content about Chinese culture.	20	24	28	18	10
6	I like content that fits daily life in contemporary China.	10	12	31	33	14
7	I think the introduction text should be systematic and rich.	7	11	29	33	20
8	I think the Russian introductory materials should be short and clear.	9	10	18	34	29
9	I think structural diagrams are easier to remember than written explanations.	5	7	11	56	21
10	I will pay attention to the key words and phrases highlighted in the introduction.	9	12	14	36	29
11	I will pay attention to the table of contents of the digital handout to check the progress of the class.	17	19	21	20	23
12	I think that reading the introduction helps us to systematically understand the connotation of Chinese culture.	16	17	19	25	23
13	I don't think reading a lot of Chinese and Russian introduction will help me to understand Chinese culture better.	2	4	7	37	48
14	I think the illustrations in introduction are very helpful for me to read the material.	3	4	6	35	52
15	I like to learn relevant Russian words of Chinese culture while reading.	20	31	24	14	11
16	The sum of words and phrases listed after the text in the digital handout can help me to better master the words.	4	4	8	23	61
17	I often use the introductory material to guide the practical outcomes of the class	10	12	33	27	18
18	I often use CNKI and search engines like Yandex to learn relevant Chinese and Russian materials about Chinese culture.	1	2	4	37	56
19	I usually search through social medias such as Weibo and VK	19	25	21	19	16
20	I think short practices in Russian around Chinese cultural phenomena will make it easier for me to master the vocabulary.	15	21	17	27	20
21	I usually learn vocabulary from example sentences.	1	1	6	34	58
22	After class practice can help me better grasp the content.	2	3	6	18	71
23	I don't think it is necessary to test us the knowledge of Chinese culture.	26	30	19	16	9
24	I don't think the digital handout needs to be exhaustive. The class should focus on teaches's explanation.	8	13	19	37	23
25	I think the class leaflet "task cards" are reasonable.	24	29	25	12	10
26	I think the class leaflet "task cards" are too much.	7	9	16	32	36
27	I think activity evaluation is very effective.	1	2	20	32	45
28	I think the guiding role of teachers should be increased.	10	18	19	26	27
29	I think teachers should make more demands on task completion.	20	22	25	17	16
30	I don't think the loose-leaf task has much effect on topic understanding and practical ability improving.	3	4	6	21	66

(SD=strongly disagree; D=disagree; N=neither agree nor disagree; A=agree; SA=strongly agree)

The second questionnaire designed according to the data statistics and analysis results obtained in Table 1 refines the evaluation index into 20 items, allowing respondents to evaluate digital handouts from four dimensions. In the second questionnaire, questions 1-6 are about the recognition of digital handout and MOOC videos. According to the survey results in Table 2, in terms of the overall

impression, the respondents generally prefer MOOCs within 10 minutes, and prefer flexible and abundant forms and styles, and the content is in line with China's contemporary life. The short video time is convenient for students to memorize key knowledge in a short time and meet the needs of fragmented learning.

Questions 7-24 revolve around the introductory text section of the digital handout.

Questions 7 to 24 concern the arrangement of digital handouts. Students also have a clear understanding over certain issues, such as learning vocabulary through example sentences (20), setting up small exercises around words (21), and systematic theory learning (12). There were differences of opinion on such issues as whether introductory Russian introduction materials should be brief and concise, and the assignment of class tasks. Most students believe that introductory Russian material should be reduced to difficult and key words and phrases. The topic introduction includes pictures and diagrams to help grasp the knowledge.

In the evaluation methods and task setting questions 25-30 of loose-leaf part, more than half of the students (53) had a moderate amount of tasks after each class (25), which should be based on the knowledge in MOOC learning and introduction text, and have a strong correlation. In the process of teaching, only through the use of teaching subjects, namely teachers and students, can they play their maximum effect. Therefore, the essence of the two issues is not in conflict. And the final task setting can be simplified, so that students can concentrate and finish the homework via video output, to achieve the effect of applying what they have learned.

After sorting out the data results of all 30 questions, we further analyzed the discrimination, reliability and validity of all items. Independent sample T was tested by SPSS and it can be seen from the analysis results in Table 3 that variable 10 ($t=-.409$, $p=.662$) and variable 18 ($t=.547$, $p=.563$) have a small T value and have not reached the significance level ($p>.05$), indicating that the distinction between the two items is not significant, indicating that the respondents have no obvious directivity in the evaluation of the two indicators, which should be deleted or modified when setting the indicators.

Table 3: Test analysis results of independent sample T (Excerpt)

Variables	t	df	Sig. (2 - tailed)	Mean Difference
10	-0.409	47	0.662	-0.06214
17	-2.796	47	0.004	-0.37231
18	0.547	47	0.563	0.07287

4. The establishment of the evaluation system of college Russian digital textbooks

After the statistical analysis and sorting of the survey data, we analyzed the structural validity of all variables, and adjusted the above variables in some groups according to the correlation, combined the coincidence items with high correlation, and modified the content description of the items with poor discrimination. Then, we referred to some popular authoritative evaluation systems and standards at home and abroad, and invited 25 students who participated in the survey to evaluate the preliminary evaluation system. Through in-depth interviews with the respondents, we noticed some mistakes in the design process of indicators. After listening to the feedback of students, we added three indicators, namely, the secondary indicator instruction under the structural design, and the secondary indicator complementarity and practicality under the teaching interaction. Later, we transformed the questions of the questionnaire into specific indicator descriptions. Finally, we initially formed a set of learner opinion oriented evaluation system, which measures college Russian digital textbooks from four dimensions and 18 indicators (Table 4).

After establishing the student oriented evaluation index system for digital college Russian teaching materials, we will invite students who participated in the preliminary survey to conduct field evaluation on the two sets of digital textbooks with this set of standards in the follow-up research, so as to test the reliability of this set of index system, and as a demonstration of the practical application of this set of index system.

Table 4: Evaluation index system of digital college Russian textbooks

Level I indicators		Level II indicators	Indicator description
Present form	1	Color	The colors are rich, natural and harmonious, with clear priorities and comfortable visual effects. (For example, the consistency of colors presented and the colors in Russian)
	2	Format	The content of the page is clear, neat and orderly, and highlights the key points with clear priorities.
	3	Diversity	Distinctive style, personalized details about the main content, and diversified.
	4	Vividness	Design dynamic effects matching the theme. Full of flexibility and fun
	5	Effectiveness	Appropriate use of graphic combination and structure diagram, the form of expression is rich in layers, effective reinforcement of memory
Structural design	6	Structure	The teaching structure is clear, with clear level, and conforms to the law of cognitive development.
	7	Indication	The teaching instructions are clear and detailed, and the language difficulty conforms to the students' language development level.
	8	Process design	The design of teaching process is natural and reasonable, and all teaching links are closely linked, which is in line with students' learning habits and cognitive processes.
	9	Integrity	Effectively complete the teaching objectives, and the teaching content of paper textbooks.
	10	Adaptability	The content of paper textbooks should be reasonably arranged, and the structure arrangement should conform to the learning cognitive rules, so as to effectively guide the classroom process.
Content arrangement	11	Task setting	The task link setting is reasonable; Exquisite design; operability is stronger; effectively cooperate with the main teaching content; stimulate students' learning motivation.(1)
	12	Vocabulary	Good vocabulary preparation; Typical example (10); Practice design is immediate and effective (10); Key summary in place (10)
	13	Skill	Reasonable allocation of training items for speech, information collection and induction; The practice design is practical
	14	Multimedia material	The content of multimedia audio-visual materials is clear (1); The difficulty is in line with students' language level (1); The content effectively echoes the teaching content (1); Reinforcement Learning Effect of Matching Exercises (10)
Teaching interaction	15	Guidance	Teaching activities are in steps, effectively guide students to think independently.
	16	Inspiration	Teaching activity design pay attention to extension and expansion, pay attention to the cultivation of students' critical thinking ability.
	17	Supplementariness	Encourage students to search for extra-curricular learning materials to effectively supplement the classroom teaching content.
	18	Impromptness	Teaching activities simulate the actual use of the scene, pay attention to the cultivation of ability.

Note: (1) The score of each secondary indicator is converted according to the Likert scale. 1 represents the least satisfied, and 5 represents the most satisfied. The score of each indicator is between 1-5 points. For the six secondary indicators under the arrangement of primary indicators, each of them is distinguished by scores due to the large number of description contents. If it conforms to the description, 1 point will be given, and if it does not, no point will be given. Finally, the total score of each indicator and the other secondary indicators will be scored according to the overall impression. (2) In the end, if the total score is less than 40, it will be deemed as unsatisfactory; 40-60 points: qualified; 60-80 points: relatively satisfied; 80-100 points, deemed as very satisfied

5. Conclusion

To sum up, based on the survey results of the Chinese culture (Russian Version) digital notes

application, from points of digital textbooks own design idea, form, content arrangement, the degree of matching with the traditional teaching, the classroom practice and students' expectation to use feeling, this paper focuses on college Russian textbooks to establish evaluation system, and provides reference for the following theoretical research and scientific practice of textbook development and evaluation.

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