An Empirical Study of Multimodal Language Landscape on International Chinese Vocabulary Teaching

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Abstract- Under the current background of international Chinese teaching, international Chinese vocabulary teaching has attracted more and more attention from the education circles at home and abroad. As an effective educational tool and an important input source in the process of international Chinese teaching, multi-modal language landscape can help learners mobilize visual senses and the stimulation of multiple senses to obtain information and learn knowledge, which is beneficial to vocabulary acquisition for Chinese learner. Based on the guidance of multimodal language landscape theory, this paper uses empirical research such as questionnaire surveys and the interview to deeply explore the possibility of multimodal language landscape applied to Chinese vocabulary teaching, aiming to provide new ideas and teaching modes for the development of Chinese language teaching as a foreign language.

Key words-multimodality; language landscape; vocabulary teaching

I. INTRODUCTION

The study of language landscape began to receive public attention in the late 1990s. Since its emergence, it has attracted the attention of many international scholars. The research mainly focuses on language use in public spaces and places, covering many aspects such as street signs, billboards, and shop signs. In recent years, with the continuous development of domestic and foreign research, the relationship between the language landscape and various disciplines has become closely connected, presenting a multi-perspective and interdisciplinary development prospect. An increasing number of scholars associate the language landscape with sociology, psychology, second language acquisition, semiotics, applied linguistics and other disciplines. Among them, the influence of language landscape on language learning has also attracted the attention of scholars at home and abroad. Under the current background of international Chinese teaching, teaching Chinese as a foreign language conforms to the national development strategy and provides an important way to spread Chinese culture. As an effective teaching tool and an important input source in the process of international Chinese teaching, multi-modal language landscape has its own unique characteristics,

such as cultural education function, cultural inheritance function and cultural communication function. In the process of teaching Chinese as a foreign language, the language landscape formed by the written words of language signs most directly becomes a part of the real language learning environment, which can stimulate students' communicative motivation.

However, in actual international Chinese vocabulary classes, the vast majority of teachers still adopt a monomodal teaching mode centered on language symbols in the textbook. They only pay attention to explaining vocabulary, grammar and other language knowledge, and seldom pay attention to use multi-modal learning methods to improve students' vocabulary ability and cultivate students' interest in vocabulary learning. Therefore, exploring the application research of multi-modal language landscape in teaching Chinese as a foreign language will help to make up for the shortcomings of traditional classroom learning, and provide Chinese learners with a large variety of contextual atmosphere so that they can understand the target language and grasp the rules of communication in the target language.

Based on this, the author tries to explore the relationship between language landscape and international Chinese teaching. Through empirical research, this study tries to explore the multi-modal language landscape in Chinese vocabulary teaching from a new and more comprehensive perspective, aiming to provide new ideas and teaching modes for the development of Chinese language teaching as a foreign language.

II. THEORETICAL BASIS AND STUDY FRAMEWORK

This part separately defines the two concepts of multimodality and language landscape, and puts forward the theoretical framework of this research.

A. Research Perspective: Multi-Modality

The English expression of multi-modality can be divided into two parts: Multi and Modality. Multi means more, multiple, and diverse; Modality means modal, style and multimodality together are multiple modes. Therefore, multi-modality is a combination of different single-modalities. Regarding the interpretation of the concept of multimodality, Scholars in different fields have different understandings of its connotation. Gunther Kress and Theo van Leeuwen extended Halliday's concept of language as a social symbol to other symbol resources outside of language [1]. Kress believes that "modality" is a resource that is formed by society and endowed by culture. Images, written writing, scene layout, music, body posture, language, dynamic images, interludes, etc., are all modalities for expression and communication [2]. In 2007, Professor Gu Yue Guo proposed that modality refers to the interaction between human senses (such as vision, hearing, touch, taste, smell) and the external environment (such as people, machines, objects, etc.) [3]. Interaction is called monotonality, and interaction of multiple senses is called multimodality. In 2009, Professor Zhang Delu once again proposed a clear definition of the concept of multimodality. He pointed out: "Multimodal discourse is the use of hearing, vision, touch and a variety of sensations, such as language, images, sounds, actions, and other

means and symbol resources to communicate with each other [4].

Since the 20th century, Chinese and foreign scholars have discussed the application of multi-modality in teaching from different perspectives. Stein proposed a multi-modal teaching method. He contained that curriculum, teaching and evaluation should be developed with the modal characteristics of the learning environment as the center and believes that all activities in the classroom are multi-modal [5]. Hu Zhuang Lin (2006) and other scholars also proposed to use multi-mode resources to teach, and discuss the modal resource design in foreign language classroom teaching and how to apply modal systems to improve teaching effects [6]. Previous studies have proven multi-modal use in English teaching, which can play a pivotal role in syntax, speaking, writing, and have a significant effect on improving students' language skills. According to the characteristics of multi-model symbol resources, the author believes that if it is used to use it to international Chinese vocabulary teaching, it can make full use of the advantages of multiple symbol resources according to the teaching scenario, mobilize students' interest in learning and mastering English language skills. Therefore, in this thesis, the multimodality will be adopted as the research perspective to explore teaching method on international Chinese vocabulary.

B. Linguistic Landscape: Some Definitions and Functions

The material carriers used to display the language and characters in the real environment are called linguistic signs, such as street signs, billboards, reminders, shop signs, etc. In sociolinguistics, the study of language use on public language signs is called "language landscape" research. Landry & Bourhis was the first to put forward and use the concept of "language landscape", and defined it as: "appearing on public road signs, billboards, street names, place names, shop signs, and public signs of government buildings [7]." Languages collectively constitute the language landscape of a certain territory, region or city group", which is the most classic and most widely cited definition in the study of language landscape. In addition, with the in-depth development of research, many other scholars have defined the language landscape. For example, Itagi & Singh (2002) mentioned that the language landscape refers to the "application of written language that can be seen in the public domain [8];" Ben-Rafael et al. (2006) believes that the language landscape is "a language object that identifies the public space" [9], and in 2009, it was again proposed that the language landscape refers to the "symbolic construction of public space [10]." Jaworski & Thurlow defined it from the perspective of social semiotics as "the interaction between language, visual activities, spatial practice, and cultural dimensions, especially the construction of spatial discourse using text as a medium and using symbolic resources [11]." This is the broadest and most profound definition of the language landscape we have seen.

Landry & Bourhis believes that language landscape has two main functions: informative function and symbolic function [12]. The information function mainly means that it can provide information on the language characteristics of a certain area, the social status of the language, the diversity of the language, and the usage status; the symbolic function mainly means that it can reflect the value and status of the language, whether it is in a dominant or a subordinate position, it can even convey the strength or

weakness of a certain ethnic language.

In the process of Chinese vocabulary teaching, language landscape occupies a significant role in language learning. So, the author aims to apply language landscape as a resource to promote Chinese as a second language or foreign language teaching, so that the language landscape as a part of the real context has an effective auxiliary effect on Chinese teaching.

C. The Theoretical Framework of the Application of Multimodal Language Landscape to International Chinese Vocabulary Teaching

In view of the previous explanations and discussions on "multimodality" and "language landscape", we conclude that a multi-modal language landscape should include at least four modal types: the first type is a static visual modal landscape that combines pictures, colors and text elements; the second type is dynamic visual modal landscape and combined with video and audio; The third type uses real and visible language landscapes in life as scenes and embodied modal types that can be experienced personally.

Vocabulary teaching is an important part in the process of the entire teaching system. The application of multi-modal language landscape teaching mode to Chinese vocabulary teaching breaks the teaching limitations of traditional vocabulary methods. Therefore, this article attempts to use multi-modal theory as a research perspective, and self-construct a theoretical framework of multi-modal language landscape applied to Chinese vocabulary teaching (shown in Figure 1), aiming to better guide later experiments.
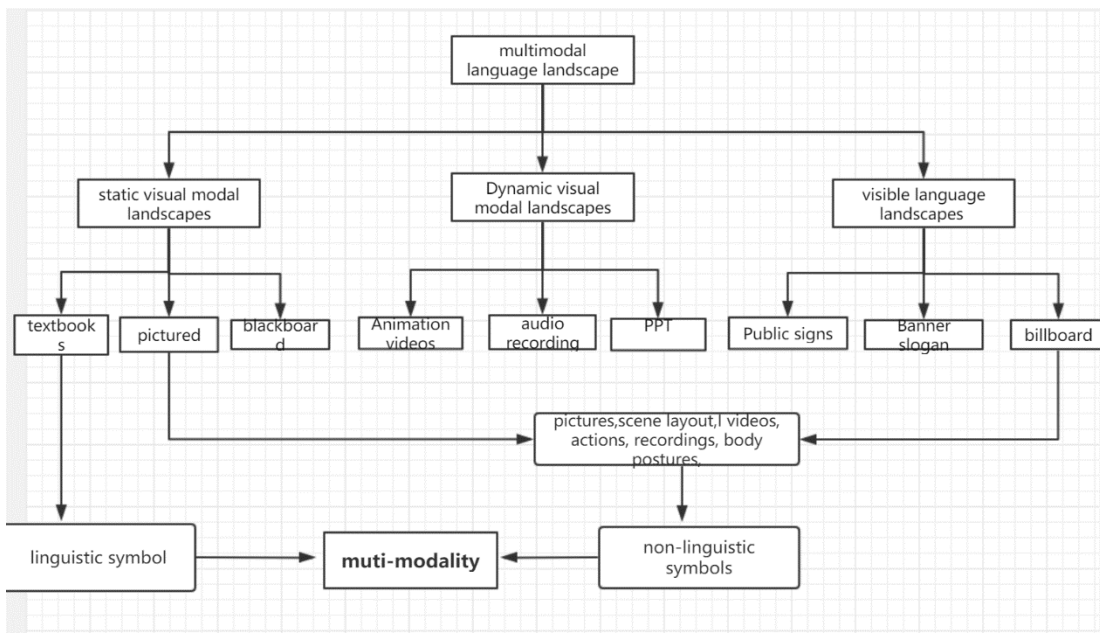
FIGURE 1. THE THEORETICAL FRAMEWORK OF MULTIMODAL LANGUAGE LANDSCAPE IN CHINESE VOCABULARY TEACHING

III. RESEARCH METHOD

This research is based on the "multi-modal language landscape teaching model" for teaching Chinese as a foreign language.

By collecting, comparing and analyzing various data after the multi-modal language landscape is applied to international Chinese teaching, it compares and tests the learners' ability to acquire vocabulary knowledge, thus verifying the feasibility of the "multi-modal language landscape teaching model" constructed by this research in teaching Chinese as a foreign language. The multi-modal language landscape used in teaching effect presentation is mainly based on the pre-test exams and post-test questionnaire. The questionnaire is to understand the learners' satisfaction and recognition of the experimental research. At the same time, by means of interviews and other methods, a certain investigation and research on students' learning styles and attitude towards muti-modal language landscape are carried out, so as to understand the situation of students' application of multi-modal language landscape in teaching Chinese as a foreign language. The specific research methods are as follows:

A. The Questionnaire

In this paper, the questionnaire is involved, which are distributed to the conduct experiments of one international Chinese teaching classes in Zhengzhou International Chinese Education. Through the analysis of the data obtained in this questionnaire, the changes in the English vocabulary level of the students in the experimental class before and after the experiment and the changes in the recognition of the concepts related to the multimodal reading teaching model are summarized.

B. The Interview

The interview mainly collects relevant survey data through face-to-face communication. Its advantages are strong flexibility, simple operation, and high credibility of the data obtained. After the experimental teaching is over, a number of students in the experimental class are selected for interviews to know what are the learner's attitude towards Chinese vocabulary teaching in a multimodal language landscape.

IV. DATA ANALYSIS AND DISCUSSION OF SURVEY RESULTS

A. Questionnaire Analysis

The purpose of the survey is to obtain whether students can accept multimodal vocabulary teaching after experiment and its advantages compared with the traditional teaching mode. This questionnaire surveyed 45 Chinese learners, and every questionnaire was returned. The content of the questionnaire will be analyzed and discussed in accordance with the three sections of teachers' use, students' learning inclination, and students' learning expectations.

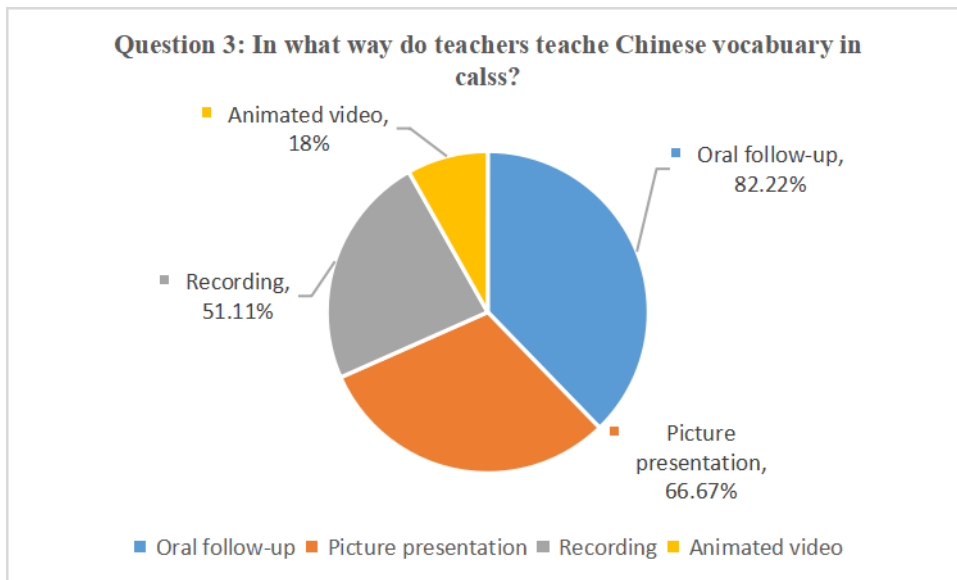1)Teachers' use of multi-modal language landscape

It mainly involves the frequency of use, manifestations, and ways of use in the classroom and so on. The specific results are shown in Table 1.
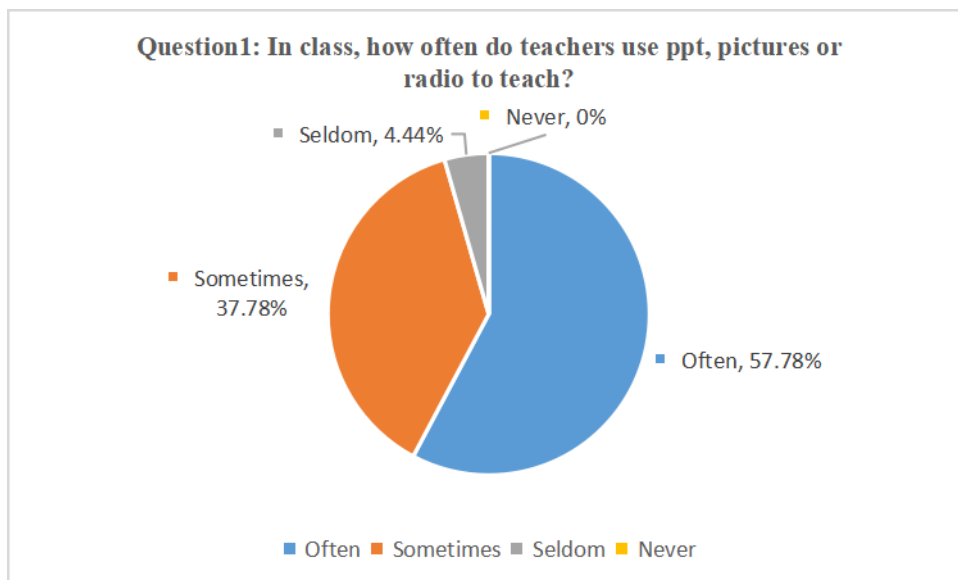
**TABLE1.** THE FREQUENCY OF TEACHERS' USE OF MULTI-MODAL LANGUAGE LANDSCAPE

Regarding the frequency of classroom use, 57.78% of people think that the teacher often uses PPT for vocabulary teaching, and 37.8% think that the teacher sometimes uses PPT for vocabulary teaching. It can be seen that teachers in this class use PPT for vocabulary teaching more frequently to simulate the real situation, thus making Chinese learns feeling the real language environment and helping to learn the use of vocabulary. Therefore, multimedia PPT is the main way of multi-modal language landscape.

In addition, based on the specific presentation methods of the multi-modal language landscape used in teaching Chinese as a foreign language in the classroom, the author conducted further investigations and sorted them out, As shown in Table 2. it can be seen that the manifestations of multi-modal language landscape in this class mainly include Oral follow-up. 66.67% point out that teachers employ picture presentation to teach vocabulary. What's more, 51.11% claiming recording is also a way to learn vocabulary. While based on results, it can be concluded that most teachers are inclined to use some picture and recording teaching mode for vocabulary teaching. However, in terms of animated video and outdoor activities, many teachers ignored this way to teach vocabulary, which need to be improved in the future teaching.

TABLE 2. THE WAY OF TEACHERS' USE MULTI-MODAL LANGUAGE LANDSCAPE

In terms of way of use multi-modal language landscape, it can be seen from Question 7 that only 13.33% of people often participate in class activities with classmates to immerse in cultural atmosphere, 24.44% of people sometimes participate in class activities with classmates, 28.29% of people think that they seldom participate in class activities with classmates, and 33.33% of them never participate in classroom activities with classmates. It shows that most students thinks that they never or seldom participate in outdoor activities, which indicates outdoor activities in the class are not the primary way of multi-modal language landscape teaching.
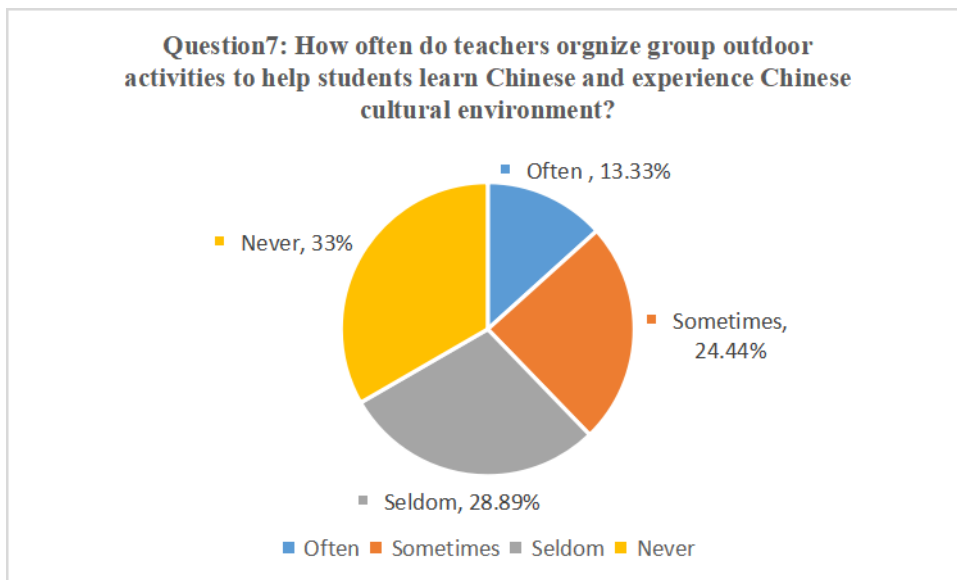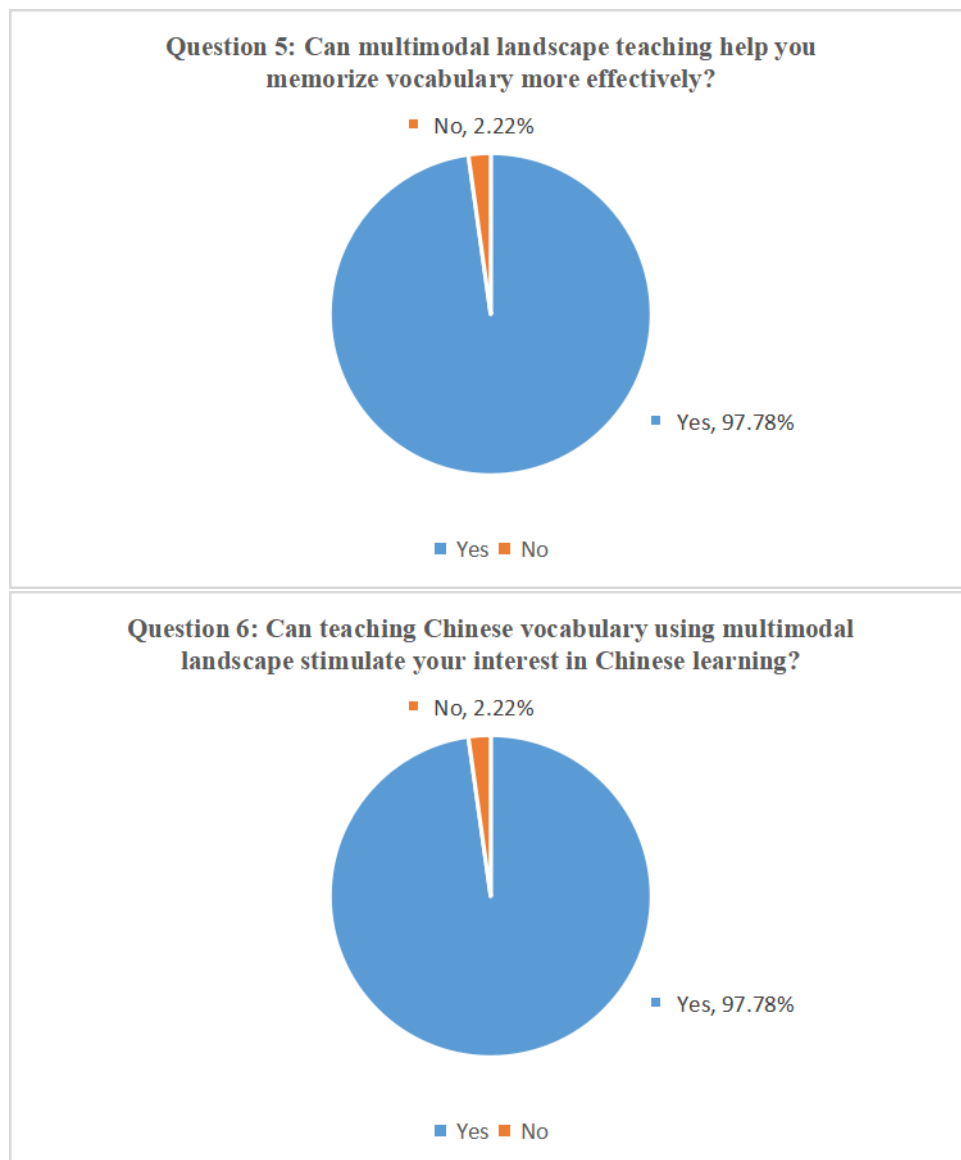

TABLE 3. THE INCLINATION OF TEACHER'S USE OF MULTI-MODAL LANGUAGE LANDSCAPE

Based on survey data, we have learned that the teaching of language landscape teaching application is mainly through indoor and outdoor teaching models. Among them, PPT is widely used indoors to present the language landscape, and it involves pictures, sounds, animations, videos, etc. In addition, more students like outdoor activities language landscape mode to learn vocabulary, but most teachers ignore this teaching mode and not widely used in vocabulary teaching

2) Students' learning inclination

As the most direct and representative learning experiencers in the teaching process, it is necessary to investigate and analyze

their application effects and learning experience. The specific results are shown in Table 4.

Question 10: Do you think multimodal landscape is helpful for your Chinese vocabulary learning?
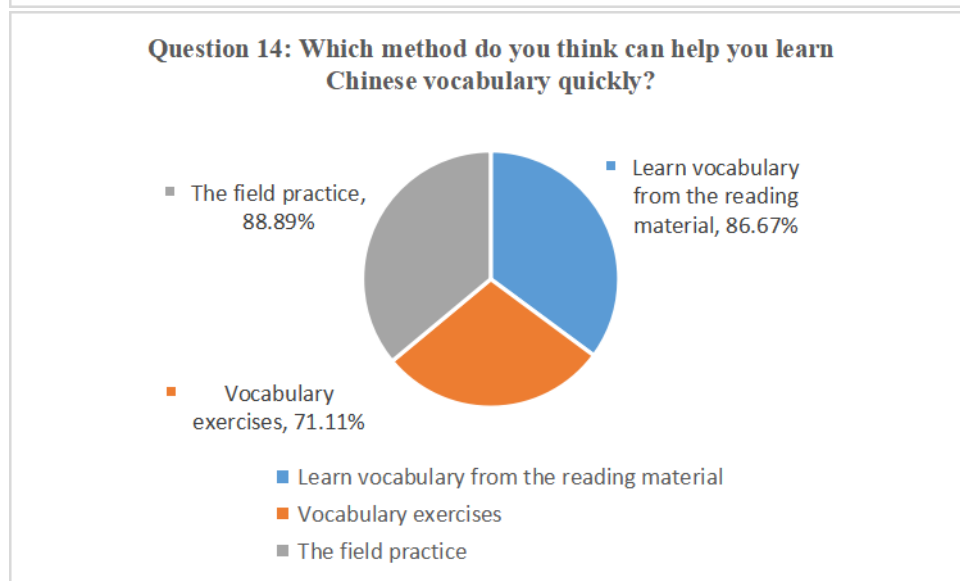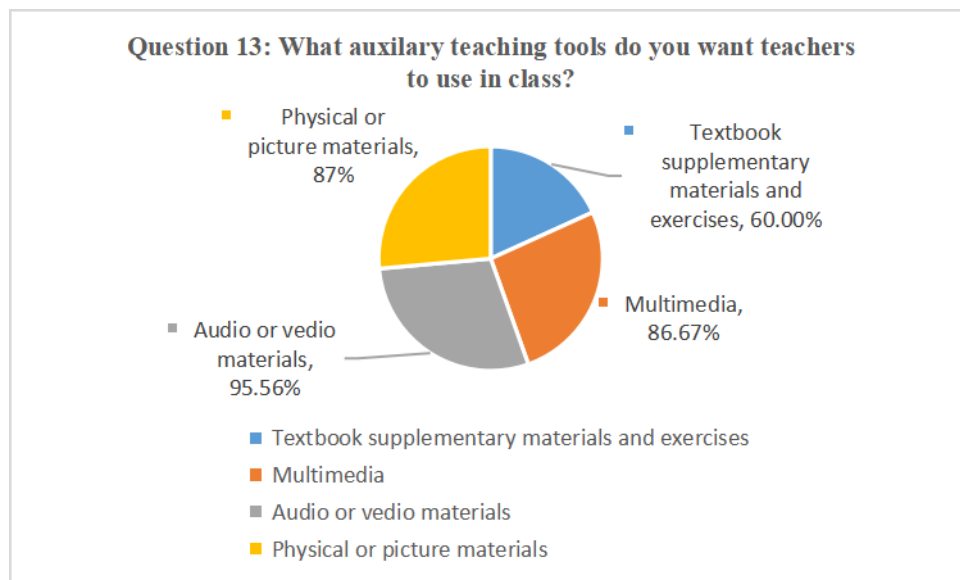
No, 0.00%

Yes, 100.00%

Yes ■ No
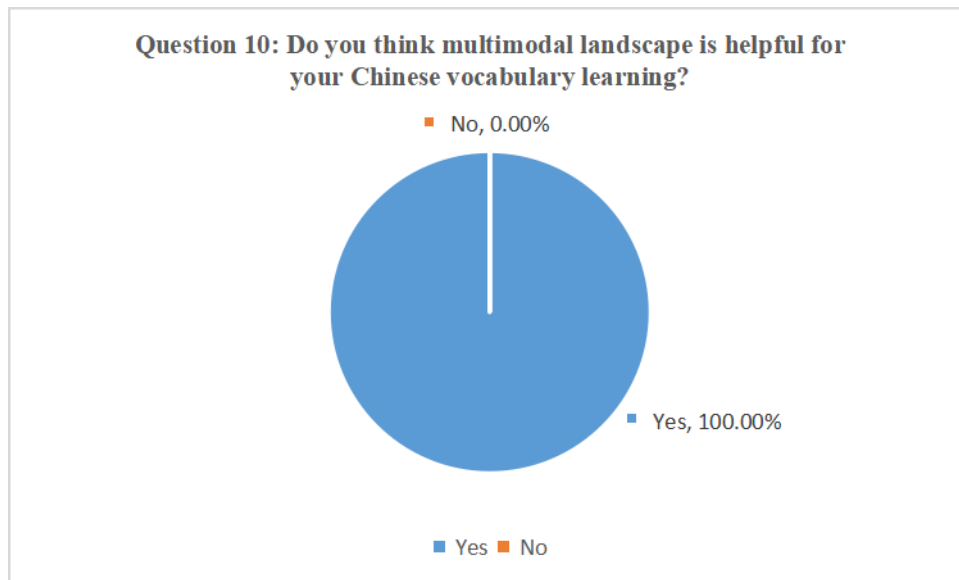
TABLE 4. THE STUDENTS' INCLINATION AND ATTITUDE TOWARDS MULTI-MODAL LANGUAGE LANDSCAPE

It can be seen from Question 5 in Table 4 that 97.78% of people think that the use of multi-modal teaching and methods can help memorize vocabulary for a longer period of time. It shows that most people are supportive of this way of language learning. Through Question 6 and 10, we found that most people think that using a multi-modal language landscape to teach Chinese vocabulary can always arouse interest and be helpful in Chinese vocabulary learning.

Based on the above investigation and analysis, we make the following conclusions: 1) The use of multi-modal teaching and methods can help students memorize vocabulary for a longer period of time; 2) The multi-modal language landscape teaching method play an active role in memory effects and interest in Chinese learning; 3) Although the use of multi-modal language landscape can give full play to teaching advantages in some aspects, the use of this teaching aid requires more research and more design.

3) Students' learning expectation

Participants' learning expectation on classroom teaching helps teachers improve follow-up teaching activities, solve problems arising in the teaching process, and enhance the teaching effect. This survey focuses on understanding learning expectation of the subjects. The statistical results of the survey data are as follows in the table 5:

Question 13: What auxilary teaching tools do you want teachers to use in class?

- Physical or picture materials, 87%
- Textbook supplementary materials and exercises, 60.00%
- Multimedia, 86.67%
- Audio or vedio materials, 95.56%

■ Textbook supplementary materials and exercises
■ Multimedia
■ Audio or vedio materials
■ Physical or picture materials

Question 14: Which method do you think can help you learn Chinese vocabulary quickly?

- The field practice, 88.89%
- Learn vocabulary from the reading material, 86.67%
- Vocabulary exercises, 71.11%

■ Learn vocabulary from the reading material
■ Vocabulary exercises
■ The field practice

TABLE 5. STUDENTS' LEARNING EXPECTATIONS FOR MUTI-MODAL LANGUAGE LANDSCAPE TEACHING MODE

From Question 13 in Table 5, it can be seen that for the use of auxiliary teaching tools, 86.67% of the participants want to use multimedia more, 60% choose to use textbook supplementary materials and exercises, and 95.56% and 86.67% respectively prefer to use video and physical or picture materials for vocabulary teaching. From this we can understand that most students expect teachers to use multimedia tools to assist in teaching. In terms of the ways to learn Chinese vocabulary quickly, most students think that vocabulary training, field practice and learn from reading all are good ways to learn vocabulary.

Based on the survey of student recognition, we believe that most students are more supportive of the multi-modal language landscape teaching model. It is presented in the form of pictures, sounds, animations, etc., which are more helpful in improving students' vocabulary use and cultural learning. In addition, Students prefer the learning methods of multimedia and outdoor classrooms, but some traditional teaching methods such as blackboard explanation, special training, textbook supplementary and other methods are not completely excluded.

B. Interview Analysis

After the experiment, the author conducted interviews with the students. It mainly aims to understand the impact of multi-modal language landscape teaching on students.

Interview target: Among the students in the experimental class, based on the post-test results, we select 10 students with greater progress in their total scores to conduct interviews to understand how multi-modal language landscape teaching has helped them.

Interview content:

1. Do you think the Chinese class in this experiment is more interesting than the previous ones? Why?

2. Do you like the PPT, pictures, animations, and some other multi-modal language landscape used by the teacher in the classroom? How does it help your Chinese vocabulary?

3. Do you like vocabulary learning more now than before? Why?

Interview results:

When asked if they think the current class is more interesting than before, most of the student's expressed affirmation and believed that the PPT, pictures, animations, and teacher's body language in the class can reduce the difficulty and boredom of vocabulary learning. When asked whether students are more interested in learning Chinese vocabulary, most of the interviewed students expressed interest and confidence that they can get better results in the test.

V. CONCLUSION

Based on the self-built multi-modal language landscape theoretical framework, this research selects students from Zhengzhou International Chinese Language Education as the experimental subjects. And use static multi-modal language landscape, dynamic multi-modal language landscape and visible language landscape to carry out elementary Chinese vocabulary teaching in the practical classroom; After the experiment, it shows that the vocabulary teaching effect of multi-modal language landscape is significantly better than traditional reading teaching. Especially in improving students' initiative in learning and mobilizing the classroom atmosphere. Through the survey of students' recognition of multi-modal language landscapes and teachers' usual classroom observations, the research found that students prefer landscape teaching methods and believe that it is beneficial to Chinese learning. Therefore, teachers can appropriately choose different modal language landscapes to meet the teaching needs of different contents and achieve better teaching results. For static visual modal landscapes, color pictures are the main form of expression, which easy to operate and rich in subject matter content that can be selected; dynamic modality such as videos, audio recording have vivid and interesting characteristics which promote students participate in the classroom with more enthusiasm. What's more, the visible modal language landscape provides students with a natural language learning environment, and students can directly participate in the experience and interact.

Based on the teaching experiment and student feedback of the application of multi-modal language landscape in teaching Chinese as a foreign language, the author try to make the following summary:

1) Multi-modal landscape teaching has certain advantages compared with traditional teaching methods, but it needs to cooperate with other teaching methods; 2) The use of language landscape should not be limited to the use of a single modality, different types of multi-modal language landscapes is conducive to the interaction of multiple senses. Teachers can complete teaching tasks according to the teaching content and the language landscape of multiple modalities.

In view of the first attempt to apply the language landscape to teaching Chinese as a foreign language, this article also has some limitations. In terms of data collection, due to the impact of the epidemic, only online questionnaires can be used to collect data, and the validity of the questionnaire cannot be avoided. In addition, most of this research adopts more subjective research such as questionnaires and interviews, and no fixed test papers are designed to test the specific learning effects of students based on multi-modal language landscape teaching. This will need to be studied in depth in future teaching experiments. At this stage we can only combine the current research results, take all aspects, conduct comprehensive research from multiple aspects, and devote ourselves to exploring the multi-modal language landscape in teaching Chinese as a foreign language. Which aims to provide some practical suggestion for the future study.

ACKNOWLEDGEMENT

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