Study on the application of schema theory in English listening teaching in higher vocational colleges

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Abstract: Listening is an important part of English teaching in vocational colleges, but students' listening level and learning enthusiasm are not optimistic. This paper combines schema theory with listening teaching to study how to help students establish schema, activate schema and enrich schema before class, during class and after class, so as to improve students' listening ability and learning interest and enhance their confidence in learning English.

Key words: Schema theory, higher vocational English listening teaching, language schema, content schema

In vocational English teaching, listening is a very important teaching content, but the listening teaching in vocational colleges is not optimistic, teachers and students generally think that listening teaching is the most difficult, the lowest efficiency and the worst effect. The reason is that from the perspective of "teaching", some listening materials are old and boring or too difficult. Some teachers have a single teaching method and poor effect. They ignore the guidance of listening strategies on the topic. From the perspective of "learning", vocational college students generally have a poor English foundation and lack of interest and learning strategies. This paper studies the application of schema theory in vocational college English listening teaching, hoping to solve the problems existing in vocational college students' listening learning and improve their listening level with the help of this theory.

1. Schema theory and listening comprehension

The concept of Schema first appeared in cognitive psychology, and then gradually formed the Schema Theory, which has been widely used in English reading and writing teaching and achieved good results. There are not many applied studies on it in English listening teaching, but it has gradually shown its effectiveness.

1.1 Definition of schema theory

There is no universal definition of schema theory. As early as the 1930s, Bartlett proposed that schema is a functional grouping of past events or experiences, which can always play a role in any organically adapted communicative response. Rumelhart held that a schema is the synthesis of all people's general knowledge. Widom regarded schema as the knowledge framework of known things or information stored in the human brain. Although there are different opinions, schema theory can be understood as follows: when people understand, absorb and input information, they need to associate the input information with the original information (background knowledge), and the decoding and encoding of the new input information will depend on the original information schema in the brain. Only by matching the original information schema can they complete the series of information processing processes.

1.2 Classification of schema

Schemata are divided into linguistic schemata, content schemata and formal schemata. These three support each other and form the framework for language input, comprehension and output.
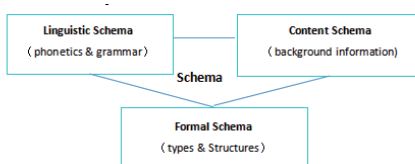

Figure 1: Classification of schemata

In traditional listening teaching classes, teachers often attach importance to language schemata, but in practice, it is found that one of the important reasons leading to the low efficiency of listening class and the slow progress of students' listening ability is that students lack of understanding of the social and cultural background knowledge related to the listening materials (that is, content schemata). In order to understand the materials, it is more important to be familiar with the topic and have the background knowledge of the topic than to master the vocabulary knowledge.

1.3 Schemata Listening mode of information processing

Schema theory points out that listening comprehension is not only a process of decoding literal language information, but also a process of dynamic interaction between input information and the existing knowledge in the listener's mind, so as to realize semantic reconstruction. The information processing of schema listening mode can be divided into two processing modes: bottom-up and top-down. The details are as follows:

Table 1: The information processing of schema listening mode can be

Information processing mode	How do you understand listening materials	When to use this type of information processing
bottom-up processing	Understand listening materials by using linguistic schemata (sounds, vocabulary, etc.) in your head	When the topic is new to the listening material

top down processing	Use the content schema (background knowledge) in your mind to understand the listening material	2. When you are familiar with the topic

Compared with language schema, mastering rich knowledge of content schema and top-down information processing will help students to understand listening materials more effectively. Of course, in the process of listening teaching, it is necessary to combine content schema and language schema, and choose their own strengths to understand the main idea of the discourse effectively.

2. The role of schema theory in English listening comprehension in higher vocational colleges

The combination of schema theory and listening teaching can help students construct context, eliminate language ambiguity, and improve the accuracy and prediction of listening comprehension. Taking the listening material "Gap Year" (Gap year) in the fourth unit of "New Era Vocational English (Basic Module) 1" as an example, this paper illustrates the role of schema theory in vocational English listening comprehension.

2.1 The predictive function before listening

In China, there is no such thing as "gap year". If teachers do not provide relevant background knowledge in advance (for example, in western countries, some students will take a year off before going to university to work abroad, so as to get a different experience), it will be difficult for students with poor English foundation to understand. On the contrary, if the students have mastered some relevant vocabulary (language schema) before listening, especially understanding the relevant background knowledge (content schema), they can predict the future listening content, and they can understand the general idea more smoothly when listening.

2.2 The selective processing of information after listening

When a schema is activated and enriched, an information processing framework will be automatically constructed. If some information in the listening material is associated with the schema, the schema will persist and expand; If some information is not relevant to the schema, the schema will ignore it. This process can be either the students consciously extend the schema themselves, or the teachers help the students. For example, students gain some knowledge about "gap years" before listening, and after listening, they learn some new related knowledge: gap years can not only bring different experiences, but also improve their GPA and increase job satisfaction. In this way, the students had a more complete picture of the gap year in their minds.

3. Apply schema theory to the strategies of English listening teaching in higher vocational colleges

How to integrate schema theory into higher vocational English listening teaching to better improve students' listening level, there are the following strategies.

3.1 Teachers themselves: change the teaching concept + strengthen learning + choose the appropriate teaching materials

The first thing to change is the traditional English listening teaching model with more language input and less cultural background input. English teachers should actively participate in a variety of online and offline teaching training, pay attention to teaching trends and new teaching concepts, learn teaching papers and essays, and change and update their teaching concepts. In addition, teachers should often read Chinese and English articles and books related to Chinese and western cultural background knowledge, and usually pay attention to the accumulation of English short cultural articles (relatively small vocabulary, short space, can be understood by vocational students) for listening classroom teaching.

In addition, the listening materials of some higher vocational colleges are too old, which are not attractive to students and cannot stimulate their desire to learn. In addition, some of the listening materials are difficult, such as too many CET-4 vocabulary, or more complex sentences, or speaking too fast, most of the vocational students have difficulty in completing the listening practice. Therefore, when choosing the teaching materials, teachers must combine the English foundation and interest of the students to choose the teaching materials.

3.2 Before class: Establish schemata

Before class, teachers can assign preview tasks, and let students first learn the cultural background knowledge and vocabulary, phrases, idioms related to the listening topic on the network teaching platform such as Learning Tong, or assign tasks for students to search the Internet by themselves to establish students' schemas. For example, the listening exercise of Unit 4 of "Business English" is about the promotion of ice cream sandwich products. Before class, you can publish two assignments on the learning channel: The first assignment: Ask students to complete a word meaning matching exercise. These words are all related to the listening content of this unit, such as launch, promote, ice cream sandwiches, etc. Ask students to recite these words so as to establish their language schema; The second assignment: ask students to collect short articles related to the product of ice cream sandwich (such as the features of the product, how to promote it, etc.) and upload them to the homework for students to have a better understanding of the product in advance, so as to establish its content schema.

3.3 After class: Continue to expand the schema

Due to the limited class time, teachers can take various forms to help students continue to expand the schema after class according to the students' English foundation. For example, they can recommend some literary works related to the listening topic to students (can be a simplified version), hold lectures on English cultural background knowledge (both teachers and students will speak on stage), organize English speech competitions, organize English salons, etc. In this way, it can help students to memorize the knowledge they have mastered in depth, expand their cultural background knowledge and vocabulary, improve their English listening comprehension ability, and enhance their learning interest. With the continuous expansion and completeness of their schemata, students' confidence in learning English is also increasing. In this process, teachers can also arrange some comparative learning of the cultural differences between China and the west to help them eliminate the language barriers in English listening, so that students' language schema and content schema can be continuously enriched and expanded in extracurricular activities of extensive listening and extensive reading.

4. The teaching effect after applying schema theory

In order to verify the effectiveness of the application of schema theory to English teaching in higher vocational colleges, a special application research is carried out. The subjects of this study are grade 22 freshmen from the Business School of Wuxi Nanyang Vocational and Technical College. The teaching material is Business English. Considering that the difference of students' English level and the number of classes would affect the experimental results, two combined classes with similar English level (determined according to the scores of the first semester) and similar number of students were selected: E-commerce 221 and E-commerce 222 (74 students in total) as the experimental class, and e-commerce 223 and E-commerce 224 (78 students in total) as the control class. The experimental class integrated schema theory into listening teaching, while the control class adopted the traditional teaching mode: understand the question - play audio - explain the answer, the teacher only explained vocabulary and grammar, did not supplement the cultural background knowledge. The two classes used the same textbook, the same number of hours, and the same teacher.

Before the experiment began, first do a listening test (the two classes have the same paper), choose the English application ability B test listening questions. After a semester of teaching, at the end of the semester, the listening test was conducted again (the same papers for the two classes), and another set of listening questions of the English Applied ability B test were selected. The test situation is as follows: Table 2 Listening teaching test of experimental class and control class

	Average score of pre-test	Post test average	Raise the score
Experimental Class	60.5	67.3	6.8
Control Class	60.7	62.5	1.8

As can be seen from the above table, the listening score of the experimental class has increased by 6.8 points after just one semester of listening teaching integrated with schema theory, indicating that schema theory has greatly promoted listening teaching. In addition, through the follow-up interviews and questionnaires with students, as well as the classroom observation (attendance and performance), it is found that the students' interest in learning English has increased, and their confidence in learning English has also increased with the improvement of their grades. In contrast, although the listening performance of the control class was similar to that of the experimental class, after one semester's study, the listening level improved little, and the students' attitude towards English learning was not as correct as before. Most of the students were not interested in learning English.

5. Epilogue

In vocational college English teaching, listening teaching plays an important role, and listening level is an important yardstick to measure students' English level. However, compared with undergraduate students, vocational college students generally have weak English foundation and lack of learning enthusiasm. Practice has proved that combining listening teaching with schemata, helping students establish, activate and enrich schemata before, during and after class can effectively improve students' listening level and learning interest, and enhance their confidence in learning English. There is a long way to go, and teachers still need to explore how to better apply schema theory to listening teaching in higher vocational colleges, make efforts to diversify each teaching link, and design teaching content more reasonably according to learning conditions.

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