Strategies for Applying Schema Theory to Oral English Teaching in Universities

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Abstract: Schema theory is one of the important theories in foreign language teaching. However, there is only a small amount of domestic research that has applied schema theory to oral English teaching. In view of this, based on schema theory, this study analyzes the current situation of oral English teaching and student learning and explores the strategies for applying schema theory to oral English teaching, in the hope that more oral English teachers and learners will use schemata to improve the quality of oral English teaching and learning.

Keywords: Oral English; Schema theory; Teaching strategies

1. Introduction

Learning a foreign language involves five skills: listening, speaking, reading, writing, and translation. Among these, reading and listening are input skills, and speaking and writing are output skills. In the past few decades, the basic skills of Chinese English learners have been greatly improved through foreign language teaching. However, there is an imbalance in the development of various skills, especially the weak oral skills of most students. The reason may be that the college entrance examination does not test oral English; another reason is that many colleges and universities only require non-English major students to pass the written exam of College English Band 4 (CET4) and College English Band 6 (CET 6), and there are no clear requirements for the oral exam. In addition, there is a shortage of theories about oral English teaching, compared with the other four skills. Consequently, teachers lack guidance from relevant theories.

The schema theory of cognitive psychology has been widely used in English teaching research. It not only affects the understanding of input information (reading, listening), but also affects the production of discourse (speaking and writing). The inspiration for schema theory for English teaching is that it can activate the original schema in learners' brains and help students understand learning materials more deeply and accurately. Although the schema theory has been widely used in research on foreign language teaching, it mainly studies the role of this theory in foreign language reading and listening. Some studies have been extended to comprehensive courses [1], which proposed a task-based comprehensive English teaching model from the perspective of schema

theory, and the effectiveness of this teaching model was verified through teaching experiments. However, the number of studies on schema theory and English-speaking teaching and practice is very limited, so this study first analyzes the current situation of oral English teaching, and then, based on the introduction of schema theory, explores strategies for applying this theory to oral English teaching in universities.

2. Concepts related to schema theory

2.1. Introduction to schema theory

German psychologist Kant proposed the schema theory in 1781, with the purpose of explaining and understanding psychological processes. In 1932, the British cognitive psychologist Bartlett defined schema in his article "Memory" as the dynamic organization of people's past experiences in the brain, and applied the concept of schema to the study of memory and knowledge structures. Later, American artificial intelligence expert Rumelhart [2] developed the concept of schema into a complete theory. He believed that schema is the sum of all people's general knowledge, and everyone stores various schema knowledge in the brain. It can be concluded that the above scholars have basically the same definition and view of schema. Schema is the storage form of various types of knowledge and information in the mind, and are the reflection or active organization of past experiences by the brain.

Schema is necessary for forming and executing language plans [3]. The process of oral expression is an information encoding process. It first needs to use the existing knowledge related to the topic in the brain to organize it into a language plan, then activate the corresponding language knowledge to encode the information grammatically and phonemically, and finally produce language through the vocal organs. Here, the knowledge used for encoding (including encyclopedic knowledge, language knowledge, etc.) is part of the speaker's knowledge schema [4]. This shows that if there is a lack of corresponding schema in discourse production, sound language plans and appropriate language expressions cannot be formed. Therefore, schema theory has a guiding significance for oral English teaching.

2.2. Types of schema

Schema is generally divided into three types: linguistic schemata, content schemata, and formal organizational schemata. Language schemata refer to language knowledge, that is, knowledge about pronunciation, vocabulary, and grammar; content schemata refer to the topic, background knowledge, or common sense of the discourse; formal schemata refer to the structure of various articles, that is, genre knowledge, such as news, novels, essays, and dramas, etc. Those genres have their own unique structures and characteristics.

2.3. Information processing methods

In the process of information processing, schema theory emphasizes two methods. One is the bottom-up method, which starts with the most basic language schemata, such as starting from understanding pronunciation and vocabulary and focusing on the identification of vocabulary and sentences. Then, it gradually accumulates to higher-level schemata. The other is a top-down approach, which highlights the identification of higher-level schemata, such as formal schemata and content schemata, and emphasizes the identification of the overall text structure and the role of background knowledge in oral communication. Bottom-up processing emphasizes the activation of the most specific schemata and then aggregates them into higher schemata, while top-down processing emphasizes the recognition of the overall structure [5].

3. Application strategies of schema theory in college English-speaking teaching

3.1. Helping students establish effective linguistic schemata

First of all, we should pay attention to the cultivation of students' phonetic knowledge, including weak forms of words and sentences, liaison, loss of plosion, stress, etc. On the one hand, in the oral language class, there must be explanations of phonetic knowledge points [6]. Teachers can use traditional teaching methods, such as requiring students to continuously build their own new schema and expand their own schema networks through reading, reciting, and other methods, because oral language skill depends on whether the schema information in the brain is rich in external speech information, whether it can effectively activate relevant schema and whether the activated schema can be quickly converted into speech information after comprehensive sorting [7].

On the other hand, attention should be paid to students' practice after class. For example, teachers can find suitable video clips on mobile applications in advance, such as MofunShow, and ask students to imitate them, or they can imitate certain sentences in original movies or television series. In addition, before teaching, teachers and students can work together to create an expression bank of spoken English expressions related to the unit theme [8].

Teachers can take the "New Progressive College English Inspire 2" as an example to explain how to apply schema theory in oral English teaching in universities. The book covers eight units, with each unit including four parts: Part I Warm-Up, Part II Listening and Speaking, Part III Video, and Part IV Expansion Activity. In Unit 1 Education, there are three warm-up questions in Part I Warm-Up. They are as follows:

(1) Which schools have you attended?

(2) Which class is your favorite?

(3) What courses would you like to study in the future?

Before class, teachers and students use Tencent online documents to edit a bank of Chinese and English expressions related to school categories and course names. Students are asked to write Chinese and English names of their favorite courses, and the teacher reviews whether these expressions are correct. The reason the co-construction of the expression bank by teachers and students is proposed is that only students know which course they like or want to learn. After reviewing the expressions in the bank, the teacher exports the document of these expressions as an expression bank of this part for students to learn and use.

In addition to pronunciation and vocabulary, students should also be taught English grammar knowledge, such as the emphasis on form combination in English and the emphasis on meaning combination in Chinese. English words, clauses, and sentences are connected by means of correlatives, prepositions, participle structures, etc. The grammatical meaning and logical relationship are expressed through the morphological changes of the vocabulary itself, and there are a lot of affixes in English. Chinese attaches great importance to the combination of meaning and is accustomed to following the logical sequence of the development of things (time sequence, cause and effect, time and space), and writing in the form of short sentences without too many formal connections between sentences. For instance, the subject of an English sentence is rarely omitted in English writing, while in Chinese writing, sentences without a subject are often used. The subject's status in English sentences is unshakable. Non-subject sentences are generally not used. Except for imperative sentences, dialogues, explanations, or some special practical writings, the subject can sometimes be omitted. Understanding the differences between English and Chinese will help students use standardized English language forms when speaking and improve their English expression skills [9].

3.2. Helping students build rich content schemata

It is very important to cultivate students' ability to flexibly use existing schema knowledge to communicate. At the beginning of teaching, the teacher can design some oral topics close to life for students, so that they will

not be left speechless, such as talking about college life, how to choose courses, how to borrow books from the library, etc. It is true that the learning of oral English is inseparable from the understanding of the culture of English-speaking countries. Therefore, cultural background knowledge must be incorporated into oral English teaching to help students understand the kind of expressions that are consistent with Western thinking.

In Part II Listening and Speaking of Unit 1 Education, before listening to the short audio Photo Camp, the teacher can ask students to think about what they can learn in Photo Camp. Students can basically give the answer: "Learn how to take good photos." The short audio mentioned that students went to Doha to learn about the culture and language of Qatar, and also went to the Republic of Barbados to learn about local water issues. When preparing lessons, teachers can find video clips to introduce Doha and the Republic of Barbados to enrich students' relevant background knowledge. For example, when students watch the video, they learn that Barbados is the only black-developed country in the world. On November 30, 2021, Barbados officially seceded from the Commonwealth, etc. After watching the video clips, teachers can ask students to introduce Barbados in English.

On the other hand, under the current general trend of Chinese culture going global, students must also learn to express Chinese culture in English, and then compare Chinese and Western cultures to enhance students' national pride. When teaching Unit 4 Festivals, teachers can arrange in advance for students to introduce the unique festivals and traditional customs of China's ethnic minorities in English, give full play to the value-leading role of the ideological and political elements in teaching, put students in the center, and adhere to moral education [10]. Meanwhile, the teaching should be based on China's position, embodying Chinese characteristics, and demonstrating the humanistic spirit of the new era.

3.3. Helping students accumulate various formal schemata

Teachers can provide students with articles of different genres before class or during class, and guide students to analyze the genre of the material and master its structure. For example, the first paragraph of a news article is the introduction part, which provides the main information, followed by the details of the news, which is the so-called inverted pyramid structure [11].

For example, telephone English has its common sentence patterns, such as "Hello, this is...talking. Can I talk to...?" If students know about these necessary expressions when picking up a phone or making a phone call, it would be really helpful for them to improve their oral English. In addition, teachers should pay attention to conjunctions that express logical relationships, including causal relationships, comparative relationships, time relationships, and contrastive relationships in the teaching. After helping students master the corresponding genres, teachers can create various scenarios for students and encourage students to use various formal schemata to express their thoughts [12]. For example, Listening 2 in Unit 4 Festivals has three phone messages, requiring students to identify who left messages for whom and what suggestions were given in the messages. By studying these three telephone recordings, students can understand the expressions of telephone messages and learn common sentence patterns for expressing suggestions.

3.4. Optimizing the way students process information

Teachers can apply information processing methods to oral English teaching in universities. Low-level students focus on the basic units that constitute language, such as phonemes, words, etc., and synthesize the meaning of phrases, sentences, and paragraphs from these small basic units, and then express the meaning they want to express, while high-level learners tend to adopt a top-down approach, starting from content and form schemata, focusing on the logic and appropriateness of spoken language production. Teachers should encourage students

to actively speak English and avoid sticking to individual words [13]. In this way, students can have a higher-level concept of information processing, pay attention to the content and form schemata, think about what they want to express from a macro perspective, and then follow the instructions of different forms of schemata, connecting old schemata to new schemata [14].

3.5. Constantly updating the educational concepts

In teaching, in addition to using traditional teaching methods, teachers can also draw on online and offline blended teaching methods and arrange the language input to be completed online before class. As teachers, we must constantly update educational concepts, improve teaching methods, guide students to activate and apply existing schema knowledge, strengthen oral output, continuously improve their communicative skills, and make contributions to cultivating high-quality foreign language talents in teaching practice [15].

4. Conclusion

English speaking is a very important output skill in college English. It requires continuous practice to speak English well. At present, there are few class hours in college oral English teaching, and students are unmotivated and do not dare to speak English. Schema theory has a positive impact on oral English teaching and learning. Teachers can start helping students establish effective language schemata from four aspects: constructing rich content schemata, accumulating diverse formal schemata, optimizing students' information processing methods, and constantly updating educational concepts. By applying schema theory to college oral English teaching, college students' English-speaking expression level can be improved.

This study also has some shortcomings and limitations: (1) This study is only a qualitative study and does not use data to illustrate the problem. Future research can focus on empirical research on the role of schema theory in oral English teaching. (2) This study only involves college oral English teaching. Future research can study oral English teaching in primary and secondary schools. (3) Factors such as speaking speed and accent will also affect oral English teaching. Future research can also be conducted from this perspective.

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