A Study on the Reform of College English Teaching Based on Schema Theory

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Abstract: This paper will conduct research based on schema theory to promote reform and improve the quality of English teaching in modern colleges and universities. This paper focuses on the basic concept of schema theory and its effect on English teaching and then puts forward some reform strategies given the current situation of English teaching in colleges and universities. Through the research, the teaching reform closely follows the schema theory, and the teaching quality can be effectively improved after the reform.

1. Introduction

At present, due to the greater and higher demand for English talents in the development of the country, universities bear a heavier responsibility for talent cultivation. This has led many universities to reflect on their current English teaching situation and find that although English teaching can cultivate a large number of English talents, the quality of talent generally does not meet expectations, indicating that the quality of modern English teaching needs to be improved. Therefore, many universities are actively carrying out English teaching reform work. However, in the reform work, the vast majority of domestic universities have encountered difficulties, mainly manifested in the lack of reform methods. Therefore, in order to help universities find English teaching reform methods, it is necessary to conduct relevant research from the perspective of schema theory.

2. Basic concepts of schema theory and its role in English teaching

2.1. Basic Concepts

Schema theory is a way of using "schema" tools to display and convey information, which can effectively associate people with other content related to the theme of the "schema". For example, using "schema" tools to display a "dog" with no other information in the picture, but when people see a "dog", they will associate knowledge information related to name, breed, lifestyle, and gradually construct a brain mind map. From this perspective, the "schema" in schema theory is a knowledge unit that is based on a certain topic, stores knowledge information related to that topic, and awakens the human mind through theme display. Its principle is that based on cognitive psychology (schema theory originated from cognitive psychology), as people's exposure to a certain environment increases, their understanding of the environment will also continue to deepen. Subsequently, people will form corresponding memories. When the memory reaches a certain level, the original pattern environment
will gradually transform into a familiar environment. At this time, when people need to recognize something in this environment, they can directly search for corresponding knowledge from their existing memory, and then recognize and judge the thing. Combining this logic, the subjective influence of the human hand may lead to differences in understanding and cognition of things, but education can weaken the subjective influence and help people form more objective cognition. For example, if A knows nothing about boxing and only watches it frequently, then from A's perspective, boxing will be linked to behaviors such as "fighting". On the contrary, if A has a deep understanding of boxing and can distinguish it from "fighting", then A will not confuse the two, indicating that people have different views on things in both situations. From this perspective, recording this way of understanding and the intervention of the subject in human cognition forms a "schema", and the related cognitive methods are also known as "schema cognition". There are many forms of "schema" tools, but any form is composed of two basic elements, as shown in Figure 1.

![Figure 1: Structure of the “Schema” tool](image)

Referring to figure 1, “schema” contains two elements: a topic and knowledge, including the theme in several “schema”, which is 1, the knowledge quantity of N. However, there are different forms of contact between different knowledge and subject. According to the contact form, knowledge can be divided into several levels, including the level of N number (level of falsified elements). In this case, displaying the theme can arouse people’s knowledge memory at a certain level, which is the basic mechanism of “schema”.

### 2.2. Teaching Function

Schema theory is derived from cognitive psychology and is related to people's cognition. Teaching is a typical process of knowledge cognition. Therefore, people have long been aware of the relationship between Schema theory and teaching. Therefore, we have begun to develop the teaching effect of Schema theory. Now we have reached a mature conclusion: Firstly, Schema theory can help students to establish clear and profound knowledge units, that is, all the knowledge of any subject can be divided into several knowledge units. For example, in English teaching, words can be divided into several knowledge units with the spelling, semantics and grammar of the word. Teaching itself is to let students know the knowledge unit. But the knowledge unit of regular teaching is not deep enough to let students know the knowledge of the knowledge unit. Often, students will not be able to construct the knowledge unit because of the previous knowledge connection.

### 3. Current situation and reform strategies of college English teaching

#### 3.1. Current Problems

There are two main problems in college English teaching, which are as follows.
3.1.1. Differentiation of knowledge units

Although modern college English teachers will actively divide knowledge units according to the chapters and units in the textbook and then carry out teaching work according to the unit structure, there is still the phenomenon of knowledge unit differentiation in teaching, which is reflected within and between knowledge units: First, the knowledge unit contains a large amount of English knowledge, and there is a necessary connection between each knowledge. However, teachers carry out knowledge education item by item in teaching and rarely show the connection between knowledge, so there is differentiation within the knowledge unit, which is not conducive to the establishment of knowledge cognition of students. Second, also found a link between knowledge units. For example, students need to learn words to learn semantic knowledge, but words and meanings belong to two distinct but closely related units of knowledge, and teachers rarely mention the links between units of knowledge, which adversely affects teaching [7-9].

3.1.2. The content is in a single form

At present, college English teachers generally display the teaching content in the form of text and text in the teaching work. Although this form of teaching content has a certain teaching role, it cannot fully cover the teaching needs, and there will be problems in some teaching links, leading to an increase in learning difficulty for students[10]. To a teacher’s teaching as an example, it is in the teaching of the picture will show the content of the English word. In this way, students can rely on the picture from the perspective of Chinese characters to understand the meaning of English words, but when the links such as teaching into the hearing training, teachers through graphic can’t intuitive display content again, at this time if you use the phonetic teaching equipment, It’s a modest relief, not a complete solution.

3.2. Reform Strategy

According to the current situation of college English teaching, the two big problems can rely on the schema theory to reform. However, before the reform needs to be prepared for the schema theory, preparation work is: first, establish more “schemata” in the form of tools, namely, although schema theory generally advocates the combination of pictures, text, and other content to establish “schemata” tool, but this kind of tool has a variety of forms, specific see table 1. The reason for establishing different “schema” tools is that they have different applicable conditions. Therefore, to fully integrate schema theory into college English teaching, it is necessary to start to establish it. For example, graphic and text tools are suitable for basic theory teaching, while picture and sound tools are suitable for listening training. Secondly, based on the teaching needs, a cognitive structure of knowledge is constructed. According to the teaching effectiveness of schema theory, this theory can meet the two needs of knowledge education within the knowledge unit, the relationship between knowledge education units, and solve problems, and fully play its role. According to different needs, corresponding cognitive structure needs are corresponding, that is, the laws of students learning knowledge, as shown in Figure 2 and Figure 3.

<table>
<thead>
<tr>
<th>The name of the tool</th>
<th>Basic composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic tools</td>
<td>Pictures and text</td>
</tr>
<tr>
<td>Figure sound tools</td>
<td>Picture plus audio</td>
</tr>
<tr>
<td>Sound article tools</td>
<td>Audio plus text</td>
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</table>
Based on the above preparation, we can adopt the following strategies to carry out teaching reform.

### 3.2.1. Knowledge unit education

In figure 2, the teacher should work first in the whole system of English knowledge to construct the corresponding knowledge unit and each knowledge unit in order, to start from the first knowledge unit teaching and suggests using graphic tools during, the reason is that the first unit of education involves the knowledge of information theory, based on more other “schemata” tools do not apply. On this basis, relying on the graphic tool for teachers can be knowledge as the theme, with the student to carry on the practice, such as with a word as the theme, teachers show students the picture, requests the student to the exact spelling words, write grammatical sentences, etc., so you can to all the knowledge is knowledge unit together, to help students establish a clear cognition. After completion, teachers organize students to practice overtraining without using “schema” tools, mainly to prepare for the subsequent knowledge unit relation education.

### 3.2.2. Knowledge unit relation education

Knowledge unit relation education involves more than two knowledge units, so teachers must first complete the internal education of relevant knowledge units to ensure that students understand each knowledge unit before carrying out the education work. In education, work can be used as a graphical note taking tool, that is, knowledge unit relationship education requires students to do a lot of listening and writing. Therefore, these two tools can help them adapt graphic tools to listening training. Teachers can use multiple units as a subject, and the knowledge involved provides students with multiple images without text, and then play audio to ask students to choose the correct image.

The audio-text tool is suitable for writing training. It proposes the situation theme through the audio and provides the corresponding text examples for students to conduct imitation writing and other training.

### 4. Conclusion

To sum up, college English teaching has a great responsibility, but the current teaching quality does not meet expectations, so it needs to be reformed. In the reform, college English teachers can rely on the schema theory to carry out their work, which can provide a powerful help to English
teaching. Teachers only need to master the application ways of various “schema” tools and then carry out education by students’ cognitive laws, which can significantly improve the teaching quality and achieve the purpose of the reform.

References