

# The Use of Schema Theory in the English Vocabulary Teaching

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## Abstract

Vocabulary is one of the three basic elements of a language. However, in many senior high schools, in the actual practice of senior high school English teaching, vocabulary teaching is not fully valued as it should be. Not only are teachers' teaching methods simple and single, but also students are still given priority to memorize vocabulary by rote. The schema theory combines the known knowledge structure in people's brain with the new knowledge system to complete knowledge input. The purpose of this thesis is to apply schema theory to English vocabulary teaching in senior high school, so that students can learn to connect new concepts with their known knowledge to get familiar with the meaning of words and various uses of words, so as to help students expand their existing vocabulary.

## Keywords

Schema Theory; English Vocabulary; Vocabulary Teaching.

## 1. Introduction

Vocabulary is recognized to be an important element for a language. Like bricks of a high building, it plays an important role in learning a foreign language. Just as David Wilkins once said, "Without grammar, very little can be conveyed; without vocabulary, nothing can be conveyed." (Song Li,2009) There is no doubt that vocabulary is the basic step of learning a foreign language. Without a certain amount of vocabulary, a person cannot communicate with other people freely. Therefore, it is significant to learn and memorize vocabulary.

In face of such a large size of vocabulary, teachers and students always suffer from heavy stress and even usually feel hopeless. For one thing, students should master a lot of required words and phrases. For another, due to the lack of efficient instruction, students learn new words insufficiently and fail to have a good command of vocabulary. Besides, because of the limited time in class, teachers seldom guide students to learn and memorize words efficiently. Therefore, it is urgent for the teachers to try different teaching approaches to help students learn and memorize words more proficiently.

As an old saying goes, "Teaching one to fish is better than giving him fish." When it comes to the language learning, it is better to guide students on methods rather than show them only vocabulary knowledge in the process of vocabulary teaching. It is certain that proper methods can help the students to get double harvest in vocabulary learning. Schema theory is such a theory of knowledge representation, which is once widely applied to many fields of English learning and a lot of productive work has been performed. Besides, many effective solutions of the application of schema theory have been put forward.

## 2. Schema Theory

The term schema was introduced by Kant and it was Piaget who firstly used the theory into practice. He applied schema in describing creativity and developmental changes of children during their early study and put forward the hypothesis that meaning comes into being when learners assimilate new information into their present schema. (Piaget, 1967).

## 2.1. The Definition of Schema

Schema was first advanced by the German Psychologist Kant in 1781, while it was Bartlett (1932) that developed the definition of schema in the 1920s. In his famous book "Remembering", he put forward that human understanding and remembering of things is influenced by their experience or previous knowledge, and the prior knowledge are presented mentally in some kind of schema. But his opinions were considered to be not clear and not to be used for a long time.

George Yule (2000) defined schema as a general term for a conventional knowledge structure which exists in memory. Though somewhat different in forms, they share something in common. Schemata are previously acquired knowledge structures. In interpreting what we experience and what we hear or read about, we have many schemata, which contribute to understanding a discourse completely." Chang (2005) thought that a schema is termed as an organized, general knowledge about situations and individuals that has been abstracted from prior knowledge that stored in long term memory. It is a hypothetical mental structure for representing generic concepts stored in memory and a generalized mental model used to organize memory, to focus attention, to interpret experience, and to codify actions.

From the previous study of schema definitions, we can make a summary that the schema is some kind of framework, or plan, or script which is a hypothetical mental structure to represent generic notion stored in people's memory. According to the previous definitions, memory assimilates new content with the existing schema and integrates the new information with the previous one stored in mind. Therefore, vocabulary learning is a successive process that involves assimilating new words schema with the prior organized knowledge.

## 2.2. The Classification of Schema Theory

Scholars have proposed various classification methods for schema theory. Carrel (1983) divides schema into form and content schema. Anderson (1985) is divided into story and expository schema. Cook (1997) divided it into world, text, and language schema. At present, the generally accepted classification methods are language schema, content schema and formal schema.

Language schema refers to basic language knowledge and is the cornerstone of the other two schemas (Rosch,1973). Without language schemata, we can't interpret any content in language, other schemata can't be developed in the mind, and language acquisition is impossible. The definition of language schema includes language knowledge, such as pronunciation, vocabulary, grammar, etc. The construction of language schemata plays a crucial role in foreign language learning, because without basic language knowledge such as pronunciation, vocabulary and grammar contained in language schemata, we cannot understand single words and sentences in language, activate and use content schemata and formal schemata in brain, and it is difficult to master the language.

Content schema refers to the cultural background knowledge of the topic (Wang,1998). People's understanding of language, mastering of background knowledge and understanding of theme constitute content schema (Li, 2007). In English teaching, there is a common phenomenon that although some students can recite or spell many words skillfully, they are not good at understanding the words in a specific context and cannot accurately use the words to express their views. An important reason for this phenomenon is that students have not constructed a good content schema.

Formal schema is the law related to word meaning and part of speech summarized according to the external form of vocabulary (Wang, 1998). A large number of English words are composed according to word formation, so formal schemata can be used to help students analyze and reason the meaning of unfamiliar words according to the common meanings of affixes while knowing the roots of words, and constantly expand their vocabulary by drawing

examples. The process of vocabulary learning is an active extension of thinking (Carter,1998). This process not only includes the basic language knowledge of vocabulary, but also is closely related to the cultural background knowledge of learners, and the recognition of external forms of vocabulary is also indispensable. If rich and accurate schemata are constructed in teaching, vocabulary learning and application will be easy.

The learning process of vocabulary learning is the process of the main dynamic expansion of the construction of thought dimension (Yule,2000). This process includes not only the basic linguistic knowledge of vocabulary, but also related to the learner's knowledge of the cultural background, and the recognition of the forms outside the vocabulary is essential. If rich and accurate schemas can be constructed in teaching and learning, the learning and operation of vocabulary will be light and easy to perform.

### **3. The Application of Schema Theory in English Vocabulary Teaching**

#### **3.1. Phonetic Schema Building**

As we all know, English belongs to both alphabetic character and phonetic system. If we ignore phonetic teaching, students will be faced with a permanent difficulty in learning. So in the initial stage of senior high school, teachers had better teach students phonetics systematically so as to make them master some basic skills of pronunciation, such as the pronunciation of vowel letters, pronunciation of vowel letter combinations in both stressed and light syllables, pronunciation of consonants as well as that of the consonant clusters, etc. Moreover, teachers ought to help students master pronunciation changes such as liaison, loss of blasting, weak form, intonation and rhythm, etc. In this way, we can make students establish some knowledge of phonetics so as to make them understand the relationship between the pronunciation and spelling, which is required in the New Senior High English Curriculum Standard. By activating phonetic schema and memorizing vocabulary on the basis of the relationship of pronunciation and formation, we can reduce the students' difficulty of memory and enhance the accuracy in vocabulary memorizing. To ensure students to develop a quick spelling skill and to ensure them to input correct phonetic schema in the brain, we'd better do well in the single tone teaching. According to the relationship between the pronunciation and spelling, we ought to compare and analyze the same points and similarities in pronunciation, formation and meaning and try to find out the inner laws (Chen,2003). Only in this way, can we help students produce a positive transfer, reduce the difficulty in memorizing words and improve the efficiency of memory in vocabulary learning.

#### **3.2. Using Word-formation**

The English language has a wide resource. Not only does it adopt words from other languages, but also it extends vocabulary from the material available in the language which is the called word-formation or word-building (Zhou, 2012). Word-formation is an important way to enlarge vocabulary. As is known to all, the expanding of vocabulary in modern English mainly depends on word-formation. There are various means being at work now. The most productive of them are affixation, conversion and compounding. Affixation is generally known as derivation, which includes prefixation and suffixation.

The affix is simple for students to remember as long as teachers can guide students to find out some rules and then make full use of them. Prefixes only can modify the meaning of the roots but do not change the word-class of the roots. However, suffixes do the opposite. Unlike prefixes, the primary function of suffix is to change the grammatical function of roots. For example, write-writer, sing-singer, read-reader, work-worker, act-actor, translate-translator, invest-investor. From them, students can conclude under the guidance of teachers that the meaning of this verb changes from an action to the people who do the action when plus -er or -or.

Above all, word-formation has played so important a part in vocabulary learning. And as an important way of acquiring vocabulary, word-formation is listed in “Standard for English Curriculum in High School” issued by the Ministry of Education for high school English teaching.

### 3.3. Using Contextual Knowledge

Context is the situation where an utterance is used. The students should be fully aware that context has an effect on word meaning. As is known to all, the meaning of a word may be different according to different situations in which the word is used (Liu, 2006). They usually enlarge our vocabulary by reading. When they meet new words during reading, they should make the best of the contextual clues that was stored as schema in their mind to assist us to guess the meaning of the new words. The word that lies in a new context may have new collocations and new meanings. This method is also a skill required in high school. Therefore, it is sure that students can guess the meaning of a new word by the surrounding in the written text. Nowadays, it is popular with vocabulary teaching in high school.

## 4. Conclusion

Based on specific application of schema theory to vocabulary teaching in high school, this paper attempts to stimulate students' existing schemas. It does not enrich the original schemas and create new schemas to strengthen the relationship between vocabulary. This allows students to turn isolated words into a series of related words.

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