Exploring English Vocabulary Memorization Strategies of Chinese College Students

Taking BaiCiZhan, MaiMemo, Scallop, and No Memorize Word App as Examples

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Abstract. Vocabulary learning is the foundation of English learning, and English learning without talking about vocabulary learning is often ineffective. However, learning English vocabulary has always been a difficult task for Chinese students. Due to the problems of learning methods, tools and approaches, many English learners have poor vocabulary memorization results and thus become averse to learning this language. With the introduction of smartphones and the emergence of English learning apps, students can learn English vocabulary effectively by using fragments of time without the limitation of time and space. Based on the current situation of college students' English vocabulary learning, this paper analyzes the methods and strategies of college students' vocabulary memorization based on the mainstream English vocabulary memorization applications in China, and comes up with three strategies that are suitable for college students to learn English vocabulary effectively: the combined association memorization method, the split-word batch memorization method and the daily context memorization method.

Keywords: Mobile Apps, Learning Strategies, Vocabulary Learning.

1   Introduction

Vocabulary plays an important role in every language. With the popularity of English, the need for efficient English vocabulary learning methods has become more urgent for English learners. In the past 40 years of development and improvement, many results have been achieved in the study of vocabulary memory [1]. The study of vocabulary memory is especially important for English learners and English teachers. As two important methods of English vocabulary memory at the present stage, the associative memory method and the image memory method have different advantages as well as some disadvantages. With the rapid development of "Internet+" network technology and the widespread use of "5G" mobile wireless technology, mobile learning has been developing rapidly. The way of people's life and learning has changed dramatically. The combination of "Internet+" and education has gradually become a powerful driving

force for the development of education modernization. With the popularization of smart phones, there are a lot of mobile English learning apps, each of which is loved and welcomed by learners for its special features and efficient learning experience. In this paper, the author studies English vocabulary memorization methods presented in the mainstream Chinese word memorization APPs at this stage, and combines them with the characteristics of contemporary Chinese college students' vocabulary learning to propose a more suitable English vocabulary memorization strategy for college students.

2   The Role of English Vocabulary

In today's increasingly widespread international communication, English plays an important role in many aspects of life, including education, economics, and international relations [2]. English has an important influence as an international lingua franca, but learning English is a difficult task for most people. In English learning, learners who lack the learning of grammar cannot express and understand well; learners who do not have a certain amount of vocabulary can become empty talk about practical activities and communicative skills such as listening, speaking, reading, and writing. The key to English learning is the accumulation of English vocabulary, which can form phrases, sentences, and articles, and is the basic element of language, the foundation of English, and is always used in English learning. Learners' mastery of vocabulary affects their ability to achieve proficiency or mastery of the language [3]. Therefore, English vocabulary is the core element of English learning and is a challenge that learners must overcome.

In writing, for example, the more synonyms a learner has, the richer his or her composition will be. Each English vocabulary has its own unique features in terms of phonetics, semantics, word formation, etc. [4]. These words form sentences, and sentences form paragraphs, and paragraphs form a beautiful essay, and this is where the vocabulary comes into play. This is where vocabulary comes into play. A large vocabulary in the English language learner's mind contributes to the accuracy and appropriateness of the wording [5].

In reading, the mastery of vocabulary affects the English language learner's understanding of the text, and reading questions often test the test taker's understanding and grasp of words and phrases. Regardless of the type of test, reading is one of the more important types of tests [6]. Reading tests a learner's knowledge of the language and his or her overall ability to obtain information from the material. Vocabulary is the foundation of a learner's understanding of a text. Learners can only fully comprehend reading material if they have a rich vocabulary [7].

3   Current Problems of English Vocabulary Memorization Among Chinese College Students

3.1   Blitz Memorization

Blitz memory is a repeated cycle of being forced to remember something forcibly in a short period of time, and is particularly applicable to the run-up to an exam. Some Chinese college students tend not to make any effort at all, but to memorize vocabulary in a blitz before the English exam. It is difficult to internalize words that are memorized in this way into long-term memory [8]. It only lasts for a short period of time and can create the illusion that students have mastered the vocabulary. It may help students do better on subsequent tests, but it does not prove that they have a good grasp of the knowledge. After a period of time, if the student does not review the blitz memory, he or she will forget and end up with nothing.

3.2   Mechanical Memorization

Mechanical memorization refers to the rote memorization of English vocabulary or its compulsory implantation through reading aloud, which usually belongs to forced input learning. Input learning means that learners fail to use some reasonable methods at the level of thinking, but memorize blindly, failing to integrate the memorized content with the knowledge they have already learned, and the new knowledge memorized in this way is difficult to be incorporated into the learners' existing knowledge system [9]. Mechanical memorization often takes a long time and is difficult to be stored in learners' minds for a long time, and it is also easy to make learners have negative emotions about English learning, which can discourage learners' interest in learning English and even make them bored with learning. However, mechanical memory is not entirely undesirable, and learners sometimes need to resort to mechanical memory when learning vocabulary. Therefore, on the basis of understanding, learners can engage in appropriate mechanical memory, which helps to improve the effectiveness of English vocabulary learning.

3.3   Passive Memorization

Word recognition and use are in a sense two different concepts. Passive memory is when learners are forced to think and remember the information they receive, such as by repeatedly looking at the spelling, copying the words, and the Chinese meaning of the words. The formation of this type of memory is unpleasant and difficult to begin with, so the brain has a shorter retention time for information that is subjected to passive memory compared to active memory. American educational psychologist Ausubel once pointed out that "learning must have the tendency of meaningful learning". Passive memory runs counter to this idea, which mainly refers to the fact that contemporary college students memorize vocabulary mainly by mechanical indoctrination in the teacher's classroom. The main disadvantage of passive learning is that it ignores learners' active knowledge and understanding of vocabulary, which makes learners

realize the importance of vocabulary for language learning and makes it difficult to mobilize learners' interest in vocabulary learning [10]. In the process of passive memorization, learners' brains cannot actively discriminate and process the learned knowledge, which is one of the reasons for the low efficiency of this method.

4   Different Mnemonics in Chinese Mainstream Vocabulary Learning Apps

4.1   "BaiCiZhan" Image Memory Method

A typical vocabulary learning app that uses the image memory method is "BaiCiZhan", which combines each English word and each word pronunciation with a specific picture, and the vivid images stimulate the deeper and more concrete perceptions of the human brain, and the brain will receive these perceptions and quickly establish a corresponding connection with the words, causing a kind of jumping imagination [11]. In this way, learners can easily associate the pictures with the vocabulary when they see it again, and then recall the meaning of the vocabulary. For example, the picture of the word "human" is a man drinking water, and after learning the vocabulary in "BaiCiZhan", learners will recall the picture of a human whenever they see it. However, the shortcoming of this method is that some adjectives are difficult to have accurate pictures of, and when the pictures given by the app are different from the learners' perception of the adjective, it is difficult for the learners to understand the meaning of the pictures.

4.2   "MaiMemo" Split-Associative Memorization and Whole-Harmony Method

MaiMemo is a highly efficient anti-forgetting English memorization software. It aims to make the boring task of memorizing English words more effective and sustainable by creating targeted memory planning and anti-forgetting strategies based on the theoretical principle of the Ebbinghaus forgetting curve and personalized analysis of individual's memory level. Among them, split-associative mnemonics and holistic harmonic mnemonics are the two most typical memory strategies.

Split-associative mnemonics refer to splitting a complete word into several parts that learners are familiar with, and then using a story to connect these parts so that learners can understand the new word based on their existing knowledge base [12]. For example, the word "insert" can be split into two parts: "in+sert". "in" means "inside"; "sert" means "stuffed". The two together can be expressed as inserted, and it's very easy to remember.

Holistic harmonic mnemonics is to translate the pronunciation of a word into a form that is familiar to the learner. Although this method can make learners remember the pronunciation of words better, it is only suitable for learners who are proficient in pronunciation rules and have a certain foundation [13]. For example, "ponderous" can be

transformed into "fat as hell" in Chinese, which describes a person who is very fat, so it is good for understanding the meaning of the word itself, "bulky".

4.3   The "Scallop" Method of Categorization and Organization

"Scallop" is an educational software licensed to Collins Dictionary, which is a vocabulary learning software based on the English-English definitions for users to train. Its main feature is the mnemonic method of word summarization and organization.

The mnemonic method of categorizing and organizing refers to the memory method of organizing similar or similar words to reduce the burden of memorization. This method can help learners to group a large number of similar words together, so that learners can easily distinguish these similar words and quickly increase their vocabulary reserves. For instance, learners can put declaim, exclaim, proclaim, reclaim and other words that look similar together for comparison and inductive memory.

4.4   "No Memorize Word" Method of Root Words and Affixes

"No Memorize Words" is a context immersion English word learning tool that helps users improve their understanding and memorization of words by providing a variety of real-life scenarios of word interpretation. The most important feature is that it integrates root word mnemonics into the English context so that learners can memorize English words.

Root word mnemonics is a method of memorizing words by using the connection between the meaning of roots and affixes and the meaning of words and by making appropriate associations [14]. It is usually more interesting, regular and universal than other methods, and can help learners get rid of mechanical memory. This method is also easy to master and effective, and can quickly improve learners' vocabulary in a short period of time. When learners use the root word method, they need to memorize the relevant roots and affixes in advance. This method helps learners to simplify their word recognition and allows them to guess the meaning of new words by using the roots and affixes when they encounter them. For example, "clarity" can be split into "clar (meaning "clear") + ity (noun suffix)" in the root-affix mnemonic method.

4.5   Comprehensive Analysis

"BaiCiZhan" can help learners to use multi-sensory learning and use image memory while memorizing words by associating pictures with words to form an interchangeable code, but the time required for this conversion needs to be shortened through continuous training. "Scallop" requires learners to have strong self-control and a strong foundation in English. The main method used is to memorize similar words together using the categorization method, which is more suitable for learners who only need to look at the words and their English meanings to recall their Chinese meanings, and do not need to be able to spell them. "No Memorize Word" uses root word mnemonics to split up words, which can help learners to reduce their memory burden to a certain extent. At the same time, "No Memorize Word" restores various scenes of word usage

through hundreds of thousands of real scenes with audio examples, puts words into different contexts to help remember them, effectively improves the efficiency of word memorization, and helps learners thoroughly master the various meanings and different usages of words. Based on more than 50 billion users' memory behavior data, "MaiMemo" combines with learners' memory feedback to accurately locate the user's forgetting threshold for each word, dynamically adjust the review plan, and efficiently plan massive vocabulary memory. For example, the use of harmonic and split association helps learners to quickly memorize words, thus effectively improving learners' memory efficiency.

5 Strategies Suitable for College Students to Learn English Vocabulary Effectively

5.1 Combined Association Memorization Method

Combined association mnemonics is a method of memorization by association using the connections between things. Students can combine roots and affixes to split up the association of words and memorize words through some interesting associations between things for a long time to improve the memory effect. Students should also regularly test their memory after memorizing words using this method, because the brain can only remember a limited amount of content and what is remembered will be gradually forgotten over time. Students need to recall the words they have memorized at intervals to avoid forgetting them.

5.2 Split Word Batch Memorization Method

The split word batch memory method focuses on splitting words and then converting the split parts into phonetic or pictorial things for shorthand. Students can also collect similar words together, split the same and different parts of them, and use images or stories to memorize them. This not only increases the number of words memorized but also combines many words together to speed up memorization. For example: there is a head bull (B) ready cull (C) a dull (D) gull (G) and lull (L) force pull (P) a null (N) hull (H). Students can visualize this scenario in their minds as a bull ready to pick a foolish gull and coax it into pulling hard on a useless hull. Each person gets different results using batch mnemonics, and good associations tend to make memories last longer. As students continue to input words, they need to continually internalize the vocabulary they learn and apply it to their speaking and writing practice. Students can use this method to extend the meaning of words or deepen the memory of words in their minds when they read articles. Students can also master the usage of words through writing and use batch memorization of synonyms to improve their writing.

5.3   Daily Context Memorization Method

"Don't teach words alone; don't learn words alone." This is the basic principle of vocabulary learning. There are different ways to memorize different words, but the essence of all kinds of memorization methods is based on the knowledge of the language. Students need to memorize words in context and remember the specific usage of words in different contexts so that they can live and learn the words. Vocabulary learning does not exist independently. It requires students to practice diversity in their lives, and a word must be associated with other words in order to show more meaning. When the students encounter multiple meanings of a word or familiar words, they can relate the meanings of the words to each other and drive the unknown from the known, so that they form structured and networked knowledge. Word memory is inseparable from daily use, and students should shift from passive learning to active input to achieve efficient learning by repeatedly memorizing and using words [15].

6   Conclusion

With the continuous progress and rapid development of networks and digital technology, the process of modernization and informatization of education is also in progress. Smartphones have been integrated into people's lives, and nowadays college students almost have a smartphone, and the frequency of using smartphones and tablets is increasing day by day. Mobile APPs with different features on cell phones and tablets are highly appreciated by most college students for their access to English learning materials and data in a short period of time, and they are sought after in the process of studying English and passing English grades, thus greatly improving learning efficiency and English proficiency.

Word memorization is undoubtedly the most basic and important component of the second language learning process. In order to have outstanding listening, speaking, reading and writing skills, learners need to accumulate a large number of words in the first place. The rigidity and dullness of traditional vocabulary teaching limit learners' motivation and thus fail to improve learning efficiency. Therefore, English teachers should actively improve their vocabulary teaching methods and flexibly use modern multimedia so that technology can increase interest in English vocabulary learning and enhance the attractiveness of vocabulary learning. With the help of modern vivid mobile learning applications, students can efficiently build their own vocabulary databases. By analyzing three problems of English vocabulary memorization among Chinese college students at present and using the different learning and usage characteristics of four English learning apps, such as "BaiCiZhan", "MaiMemo", "Scallop" and "No Memorize Word", the author explores that college students should use scientific mnemonics to strengthen their own efficient learning of vocabulary and train their thinking skills in the process. Although the fun mnemonic method can make students motivated to memorize words and develop their own understanding and knowledge of vocabulary, word memorization is still a long and arduous road that requires the long-term persistence of learners to achieve the desired effect.

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