

Using Mind Mapping for English Vocabulary Teaching

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Abstract

This study aims to explore the application of mind mapping in English vocabulary teaching. The researchers conducted on-site teaching by using mind mapping at a higher vocational college in China and made a survey to study its effectiveness. Through practice, the authors found that using mind mapping to teach English vocabulary can enhance students' vocabulary memory and application, making learning more interesting and effective, and improving students' self-learning abilities. In addition, the researchers use Constructivism Theory and Knowledge Visualization Theory to analyze and discuss the survey structure in detail, and draw proper conclusions. The article also provides detailed guidance on how to use mind mapping to organize, classify, and review English vocabulary, and shares some practical teaching experience.

Keywords: mind mapping, English teaching, vocabulary learning, constructivism theory, knowledge visualization theory

1. Introduction

1.1 The Importance of Vocabulary Acquisition

Vocabulary is the foundation of language and plays an important role in all aspects of language using, including reading, writing, speaking, and listening. Without a solid vocabulary base, language learners may have difficulties in understanding texts, expressing ideas, and communicating with others. Many scholars have emphasized the importance of vocabulary. For example, Wilkens (1972) pointed out that without grammar, very little can be conveyed; without vocabulary, nothing can be conveyed. McCarthy (1990) also emphasized the importance of vocabulary in language and language learning. Vocabulary acquisition is an essential part of language learning as vocabulary provides us with the words we need to express our thoughts, emotions, and ideas (Wang, 2013). Therefore, the importance of vocabulary acquisition is self-evident. It forms the foundation of language learning and plays a crucial role in words, sentences, and literary studies. The quality and quantity of one's vocabulary directly affect his ability to express meanings and ideas. Students with a rich vocabulary can communicate more fluently, whereas those with a limited vocabulary may have troubles with communication.

Many scholars have emphasized the importance of vocabulary acquisition and conducted extensive research on this topic. Ma (2009) discussed the importance of vocabulary in language learning, stating that vocabulary is one of the most basic building blocks in language, and learning vocabulary can help learners understand the completeness of sentences and texts. Zhou (2019) believes that a student's English vocabulary determines his English proficiency, and those with a rich vocabulary are more fluent in reading and speaking, whereas those with a limited vocabulary may have trouble in reading and speaking.

Vocabulary size contributes significantly to language acquisition, and vocabulary acquisition and language application form a virtuous cycle of mutual support and promotion (Nation, 1997). Furthermore, the more vocabulary one has, the more precise and clear his expression becomes. Vocabulary acquisition is not only crucial to English learning but also to the way of thinking. By learning new words, one can expand his knowledge and improve his cognition, hence promoting his long-term personal development. In conclusion, vocabulary acquisition is crucial to a person's language learning, communication and long-term development. It can be easily seen what an important role vocabulary plays in language and language acquisition. Therefore, the importance of vocabulary cannot be overstated since it is the foundation of language construction.

1.2 Challenges of Vocabulary Acquisition for EFL Learners

For non-native speakers, mastering the English language can be a daunting task, particularly when it comes to vocabulary acquisition. English has an extensive lexicon with many words that sound similar but have different meanings or multiple definitions. This presents a challenge to EFL students who struggle to memorize new words and distinguish similar words. It can also be a challenge for them to know how to use the words appropriately in the context.

One of the biggest challenges to EFL students is to acquire enough vocabulary to express themselves accurately in spoken and written English. Studies have shown that vocabulary size is directly linked to reading comprehension, writing proficiency, and overall academic success (Nation 1995). However, building a large vocabulary requires significant effort and dedication on the part of the learners.

In addition to the sheer quantity of words to learn, another challenge is the intricacy of English spelling and pronunciation. While there are some patterns and rules governing spelling, English orthography is very complex and often inconsistent (Dai, 2020). Furthermore, many English words are pronounced differently than they are spelled, making it challenging for EFL students to acquire accurate pronunciation skills.

Contextual understanding is also crucial to effective vocabulary acquisition, as English words rarely exist in isolation (McCarthy, 1990). EFL students must learn how to use the proper words correctly in sentences and understand how their meanings change in different contexts. Moreover, new words and phrases are constantly added to the English lexicon, further complicating the task of vocabulary acquisition (Vermeer, 1992).

1.3 Challenges of Vocabulary Acquisition for Chinese Students of Higher Vocational College

Vocabulary acquisition has been a pressing issue for higher vocational college students in China despite the increasing attention and development of vocational education in recent years. According to the 2018 Report on Employment Quality of Vocational College Graduates in China, English proficiency is one of the important indicators of vocational college graduates' competitiveness in the workplace. Nevertheless, more than 70% of the surveyed graduates believe that their English ability is not strong enough, with the highest proportion (about 60%) citing insufficient vocabulary retention and application skills (Zhao, 2019). This not only affects students' English learning performance but also has a significant impact on their future career development.

The reasons for Chinese higher vocational college students' difficulty in acquiring English vocabulary are complex. On one hand, English teaching in primary and secondary schools in China is characterized by singularity and mechanization, emphasizing memorization of vocabulary and grammar rules while neglecting the cultivation of language using and communication skills. Additionally, in higher vocational colleges, English teaching problems such as unqualified English textbooks and courses, inadequate teacher capacity, and monotonous teaching methods all hinder the students' English vocabulary mastery (Liu, 2020). On the other hand, students' personal problems such as family backgrounds, learning environments and habits all have impacts on their English vocabulary mastery (Liu, 2020). For example, higher vocational college students in China may not have received sufficient support and attention in English learning during their secondary school years, and may lack good environments, opportunities, and resources to learn English, resulting in relatively weak English foundations. Some students even show problems such as hating study, self-denial and so on. In addition, many students may not have passed the college entrance examination before entering higher vocational colleges, and their English basis may be one of the factors contributing to their English learning difficulties.

Some higher vocational colleges in China have recognized the importance and challenges of vocabulary teaching, but they still rely on traditional methods. For example, grammar-translation method is very popular in vocabulary teaching, but this method only requires students to recite words and their corresponding Chinese meanings repeatedly, so students cannot really use words proficiently. Despite their great efforts, many students still face great challenges, especially when it comes to memorizing new words. Besides, textbook structure is another problem. Textbooks are usually divided into several topics, each belonging to a unit. However, topics vary greatly from one unit to another, which means that after studying the next topic, students may quickly forget the words from the previous unit(s). Since the topic and vocabulary of each unit are isolated, students cannot integrate the words in a systematic way, which increases the difficulty of memorizing and using them. Therefore, a more useful and efficient vocabulary teaching strategy is urgently needed in higher vocational colleges of China.

2. Literature Review

2.1 Mind Mapping

Mind mapping is a visual tool that helps individuals organize and connect ideas, thoughts and concepts. Developed by Tony Buzan in the 1960s, mind mapping is now widely used in education, business, and personal development. As Tony Buzan (2002) explained, mind mapping can further utilize the potential of the brain by

expressing different thoughts in an imagery and divergent way. Buzan (1993) believed that mind mapping is an effective way of thinking that guides the brain's memory and cognition through the combination of graphics and texts. Buran and Filyukov (2015) also pointed out that mind mapping is not only an effective way of thinking but also a non-linear way of expression. Zhang(2021)believed that mind mapping is a tool that helps people develop cognition and enhance their thinking abilities. Luangkrajang (2022) exposes that the usage of a mind map in English language classes can provide students the chance to be active learners by independently gaining facts, processing information, arranging specifics, and developing knowledge. Tarin & Yawilong (2022) made an experiment which shows that writing development through the use of mind maps can facilitate EFL students' writing performance and positive attitudes towards the easiness and enjoyment of English writing, and they advocated the use of mind maps to enhance EFL students' writing development and encourage their enjoyment during EFL writing activities.

2.1.1 Features

According to Buzan's (2002) summary, mind mapping has the following basic characteristics: Firstly, they are centralized, with attention focused on the central image. Secondly, they are radiating, with branches stretching out from the central theme like a tree. Thirdly, they are hierarchical, based on the level and content of their relationships. Fourthly, they are holistic, with the content of the mind maps not being isolated but interconnected by lines to form a complete knowledge network, and each connection represents a way of thinking. Fifthly, they are diverse, using colors, shapes, code, etc.

One of the key features of mind mapping is its ability to draw on both sides of the brain. Mind mapping often uses images, symbols, and colors, which activate the right hemisphere of the brain responsible for creativity and imagination(Buran,2015). Meanwhile, text and logical connections activate the left hemisphere responsible for reasoning and analysis. By combining these two types of thinking, mind mapping can help its users to generate and connect new ideas, leading to greater insights and understanding of complex information(Wei, 2021).

2.1.2 Benefits and Functions

Research has been conducted on the functions of mind mapping in teaching, and the results generally recognize that mind mapping has functions in promoting creativity, learning ability, and enhancing memory. Futrell et al. (2002) believes that as a cognitive tool, mind mapping can enhance students' learning speed and accuracy, and it can also serve as a teaching strategy to promote the development of teaching practice. Li (2019) points out that mind mapping can convey images, symbols, numbers and new information, and build bridges among them, making it an effective metacognitive tool. Abi-El-Mona & Adb-El-Khalick (2008) conducted a comparative experiment of scientific concept learning by using mind mapping, and the results showed that students who learned scientific concepts by using mind mapping scored higher than those who learned by using traditional note-taking methods. Eriksson & Hauer (2004) found, in a qualitative study of using mind mapping to cultivate students' marketing skills, that using mind mapping can greatly enhance learners' enthusiasm, making them more attentive in class and cultivating their marketing skills. Zhang et al. (2023) suggested that mind mapping, as a teaching strategy, can not only encourage learners' interest and enthusiasm for learning but also stimulate their ideas and improve their expressive ability. In addition, some scholars pointed out that regarding mind mapping as a teaching strategy can exercise students' divergent thinking abilities (Lu et al. 2021). Li's (2019) research also shows that mind mapping can stimulate perceptual cognition through graphic combination, analyze the connection between things clearly, and promote creativity and cognitive growth. Luangkrajang (2022) examined the use of mind mapping in language teaching and revealed the effectiveness of mind mapping in English classes. He found that mind mapping can positively enhance students' mastering ability and make them more active.

2.2 *Benefits of Mind Mapping to English Vocabulary Teaching in Higher Vocational College of China*

The application of mind mapping as a divergent thinking tool in education has had a significant impact. For example, Chen (2005) found that using mind mapping in adult education for natural science can greatly improve teaching effectiveness, outperforming traditional teaching methods. Howitt (2009) discovered that mind mapping could help children share knowledge and build webs of relationships among pieces of knowledge. Tan (2020) found that mind mapping was an assisting tool that can not only improve the programming abilities of computer science students but also enhance their metacognitive abilities.

As stated earlier, higher vocational college Students in China have difficulties with vocabulary, and mind mapping could provide help with their vocabulary acquisition. The researchers of this study have used mind mapping in a higher vocational college in China and achieved good results. We mainly use three types of mind maps: situational maps, synonym/antonym maps, root & affix maps. By using the software Xmind, we have designed and made various maps to make explanation and set examples for the students. The following maps are some typical ones designed and made with Xmind. These mind maps help the students better understand and master the meanings and usage of words.

Situational maps associates words with specific contexts, making learning more intuitive and vivid (Figure 1).

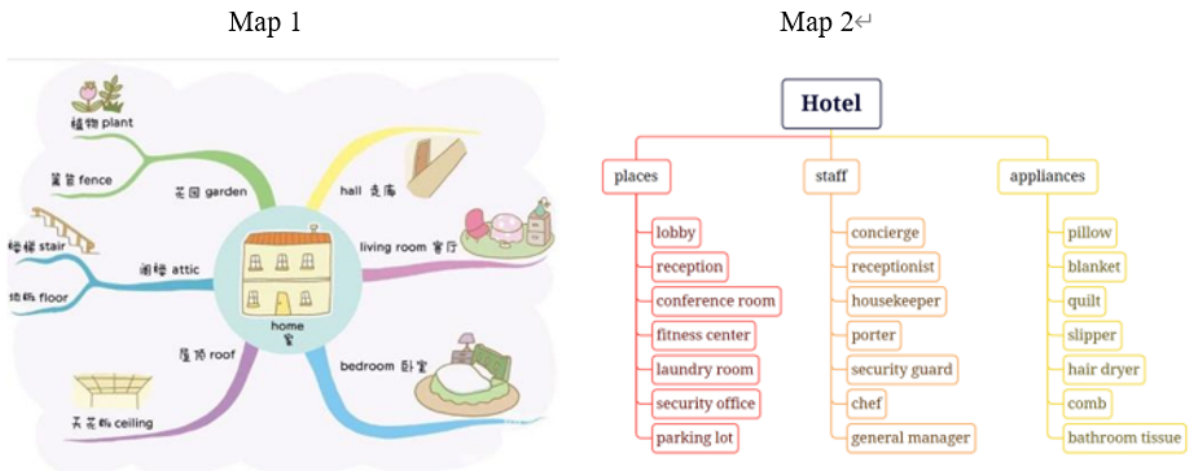


Figure 1. Map 1 and Map 2

Synonym/antonym maps can help compare and distinguish subtle differences between words, so learners can better understand their meanings and usages (Figure 2).

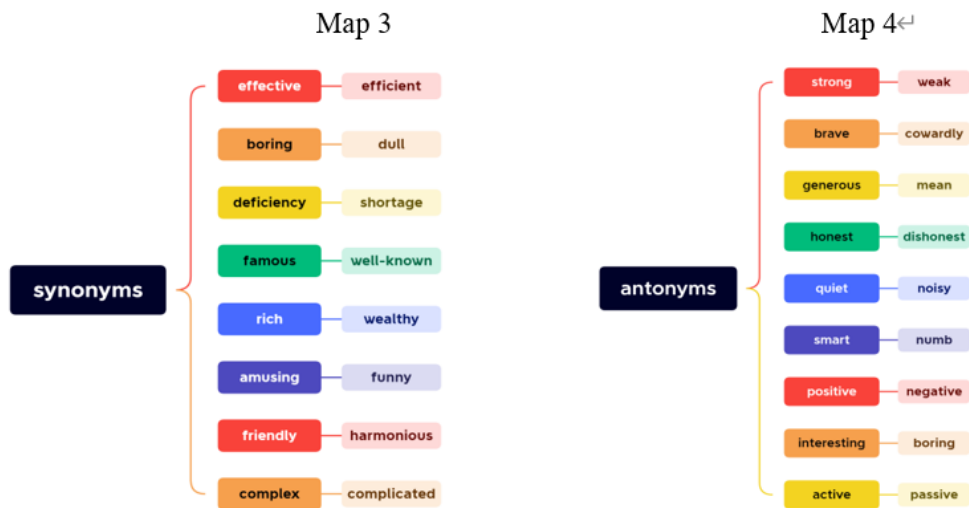


Figure 2. Map 3 and Map 4

Root & affix maps (Figure 3) can help understand the composition and origin of words, so students can better understand and memorize them. By using these mind maps, students can learn and master words more systematically, deepening their understanding and mastery of the language.

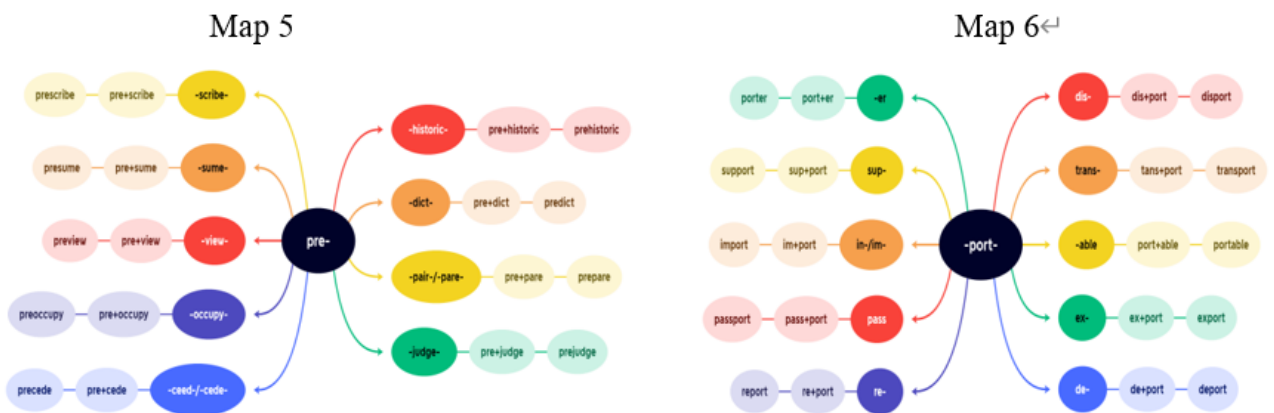


Figure 3. Map 5 and Map 6

3. Methodology

3.1 Related Theories

Constructivism theory holds that knowledge is constructed through the contact and collision between students and external factors. Students' inherent cognitive structure is the main component of knowledge construction, and this cognitive structure will also change as learning deepens. Yu (2013) holds that learning is a dynamic process in which students, in a specific environment, integrate new knowledge with their existing knowledge through discussion and cooperation with teachers and classmates. Mind mapping provides students with prompts for the core content of learning, inspiring them to draw on their own knowledge and experience and communicate with teachers and classmates to further construct knowledge, deepen understanding, and integrate it with their existing cognitive structure.

The constructivist teaching approach advocates the concept of "teachers-guiding-students". Teachers play a role in transmitting knowledge by guiding and assisting the students in constructing knowledge during teaching activities. In the teaching process, teachers need to create teaching scenarios that interest students and inspire them to think about the deeper meaning. They guide the students to discover and correct deficiencies and errors in the learning process, so as to deepen the memory and improve knowledge construction (Lu et al., 2021). Through the use of mind mapping in classroom teaching, students can improve the completeness and clarity of their knowledge system under the guidance of teachers, hence deepening their understanding and mastery of knowledge.

Visualization as a professional term can be traced back to the 1980s. Knowledge visualization is an important part of visualization, which refers to the use of visual information to increase the innovation and dissemination of knowledge. There are some common methods including knowledge maps, sketches, and visual metaphors. Through various visualized information, knowledge can be quickly disseminated and widely spread (Khusniyah, 2019). Thanks to the development of science and technology, different types of mind mapping software and concept mapping software have emerged and accelerated the development of knowledge visualization. Knowledge visualization has many advantages. For example, it is more intuitive, which is consistent with the principles of how the human brain processes information (Khusniyah, 2019). Besides, it can play a role in transmitting and memorizing knowledge. In general, knowledge visualization is the use of graphic methods to construct and disseminate complex knowledge.

Mind mapping is a scientific and efficient thinking tool. It stimulates students' thinking with direct and vivid visual effects, and then constructs a clear graphic and textual knowledge system, transforming the thinking in their minds into an explicit knowledge system (Sun, & Wang, 2022). It is beneficial for teachers to understand students' thinking activities and carry out teaching activities based on students' learning situation. In addition, its drawing method is concise and easy to learn, and it is not limited by location and environment (Buzan, 2018). Relevant vocabulary is presented in the form of mind mapping, which can stimulate the brain in multiple dimensions and make learning more effective. Knowledge visualization has been widely applied in linguistics. Halliday (1978) pointed out that meaning is constructed through the process of exchanging symbols in society. Therefore, visual expression of symbols can convey language meaning more intuitively, thus achieving knowledge dissemination and communication. Additionally, linguists Kress and Van Leeuwen (2001) stated that visual language is an important mode of communication, conveying information through visual symbols such as images, colors, and layout. Mind maps help students to enhance their vocabulary by linking new and old words with visuals that aid in conveying meaning in a particular setting (Khusniyah, 2019). Therefore, the use of visual symbols in knowledge visualization can help people better understand and memorize knowledge.

3.2 Research Design

The participants of this experiment were 90 first-year students from a higher vocational college in China. They were from two natural teaching classes taught by one of the two coauthors of this paper. They were in the same major and had not been exposed to mind mapping before the English experiment. All participants participated in one pre-test and three post-tests, and personal interviews were conducted with those who were representative of the typical participants.

There were four research tests in this experiment: Test 1 was the pre-test, which consisted of 50 vocabulary multiple-choice questions and mainly tested students' vocabulary level. Test 2 was the first post-test, which was a matching question and mainly tested the short-term memory effect of mind mapping on word meaning in English vocabulary teaching. Test 3 was the second post-test, which included completion and translation questions and mainly tested whether mind mapping has a positive effect on long-term memory of vocabulary and whether it has different effects on word form and meaning memory.

The experimental process of this experiment was divided into six steps: pre-test, mind map training, comparative vocabulary teaching, post-test 1, post-test 2 and post-test 3. Through the pre-test, the ability of the participants to understand word meanings by using mind mapping was tested, and the English vocabulary level of the participants was evaluated. The results of the pre-test in Table 1 showed no significant difference in the English vocabulary level between the experimental class ($M=71.88$) and the control class ($M=70.98$) ($P=0.669$). One class was randomly assigned as the experimental group, and the other as the control group.

Table 1. Independent Samples T-test Analysis of Pre-test Scores

Test	Number of Participants	Mean Score	Standard Deviation	F-value	T-value	P-value	Effect Size
Experimental Group	45	71.88	11.273	1.103	0.429	0.669	0.90
Control Group	45	70.98	9.268				

3.3 Procedures

In English vocabulary teaching, the control group adopts the traditional vocabulary teaching method and completes regular vocabulary learning assignments after class. The experimental group adopts the mind mapping vocabulary teaching method for a period of 12 weeks. The strategy of mind mapping vocabulary memory is taught, and the training of mind mapping is integrated into the classroom vocabulary teaching. The vocabulary in the textbook is associated, visualized and schematized in the mind mapping to deepen the learners' analysis and understanding of the vocabulary. After class, students are required to complete mind mapping vocabulary assignments.

The specific operational steps for the experimental group are as follows.

(1) Mind map training for English keywords. The teacher explains the mind mapping strategy and guide the participants to discuss in groups. The participants are expected to find suitable keywords, reorganize the learned vocabulary, and conduct independent brainstorming exercises to compile new words through image association memory in the mind maps. When showing the students mind maps, the teacher asks them to consider whether the mind maps can also be integrated with other English words that have similar or related meanings or forms. It aims to cultivate their vocabulary association awareness and practice their independent use of mind mapping for self-learning.

(2) Filling in the blanks with selected words. The participants are shown the mind maps of vocabulary, and through discussion, they are required to identify the related meanings or classification features of key words and associated words, and choose the correct words to fill in the blanks and complete the mind maps. This exercise aims to strengthen the students' ability to analyze and memorize vocabulary by using mind mapping, and improve their ability for independent learning. After class, the experimental group is assigned with extra-curricular mind mapping tasks. They use vocabulary learning software on their mobile phones to memorize vocabulary and draw vocabulary mind maps by themselves, extending the training of mind mapping to after-class activities, and cultivating the habit of independent application of mind mapping.

4. Results

The difference in scores between post-test 1 and post-test 2 of the experimental group and the control group reflects the impact of mind map training on short-term and long-term vocabulary memory. Please refer to Table 2 and Table 3:

Table 2. Independent Samples T-Test Analysis Table for Posttest 1

Posttest 1	Sample Size	Mean Score	Standard Deviation	F-Value	T-Value	P-Value	Effect Size
Experimental Group	45	69.72	13.541	1.564	3.457	0.001	9.08
Control Group	45	60.64	12.246				

Table 3. Independent Samples T-Test Analysis Table for Posttest 2

Posttest 2	Sample Size	Mean Score	Standard Deviation	F-Value	T-Value	P-Value	Effect Size
Experimental Group	45	39.96	7.879	2.690	8.725	0.000	15.28
Control Group	45	24.68	9.344				

The statistical results in Table 2 and Table 3 show that there were significant differences ($P < 0.05$) between the post-test scores of the experimental and control groups, indicating that developing mind mapping memory strategies in English vocabulary teaching promotes both short-term and long-term vocabulary memory. The average score differences between the experimental and control groups in post-test 1 and post-test 2 were 9.08 and 15.28, respectively. It should be noted that the difficulty level of post-test 2 was significantly higher than that of post-test 1, indicating that the effect of mind mapping memory strategy on long-term memory was more pronounced.

Table 4. Independent Samples T-Test Analysis Table for Posttest 3

Test Object	Number	Mean Score	Standard Deviation	F-value	T-value	P-value	Mean Difference
Experimental Group	45	36.68	12.058	3.142	8.962	0.000	19.78
Control Group	45	16.89	9.435				

Table 5. Paired Sample t-test analysis table for the experimental class

Test Object	Number	Mean Score	Standard Deviation	Standard Error of Mean	T-value	P-value
Pre-test	45	71.88	11.273	2.316	15.202	0.000
Post-test	45	36.68	12.058			

According to the statistical results of the independent samples t-test in Table 4, there was a significant difference ($P=0.000$) between the post-test 3 scores of the experimental group ($M=36.68$) and the control group ($M=16.89$). Based on the paired samples t-test statistics in Table 5, there was also a significant difference ($P=0.000$) between the pre-test and post-test 3 scores of the experimental group, indicating that the use of mind mapping memory strategies in English vocabulary teaching had a significant effect on promoting autonomous learning.

5. Discussion

5.1 The Effects of Mind Map Training on Short-term and Long-term Vocabulary Memory

The analysis shows that the mind mapping memory strategy can improve the efficiency of vocabulary memory, especially for long-term memory. There are three main reasons: The combination of mind mapping and English vocabulary teaching has opened up new horizons for learners, making the daunting task of memorizing word forms easier and helping to easily understand confused meanings. The participants who learned mind mapping and applied it to English vocabulary memory showed a higher interest in learning English vocabulary. This finding is also consistent in a study by Luangkrajang (2022), who used mind mapping in EFL classrooms and revealed that EFL students had positive opinions toward the use of mind mapping. His study showed that by integrating mind mapping techniques in English language classrooms, students can transform textual descriptions into visual depiction, allowing visual learners to capture and understand the details of the lesson more easily (Luangkrajang 2022).

(1) Mind mapping stimulates imagination and association abilities. When memorizing vocabulary, students strive to make associations and collect synonyms and related words, which is a challenging process that requires a lot of effort. This activates the student's mental lexicon, as well as their previously learned knowledge and experience. Cohen et al. (1986) suggested that the deeper the level of information processing, the more likely long-term memory is to be retained.

(2) The process of constructing a mind map for vocabulary is a process of deep processing of word forms and meanings, which further strengthens the understanding of vocabulary and promotes long-term memory.

(3) Mind mapping reduces cognitive load. The cognitive load theory points out that a large amount of information is stored in long-term memory in the form of cognitive schema. However, the workload of working memory is limited, and only a small amount of memory information can be processed at the same time. If overloaded, it will hinder learning.

5.2 The Effects of Mind Map Training on the Memory of Word Forms and Meaning

The results of the post-test on fill-in-the-blank and translation questions of the experimental group showed that mind map training had different effects on word form and word meaning memory. The differences in scores between fill-in-the-blank questions ($M=16.7$) and translation questions ($M=23.2$) indicated that mind mapping had a more significant effect in promoting vocabulary meaning memory. This conclusion was also supported by students' recognition in personal interviews and group discussions. The association and divergence of mind mapping make the meaning of vocabulary easier to understand and remember, and the situational association helps students focus on memory of contents.

5.3 The Impact of Mind Map Training on Self-learning

After mind map training and teaching, the participants acquired certain mind mapping strategies and were able to gradually apply them independently. When memorizing new words, the participants were able to analyze word forms and understand meanings, and they were willing to apply this ability to their self-learning. This is consistent with Zhao's (2015) findings, which found out that the use of mind mapping in teaching cannot only improve students' vocabulary, but also greatly deepen their mastery and application of new words. O'Malley & Chamot (1990) also pointed out that valuing the training of effective learning strategies for students and developing their self-learning abilities can help improve their academic performance. Therefore, it can be easily

seen that combining mind mapping with vocabulary teaching has great significance in educational practice.

In addition, the researchers found that there were individual differences in the improvement of scores between the post-test 3 and the pre-test. The smallest and largest progresses were both found in the high-scoring group. This indicates that learners' individual cognitive levels play an important role in mind map training and application. Sun (2020) proposed that vocabulary tests can directly assess the ability to acquire new knowledge. This type of knowledge may be easy to acquire, but it also depends on the students' interests and talents. Students' personal way of cognition is one of the factors that contribute to individual differences. For example, visual and holistic learners benefit more from the mind mapping due to its visual and associative features. In a personal interview, a student who enjoys drawing and is good at making associations expressed his feelings, saying, "I didn't expect that drawing could help me remember English words so well. I used to have a headache with memorizing English words, but now I enjoy it because I can use my artistic talents in memorizing English words. This enhances my learning interest and improves my efficiency. Therefore, the differences in cognition styles have an undeniable impact on the application of mind mapping.

6. Conclusion

In conclusion, the findings of this experimental study are as follows: (1) The application of mind mapping in English vocabulary teaching can promote both short-term and long-term memory, and its effect on long-term memory is more significant. (2) Mind mapping has a better effect on word meanings than word forms. (3) Mind map training has a positive impact on improving English vocabulary self-learning. (4) In terms of improving vocabulary self-learning ability, the promotion effect of mind mapping is greater for the high-scoring group than for the low-scoring group. (5) Individual language ability and cognition style have an impact on the application of mind mapping.

Moreover, this experiment further proves that mind mapping is beneficial to the effectiveness of English vocabulary teaching. By incorporating mind mapping into vocabulary learning, a more logical vocabulary memory is strengthened, which helps students integrate new words with old ones, constructing a memory network according to certain logical thinking. It highlights the vertical and horizontal meaning connections of vocabulary, enabling students to master vocabulary in a more complete and coherent way. Mind map training can effectively improve students' cognition and thinking patterns, promote their vocabulary understanding and memorizing, help them fully demonstrate their creativity and cultivate their self-learning ability. The effective combination of mind mapping and English vocabulary teaching can ameliorate the inefficiency of traditional vocabulary teaching to some extent, enrich teaching methods, and promote English vocabulary teaching in higher vocational colleges of China.

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