

# An Application of Mind Mapping to English Vocabulary Teaching in Senior High Schools

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**Abstract:** *In the traditional vocabulary teaching, only a simple introduction of the meaning and usage of words is boring in class, and only a simple memory after class. Such a cycle will lead to the weakening of students' interest in learning. Students think that learning English is just memorizing words, and there is no fun at all. This is the problem existing in the current English vocabulary teaching. The application of mind mapping in vocabulary teaching can solve this problem. In vocabulary teaching, the presentation of mind map can make students learn to think, so that students will be deeply impressed with the knowledge points they have learned. As a new teaching method, it is of great significance to apply mind mapping in English vocabulary teaching. It can cultivate students' interest in learning English, improve their attention and thinking ability. However, when applying mind mapping to teach students knowledge, teachers should also realize that mind mapping is not omnipotent. Teachers should learn to apply mind mapping scientifically and reasonably in teaching.*

**Keywords:** *Mind Mapping; English Teaching; Vocabulary Teaching*

## 1. Introduction

With the development of The Times, any profession will change with the development of the society, and education is no exception. After decades of economic construction, China has not only changed its economic strength, social environment and people's thinking, but also changed people's understanding of education, the relationship between people and society, the way of thinking and other aspects. Because of this earth-shaking change, the old-style education has changed, and our country has begun the reform of the new curriculum.

### 1.1. The requirement of new curriculum reform

For the reform of teaching methods have the following requirements, the first, highlight the "heuristic" teaching thought adhere to the "heuristic" teaching guiding ideology, according to the requirements of guiding students to take the initiative to learn to choose and design teaching methods, is the implementation of quality education to carry out a key of teaching method reform. Second, emphasizing teaching students to learn to learn to learn is an important idea of the reform of teaching methods. Teaching students to study is an internal strategy for the development of students' quality, one of the fundamental ways to improve academic performance, and one of the important countermeasures for education to face modernization, the world and the future. Third, focus on the study of teaching methods including teachers teaching methods and students learning methods two aspects. To implement quality-oriented education and reform teaching methods, we should gradually transition from only studying teaching methods in the past to both studying teaching methods and studying methods, so as to unify teaching and learning. The fourth, urges the student to know the affection harmonious development teaching method reform must pay attention to the cultivation student study the positive emotion and the good study attitude, pays attention to the passion to arouse interest. In order to improve the development of personality and carry out the reform of teaching methods in the implementation of quality-oriented education, we must pay attention to the affective factors of students in the learning process and promote the harmonious development of students' understanding of affective factors. Fifth, realize the optimization of teaching method. The reform or optimization of teaching methods does not lie in which methods are excluded or preferred, but in how to make the best choice of teaching methods according to different restrictive factors.

### ***1.2. The research significance of mind mapping***

Mind mapping is one of the innovations of teaching methods in the new curriculum reform. Mind-mapping teaching method is a new teaching method which appears with the deepening of education reform in China in recent years. Both students and teachers can build up a perfect knowledge system by drawing mind mapping. Mind mapping drawn according to logical habits and the relevance between knowledge points can play a positive role in promoting both teachers' teaching and students' independent learning.

By using the way of mind mapping, students can accurately grasp the relationship between knowledge points, and on this basis to further expand and diverge their thinking. In this way, students' learning efficiency and ability can be significantly improved, especially for students' independent learning. Some English teachers in their English teaching process do not pay attention to the application of new teaching methods, new teaching ideas, new teaching models, the application level of mind mapping is relatively shallow, or even do not pay attention to the role of mind mapping. Part of teachers for the use of multi-media teaching facilities there are all kinds of problems, some teachers overuse, some teachers will be on the shelf, for the characteristics of the senior high school English teaching under the new situation do not fully understand and grasp, for senior high school students' English learning the actual level of no practical investigation. In teaching activities, some teachers often spend a lot of time on the narration of English knowledge points. However, it does not pay attention to the building of students' English knowledge framework and English knowledge system, and it does not make use of the favorable conditions of mind mapping to provide students with more learning convenience. Some above the lack of communication between students and teachers in the classroom, in the classroom does not pay attention to and become a student, even this should not have boundaries and diaphragm, and the long-term plan for students learning English, and other subjects to study had a negative effect, for the improvement of English teaching as a whole to produce a certain way.

Therefore, we urgently need to use the form of mind mapping in our English teaching activities to improve and solve the corresponding problems. Therefore, in senior high school English teaching in China, students need to master the application of mind mapping and apply it to English learning.

### ***1.3. The structure of the thesis***

In the first chapter, I first introduced the requirements of training objectives, teaching methods and the overall requirements under the reform of the new curriculum standard, and the mind mapping is exactly in line with the reform of teaching methods. Secondly, I introduced the significance and advantages of using mind mapping in teaching. We urgently need to use the form of mind mapping to solve and improve the problems in senior high school English teaching in China.

In the second chapter, I divide it into four parts, namely, the meaning, type, composition and mode of mind mapping and its application.

In the third chapter, I discussed the mind mapping for the application of English vocabulary teaching in senior high school, first, in the lead-in part, the application of the use of mind mapping, subject as the core, let the student to carry on the association of old words, before the review to consolidate the knowledge, to realize the effective connection of old and new knowledge, and inspire their learning interests and enthusiasm. Second, in the presentation link, there are the following applications: using mind mapping to distinguish similar words and increase vocabulary. Combine sound and words to enhance recognition; Use mind mapping to master the roots and affixes and reduce the difficulty of vocabulary; Use mind mapping to learn subject words; Use mind mapping to learn polysemy vocabulary. In the practice section, memorize the words using mind mapping.

In the fourth chapter, I summarized the four advantages and limitations of mind mapping in senior high school vocabulary teaching. The advantages are as follows: stimulating students' interest in learning and enhancing their self-confidence; cultivating students' learning strategies and improving their language application ability; exercising students' thinking ability and innovation ability; improving students' knowledge structure. There are three main limitations. First, mind mapping is a divergent and layered representation, which is not easy to express and relatively complex information. Secondly, not all senior high school English vocabulary can be explained by mind mapping. Finally, the application of mind mapping in teaching is a great challenge to both teachers' professional ability and students' learning ability.

## 2. Mind Mapping

### 2.1. Definition

Mind Mapping, also known as brain Map, Tony Buzan, he created the “Mind Map” and famous for Mr. Brain, is an effective graphic thinking tool to express divergent thinking, it is simple and very effective, is a practical thinking tool. Mind mapping uses the skills of both text and text to show the relationship between different levels of topics with subordinate and related hierarchical maps, and to establish memory links between theme keywords and images, colors, etc. Mind mapping makes full use of the functions of both sides of the brain and the laws of memory, reading and thinking to help people develop in a balanced way between science and art, logic and imagination, thus unlocking the infinite potential of the human brain.

### 2.2. Types

It has eight types, including Circle Map, Tree Map, Bubble Map, Double Bubble Map, Flow Map, Multi-flow Map, Brace Map and Bridge Map. Mind mapping are not the same as concept maps. Concept map and mind mapping belong to two different “camps”, which not only have certain connection, but also have considerable difference. The main links are as follows: firstly, both mind mapping and concept map express people’s thinking in the form of the most intuitive images. Secondly, both of them have a clear theme, and both are based on this theme to “spread branches and leaves”. Third, around a theme, each level is interrelated with each other. Finally, both of these are highly malleable, and the plotter can extend them at will according to his needs. The differences between the two are as follows: mind mapping show the differences between keywords and other branches in the form of a tree, while concept maps show their corresponding content in a network structure.<sup>[4]</sup>

### 2.3. The components and drawing methods

The components and drawing methods of mind mapping are also very particular. The components of mind mapping mainly include the following: keywords, lines, colors and corresponding graphic annotation. To draw a mind mapping, the specific steps are as follows: First, identify key words on a blank sheet of paper and clarify the purpose of the drawing. Secondly, starting from the keywords, the branch is gradually extended, and the words of each branch are connected with colored lines, and a keyword is determined on each branch. Next to each node, everyone can mark according to his or her own habits. The marking forms are not rigid, as long as it is easy to remember. Then, it expands along the branches.<sup>[3]</sup>

### 2.4. The application

The establishment of mind mapping is conducive to people’s all-round and systematic description and analysis of the problems they are thinking about, which is very conducive to people’s profound and creative thinking of the problems they are studying, so as to find the key factors or key links to solve the problems. The production of mind mapping is very flexible, without many strict restrictive principles. The key point is that it can reflect the thinking characteristics and production goals of the producers, and develop their thinking ability and improve their thinking level. By using the method of “mind mapping”, people’s thinking ability can be greatly improved. Mind mapping can inspire people’s rich imagination, it can put the philosophy of many ways of thinking without any obstacles, including the continuity, thinking of the depth of thinking, critical thinking, divergent thinking, association thinking, analogical thinking, image thinking and inspiration thinking, dialectical thinking, so it can greatly improve the level of man’s philosophical thinking and to use the level of philosophical methodology.

Mind mapping is a very effective teaching method under the new curriculum standard. It is also widely used in senior high school English teaching, such as writing class, reading class, vocabulary class and so on. In writing class, under the influence of the traditional English education, we are often English composition teaching for students’ practical English level and practical ability to learn don’t care, it is to pay attention to the teaching of specific English vocabulary, ready-made templates, composition of English sentence patterns, to make students get higher scores of English works and that for the cultivation of the students’ practical ability may have the opposite effect.<sup>[1]</sup>

We can appropriately adopt the form of mind mapping in the composition teaching to promote the development of our English composition teaching activities. First of all, we can use the mind mapping

to introduce students to many common forms of English composition, using the way of mind mapping to classify them, so that students can control their own composition theme in the macro. Then the teacher should guide the students to diverge their thinking, outline each composition form and the corresponding framework, and take special symbols, differentiated colors and other forms to do homework in the process of constructing the mind mapping.<sup>[2]</sup> Teachers should also give corresponding guidance to help students draw their own mind mapping as soon as possible, so as to not only deepen their understanding of the English composition genre, but also specifically improve their English thinking ability and learning ability. In reading class, some students' English reading ability is poor, the speed of reading is slow, and the overall quality of reading is not high. The reason should be the deviation of students' thinking in English learning and the lack of divergent thinking in English. Therefore, we should reasonably use mind mapping in the teaching of English composition, so that students can consider English problems from a higher dimension. As English teachers, we should guide students to use mind mapping to explore English reading patterns, establish central sentences and central paragraphs, and determine answer intervals, so as to make an English article richer in hierarchy and readability. Mind mapping can make the reading article clear at a glance, and the primary and secondary relationship between the characters in the story is clear and clear. Students can effectively improve their ability to understand the article and analyze the materials in the process of using mind mapping, thus improving their English reading ability. Therefore, we should use mind mapping to provide more help to our students in the specific English reading teaching. I will mainly introduce the application of mind mapping in senior high school English vocabulary teaching.<sup>[5]</sup>

### 3. The Application of Mind Mapping to Vocabulary Teaching in Senior High School

The current English vocabulary teaching method is simple. Teachers lead students to read the words several times, and then explain the relevant variants and collocation to students. Then students memorize the words by rote, which means they have completed the learning of English vocabulary. In this way, English vocabulary learning efficiency is low. As soon as English learning is mentioned, students will think of English words. If this goes on for a long time, students' interest in English learning will gradually lose. In view of this phenomenon, it is not necessarily a new attempt to carry out English vocabulary teaching effectively with mind mapping.

#### 3.1. Lead-in part

In lead-in part, let the student to carry on the association of old words around the theme, Before the review, I will consolidate knowledge, realize the effective connection between new and old knowledge, and stimulate their interest and motivation in learning. Next, I will explain the lesson of earthquake, Unit 4, which is a compulsory unit for high school English. this passage mainly tells the story of the Tangshan earthquake happened in the end. In the import link, I adopt the method of the mind mapping to import, I will be at the beginning of class, let the students watch a video about the natural disasters, causes the student interest, causes the student to pay attention in class, I'll let the students around the theme of natural disasters brainstorming, discuss what they know the name of the natural disasters, to complete the mind mapping. According to the Figure 1. Students may think of earthquakes, floods, fires, tsunamis, leading to the topic - earthquake.

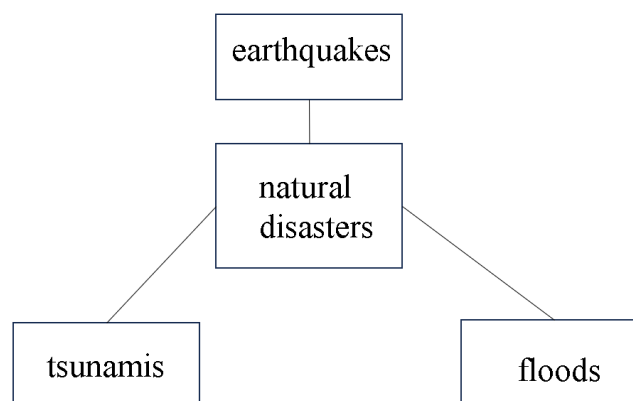


Figure 1: Mind mapping 1

Combined with the introduction of mind mapping course, the new and old contents can be effectively connected. English vocabulary learning is from simple to deep, from easy to difficult, and from simple to complex. Therefore, in the teaching of English words, we can carry out course introduction with mind mapping to guide students to systematically comb and integrate the words they have learned. Then through the expansion of the mind mapping, the effective connection of the learning content, to help students reduce the study burden. Mind mapping can also stimulate students' interest in learning and improve learning efficiency.

### 3.2. Presentation part

#### 3.2.1. Using mind mapping to distinguish similar words

Senior high school English has many kinds of vocabulary. However, there is a certain correlation between different kinds of words. If students only memorize vocabulary by rote in learning, it will not only take a lot of time, but also stimulate students' weariness of learning; it will affect the amount of memorizing art. However, if students can construct the context map of mental response relationship by using the connection between single functions and using the field thinking guidance, they can memorize the words well.

Combine phonetic words to enhance recognition. Phonetic words are usually similar in terms of pronunciation and writing because of similar sentence composition, which increases the difficulty of English learning for students. But because of its sentences like this feature, we can find its mostly can be traced back to a common word, such as success, succeed, successful, successfully and so on, According to the Figure 2, by succeed extends, although the pronunciation is similar, but you can succeed, to expand its word using mind mapping memory, part of speech of each word and specific use situation analysis, enhance its identification.

In the second part of the text, the railway tracks were now useless pieces of steel, so don't pick up and pick up the words so much as useful, uselessness and used, so don't pick up the words so much as use. This method can help students to expand their vocabulary, distinguish similar words and understand words better.

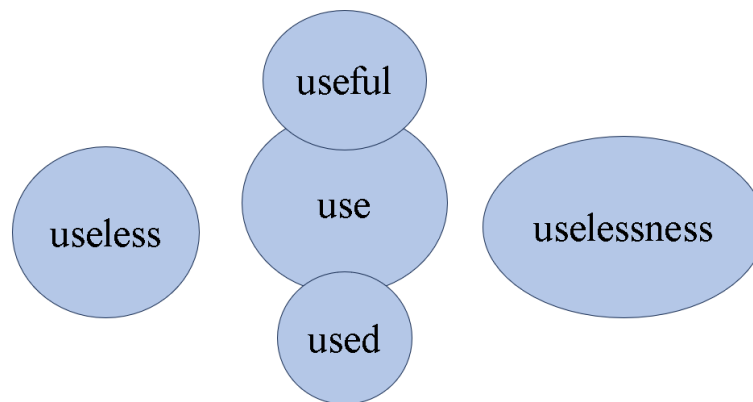


Figure 2: Mind mapping 2

#### 3.2.2. Using mind mapping to reduce the difficulty of vocabulary

According to the survey, students with strong English expression ability and large vocabulary will use the root word level to memorize words when learning vocabulary knowledge. The composition of English words is regular and feedable. Sentence is the basic unit of English, which is divided into morpheme, word, phrase, clause and sentence according to the structure level, thus it can be seen that morphemes are the basis of words, and morphemes are made up of root and affix groups or. As long as students master root and affix groups, it is quite difficult for them to memorize the basis of words, which can improve their sensitivity to words and improve the actual memory efficiency. With the help of mind mapping to carry out English vocabulary teaching, we can better grasp the composition of words, master the root and affix memorizing method, reduce the difficulty of memorizing and improve the teaching efficiency.

The most effective method of generating English words is affixes, which is the method of adding affixes on the basis of English root. This method is praised as "the shortest and best way to learn English". Combining mind mapping to help students learn English roots and affixes can achieve twice

the result with half the effort. For example, the teaching of negative prefixes. There are many negative prefixes in English. “un-”, “im-”, “il-”, “in-”, “dis-”, “mis-”, “non\_” and so on can all express the meaning of “no, on the contrary”. Each negative prefix can be used in the creation of many new words, such as “diss-”, “discount”, “discover”, “disappear”, “dislike”, “dishonest”, “originally” and so on. Teachers can start by guiding students to summarize negative prefixes, and then associate related words with each negative prefix to help students quickly grasp the usage of negative prefixes and the meaning of related words.

For example, in the lesson of earthquake, According to the Figure3, there are many words with “-ly” suffix, such as seriously, smelly, suddenly, etc. In the teaching process, the mind mapping can be used to let students understand that such words are generally adverbs, so that students can judge the part of speech of the new words. Mastering the meanings of common roots and affixes will effectively expand students’ vocabulary, which can not only help students learn new words and memorize the same root words, but also help students guess the meaning and part of speech of the words. Rational and effective mind mapping can highlight the key points of teaching, effectively memorize vocabulary and improve learning efficiency.

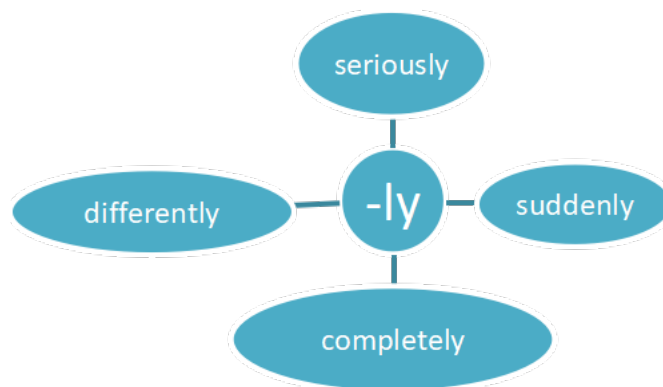


Figure 3: Mind mapping 3

### 3.2.3. Using mind mapping to learn subject words

Each module or unit of senior high school English textbooks has a clear theme division. Teachers can help students to integrate vocabulary, find subject words, and link vocabulary related to subject words into memory network structure through mind mapping according to the scope, theme and function of vocabulary expression. For example, “festival” is one of the teaching themes in senior high school, around which students have to master many vocabularies related to festival celebrations, ways of celebrating, and people and things related to the festival.

In the lesson of earthquake, students can use mind mapping to teach some verbs about earthquake. According to the Figure 4, There are also many such words in the text, such as shake, crack, burst and so on. Mind mapping can effectively form related vocabulary under this theme into an organic whole, help students remember all English vocabulary related to keywords “festival” and “earthquake” more effectively, help students form a reasonable knowledge network, and enhance the integrity and effectiveness of vocabulary learning. Theme-oriented mind mapping improves students’ information processing mode, improves the efficiency of vocabulary memory, and enables students to master vocabulary flexibly in the process of reviewing and refining vocabulary knowledge.

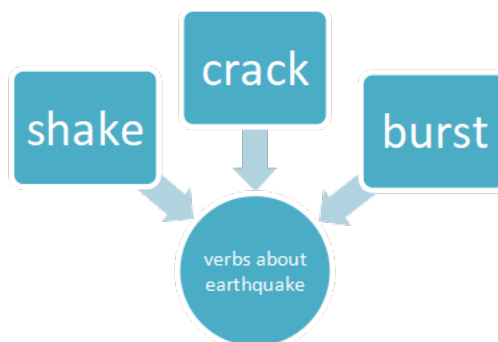


Figure 4 Mind mapping 4

### **3.2.4. Using mind mapping to learn polysemy vocabulary**

As senior high school students are faced with the pressure of the college entrance examination, students must master the vocabulary required by the syllabus in English learning so that they can be prepared for the college entrance examination. However, as many students lack vocabulary and methods, it is difficult for them to master English vocabulary effectively. At the same time, because of the way of rote memorization, it not only wastes a lot of time of students, does not get good results, but also leads to students' learning of English vocabulary in a negative state. Therefore, senior high school English teachers must adopt effective vocabulary teaching methods to help students master a variety of vocabulary memorization methods, so that students can walk out of the mistakes of vocabulary memorization, and enhance their confidence in English learning. From the English college entrance examination papers in recent years, the number of polysemous words is more and more, which has better requirements for dry students. It is one of the most difficult points in students' vocabulary learning.

Looking at all kinds of senior high school English test papers, it is not difficult to find that the examination of polysemy shows an increasing trend year by year. Although students can grasp the basic meaning of a word, they are often unable to accurately judge the specific meaning of the word in a specific context. In particular, some words have nouns, verbs, adjectives and other parts of speech, so teachers can help students form a clear mind mapping, which is conducive to memory comparison and learning the common collocations and idioms of the word, so as to achieve the best learning effect of vocabulary.

For example, in the lesson of earthquake, the word "cover" can be used as an object verb, an intransitive verb, or a noun, but the meaning of the word varies greatly in different language situations. In the text cover in different parts of speech under the different meanings are revealed, and there are specific examples or common Collocation as an auxiliary context to understand, but also the association learning to the word, lead to discover, uncover, the teaching of the whole word more comprehensive. Mind mapping is very effective.

### **3.3. Practice part**

Using mind mapping to memorize words. Mind mapping is consolidated after class to improve the learning effect. People's memory will be forgotten. Only by constantly reviewing and consolidating, can we internalize and absorb the input vocabulary knowledge and remember it more firmly. The same is true for English vocabulary learning. Teachers should guide students to review and consolidate continuously with mind mapping. Only in this way can students' memory depth of English words be enhanced. When teachers guide students to review and consolidate, they can guide students to start with the basic attributes of words, such as nouns, verbs, adjectives, etc., to summarize and conclude. At the same time, when memorizing related words, we can also expand our memory by combining relevant pictures, colors and specific things to find out the internal associations between different words.

For example, if you have some sentences and words in the text that describe the earthquake process, you can remember them through pictures. Through different memory lines, a large number of complex English vocabulary into a system of modules, improve the review efficiency, enhance the English vocabulary learning effect, for other aspects of learning to lay a good foundation.

## **4. Conclusion**

As a learning strategy, mind mapping has obvious advantages in teaching. It is of great help to cultivate primary school students' interest in English learning, improve their attention and cultivate their thinking ability. However, when applying the knowledge of mind mapping in teaching, teachers should also realize that mind mapping is not omnipotent. Teachers should learn to apply mind mapping scientifically and reasonably in teaching.

### **4.1. Advantages of mind mapping**

There are many advantages of mind mapping in vocabulary teaching, such as stimulate learning interest and enhance self-confidence, train students to form good learning strategies and improve their comprehensive language use ability, exercise students' thinking ability and cultivate innovative spirit and promote the structure of knowledge and improve students' memory. I will introduce more

information about these points.

Stimulating learning interest and enhancing self-confidence, the ancients said that “knowledge is not as good as good as happy” in the learning of knowledge and technology, interest can be said to be the best teacher, if the students are not interested in their knowledge, so even if the teacher in the teaching time to work hard, the students can really master the knowledge may be few. English is a foreign language knowledge, students in the learning of the lack of the corresponding language environment, learning will inevitably be some difficulty, which makes many students in the learning of the lack of interest in learning. The application of mind mapping in the classroom helps stimulate students’ interest in learning and improve their attention. For example, many students may have such trouble when memorizing words. A word is memorized repeatedly, remembered and forgotten, forgotten and need to be remembered again. Over time, students may get tired of memorizing words and lose interest in English learning. However, if the teaching method of mind mapping can be used to classify different types of words in teaching, the time for students to remember the words will be greatly shortened, and the review time will be more relaxed, which is helpful to stimulate students’ interest in learning and improve their attention.

Training students to form good learning strategies and improving their comprehensive language use ability. “In the traditional English classroom, what is taught is the teacher, how students learn and what vector they learn are calculated by the teacher, and students become a container for passive acceptance of knowledge. This teaching mode unfavorably diverges students’ thoughts and cultivates their independent learning ability. therefore in the teaching of English knowledge, the teacher must learn to apply to cultivate students in the learning of “mind mapping, form good learning strategies, improve their comprehensive language using ability. For example, after learning the word “grape”, teachers can guide students to say the color, shape and use of grape with their English knowledge, and teach students to associate with it in the teaching process. Teachers can also be held “my day” such English theme activities, let students use their knowledge of English learning by a - said their own all did some what a day, what are the meaningful things, in this way, students in the learning process, language using ability get promoted, feeling the knowledge bring us success, also more active in learning.

Exercising students’ thinking ability and cultivating innovative spirit. Students at the time of learning knowledge, not only to the teacher speak knowledge from memory, the king of exam time to get good grades, it’s just one of the most shallow a hierarchical knowledge learning, knowledge learning more important goal is to at the time of teaching, exercise the students’ thinking ability, to be able to apply their knowledge to solve some practical problems, reflect the effect of knowledge. Teachers and students can give full play to their own thoughts and images, draw a mind mapping full of personality color. At this time, teachers need to open their minds. The teachers themselves! When making mind mapping, we should start from how to make students accept quickly and accord with the rules of language itself, and boldly imagine to find the essential characteristics hidden behind the phenomena. From the design of the theme structure to the establishment of a variety of links, cross dislocation, reasonable combination, it shows that to make the finishing touch, hit the key. When they study English knowledge, for example, about the topic of conversation, the topic is similar to the oral communicative language teaching, teachers teaching should not be too much interference in the students, but will think map learning teaching strategies through the classroom teaching, students are encouraged to freely express their views and means teachers need only exists in the expression of a - for students. Some mistakes and deficiencies, can be corrected to train their innovative ability.

Promoting the structure of knowledge and improving students’ memory. In fact, the learning of English knowledge is similar to the learning of language knowledge, both of which are based on language learning. By learning the mother tongue with language knowledge, students can have a good language environment. However, English learning lacks the corresponding language environment, which makes some students lack polarity when learning English knowledge, and the acquired knowledge does not form a complete system structure. Therefore, in the teaching of English knowledge, teachers must learn to use mind mapping to make students feel interested in learning, and provide students with a suitable language learning environment during teaching. For example, some English game activities can be carried out during the teaching period, such as the activity of “guess the words”. Students can guess the words in the form of mind mapping. In addition, in the teaching, teachers should also help to construct their own knowledge system in the brain, such as the end of the semester, to help students review and consolidate their knowledge of Confucianism from the words, sentence patterns and simple grammar knowledge to composition, to help students better understand English knowledge, strengthen their memory of knowledge.



#### 4.2. Limitations and suggestions of the study

There are three main limitations. First, mind mapping is a divergent and layered representation, which is not easy to express and relatively complex information. Secondly, not all senior high school English vocabulary can be explained by mind mapping. Finally, the application of mind mapping in teaching is a great challenge to both teachers' professional ability and students' learning ability.

In view of the mind mapping for the application of English vocabulary teaching in senior high school, I have some suggestions. First of all, in the process of making a mind mapping, don't be too formalized, in particular to jump out of the bondage of traditional linear thinking, and try to make the students' thinking in a stimulated and completely open state. Second, the most important principles for making mind mapping are associative thinking, image thinking and intuitive thinking. Therefore, a mind mapping made on a certain key word must be a logical and divergent concept relation map that fully reflects students' personalized development around the key word. Third, a mind mapping can be made for the same theme for many times. Through this method, students' understanding of the theme can be better explored and their thinking level can be developed. Finally, teachers should strengthen their professional ability to better control the teaching method of mind mapping.

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