

APPLICATION OF MIND MAPPING TO PRIMARY SCHOOL ENGLISH TEACHING

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Abstract

APPLICATION OF MIND MAPPING TO PRIMARY SCHOOL ENGLISH TEACHING

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Under the Supervision of Dr. David Gillota

This paper analyses the use of mind mapping to China primary school's English teaching and probes into its current situation, the characteristics of primary school students in the cognitive development stage, and the characteristics and functions of mind mapping. The research involves the method of mind mapping about how mind mapping can be applied in the teaching of the English vocabulary learning, reading comprehension and writing skills. This paper's conclusion, based on a series of studies, mind mapping teaching is more functional than traditional teaching methods and teachers can apply the mind map in the primary school English classroom teaching properly, according to the students' learning situation.

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Chapter I Introduction

Mind mapping is a graphic technology proposed by Tony Buzan. As a thinking tool combining graphics and text, mind mapping can clearly present the thinking process. It takes a subject word as the core, forms knowledge fragments into a systematic knowledge framework, and shows the correlation and relationship between different forms of knowledge. Mind mapping is a tool that has been used and researched in many fields both in the country and abroad. The application of a mind map can help students sort out language knowledge, improve their thinking ability, promote their interest in learning and enhance their creativity. In China, the mind mapping is more popular in senior high school English class.

English Curriculum Standards for Compulsory Education (Ministry, 2022) advocates the “cultivation of students’ English core literacy”, namely “language ability, cultural awareness, thinking quality and learning ability.” The traditional explanation method and teaching process cannot promote the cultivation of students’ core quality. Teachers should “treat students as the central learning object”, work on developing students’ language understanding and expression ability, teach students to “find problems, analyze and solve problems” by using learning strategies (Ministry, 2022, pp. 4-6). Scientific teaching methods can successfully give students learning scaffolding and assist them to acquire the knowledge independently. Consequently, it is vital to use mind mapping in primary schools’ English teaching. This paper discusses how to effectively apply mind mapping to assist students’ learning in primary school English classes.

Statement of the Problem

What are the advantages of mind mapping?

How can teachers effectively use and guide students to use mind mapping to assist learning in English class in Chinese primary schools?

Definitions of Terms

Mind mapping was first proposed by Tony Buzan in the 1960s. It is a complex diagram imitating the structure of brain cells. It takes a central theme as the starting point in the form of graphic combination and shows the relationship between themes at all levels with relevant hierarchical diagrams (Zhou et al., 2023, p. 1749). Mapping is a tool includes words and graphics and thus, mapping is a combination of words and graphics. The information presented is interrelated and drawn in a certain order (Deng et al., 2022, p. 2).

Purpose of the Study

English teaching in primary schools should attach importance to the cultivation of students' language ability, the ability to learn language by using learning strategies and the development of thinking. Research by Feng et al. (1994) supports "The EFL learners who were trained using the mind-mapping technique were able to enhance their vocabulary recall and retention, learning motivation, and willingness to communicate" (p. 11). Based on the analysis of the functions of mind mapping in primary school English teaching, this paper puts forward some ways and precautions for applying mind mapping according to different lesson types.

At present, in primary school, mind mapping is often used in senior English teaching. Mind mapping has many forms and different functions. In my daily teaching and observational learning, sometimes I am not sure which kind of mind map is more suitable to use, and sometimes I find that some teachers pay more attention to beauty and innovation when choosing mind maps and want to make the blackboard design look novel and attractive, rather than paying attention to the thinking process. Besides, there are numerous methods of mind mapping, therefore, it is challenging to direct students to use mind mapping correctly.

Thus, this paper investigates the use of mind mapping in English class of primary school, explains mind mapping's benefits, and analyzes how to use mind mapping to aid thinking development of students and guide them to use mind mapping for learning English.

Methodology

This paper will research online resources and paper documents, such as the definition, the advantages and the application that mind mapping in English teaching at home and abroad. The foremost source of literature is the University of Wisconsin-Platteville Karmann Library.

I will make the idea of mind mapping clear by reading literature and give an account of the current situation of primary English teaching in China by combining my own primary English teaching experience and literature reading. I will expound mind mapping's methods and advantages in the areas of vocabulary, reading, even writing teaching by researching the application of mind mapping in English teaching. Finally, I will summarize the positive influence and effective strategies of mind mapping on English teaching in primary schools.

Chapter II Review of Literature

This part will focus on the origin and benefits of mind mapping, the current state of English teaching in primary schools in China, and the analysis and summary of the application and function of mind mapping in vocabulary teaching, reading teaching, and writing teaching in primary schools in China.

A Review of Mind Mapping

Mind mapping was born in the 1960s by Tony Buzan. It is a very strong logical and thinking tool, which enables people to unleash the potential of their minds and hence improves their thinking freedom (Buzan, 2017).

Mind mapping has the characteristics of concentricity, radiation, hierarchy, integrity and diversity. It can help learners focus on the central theme, divergent thinking, activate creativity, and sort out information with images and symbols (Wu, & Zheng, 2023, p. 45). The combination of pictures and words in mind map helps children to establish visual and linguistic connections, thus understanding stories and vocabulary and promoting language development. In addition, the hierarchical relationship of mind map is also beneficial for children to understand the task relationship and plot development in the story (Boerma et al., 2022).

Mind mapping facilitates language input and output. As a result, the application of mind mapping in vocabulary, reading and writing teaching can improve the students' language application, analysis even problem-solving ability. In addition to improving students' language skills and learning strategies, comparing Chinese and foreign cultures through mind mapping is helpful to cultivate students' critical thinking and broaden their international horizons. (Deng, & Zhu, 2022).

In classroom teaching, teachers and students can use hand-drawn or electronic devices to make mind maps according to their learning needs. Learners can use mind maps to take notes, brainstorm, organize information and present thinking processes. Research show that students, who draw mind maps by hand, have better learning effects than those who draw them by electronic equipments (Zhao et al., 2022).

Besides, the using of mind mapping may boost the students' involvement, give full play to students' dominant position in learning, and promote students to actively summarize information and build knowledge networks. Furthermore, the construction of mind map in the group is conducive to cultivating students' innovative, cooperative, communicative and critical thinking abilities and promoting students' active learning and all-round development (Luangkrajang, 2022).

Current Situation of English Teaching in Primary Schools

Primary schools' English teaching is a key part of China's education system. With the deepening of the new curriculum reform, English teaching in primary schools is constantly being adjusted and improved. At present, English teaching in primary schools advocates the whole unit teaching, and gradually focuses on cultivating students' awareness of learning English actively, strengthening students' application and expression ability, and improving students' cultural awareness and thinking ability. However, the traditional teaching method based on "speaking-listening-practicing-testing" is often rigid and monotonous, which cannot effectively mobilize students' enthusiasm for learning, and limits students' expansion and extension of knowledge (Zhang, 2023).

Primary school pupils are in the vital stage of the language learning process, and their learning characteristics include strong curiosity, strong imitation ability and high acceptance of

new things. However, their distraction and lack of persistent concentration require that teaching methods should be livelier and more interesting, which can stimulate and maintain students' interest in learning. In addition, primary school students' cognitive ability and logical thinking are developing, and concrete and vivid teaching methods are needed to help them understand and remember new knowledge (Zhang, 2023).

English teachers in primary schools promote students' interest in learning through external motives such as praise, reward and improving classroom interest. Zhao et. al. (2023) found that most students are not interested in English learning and lack internal motivation by investigating their primary school students' interest and difficulties in English learning. Half of them learn English for fear of being punished by their teachers, and a few students are interested in English or interested in English classes. Students' lack of learning motivation leads to poor teaching effect. In addition, memorizing words is one of the troubles for primary school students to learn English. A few students in grades five or six can't even understand English classes because of their weak foundation. The large number of words, many similar words, complicated pronunciation rules and inaccurate application have caused troubles for non-native speakers. It is a big problem to accurately understand the meaning of words in sentences and use words properly (Wu, & Zheng, 2023).

At present, the teaching methods and styles of English teachers in primary schools are different. Part of teachers constantly innovate teaching methods, pay attention to language content and situation, and cultivate students' comprehensive ability and cultural literacy; Some teachers concentrate more on the teaching of knowledge and grammar than language expression; A few teachers are still using the old teaching method which is hard to help students to improve their language expression. (Zhao et al., 2023)

Application of Mind Mapping in English Vocabulary Teaching

Vocabulary can be said to be the foundation of language, so it is very significant. Learners' vocabulary and mastery of vocabulary will affect the correctness and accuracy of their understanding and expression of language. Comparing with learners with limited vocabulary, learners with rich vocabulary can read and express more fluently and accurately. Foreign language learners should understand the meaning of words in different contexts and learn to use words accurately in sentences. Secondly, learning vocabulary can help learners understand more knowledge and promote long-term development (Wu, & Zheng, 2023).

Mind mapping can promote learners' memory, especially long-term memory. Applying mind map to vocabulary teaching can effectively help students remember words, particularly their meanings (Wu, & Zheng, 2023, p. 51). By using "situational maps, synonym/antonym maps, root & affix maps" in vocabulary teaching, the researchers found that: situational maps can combine words with context, helping students to contact life situations and memorize vocabulary; synonym/antonym maps can make students visually compare the differences of words, understand the meaning of words and apply them accurately; the root and affix maps can assist students to comprehend the creation of words and learn them systematically (Feng et al. , 2023). Acat suggested that teachers can use concept maps to teach words to enhance students' vocabulary and put forward that mind maps should be incorporated into teaching materials (Acat, 2008). Besides, instructing students to use story maps to sort out the characters, plots, etc. of the course can assist them to organize and understand the content of the article and at the same time realize the meaning of vocabulary (Khatib, & Faruji, 2012).

Feng et. al. (2023) deals with the effect of applied mind mapping on students' vocabulary and motivation for learning. The research proves that the mind mapping technology in teaching

can make the English classroom more attractive, and graphics, colors and symbols can effectively attract learners' attention, improve their enthusiasm and learning motivation, thus promoting them to remember vocabulary.

Application of Mind Mapping in English Reading Teaching

Reading is an important way to acquire information and knowledge. Recognizing words is the basis of reading, but although English foreign language learners know words, English reading is still difficult for them, and many English foreign language learners must spend a lot of time reading and understand the meaning through repeated reading (Andoko, 2020). The cultivation of reading ability is very important for foreign language learners. Appropriate reading teaching strategies can better improve learners' reading ability. Along with the continuous innovation of teaching methods, mind mapping, as the better efficient teaching aid, it has been used in the teaching of many subjects, especially in English reading teaching (Liu, & Yuizono, 2020). Through visual information organization, mind map can enhance students' ability to process information, help students improve the efficiency of information understanding and memory, enable students to employ critical and creative thinking while boosting students' participation and learning motivation.

Numerous research has shown that using mind mapping for English teaching can enhance the students' information processing, reading comprehension and memory skill. Through its visual nature, a mind map can aid students to group and remember information in English reading classes, and thus increase the speed of getting across the main ideas and the structure of the topics (Zhou et al., 2023). Mohaidat's (2018) research also shows that mind maps are the graphical representation of the text information, and these core key concepts and structures can enable the students to better organize and memorize the learning content, and the new

information is linked with their previous knowledge, thus, their understanding becomes deeper, and their memory is improved. By employing mind maps, students can stimulate the main facts in the reading process and link the old and new knowledge more accurately, hence, they can learn better and more independently (Zhou et al., 2023).

The employment of mind mapping in English teaching is a step-by-step process to make students' learning process more efficient and the teaching quality higher. Mind mapping will be the better tool to show the teachers teaching objectives and contents more clearly, and make teaching activities more dynamic, interactive and personalized (Zhou et al., 2023). Thus, the incorporation of mind mapping as a means of teaching in English teaching can increase the students' reading skills and it will create the interest of the students to learn and, as a result, it will improve the learning efficiency (Merchie et al., 2021). This, for instance, electric mind map is a more creative and interactive learning tool for students through the merging of images, colors and keywords and the comfort of computer software. Studies have proved that this technique not only makes students to better understand the text in depth, but also makes them more interested and motivated in learning. The electric mind map technique encourages the more efficient processing of information and the formation of the long-term memory by activating the visual and logical processing areas of the brain, which makes students to identify the information structure more quickly when reading English materials and it also improves the teaching of English reading (Mohaidat, 2018). According to Merchie et al. (2021), mind mapping triggers the students' selective processing strategies, memory and understanding ability in reading learning in senior primary schools, and it is shown that presenting mind mapping before or after text processing is beneficial for the students to process and remember information. It is suggested that teachers use mind maps appropriately to promote students' cognitive activities in

the reading process, and flexibly adjust the timing and methods of using mind maps according to students' specific needs.

Application of Mind Mapping in English Writing Teaching

“It is widely accepted that writing is viewed as a complex cognitive process” (Tarin, & Yawiloeng, 2023). Writing in English is more complicated than writing in mother tongue. The author should organize the detailed content properly and use the knowledge of language and grammar to express it in a foreign language. To write an article in English, the author should master all kinds of complicated writing skills, and then express his ideas with correct grammar and appropriate words. As far as teachers and students are concerned, it is difficult to teach and learn English writing. For example, teaching time is limited, the writing process is complicated, and grammar and vocabulary are difficult to master. Causes students to be afraid of difficulties (Tarin, & Yawiloeng, 2023).

The idea of using mind maps to plan before the thesis helps students to write more efficiently in course assignments and makes the writing process more interesting. The experimental results of Vijayavalsalan (2016) show that students who implement mind mapping strategy perform better in writing quality, organization, logic and creativity than students who do not use this strategy. Furthermore, mind mapping also improves students' overall satisfaction and self-confidence in thesis writing. Mind mapping also stimulates students' creative thinking and critical thinking, making the learning process more active and fruitful (Sabarun et al., 2021), and enhancing students' interest and participation in writing tasks. The use of mind mapping technology in teaching can not only improve students' language ability, but also boost their self-esteem and motivation, thus improving their overall learning effect. Therefore, mind mapping is

an important auxiliary tool in English writing teaching, which deserves to be widely popularized in various educational backgrounds (Tarin, & Yawiloeng, 2023).

As a pre-writing activity in writing teaching, mind mapping can help students clearly plan the article structure, stimulate creative thinking, and promote students' critical thinking (Hash, 2022). At the planning and drafting time, mind mapping can promote students' thinking activities and help them clearly identify and relate information, thus improving the logic and coherence of writing (Tarin, & Yawiloeng, 2023). Flow mind map, as a structured thinking tool, helps students organize their thoughts and plan their writing content before writing, and displays information in an intuitive and systematic way, so that students can link and organize their writing materials more effectively, thus improving the accuracy and efficiency of writing (Sabarun et al., 2021).

In the teaching of reading and writing, through the arrangement and display of visual information, mind map helps students to better organize their thoughts and promote the in-depth understanding and long-term memory of information. Research shows that combining mind mapping with situational games can improve EFL students' writing ability, especially in language fluency and detail presentation. Through the interaction and tasks in the game, students can use and practice the newly learned language knowledge in specific situations, thus enhancing the motivation and effect of learning. Besides, mind mapping can also activate the students' creativity and allow them to create much more complex and original writing. Thus, the mind mapping technique not only makes the teaching more interactive and interesting but also enables the students to develop high-level thinking skills (Fu, 2019). Moreover, the use of mind mapping, which is supplemented by other teaching methods such as peer learning and multimodal teaching is more diversified, and therefore, it is more interactive and effective. Thus,

the application of mind mapping in English teaching, especially for the subjects of writing and reading, can immensely improve the teaching quality and the students' learning efficiency (Hash, 2022).

Through the application of mind maps, students have performed better in terms of writing and reading. Through the visual form of the text content, mind mapping assists the students to comprehend and recall the information better, and to improve their language organization ability and critical thinking. Research has shown that mind mapping can enable students to locate key information effectively and hence, the coherence of the structure and the argument of the article is strengthened. Besides, when used together with the electronic feedback tools, mind mapping can give students specific improvements suggestions that will help them to write better. This method not only boosts the students' writing quality, but also, at the same time, it helps them to understand the English language structure, which is a strong mechanism to improve the effectiveness of the English teaching (Lachner et al., 2017).

Aiming at the application research of mind mapping, Vijayavalsalan puts forward the following suggestions: First, it is recommended that teachers, most of them map their minds, and when teaching, especially in writing teaching, use mind mapping a lot. Subsequently, the idea of the future research is that it can investigate the possible use of mind mapping to students of various fields and of different learning backgrounds, and how to combine the modern educational technology to the teaching effect optimally. Besides, the research also advises the creation and the wide spread of a mindmanager that can be used in the virtual environment, so that teachers and students can apply and use this method easily (Vijayavalsalan, 2016).

Summary

The above analysis of the literature proves the application of mind mapping in English teaching is helpful in developing students' ability to find information, understand and remember the words and the articles, thus, the students can build a knowledge hierarchy and the long-term memory will be formed. Improve students' ability to deal with complex information and grasp key information; Cultivate students' critical thinking and creative ability; Stimulate learning interest and motivation and improve students' participation and efficiency in English learning. Usually, mind mapping can be utilized for the teaching of vocabulary, reading and writing of English in primary schools, to cultivate students' language understanding and expression ability and develop their comprehensive language application ability and thinking consciousness.

Chapter III Conclusions and Recommendations

Conclusions

Being an efficient visual learning tool, mind mapping has been a well-known application in the educational field, especially in the language learning process. By organizing the visual display of information, it significantly enhances students' language learning efficiency and helps them to process and remember language information more effectively, especially when learning new vocabulary. Besides, the mind mapping method can show the link and the place of the material, assist the students to comprehend the complex information structure, and encourage their critical thinking and creative thinking.

The graphical learning tool has many good things such as colors, symbols and pictures and so it is really making the interactivity and visual appeal of the learning materials more interactive and visual. Besides, this makes the learning process more exciting and fun, hence the students' learning motivation and participation are remarkably improved. Teachers can clearly show the teaching content through mind map and guide students to think in a hierarchical and logical way. Students can participate in the learning process more actively by creating, perfecting and modifying mind maps themselves.

Furthermore, the use of mind mapping is also very successful in teaching reading and writing. It helps students to sort out and relate the key information in the article more effectively during reading, such as people, events and themes, thus improving their understanding and memory ability. During writing, students can organize their thoughts and arguments by constructing mind maps, which not only improves the logic and coherence of writing, but also stimulates creativity and makes students' works richer and deeper. Therefore, mind mapping not

only optimizes the teaching process, but also greatly improves students' language ability and learning effectiveness.

Recommendations

Since primary school students have limited attention maintenance time and low vocabulary, mind mapping using in primary school English teaching demands that teachers, for the sake of guidance and language support of the learners, must be ready to do this. When preparing lessons, teachers can combine students' age and interests to make electronic mind maps with pictures and texts and present them on computer screens in class. It is also possible to guide students to think and gradually generate mind maps through blackboard writing in the teaching process.

The application of mind map in vocabulary teaching can make the language learning more efficient and deeper for students by means of vocabulary mastery. Mind mapping attracts students' attention and stimulates their learning interest and motivation by combining visual elements such as graphics, colors and symbols, thus promoting long-term vocabulary memory. Firstly, teachers can use situation map to put words in specific life or cultural situations to help students establish the connection between vocabulary and practical application. This method not only enhances the memory of vocabulary, but also facilitates students to use this vocabulary correctly in actual conversation or writing. Another advantage is that the synonym/antonym diagram can possibly expose the correlation between the word meanings, so, students can implicitly relate and understand the slight differences of words. To help students master the meaning of words more accurately and improve the accuracy and richness of language. Moreover, the Root and Affix Diagram can show the internal structure of vocabulary, such as root, prefix and suffix, which helps students to understand and remember the composition of vocabulary systematically, and then can analyze and master new vocabulary independently.

Mind mapping in teaching can be used to assist students in the comprehension of the readings as well as the development of their information processing skills. Teachers can collect a simple framework of mind map prior to the class to put forward the main idea of the article. After reading the text, students can update and expand the mind map according to the known framework, add more detailed information and sort out the relationship between the information. Such activities not only help students identify the key information in the text, but also stimulate their critical thinking and creative thinking, enabling them to think deeply and integrate information in the reading process. Students can, besides, re-tell the article's content by mind map after the reading process, and to consolidate their memory and understanding of the structure.

Teachers can present students the steps to use mind maps so that they can plan the structure of the article before writing. Depending on the theme of the composition, teachers can give several extensible aspects as keywords to guide students to think about the writing content from different aspects. For example, writing a career composition in the future can radiate “What?” “Why” and “How” from the central theme “My Future Job”. From these three aspects, students think about what they want to do in the future, why they want to do this work, and how to work hard to realize their dreams. Teachers can guide students to think about how to realize their ideals from the aspects of physical health, learning situation and skill requirements. These are helpful for students to keep clear thinking, organization and coherence in the writing process.

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