

USING MIND MAPPING TO TEACH READING COMPREHENSION IN
JUNIOR HIGH SCHOOL

Approved: _____ *Mari Strobl* _____ Date: May 23, 2019
Paper Advisor

USING MIND MAPPING TO TEACH READING COMPREHENSION IN JUNIOR
HIGH SCHOOL

A Seminar Paper

Presented to

The Graduate Faculty

University of Wisconsin-Platteville

In Partial Fulfillment

Of the Requirement for the Degree

Master of Science in English Education

By

Rui Ma

May 2019

ACKNOWLEDGEMENTS

Acknowledgments are first made to all the teachers in University of Wisconsin Platteville in Cohort 14. They have helped me a lot in various ways in the preparations of my thesis. I would especially express my deepest gratitude to my supervisor, Professor Staci Strobl, not only for her unfailing guidance and support throughout the writing process but also for her strict academic attitudes from which I benefit a lot.

Secondly, I want to thank the students and teachers of Grade Nine in No. Three Middle School, Karamay, Xinjiang, who helped me a lot.

Last but not least, I would also like to express my sincere thanks to my parents and husband who gave me a lot of support and encouragements which helped me finish the thesis writing. I love you.

ABSTRACT

Reading is one of primary ways of language input. Reading teaching is also an important component in English teaching in junior high school. And National English Curriculum Standards for Nine-Year Compulsory Education (2011) puts emphasis on the importance of cultivating students' reading competence. However, the present situation of reading teaching in junior high school is far from satisfactory. Problems such as failing to see whole for the part, failing to find the main idea of the passage and failing to have a clear idea of the logical relationships between paragraphs exist in both teachers' teaching and students' learning, which prevent the development of students' reading ability and lead to the lack of interests in English. Under the background of advocating students-centred teaching, teachers are supposed to explore how to guide students to read effectively and efficiently and encourage them to participate into teaching activities actively. Mind Mapping, which was originated in the early 1960s by Tony Buzan, is an expression of radiant thinking and a tool to organize and represent knowledge. The focus of attention is clearly concentrated on the central graph. As one of visual teaching and learning strategies, Mind Mapping can be used as an instructional and cognitive tool in English reading teaching and can make difficult and complicated materials clear and systematic, thus helping students to have a fuller understanding of the reading materials. Based on the previous studies made on Mind Mapping's application in English teaching and the reality of reading teaching of junior high school, the author made a library research on the application of Mind Mapping in English reading of middle school.

The results are following: (1) Mind Mapping can help the teacher to present and teach the texts more effectively and it exerted a positive effect on students' reading ability. (2) Mind Mapping is helpful for students' overall understanding and information retention of reading materials. (3) To some extent, Mind Mapping can enhance students' interests in English reading and has certain influences on their reading cognitive strategies.

On the other hand, its findings may not be generalized to all the junior high school students. In view of the above shortcomings, the author proposes some suggestions for future researches. In spite of some deficiencies, the research has its own practical significances.

TABLE OF CONTENTS

APPROVAL PAGE

TITLE PAGE

ACKNOWLEDGEMENTS

ABSTRACT

CHAPTER

I. Introduction

II. Statement of the problem

III. Definition of terms

IV. Purpose and Method of the Study

V. Significance of the Study

VI. Limitation of the Study

VII. Literature review

VIII. Conclusion and Recommendations

REFERENCE

WORKING BIBLIOGRAPHY

Introduction

Reading comprehension plays a significant role in English learning and teaching and it has obtained plenty of attention from both English language researchers and teachers. Reading is regarded as one of the most important ways of learning a language. According to Anderson (2004:1), reading is one of the most significant skills to be mastered by students. Goodman (1971) once said that we learn to read by reading. And Krashen (1988) pointed out directly that other language abilities are the results of meaningful reading and it is the fountainhead of most of our vocabulary knowledge, writing styles, advanced grammar ability as well as spelling. Besides, reading comprehension occupies a considerable proportion in Senior High School Entrance Examination, College Entrance Examination. One way to enhance reading comprehension is using Mind Mapping.

Statement of the Problem

1. The Importance of English Reading in Junior High Schools and the Problems of Developing Reading Skills

As the main form of language input in English learning, reading is an important way for English as a Foreign Language (EFL) learners to obtain knowledge and information, to widen horizons, to arouse interest in learning. Reading is a complex information processing. And in the course of reading, students cultivate their ability to analyze, think and judge gradually, for the ultimate goal of developing their comprehensive language skills, and overall English language proficiency demanded by

the new National English Curriculum Standards in China.

And in China, most students have few opportunities to communicate with people whose mother tongue is English. Thus, except having English class, listening to English broadcasts, watching English movies, the most important and common way that we gain language information is just reading. From the above, it can be easily concluded that reading has an important position in English teaching and learning.

Nevertheless, problems (e.g. failing to see whole for the part, being unable find the main idea of the passage, not having a clear idea of the logical relationships between paragraphs, etc.) exist in both teachers' teaching and students' learning in reading, which prevent the development of students' reading ability and lead to the lack of interests in English. So it is necessary and urgent for teachers to find a suitable and effective way to teach English reading so as to help students cultivate effective reading habits and be successful language learners.

2. The New National English Curriculum Standards for Nine-Year Compulsory Education

In China, most students in junior high school choose English as their first foreign language. It is, therefore, necessary to have explicit and uniform standards to guide the teaching and learning of English.

In the year of 2001, the Ministry of Education (MOE) issued the policy Full-time Compulsory Education and Senior High School English Curriculum Standards (Experimental Manuscript). This policy is called Standards (2001) for short in the following part. The Ministry of Education later revised and issued the document

National English Curriculum Standards for Nine-Year Compulsory Education (2011). For the sake of simplicity, it is shortened for NECS in the thesis. Different from the past education reforms, the 2011 reform put more emphasis on developing well-rounded individuals rather than only memorization and examination scores. The promulgation and implementation of NECS signifies that China's fundamental English education reform has stepped into a completely new period of development.

The Grades and the Corresponding Levels (Adapted from NECS, 2011)

Table 1

Junior Middle School	Work towards	Notes
Grade 7 (= Junior 1)	Level 3	
Grade 8 (= Junior 2)	Level 4	
Grade 9 (= Junior 3)	Level 5	The required standard for the end of junior high school

From this table, we know that the junior students in junior 1, 2, 3 need to reach levels 3, 4 and 5 respectively. For qualified junior high school graduates, they must arrive at the comprehensive language competence of level 5.

3. The Requirements of NECS for Students' Reading Ability

Reading is one important part in learning and mastering language skills. The NECS makes clear demands on students' reading ability. Because the subjects are Grade 9 students, the following will present the descriptions for level 5 of reading.

Table 2
Detailed Descriptions for Level 5 of Reading (Adapted from NECS, 2011.)

Level	Skill	Description
5	reading	<p>Students can:</p> <ol style="list-style-type: none"> 1. infer the meaning of new words from the context and word formation rules; 2. understand the logical relationships between each sentence in a paragraph; 3. pick out the main ideas in texts and understand the plot in stories, predicting its development and possible endings; 4. understand reading materials of different common genres/text types; 5. use appropriate reading strategies to find information according to different reading purposes; 6. use dictionaries and other reference material to carry out learning; 7. have read materials other than that included in the textbook, totaling over 150,000 words.

The NECS makes new requirements for English reading, which is an arduous task for both teachers and learners. And it is still a long way to go. Thus, new teaching and learning methods need to be introduced and applied in English class to meet the new demands.

Definition of Terms

1. Definition of Mind Mapping

Mind Mapping sometimes also named Mental Mapping, originated in the early of 1960s by Tony Buzan. He is a world famous psychologist, educator, and chairman of the British Brain Foundation. At first, he trained a group of “people with learning disabilities” and “people with losses on their reading ability” with Mind Mapping and to his surprise, these students outperformed the same grade ones. And he made great

word or picture can make itself a sub-center or association, with the whole combination radiating from the center toward all directions in the form of endless branching chains, or returning to a common center (Tony Buzan, 2004:54). By presenting the information and their relations in a radial, non-linear graphical manner, Mind Mapping is something like a brainstorming.

Mento, et. Al. (1999:2) states that Mind Mapping is a technique that can develop creativity and productivity and can also improve people's work efficiency. It is a miraculous tool for grasping thoughts and perceptions and presenting them just on a piece of paper.

Farrand et al (2002:426) defines Mind Mapping as “a diagrammatic representation of the important key words associated with a study topic.”

Sweet, et. Al. (2003:55) proposes that concept mapping, semantic mapping and Mind Mapping are the same actually. Budd (2004:35-46) holds the view that “Mind Mapping” is the hierarchies and associations flow out from a central image in a free-flowing, yet organized and coherent, manner.”

Murley (2007:175) points out that “Mind Mapping is a nonlinear visual outline of complex information which is helpful for creativity, organization, productivity, and memory.”

Tucker (2009:1) regards Mind Mapping as a visual tool used to organize, connect themes and concepts. Mind Mapping can be enriched with colors, pictures, codes and dimensions to add interest, beauty and individuality. These in turn aid creativity, memory and specifically the recall of information. Mind Mapping can store a great

deal of information effectively and efficiently. Meanwhile, we would find that the final Mind Mapping is not only easy to read and understand, but also helps people think and remember better. Mind Mapping is useful for brainstorming, which can be either individually or as a group, summarizing information, note taking, consolidating knowledge, thinking through complex problems, presenting information in a format that shows the overall structure of your subject, studying and memorizing information.

In short, Mind Mapping is a method to make radiant thinking concrete and visualized. It can organize and integrate scattered information into a complete knowledge system on the basis of certain logic, category and structure.

2. Definition of Reading

As reading is very much a part of our daily life, we hardly consider the process involved and we rarely ask the question: “What is reading?” (Wangqiang, 2006:180).

Definitions of reading have been given by different scholars.

Goodman (1967:126-135) regarded reading as “a psycholinguistic guessing game” in which “the reader reconstructs meaning encoded by a writer as a graphic display.

Rumelhart (1977) stated that reading involves the reader, the text, and the interaction between the reader and the text.

Widdowson (1979) defines reading as a kind of dialogue between the reader and the text, or even between the reader and the author. The reading levels not only have influence on the readers “understanding of the input materials, but also have an effect on the expression of the output materials.” In short, reading is an interactive process of communication.

Johnson (1983) defined reading as “a bridge between the new and the known.” The known here means prior knowledge. The more relations readers make, the more they obtain when reading. Therefore, it is necessary for readers to enlarge their store of knowledge to improve their reading comprehension ability.

Grabe and Stoller (1991) gave the definition of reading like this: “the ability to draw meaning from the printed page and interpret this information appropriately.”

Penny Ur (2000: 138) defined reading as “reading and understanding.” If a foreign language learner says that he can read the words but he doesn't know what they mean, then this is actually not reading. What he is doing is merely decoding and translating the written symbols into their corresponding sounds.

Different people define reading in different ways, however, no matter from what perspective, reading is an active, purposeful, and creative process in which the reader engages in the construction of meaning from a text. Reading comprehension involves extracting the relevant information from the text as efficiently as possible, connecting the information from the text with one's own knowledge to arrive at an understanding.

Purpose and Method of the Study

The purpose of the study is to understand best practices in using Mind Mapping in English language learning in China. One way of understanding the state of knowledge about a particular topic is to conduct a literature review. The current literature review will bring together the existing scholarly research on Mind Mapping. Unlike original research, a literature reviews organizes and interprets existing research. It also

contributes to an on-going dialogue among a community of practice, in this case between practitioners of Mind Mapping in the field of English language education. The author chose to review all literature on Mind Mapping that appeared relevant to Mind Mapping and English language learning in China, and to present a synthesis of that research in narrative form.

From a review on Mind Map and its application, it can be seen that there are still some gaps to be filled. First, with regard to the research methods, there are more theoretical studies than empirical ones. Most of the previous research about Mind Mapping's application in teaching are qualitative ones, which lack validity and reliability of a research to some extent. Second, mainstream Education journals pay less attention to Mind Mapping in the field of education, especially its application to EFL. Last, studies in EFL in China mostly concentrate on the application of Mind Mapping to vocabulary teaching, while researches on reading, writing and grammar are extremely few. In view of this situation and the NECS's requirement for students' reading, the writer will try to apply Mind Mapping in English reading in junior high school, with an aim of exploring whether this method is applicable and effective in practical reading teaching or not.

Significance of the Study

The paper will state the significance of the research from the following two aspects: the practical significance and the theoretical significance.

Through the above introduction of the importance and problems of English

reading in junior high schools as well as the requirements of NECS for students' reading ability, it is very necessary and urgent for researchers and teachers do something to improve the current situation, to meet the needs of students' development and the requirements of NECS.

After reading the relevant literature, the author finds that most of researches on the application of Mind Mapping in English are confined to the theoretical level. There are few empirical researches on its actual application. Therefore, the research tries to explore a new way to teach English reading based on Mind Mapping to cultivate students' interests in reading as well as enrich their reading strategies so as to improve their reading comprehension ability. Besides, Mind Mapping can help students establish meaningful relations between the new information and the previous knowledge, which is important for reading. For in the process of reading, students need to retrieve useful and relevant information from memory to help them understand the texts better and more thoroughly. Moreover, Mind Mapping can help teachers take good advantage of reading materials. This is the practical significance of the research.

As far as the theoretical significance of the research is concerned, the research could enrich Mind Mapping theory in the application, especially in English reading in junior high schools. The studies about the application of Mind Mapping to science teaching are much more than the researches on arts teaching. As for English teaching, research on reading teaching is scant. This research aims to do some basic work for the application and development of Mind Mapping theory, with an aim to extend the Mind Map's research and provide certain references for further studies. The author hopes this

study will produce some enlightenment on creating and using Mind Mapping in English reading teaching, and help students improve their reading comprehension ability.

Limitation of the Study

First, a literature review is an indirect measurement of whether Mind Mapping improves English language learning by paying close attention to direct measures in the literature, as well as other texts that describe Mind Mapping. On the other hand, the research tries to explore a new way to teach English reading with Mind Maps, and the research could enrich Mind Map theory in the application, especially in English reading in junior high school.

Second, Mind Map is a relatively new topic in China, there is much room to extend. My paper also centers on what works in teaching reading in a northwest China junior high school, and may not be applicable to other contexts. In future researches, many attempts can be made in listening, writing, grammar as well as other subjects.

Literature review

1. Previous Researches on Mind Mapping both at home and abroad

After Tony Buzan's creation of Mind Mapping, a great number of experts and scholars followed him. So far, Mind Mapping has been applied in many fields for a variety of purposes both at home and abroad, yet the writer will focus on its applications to Education in this part.

1.1 Researches on Mind Mapping abroad

Some developed countries like USA and European countries pay great attention to Mind training and development. The UK and Singapore have already set Mind Mapping as a compulsory course for primary and middle schools. Some people thought highly of Mind Mapping, for example, “Tony Buzan’s Mind Mapping Book will do for the brain what Stephen Hawking’s A Brief History of Time did for the universe” (TIME).

In order to strengthen students’ memorization of knowledge, there are medical textbooks compiled with Mind Mapping in Britain (McDermott et al., 1998). Mento et al. (1999:390-407) proposed that the visualization of Mind Mapping can promote users to think about matters from the whole and an overall situation. And then it would enhance the users' thinking flexibility. Goodnough and Long (2002:20-24) pointed out that Mind Mapping, used as a teaching strategy, can activate students’ learning enthusiasm and interests. Meanwhile, students are encouraged to employ graphics and colors to express their own thoughts. Brinkmann (2003:35-48) contrasted the differences between Mind Mapping and Concept Map from their backgrounds, rules for creating maps and limitations. Eriksson and Hauer (2004:174-187) did a qualitative research on cultivating students’ marketing skill with Mind Mapping. They stated that it could stimulate students’ learning interests, promote their learning initiative as well as the degree of absorption on contents. Swamy and Kulkarni (2006:493-498) employed Mind Mapping from a different respect—decision making. Lewis and Landale (2007) held the belief that through the key words, symbols, colors and association images, which are all conducive to provoking the organ of visual sense, Mind Mapping can help teachers and learners to strengthen memory, to improve their

teaching and learning efficiency eventually. Abi-El-Mona and Adb-El-Khalick (2008:298-312) did an experiment in science class to compare the effects of learning concepts in science. They divided the 62 students into two groups randomly. One was the experimental group, using Mind Mapping to help understand concepts in science; the other was the controlled group, learning concepts in science by traditional note-taking. The research showed that the experimental group's performances of concepts understanding were significantly outperformed over the control groups. They found that it was helpful to understand the learned concepts by describing the core concept and the relationships between the main concepts and subordinate concepts, and by using colors properly to represent concepts. Ruffini (2008:56-61) regarded Mind Mapping as an excellent tool for e-learning, for it can organize, guide and administer network's contents and archives effectively. Conole and Weller (2008:1-13) carried out a research on Britain's Open University. The research testified that Mind Mapping can be used as an effective tool for teaching design so as to help designers achieve their expected goals. They thought that Mind Mapping is a convenient tool for teaching designers to organize and present teaching contents.

Moreover, it is helpful and convenient for designers to share and discuss their train of thoughts in the course of designing. With the combination of quantitative and qualitative methods together, Thorpe (2008:57-72) studied an on-line curriculum's design with Mind Mapping. He proposed Mind Mapping can represent a series of learning tasks' design in a visualized way. It can not only clearly represent the sequence of a special task, but also represent task groups with similar structure. Zipp, Maher and

Antoni (2009:59-68) considered Mind Mapping as a “Mind Mapping Learning Technique” and use it as a teaching strategy to develop students’ critical thinking. Their research showed that this kind of teaching strategy can promote students to organize, optimize and integrate complex learning contents. Tucker et al (2009:8) contrasted the merits and shortcomings of making Mind Maps by hand with those by professional software. Antoni, Zipp, and Olson (2010:61) concluded that medical students applying Mind Mappings to take notes could successfully retrieve information in the short term. Ismail, Ngah and Umar’s research (2010:35-61) indicated that Mind Mapping used as a tool for cooperative learning in computer majors was conducive to improving their ability of programming and solving problems and promoting their meta-cognitive level. And other researchers also affirm the effects of Mind Mapping in improving the efficiency of teaching. Tee Tze Kiong et. al. (2012:705-708) concluded that using Buzan’s Mind Mapping benefits the students on test achievement and students are able to use it directly on study especially for note taking and revision. Noonan (2012:1-6) thought that the incorporation of Mind Mappings into an assessment strategy offers an opportunity to develop students’ understanding, memory and may go one step further in providing future practitioners with strategy for lifelong learning. And this study also explored the relationship between Mind Mapping, critical thinking and long term recall of information.

1.2 Research on Mind Mapping in China

In China, Mind Mapping is a relatively new concept and it arouses many Chinese scholars’ interests. However, the researches on the application of Mind Mapping in

Education are rare, let alone in EFL. Zhang Haisen (2011:122) stated that there are only two core journal theses in Chinese National Knowledge Infrastructure (CNKI) about the application of Mind Map in EFL from 2001 to 2010. The earliest researches about Mind Map's application in English teaching in China were in 2005.

Chen Min (2005:36-41) affirmed the effects of Mind Map in English teaching from three aspects: helping enrich cognitive schemata, facilitating meaningful learning and being an effective cognitive tool for memory. She compared Mind Mapping to a scaffold and thought highly of it. Although this paper mixed up Mind Mapping with Concept Mapping, it was constructive as an early exploration of the application of Mind Mapping in English teaching at home. Chai Shaoming and Ding Meirong (2006:7-14) did an experiment using Mind Mapping software into English reading teaching. They pointed out that Mind Mapping was not only an effective reading teaching strategy, but also an effective cognitive tool for students' reading comprehension. Pei Guanggang (2007:38-40) pointed out that Mind Mapping, as one of the technical and scientific tools and methods, is used widely in the information arrangement, management and process, and it would bring the study and teaching of foreign languages a new and significant revolution. Lin Jiancai, Dong Yan and Guo Qiaoyun (2007:65-68) made an empirical study on Chinese writing teaching in one of Singapore's primary schools. The study result showed that the experimental classes' scores were notably higher than those in the controlled classes. And they gave the result an explanation: the application of Mind Mapping can raise students' learning interest, make abstract knowledge visualized and is convenient for the processing of learned knowledge. Consequently, it would help

improve learners' understanding as well as memory. On the basis of introducing the characteristics and advantages of Mind Mapping and combining teaching practice, Liang Yanchun (2008:118-123) proposed that Mind Mapping, as one of visual teaching and learning strategies, can be used as instructional and cognitive tools in college English reading teaching. Mind Mapping can make difficult and complicated materials seem very clear and systematic, thus helping students to have a deeper understanding of the teaching materials. And it can make a positive effect on enhancing students' reading proficiency. Li Xueshun (2008:244-245) analyzed the functional characteristics of Inspiration (Mind Mapping software) and applied it to English teaching to arouse learners' learning interests and guide them to construct knowledge. Huang Xueying and Hu Zhuju (2009:38-42) explored the significance of Mind Mapping culture learning strategies in senior high school. The research showed that Mind Mapping could promote memory, form effective learning strategies, and develop self-learning ability. Wang Xinyang (2010:32-37) put Mind Mapping into practice. He applied it into his reading teaching in junior high school and concluded that teachers can use Mind Mapping in English classes to train students in divergent thinking, enrich students' reading schemata and activate their reading potential and finally improve students' reading ability. Zhao Guoqing (2012:78-84) explored the nature of Concept Map and Mind Mapping, dissected the problems in-service teachers meet when applying the two tools, and gave some advice on the relevant future research. Lin Lixue (2012:1) stated that Mind Mapping follows the brain's natural way of thinking, greatly improves students' vocabulary learning interests and efficiency, and provides new way for the

university English vocabulary teaching.

2. Application of Mind Map in English Reading

Buzan (1993:87) pointed out that “Mind Mapping reaches out in any direction and catches any thought from any angle. Once the human brain realizes that it can associate anything with anything else, it will almost instantaneously find associations, especially when given the trigger of an additional stimulus.” Mind Mapping uses a visual map to outline the main clues of the reading materials, which can help learners to have a better understanding of the texts. In 2002, Buzan states that Mind Mapping is the easiest way to put information into your brain and to take information out of your brain. Buzan expounded that Mind Mapping are particularly adaptive for reading, revising, note-taking and planning for exam efficiently.

In China, on the basis of introducing the characteristics and advantages of Mind Mapping and combining teaching practice, Liang Yanchun (2008:118-123) proposed that Mind Mapping, as one of visual teaching and learning strategies, can be used as instructional and cognitive tools in college English reading. Mind Mapping can make difficult and complicated materials seem very clear and systematic, thus helping students to have a deeper understanding of the teaching materials. And it can make positive effect on enhancing students’ reading proficiency. Ma Wulin and Chen Yu (2008:55-58) pointed out that integrating Mind Mapping into senior high school English reading had two merits: one is to guide students to focus on the key knowledge points and grasp the gist quickly, the other is to motivate students’ initiative and promote them to learn actively. Wang Xinyang (2010:32-37) is the one to put Mind

Mapping into practice. He applied it in reading teaching in junior high school and concluded that teachers can use Mind Mapping in English class to train students' divergent thinking, enrich students' reading schemata and activate their reading potential and finally improve their reading ability.

Conclusion and Recommendations

This thesis primarily concerns on the application of Mind Mapping in English reading teaching in junior high school. Based on the analysis and discussion in the last chapter, the conclusion can be safely drawn that Mind Mapping has positive effects on students' English reading. Mind Mapping is proved to be effective in junior high school English reading teaching and learning. It can help the teacher to present and teach the texts as well as help students to learn more effectively. The result indicates that reading with the help of Mind Mapping is more effective than that with traditional grammar-translation method.

Although the present study has many limitations, it has its significance both in practice and in theory. As for the practical significance, the research tries to explore a new way to teach English reading with Mind Maps; As far as the theoretical significance is concerned, the research could enrich Mind Map theory in the application, especially in English reading in junior high school. The results gained from the study may give some inspirations for further researches on reading teaching. Last but not least, the future studies should be carried out in larger samples with much more time. Thus, the conclusions would be more convincing and powerful.

References

- Ahlberg, M. (2008). Concept Mapping as an innovation: Documents, memories and notes from Finland, Sweden, Estonia and Russia 1984-2008. [DB/ OL]. [http:// cmc. Ihmc.us/ cmc2008 papers/ cmc 2008-p288. pdf](http://cmc.Ihmc.us/cmc2008papers/cmc2008-p288.pdf).
- Allan Paivio, (1986). *A mental representation*. New York: Oxford University Press, 22.
- Anderson, N. J. (2004). Exploring second language reading: issues and strategies. Beijing: Foreign Language Teaching and Research Press.
- Budd, J.W. (2004). Mind Mappings as classroom exercises[J.] *Journal of Economic Education* (vol.35):35-46.
- Buzan, T. (1999). Mind Mapping.中译本：思维导图[M]，李斯译，1999，北京：作家出版社。
- Buzan, T. (2004). Mind Mapping---radiant thinking [M].中译本：思维导图——放射性思维，李斯译，2005，北京：作家出版社。
- Buzan, T. and Buzan, B. (1993). *The Mind Mapping book—How to use radiant thinking to maximize your brain's untapped potential*. New York: Penguin Press.
- David Rumelhart, (1977). *Introduction to human information processing*. New York: Wiley
- Diane Murley, (2007). *Technology for Everyone: Mind Mapping Complex Information*, 99: 175-863.
- Farrand, P. et al. (2002). The efficacy of the ‘Mind Mapping’ study technique. *Medical Education*, 36:426-431.
- Goodman, K S. (1967). Reading: A psycholinguistic guessing game. *Journal of the Reading Specialist*, 6 (1): 126-135.

- Goodnough, K., & Long, R. (2002). Mind Mapping: A graphic organizer for the pedagogical toolbox. *Science Scope*, 25(8): 20-24.
- Lloyd, D., Boyd, B., & Exter, K. (2010). Mind Mapping as an interactive tool for engaging complex geographic issues. *New Zealand Geographer*, 66(3): 181-188.
- Mc Dermott, P., & Clarke, D. N. (1998). *Mind Mappings in medicine*. Edinburgh: Churchill Livingstone.
- Sweet, E.L., Pui, W.C., Mei, S.L., So, F.N. (2003). Developing reflective and thinking skills by means of semantic Mapping strategies in kindergarten teacher education. *Early Child Development and Care*, 173(1): 55-72.
- Tucker, J.M., Armstrong, G.R., Massad, V.J.(2009). Mind Mappings and Mind Mapping software. *ABR&TLC Conference Proceedings*. Oahu, Hawaii, USA.1-9.
- Widdowson, H.G. (1979). The process and purpose of reading. In H. Widdowson (ed), *Explorations in Applied Linguistics*. New York: Cambridge University Press.

Working Bibliography

- Ahlberg, M. (2008). Concept Mapping as an innovation: Documents, memories and notes from Finland, Sweden, Estonia and Russia 1984-2008. [http:// cmc. Ihmc.us/ cmc2008 papers/ cmc 2008-p288. pdf](http://cmc.ihmc.us/cmc2008papers/cmc2008-p288.pdf).
- Anderson, N. J. (2004). *Exploring second language reading: Issues and strategies*. Beijing: Foreign Language Teaching and Research Press.
- Antoni, D. A. V., Zipp, G. P., & Olson, V. G. (2009). Interrater reliability of the Mind Mapping assessment rubric in a cohort of medical students. *BMC Medical Education*, 9(19): 1-8.
- Buzan, T. (2002). *How to Mind Mapping: The ultimate thinking tool that will change your life*. London: Thorson: 6.
- Buzan, T. (2004). *Mind Mapping---radiant thinking*. 北京: 作家出版社.
- Conole, G., & Weller, M. (2008). Using learning design as a framework for supporting the design and reuse of OER. *Journal of Interactive Media in Education*, (5): 1-13.
- Duffy, G. (1993). Rethinking strategy instruction: four teachers' development and their low achiever's understandings. *The Elementary School Journal* [vol.94]: 231-247.
- Farrand, P. et al. (2002). The efficacy of the "Mind Mapping" study technique. *Medical Education*, 36:426-431.
- Lanzing, J. W.A., Stoyanov, S., Kommers, P. A. M. (1999). Concept Mapping as a tool and method for generating, detecting and implementing new ideas . In B. P. L. M. den Brinker, P. J. Beek, A. N. Brand, F. J. Maarse, & L. J. M. Mulder (eds), *Cognitive ergonomics, clinical assessment, and computer-assisted learning*. Lisse,

The Netherlands: Swets & Zeitlinger: 90-103.

Lewis, C., & Landale, A. *The extraordinary reader*. Berkshire, UK: Vale House Press, 2007.

Lloyd, D., Boyd, B., & Exter, K. (2010). Mind Mapping as an interactive tool for engaging complex geographic issue. *New Zealand Geographer*, 66(3): 181-188.