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Research on the Application and Role of Mind Mapping in College English Listening Teaching

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Abstract

As a visual graphic thinking tool, mind mapping presents information in a hierarchical and visualized manner, addressing common issues in college English listening teaching such as students' insufficient ability to capture information, difficulties in logical organization, and poor memory of retention. Starting from the connotation and theoretical basis of mind mapping, this paper systematically analyzes its specific application paths in college English listening teaching, aiming to explore its role in optimizing the listening teaching process and its promotion value.

I. INTRODUCTION

The College English Curriculum Teaching Requirements states: "The teaching goal of college English is to cultivate students' comprehensive application ability in English, especially listening and speaking skills."

Current college English listening teaching still faces many challenges. From the students' perspective, most students have the problem of passive reception in the listening process: they struggle to quickly capture key information, fail to grasp the logical structure of the discourse, and easily forget key content after listening, which is more obvious when dealing with complex discourses such as long conversations, lectures, and news. From the teaching perspective, the traditional listening teaching model mostly adopts the process of "playing recordings—checking answers—explaining difficulties," with a single teaching method and a lack of guidance for students' thinking processes, making it difficult for students to form effective listening strategies.

Mind Mapping was proposed by British psychologist Tony Buzan in the early 1970s. This technical tool integrates graphic thinking and abstract thinking elements such as graphics, logic, vocabulary, numbers, and colors into a tree-like structure similar to the human brain's neural

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network, reflecting a person's thinking process about something. Given the diversified forms and themes of listening texts at the college level, it is necessary to introduce mind mapping into college English listening teaching. It can not only help students build information frameworks, organize logical relationships but also cultivate their awareness of active learning and thinking ability, providing a new breakthrough for the reform of college English listening teaching.

II. THEORETICAL BASIS

The effectiveness of mind mapping stems from its inherent consistency with cognitive science theories, mainly including three aspects:

i. Information Processing Theory

According to information processing theory, the human brain processes information through four stages: "reception—encoding—storage—retrieval." Mind mapping simplifies the information encoding process through keyword extraction and hierarchical classification; its visual presentation enhances information recognition, reduces memory load, and makes information more likely to enter long-term memory. For example, after capturing keywords such as "AI" and "online study" in listening, a quick connection can be established through the branch structure of the mind map, avoiding information fragmentation.

ii. Schema Theory

Schema theory holds that an individual's understanding of new information depends on existing knowledge frameworks (schemas). In listening teaching, mind mapping can activate students' background knowledge schemas: before listening, the central theme guides students to associate related concepts (e.g., activating schemas such as "plans" "problems" and "measures" when hearing "campus life"); during listening, new information is filled through branches to integrate old and new knowledge; after listening, the complete mind map strengthens the schema structure, providing framework support for subsequent learning.

iii. Constructivism Theory

The core goal of college English teaching reform is to "focus on students" and cultivate their autonomous learning ability. As a metacognitive tool, mind mapping helps students monitor their learning process and gradually form habits of autonomous planning and self-assessment. This ability is highly transferable and can be extended to the learning of other language skills such as reading and writing, promoting the transformation of college English teaching from "teacher-centered" to "student-centered".

III. APPLICATION PATHS OF MIND MAPPING IN COLLEGE ENGLISH LISTENING TEACHING

The application of mind mapping in college English listening teaching can run through the three stages of pre-listening, while-listening, and post-listening. The design of mind mapping needs to be adjusted according to the genre characteristics of listening materials (e.g., news, long conversations, short conversations, passages, lectures) to guide students from passive listening to thinking while listening.

i. Pre-listening Stage: Activating Schemas and Clarifying Goals

The pre-listening stage mainly helps students establish connections between existing schemas and new information, preparing them for understanding

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the listening materials.

Mind mapping helps to activate knowledge schemas and predict listening content. A listener's understanding of new information largely depends on whether relevant background knowledge is activated. In the brainstorming stage, teachers can guide students to predict the theme based on the listening materials, encourage them to think about possible sub-topics under the theme, and help them draw a mind map of the theme and sub-topics. For example, if the theme of the listening material is "campus life", before listening, teachers can organize students to discuss possible sub-topics, such as "expectations for campus life", "actual situations", "problems encountered", and"measures taken". This process not only activates students' existing knowledge schemas but also clarifies unknown information through blank branches, providing a guiding prediction for understanding the listening materials.

Mind mapping helps toActivate formal schemas and focus on listening priorities. Formal schemas refer to knowledge about the genre and textual structure of listening materials. Different topics may lead to different genres, organizational structures, and frameworks. At the college level, listening texts are more difficult, longer, and more diverse in genre. According to question types of listening materials, such as detail questions, main idea questions, inference questions, teachers can guide students to mark key information directions in the mind map. For example, for the "5W1H" (who, what, when, where, why, how) elements in news listening, students can pre-list these keywords in the branches of the mind map, enabling them to consciously capture corresponding information while listening and avoid blind reception.

ii. While-listening Stage: Capturing Key Points and Building Logic

The while-listening stage is the core of listening comprehension, where students need to process a large amount of listening information in a short time. The role of mind mapping at this stage is to help students screen information, establish connections, quickly locate required content in massive information, and avoid "understanding while listening but forgetting after listening".

Mind mapping helps to record key information in real-time and build an initial framework. During listening, students can first judge the theme of the listening material based on the content of each option, then predict sub-topics according to each option, and quickly build a mind map for the listening material. Taking the central theme as the starting point, they can quickly record keywords (e.g., nouns, verbs, numbers) and logical cues (e.g., however, therefore, first) and reflect information relationships through branch levels. For example, when listening to the long conversation "a trip to Amazon rain forests", students can judge four sub-topics from the four options: "plants", "lifestyle", "experiences" and "lessons" and record relevant details of these sub-topics during listening to form a dynamic thinking framework.

Mind mapping helps to distinguish primary and secondary information and strengthen logical cognition. There is a lot of redundant information in listening materials. Mind mapping can help students distinguish the central theme, sub-topics, and their supporting details. For example, the main idea is usually a main branch, while examples and data (supporting details) are sub-branches. Through distinctions such as symbols (e.g., marking main branches with ★) or colors (e.g., red for viewpoints, blue for examples), students can clearly grasp the logical structure of the discourse (e.g., total-sub,

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comparison, cause-effect).

iii. Post-listening Stage: Integrating and Deepening, Outputting and Applying

The post-listening stage is crucial for consolidating understanding and improving ability. The role of mind mapping at this stage is to promote information internalization and knowledge transfer.

Mind mapping is useful for improving mind maps and reviewing the listening process. After listening to the material, students can supplement and revise the mind map drawn during listening based on memory and notes, fill in missing information (e.g., unclear details), and adjust logical relationships (e.g., correcting wrong cause-effect connections). Teachers can organize students to display their mind maps and help them reflect on listening strategies through comparative analysis.

Carrying out output activities based on mind maps. Mind maps can serve as frameworks for productive tasks, promoting the integration of listening with speaking and writing. For example, carrying out output activities such as retelling, debating, and writing. Students can use the mind map as an outline, first introduce the central theme, then introduce each sub-topic respectively, and retell the listening content in their own words according to the general-to-specific structure. They can conduct group debates around sub-topics of the mind map (e.g., taking mobile phones as the central theme, with sub-topics including the advantages and disadvantages of mobile phones) to deepen their understanding of the theme. They can also practice writing by expanding the content of various genres in the mind map into paragraph descriptions or short essays (e.g., expanding the mind map of "Bill Gates" into a biography), realizing the connection between listening and writing.

IV. ROLE OF MIND MAPPING IN COLLEGE ENGLISH LISTENING TEACHING

The application of mind mapping in college English listening teaching not only optimizes the listening teaching process but also has a profound impact on cognitive ability, learning strategies, and teaching models.

i. Enhancing Students' Listening Cognitive Ability

Mind mapping helps to Strengthen information screening and integration ability. Through keyword extraction and hierarchical classification, mind mapping forces students to actively screen the central theme (e.g., eliminating repetitive content, identifying topic sentences) and realize the organic integration of information in branch construction. After long-term training, students' information processing efficiency is significantly improved, enabling them to quickly locate key content in complex listening materials.

Mind mapping can Enhance logical thinking and memory effect. The branch structure of mind mapping is essentially a visual presentation of logical relationships. In the process of drawing, students need to constantly think about "which category the information belongs to" and "how to sort it more reasonably", which can exercise their abilities of analysis, induction, and reasoning. Meanwhile, visualized graphics combined with keywords make memory more relevant (e.g., seeing the branch of "Amazon Rainforests" naturally reminds one of "plants", "transportation" and "lifestyles"), resulting in a significantly lower forgetting rate compared to pure text memory.

ii. Optimizing Students' Listening Learning Strategies

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Mind mapping can Shift students' learning styles from "passive reception" to "active construction". In traditional listening teaching, students are often in a "spoon-fed" state, while drawing mind maps requires them to participate in information screening, organization, and association throughout the process, transforming "passive listening" into "active thinking". For example, when listening to news, students need to actively judge the relationship between the "lead" and the "body' and reflect it through the branch structure, which strengthens their subject awareness.

Mind mapping helps to form personalized learning methods. The flexibility of mind mapping allows students to adjust recording methods according to their cognitive characteristics (e.g., students good at image thinking can use more graphics, while those good at logical thinking can strengthen hierarchy), helping them find suitable listening strategies. Meanwhile, by comparing others' mind maps, students can identify their own shortcomings (e.g., missing details, chaotic logic) and make targeted improvements.

iii. Innovating Teachers' Teaching Models

Mind mapping is good for shifting from "knowledge imparting" to "thinking guidance". In traditional listening teaching, teachers focus more on "explaining answers", while the application of mind mapping requires teachers to pay more attention to students' thinking processes. For example, in the post-listening session, teachers can guide students to reflect by asking questions such as "Why do you classify these two pieces of information into the same branch?" and "Is this logical relationship accurate", realizing the transformation from "teaching knowledge" to "teaching thinking".

Mind mapping is useful for realizing differentiated teaching and targeted feedback. The mind maps drawn by students are "visualized results" of their listening comprehension process. Teachers can understand individuals' cognitive characteristics by analyzing mind maps—for example, some students are good at grasping details, while others are good at organizing frameworks—thus providing personalized guidance. Meanwhile, the process of collectively displaying mind maps also provides students with opportunities to learn from each other, forming a cooperative learning atmosphere.

V. CONCLUSION

As a visual thinking tool, mind mapping effectively solves problems in traditional listening teaching such as fragmented information, vague logic, and inefficient memory through paths such as activating background knowledge, screening key information, building logical frameworks, and promoting information internalization. Introducing mind mapping into listening teaching can externalize implicit knowledge through its graphical representation, endow students with more autonomy in learning, and enable them to continuously update knowledge, improve thinking systems, and enhance the application ability of English listening through the graphical knowledge framework.

REFERENCES

[1] Ministry of Education. College English Curriculum Teaching Requirements [Z]. Beijing: Foreign Language Teaching and Research Press, 2007.

[2] Tony Buzan. The Mind Map Book: How to Use Radiant Thinking to Maximize Your Brain's Untapped Potential [M]. Translated by Zhang Dingkun, Xu Keru. Beijing: Foreign Language Teaching and Research Press, 2005: 5.

[3] Meng Mengmeng. English Listening Teaching Model

Article DOI: https://dx.doi.org/10.22161/ijeel.4.4.10

Based on Schema Theory [D]. Luoyang: PLA University of Foreign Languages, 2006.

[4] Wang Duqin. Formal Schema and College English Listening Comprehension [J]. Foreign Language Teaching and Research, 2011, 115-117.

[5] Jia Zengrong, Jing Meixia. Research on the Use of Mind Mapping in College Students' Listening Learning [J]. University Education, 2017, 107-108.

Article DOI: https://dx.doi.org/10.22161/ijeel.4.4.10