



(RESEARCH ARTICLE)



## Using Mind Mapping as a Tool to Boost Learners' Engagement and Fluency in English Speaking Classes. A case study at a non-language majored institution

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### Abstract

This paper explores the theoretical foundations of mind mapping, its practical significances in increasing English learners' speaking motivation, examines its potential application in English speaking classes at the Posts and Telecommunications Institute of Technology (PTIT) in Vietnam, and presents practical recommendations for its implementation. The goal is to empower English instructors to make informed decisions that optimize student engagement and communicative competence through this innovative method.

**Keywords:** Mind Mapping; English Speaking Classes; ELT

### 1. Introduction

In recent years, communicative competence has become a central goal in English language teaching (ELT), particularly in speaking classes. However, at technical universities such as the Posts and Telecommunications Institute of Technology (PTIT) in Vietnam, English is a non-major subject for many students. These students often struggle with low motivation, limited vocabulary, and anxiety when speaking English in class. This creates challenges in maintaining classroom engagement and developing speaking fluency.

One promising strategy for overcoming these issues is the use of mind mapping. As a visual and associative learning technique, mind mapping enables students to organize ideas in a structured, memorable format. By integrating mind maps into speaking activities, students can better retain vocabulary, activate prior knowledge, and visualize the flow of communication, thus enhancing both confidence and fluency.

### 2. Theoretical Foundations of Mind Mapping in ELT

Mind mapping, popularized by Tony Buzan [2], is a visual technique that organizes information in a non-linear, hierarchical manner. Rooted in cognitive psychology and constructivist learning theory, mind maps capitalize on the brain's ability to process information associatively rather than sequentially.

In the context of second language acquisition (SLA), mind mapping aligns with several pedagogical principles:

- Schema theory: Mind maps activate existing knowledge and connect new ideas to prior concepts, thus facilitating comprehension and retention.
- Cognitive load theory: By presenting information visually, mind maps reduce extraneous cognitive load and help learners focus on key language components.

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- Communicative language teaching (CLT): Mind maps support fluency by encouraging idea generation, improvisation, and real-life communication patterns.

Empirical studies [1],[3] have shown that mind mapping enhances vocabulary acquisition, idea organization, and oral performance. In speaking classes, this technique allows students to brainstorm, plan, and present ideas in a fluid and confident manner—key components of effective communication.

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### 3. Learners' Engagement in Speaking Classes at PTIT: Current Situation

At PTIT, many students major in engineering, IT, or telecommunications and often view English as a peripheral subject. A preliminary needs analysis, including teacher interviews and student surveys, reveals several challenges in speaking classes:

- Low confidence and participation: Over 60% of students report fear of making mistakes or being judged by peers.
- Limited vocabulary and coherence: Students often speak in fragmented sentences and lack tools to structure extended discourse.
- Passive learning habits: Students are accustomed to grammar-focused instruction and rarely engage in interactive speaking activities.

Despite efforts by teachers to implement communicative methods, learner passivity persists. Many students hesitate to speak unless prompted, and group discussions often rely on a few dominant voices.

However, the same needs analysis showed that students responded positively to visual aids, collaborative tools, and techniques that help them organize their thoughts before speaking. These findings suggest that mind mapping could be a useful intervention to re-engage learners and support fluency development.

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### 4. Research Methodology and Participants

This study adopted a mixed-methods approach involving both qualitative and quantitative data collection. It was conducted over one academic semester (16 weeks) and involved 120 non-English-major students at PTIT (60 in the control group, 60 in the experimental group).

#### 4.1. Research Questions:

- Does the use of mind mapping increase learners' engagement in English speaking classes?
- Does mind mapping improve students' fluency in spoken English?

#### 4.2. Data Collection Tools

- Pre- and post-intervention speaking tests, evaluated using fluency and coherence rubrics (based on IELTS criteria)
- Observation checklists to assess classroom engagement (e.g., participation rates, willingness to speak)
- Student reflection logs and teacher journals
- Focus group interviews

In the experimental group, students used mind maps in pre-speaking tasks such as topic brainstorming, discussion planning, and presentation structuring. Teachers guided students in using digital or paper-based mind maps weekly.

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### 5. Findings and Discussion

#### 5.1. Learner Engagement

Observation data revealed a significant increase in participation in the experimental group:

- The number of students actively speaking rose from 38% to 75% over the semester.
- Students demonstrated more willingness to initiate speech and interact with peers.

Reflections indicated that learners found mind maps helpful in reducing anxiety and clarifying their thoughts:

“Before, I didn’t know how to start talking. Now, with the mind map, I can see what I want to say and connect ideas more easily.”

## 5.2. Fluency Development

Speaking test results showed measurable improvement in fluency:

- Control group: Average fluency score improved from 4.5 to 5.0.
- Experimental group: Score increased from 4.6 to 5.8.

Notably, students in the experimental group produced longer, more coherent responses with fewer hesitations. They also used transition signals and topic-specific vocabulary more effectively.

## 5.3. Teacher Feedback

Teachers noted that mind mapping improved classroom dynamics:

- Students became more self-directed and less reliant on teacher scaffolding.
- Group work became more equitable, with all students contributing ideas.

Challenges included the initial time investment for training students in mind mapping and ensuring consistent use. However, once familiar, students adapted quickly.

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## 6. Practical Recommendations

Based on the research findings, the following strategies are recommended for ELT practitioners, especially those working with non-majored students in technical institutions:

### 6.1. Integrate Mind Mapping into Pre-Speaking Activities

Use mind maps to activate background knowledge, generate topic ideas, and sequence speech points. Provide structured templates for beginners and encourage creative freedom for advanced learners.

### 6.2. Train Students in Mind Mapping Tools

Dedicate one or two sessions to introduce both traditional and digital tools (e.g., XMind, MindMeister, Canva). Teach students how to use color-coding, symbols, and branches to aid memorization.

### 6.3. Use Collaborative Mind Maps

Promote group brainstorming and shared speaking tasks using mind maps. This fosters teamwork, negotiation of meaning, and peer learning.

### 6.4. Incorporate Mind Mapping into Assessments

Allow students to use mind maps as part of oral presentations or speaking exams. This not only reduces anxiety but also encourages planning and logical sequencing.

### 6.5. Provide Mind Map Models and Feedback

Offer examples of well-structured mind maps related to various speaking topics. Give feedback on both the visual and content aspects of students’ maps to enhance their effectiveness. [4], [5]

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## 7. Conclusion

For non-English-majored students at PTIT, speaking classes often pose challenges related to confidence, vocabulary, and engagement. This study shows that mind mapping can significantly enhance both student motivation and spoken fluency. By offering a clear, visual way to organize ideas and plan speech, mind maps empower learners to communicate more effectively and confidently.

Mind mapping, when integrated thoughtfully into the curriculum, can be a low-cost, high-impact solution for increasing learner involvement and communicative competence. As English continues to serve as a critical tool for global engagement, particularly in technical fields, such innovations are essential in preparing students for real-world communication.

Further research is recommended to explore long-term impacts of mind mapping and its application in online or hybrid learning environments.

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