

FOREIGN LANGUAGES AND VIETNAMESE

**USING SEMANTIC MAPPING TO IMPROVE
PRODUCTIVE VOCABULARY FOR FIRST-YEAR
NON-ENGLISH MAJORS
AT HANOI UNIVERSITY OF INDUSTRY
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ABSTRACT: Vocabulary acquisition is vital to learning English, especially in English as a Foreign Language (EFL) contexts. This study investigated the effectiveness of using semantic mapping to enhance vocabulary retention and productive use among first-year non-English majors at the School of Languages and Tourism (SLT), Hanoi University of Industry (HaUI), Vietnam. This study bridges the gap in productive vocabulary acquisition, while previous studies have concentrated on receptive vocabulary. The research adopted a quasi-experimental design, comparing an experimental group taught with semantic mapping to a control group using traditional methods. Results revealed that the experimental group performed better vocabulary retention and productive use in gap-filling tasks. Semantic mapping is proposed as a useful teaching aid for productive vocabulary, particularly for first-year non-English majors. Concerning EFL instruction, the study makes recommendations with practical implications and emphasizes the need for more research on long-term impacts and wider applications.

KEY WORDS: Vocabulary acquisition; semantic mapping; productive vocabulary; first-year non-English majors; Quasi-experimental.

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1. Introduction

Learning vocabulary is crucial to learning a language, especially when studying English as a foreign language (EFL). It entails students learning how to identify, comprehend, and employ new words - a skill that is essential for speaking, writing, listening, and reading comprehension (Nation, 2001). Acquiring a suitable vocabulary is especially difficult for first-year non-English majors at Vietnamese institutions since they have few language resources to use while navigating academic content written in English. For them to succeed, effective teaching techniques are consequently essential. With its ability to graphically depict word associations, semantic mapping has become a potent method for teaching vocabulary that aids students in comprehending, remembering, and applying new terms (Johnson & Pearson, 1984).

Semantic mapping is beneficial in enhancing receptive vocabulary, or the ability to recognize and comprehend words (Schmitt, 2000). However, few studies have been done in the field of productive vocabulary or the active use of new words in speech and writing. This variation is important since productive vocabulary is a stronger indicator of successful language usage in everyday situations (Schmitt, 2000). Furthermore, several research have been done on advanced learners or English majors, overlooking the linguistic requirements of non-majors in English, particularly in Vietnam.

To close these gaps, this study examines how semantic mapping might help first-year non-English majors at the School of Languages and Tourism (SLT) at Hanoi University of Industry (HaUI) acquire vocabulary more productively. This research provides a useful measure of language acquisition by employing gap-filling tasks to evaluate students' memory and usage of new words, in contrast to previous studies that concentrated on receptive vocabulary. This study adds to the SLA literature by examining a crucial but little-studied topic-productive vocabulary. The results will provide insightful information for teachers looking for vocabulary teaching methods that work and

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get students interested in studying.

To summarize, this research offers different points of view by (1) shifting the emphasis from receptive to productive vocabulary, (2) using semantic mapping for learners from underrepresented groups, and (3) employing gap-filling tasks as a means of evaluating vocabulary usage. This study fills a significant gap in the literature and has significant implications for EFL teachers and SLA researchers.

2. Literature review

2.1. Overview of previous studies

Acquiring vocabulary is essential while studying a second language, particularly for students who are not majoring in English. Semantic mapping, a visual aid connecting words to their relationships and meanings, is one of the strategies that educators have investigated to enhance vocabulary acquisition. Studies on the effectiveness of semantic mapping are reviewed in this part, with a focus on first-year non-English majors at Hanoi University of Industry (HaUI)'s School of Languages and Tourism (SLT).

In quasi-experimental research, Abate and Tefera (2015) compared a treatment group that used semantic mapping with a control group that used conventional techniques involving 112 eighth graders. Semantic mapping is more successful, as the treatment group's vocabulary retention significantly improved. Similarly, Amalia (2019) discovered that employing semantic mapping increased the average vocabulary scores of twenty-one Indonesian eleventh graders from 54.2 to 81.4, indicating increased comprehension and engagement. With 40 Indonesian high school students, Quddus (2020) verified these results, showing that the experimental group adopting semantic mapping much outperformed the control group on tests.

Pham (2012) conducted a study in Vietnam with thirty-eight final-year students of finance and accounting. The study indicated that students had good attitudes towards semantic mapping, which helped them retain language related to English for Specific Purposes (ESP). Although both studies concentrated on ESP vocabulary, Nguyen (2017) also found that twenty-two students who utilized semantic mapping had significantly improved vocabulary memory.

Semantic mapping has shown to successfully improve vocabulary learning overall. Studies by Pham (2012) and Nguyen (2017) concentrate on ESP in Vietnamese contexts, whereas Abate and Tefera (2015), Amalia (2019), and Quddus (2020) highlight its advantages for younger students. Regarding its application for university students who do not major in English, there persist specific constraints. This study, titled "Using Semantic Mapping in Teaching Vocabulary to First-Year Non-English Majors at Hanoi university of Industry" aims to fill this gap by investigating vocabulary retention and productive vocabulary use, contributing to effective vocabulary teaching strategies in Vietnamese higher education.

2.2. Theoretical background

Vocabulary acquisition:

Vocabulary acquisition is the process by which people acquire new words and understand what they represent. Receptive and productive vocabulary are the two major categories into which words may be divided. While productive vocabulary refers to terms that students may actively make use of in speech and writing, receptive vocabulary consists of words that students recognize when they hear or see them (Nation, 2001).

Definition of semantic mapping:

According to Yuruk (2012), semantic mapping is the process of creating visual representations of categories and their connections. Information is categorized and presented visually in this process. Semantic mapping aids students in learning the connections between vocabulary terms in vocabulary instruction. When the teacher selects the term "elephant" as the central idea, for example, students come up with synonyms such as large, trunk, four legs, brown, and land. Subsequently, the instructor

and students group these terms according to factors including size, physical characteristics, and environment.

Semantic mapping, in general, is a visual illustration of conceptual connections in knowledge. This strategy organizes and connects similar topics graphically, which improve student understanding and usage of new language. A visual teaching technique called semantic mapping is drawing visuals to show the connections between concepts and phrases. This method assists students in classifying and organizing new language in a way that facilitates memorization. Semantic maps are frequently employed in language acquisition to improve comprehension and retention and create links between a main word and associated phrases (Johnson & Pearson, 1984).

Classification of semantic mapping:

Semantic mapping categorization techniques have been presented by several scholars; Col and Spector (1993), as cited in Nguyen (2022), is one of the more notable approaches. Semantic diagram forms include tree diagrams, star diagrams, spider diagrams, fishbone diagrams, cloud/cluster diagrams, chain diagrams, cycle diagrams, and vocabulary maps, by their classification.

Semantic mapping in teaching vocabulary:

Throughout the process of helping students acquire information and skills, educators are vital to the teaching profession. By employing diverse approaches, tactics, and strategies, educators seek to support students' acquisition of knowledge and competency across a range of domains. Assisting students in their educational journey and making sure they meet the curriculum's objectives is the ultimate purpose of teaching structures.

Yuruk (2012) highlights the emerging method of semantic mapping as a useful tool for vocabulary education. To create a diagrammatic map showing the relationships between suggested vocabulary items, student-generated terms, and vocabulary found in reading texts, this approach demands cooperation between teachers and students. By utilizing students' prior knowledge, semantic mapping helps them retain important terminology and makes it easier for them to incorporate new words into their mental pictures.

3. Methods

3.1. Pedagogical setting and participants

One hundred eighteen first-year non-English majors majoring in Electrical and Electronics Engineering at the School of Languages and Tourism (SLT) - Hanoi University of Industry (HaUI) in Ha Nam participated in the study conducted during the first semester of the 2024–2025 academic year. Utilizing a convenience sampling technique, the researchers could find study participants. Convenience sampling is a technique employed by scholars to gather data from readily available participant groups. One of the most popular techniques is convenience sampling, which is simple to use and based on participant readiness.

As a result, the participants in this research were enrolled in the Basic English course for Electrical and Electronics Engineering 1, which is crucial for their future academic and professional growth. They belonged to two classes, which made up the control group (N = 59), and two classes, which made up the experimental group (N = 59). Semantic mapping was used to teach vocabulary to the experimental group, whereas traditional techniques were used for the control group.

This scenario was selected to represent the typical Vietnamese learning environment for students majoring in subjects other than English, where students frequently have difficulties learning the general and specialized language needed for their areas (Nation, 2001). The study's emphasis on first-year students makes it possible to assess the effects of semantic mapping at an important point in language learning - the development of fundamental vocabulary abilities (Schmitt, 2010). The results are more reliable as a controlled comparison between semantic mapping and traditional methods is ensured by the separation of the groups into control and experimental.

3.2. Design of the study

This study used a quasi-experimental approach, including two student groups in the data collection process. Although not completely randomized, quasi-experiments are useful in educational contexts where complete randomization is not always possible (Creswell, 2014). To guarantee uniform vocabulary competency, both the control and experimental groups in this study received pre- and post-tests utilizing gap-filling exercises. Exercises that fill in gaps were selected because they force students to actively create vocabulary, evaluating their productive vocabulary knowledge - an important area for technical students who must correctly use specialized language (Nation, 2001).

The independent T-test is used to determine the statistical significance of the differences, and the pre- and post-test designs provide a clear comparison of the two groups' development. When comparing the means of two groups in educational research, the T-test is commonly used (Field, 2013).

3.3. Data collection and analysis

Data collection:

The researchers created pre- and post-tests with gap-filling formats to gather data for this investigation. Twenty target words were chosen from the first four modules of the course for the pre-test. Before being administered to formal groups, the exam was tested and modified on thirty students in a different class with the same majors. Additionally, thirty students in a different class were tested initially using a post-test that had the same characteristics but different items. Furthermore, the investigators verified the validity of the pre- and post-tests using Cronbach Alpha of 0.704, indicating a statistically significant level of reliability.

Data were gathered over two weeks, with a pre-test given at the start of the study to evaluate the students' initial vocabulary proficiency. Both groups took a post-test to measure vocabulary growth following the two-week training session. Selecting a short trial duration enables a targeted analysis of the direct impacts of semantic mapping on vocabulary acquisition. Pre-test/post-test formats are frequently employed in SLA research because they allow researchers to measure learning gains and follow progress over time (Ellis, 2008).

Data analysis:

Pre- and post-tests were given to the participants to gather data for the researchers. The study used descriptive statistics, such as mean scores and standard deviations, to examine the test outcomes. An independent sample t-test was utilized to investigate the potential benefits of teaching semantic mapping for enhancing vocabulary acquisition and effective vocabulary usage. If a significant difference exists between the two groups before and after the experiment, it may be ascertained with the use of this statistical approach.

4. Results and discussion

This study aims to compare the English vocabulary retention and enrichment of the experimental group using semantic mapping versus the control group using the traditional method at the School of Languages and Tourism (SLT) - Hanoi University of Industry (HaUI) in Ha Nam. For language learners, expanding one's vocabulary is essential since it has a direct impact on writing, communication, and reading comprehension. Repetitive memorizing is a common focus of traditional approaches, which may not promote long-term retention or profound comprehension (Schmitt, 2010). On the other hand, semantic mapping groups vocabulary according to themes and enables students to make links between terms and their definitions. This research aims to fill the gap related to productive vocabulary acquisition using gap-filling exercises in the pre- and post-tests for the control group and experiment group. The control group was taught traditionally, and the experimental group was taught semantic mapping. By comparing these two groups, the research hopes to add to the existing literature on the subject.

4.1. Results

4.1.1. Pre-test results

The average, standard deviation, range, and frequency of each group's pre-test results are calculated. The differences in the students' lexical knowledge are then shown by comparing the values of the two groups.

4.1.1.1. The control group

Table 4.1.1.1 below summarizes the results of the pre-tests for the Control Group:

Table 4.1.1.1. Pre-test score analysis for Control Group

Mean	Standard deviation	Range		Scores
		Min	Max	0
				1
				2
				3
				4
				5
				6
				7
				8
				9

With a mean value of just 4.25, the Control Group's average score was deficient. Students' scores, which varied from 2 to 8, showed that their vocabulary knowledge was not all the same before the intervention. In particular, there was variation in the frequency of scores along the scale: just one student achieved an eight, while fourteen students scored two, fifteen scored six, seven scored seven, and six scored four. With a standard deviation of 1.89, student performance appears to be quite variable. Most students received a score in the range of 2 to 6, with 15 students receiving a score of 6, only 7 receiving a 7, and 1 receiving an 8.

These findings show that although few students had a high degree of vocabulary knowledge before the research, the control group had a reasonable level of vocabulary competency. Students have diverse language skills, so it will be interesting to see how the intervention affects their performance.

4.1.1.2. The Experimental Group

Similarly, the Experimental Group's pre-test results were calculated using comparable numbers and entered Table 4.1.1.2 below:

Table 4.1.1.2. Pre-test score analysis for Experimental Group

Mean	Standard deviation	Range		Scores
		Min	Max	0
				1
				2
				3
				4
				5
				6
				7
				8
				9

With scores ranging from 2 to 8, the mean value from Table 4.1.1.2 shows that the Experimental group's average score was just 4.19. In particular, the distribution of marks revealed that two students received a 2, 17 received a 3, 21 received a 4, 11 received a 5, 4 received a 6, 3 received a 7, and 1 student received an 8. With a mean score of 4.19 and a standard deviation of 1.27, the pre-test for the experimental group's students also indicated a variety of vocabulary knowledge, much like the control groups. The majority of pupils received a score in the range of 3 to 4, with 17 receiving a 3 and 21 receiving a 4.

4.1.1.3. Pre-test similarities

Table 4.1.1.3. Results of the Pre-Vocabulary test

	Group	Mean	Std.Deviation
Pre	Control	4,25	1,89
	Experimental	4,19	1,27

The pre-test findings show that before any instructional intervention, the vocabulary levels of the control and experimental groups were almost the same. The experimental group scored 4.19, whereas the control group's mean score was 4.25. The control group's standard deviation was 1.89, somewhat more than the experimental group's 1.27, but still rather small. Before the start of the investigation, there was no noticeable distinction between the two groups, according to the p-value of 0.819 (>0.05). This data implies that the vocabulary bases of the two groups were equivalent, which enables us to properly assess the effectiveness of the teaching strategy under investigation. According to Cohen and Macaro (2007), the pre-test data verify that the two groups began at almost the same position, offering a reliable foundation for comparing their development.

4.1.2. Post-Test results

At the end of the second week, the researcher gave the two groups two different treatments before administering another exam. The post-test results, like the pre-test results, were analyzed in terms of mean, standard deviation, range, and score frequency. These results were then compared with one another to see if there had been any statistically significant changes.

4.1.2.1. The Control Group

A summary of the values discussed in the previous section is readily apparent in Table 4.1.2.1:

Table 4.1.2.1. Post-test score analysis for the Control Group

Mean	Standard deviation	Range		Scores
		Min	Max	0
				1
				2
				3
				4
				5
				6
				7
				8
				9

Although the control group's overall increases in vocabulary knowledge were modest, the post-test results did reveal improvement. This group's mean score went up to 5.15, with a 1.52 standard deviation, suggesting little improvement. While scores might vary from 2 to 8, most students had a score between 4 and 6. In particular, the majority of students went toward the mid-range of results, as seen by the 24 students who got a four and the nine students who achieved a 6. Although the control group showed some development, it was not as significant as it might have been, indicating that

while traditional teaching techniques had some impact, they may not have fully used students' capability to comprehend language.

4.1.2.2. The experimental group

Table 4.1.2.2. Post-test score analysis for Experimental Group

Mean	Standard deviation	Range		Scores	Frequency
		Min	Max	0	0
				1	0
				2	0
				3	1
				4	11
				5	10
				6	17
				7	8
				8	9
				9	3
				10	0
6.00	1.52	3	9		

However, the post-test findings for the experimental group revealed significantly greater gains in vocabulary. The group's mean score rose to 6.00 with a standard deviation of 1.52, indicating more improvement than in the control group. Most students scored between six and eight, while there is a range of three to nine. Specifically, nine students obtained an eight, whereas seventeen students obtained a six, indicating the positive impacts of semantic mapping on vocabulary growth. These results suggest that semantic mapping was a more effective method of helping students pick up and retain new language. This is consistent with recent research that emphasizes the benefits of visual aids for enhancing memory and learning (Jones, 2017).

4.1.2.3. Post-test differences

Table 4.1.2.3. Results of the Post-Vocabulary Test

	Group	Mean	Std.Deviation
Post	Control	5.15	1.52
	Experimental	6.00	1.52

The post-test findings show a distinct difference between the two groups as compared to the pre-test. With traditional instruction, the control group's mean score increased from 4.25 to 5.15. However, the experimental group-which implemented semantic mapping-saw an increase from 4.19 to 6.00. In the post-test, both groups' standard deviations were 1.52, suggesting a more homogeneous improvement between the groups. The p-value of 0.003 (<0.05) suggests a statistically significant difference in the vocabulary gains between the control and experimental groups. This substantial increase for the experimental group demonstrates the effectiveness of semantic mapping in enhancing vocabulary retention and usage (Morin & Goebel, 2001). The results confirm that semantic mapping helps students better organize and recall new vocabulary, supporting its use in EFL classrooms.

4.2. Discussion

The results of this study show that, among first-year non-English majors at the School of Languages and Tourism (SLT) - Hanoi University of Industry (HaUI) in Ha Nam, semantic mapping enhanced vocabulary learning. In comparison to the control group (mean score of 5.15), the experimental group that used semantic mapping had better post-test results (mean score of 6.00), indicating that this strategy is more successful at helping vocabulary retention and productive vocabulary usage. It is crucial to note that non-majors in English are typically not proficient in producing general vocabulary as well as terminology in their areas. This supports the notion that semantic mapping is useful for teaching productive skills and specialized vocabulary.

The study's short two-week length raises concerns about semantic mapping's long-term effects, and the convenience sampling technique, which could restrict the findings' application in other situations, is among its limitations. Despite these drawbacks, the research demonstrated that the teaching strategy was the cause of the variations in post-test results by verifying that the two groups' beginning vocabulary proficiency was comparable.

The research's emphasis on productive vocabulary, which fills a gap in the literature by emphasizing it in addition to receptive vocabulary - as noted by Morin and Goebel (2001) - is one of its greatest strengths. The study offers useful insights into how word recall, and usage impacted by semantic mapping, using gap-filling tasks. Its emphasis on non-majors in English as a foreign language in EFL environments such as Vietnam is remarkable as well, providing insightful knowledge on how semantic mapping may help students learn both technical and general vocabulary.

To the best of our knowledge, this study is one of the first to look at semantic mapping for productive vocabulary acquisition among first-year non-English majors in Vietnam, and it shows that it works better than traditional methods. The findings support the value of semantic mapping and are consistent with earlier studies emphasizing the function of visual aids in vocabulary learning (Heimlich & Pittelman, 1986).

These findings have important implications. In addition to improving vocabulary instruction for first-year non-English majors, semantic mapping can be used in other EFL contexts where vocabulary acquisition is a challenge for students. Moving beyond conventional methods that might not effectively engage students, educators are encouraged to use semantic mapping to increase receptive and productive vocabulary across numerous areas.

5. Conclusion

This study looked at how well semantic mapping worked at the School of Languages and Tourism (SLT) - Hanoi University of Industry (HaUI) in Ha Nam as a vocabulary teaching technique for first-year non-English majors. The findings showed that, in comparison to the control group, students in the experimental group who received instruction utilizing semantic mapping showed noticeably higher gains in vocabulary acquisition and retention. The findings of the post-test showed that semantic mapping promoted deeper cognitive engagement by assisting students in organizing, comprehending, recalling, and producing new language more effectively. The results have significant pedagogical implications for teaching English in EFL situations such as Vietnam. Semantic mapping is a dynamic substitute for traditional vocabulary training methods and a highly effective strategy.

This study contributes to the existing literature by concentrating on productive vocabulary instead of receptive vocabulary, a topic that has not been fully covered in earlier research. Additionally, it advances knowledge on the use of semantic mapping in EFL classrooms, particularly in Vietnam, where creative teaching strategies are limited for students who do not major in English.

This study's findings support semantic mapping's beneficial effects on vocabulary acquisition and emphasize how it encourages participation. Teachers may give students a more engaging and purposeful way to learn vocabulary by implementing semantic mapping into their lesson plans, which will eventually improve language development. This study establishes a framework for further research and emphasizes the necessity of investigating creative teaching methods in EFL settings.

REFERENCES

1. Abate, M., & Tefera, T. (2015), The effectiveness of semantic mapping in enhancing vocabulary knowledge among eighth graders. *Journal of Language Teaching and Research*, 6(4), 762-769.
2. Amalia, R. (2019), Enhancing vocabulary acquisition through semantic mapping: An action research on eleventh-grade students. *International Journal of Education*, 8(2), 119-130.
3. Col, J., & Spector, M. (1993), *Form of semantic map*. Adapted from Enchanted Learning. Retrieved August 8, 2022, from <http://www.enchantedlearning.com>.

4. Creswell, J. W. (2014), *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). SAGE Publications.
5. Dilek, Y., & Yuruk, N. (2012), Using semantic mapping technique in vocabulary teaching pre-intermediate level. *Akdeniz Language Studies Conference Procedia - Social and Behavioral Sciences*, 70, 1531-1544.
6. Ellis, R. (2008), *The study of second language acquisition*. Oxford University Press.
7. Field, A. (2013), *Discovering statistics using IBM SPSS statistics*. Sage.
8. Heimlich, J. E., & Pittelman, S. D. (1986), Semantic mapping: Classroom applications. *International Reading Association*.
9. Johnson, D. D., & Pearson, P. D. (1984), *Teaching reading vocabulary*. Holt, Rinehart, and Winston.
10. Jones, M. (2017), Vocabulary acquisition and the use of semantic mapping. *Language Learning Research*.
11. Morin, R., & Goebel, J. (2001), Basic vocabulary instruction: Teaching strategies or teaching words? *Foreign Language Annals*, 34(1), 8-17.
12. Nation, I. S. P. (2001), *Learning vocabulary in another language*. Cambridge University Press.
13. Nguyen, H. (2017), Enhancing ESP vocabulary retention through semantic mapping: An action research at Thai Nguyen University of Technology. *Journal of Technical Education*, 13(1), 45-60.
14. Nguyen, H. (2022), The effectiveness of semantic mapping for teaching vocabulary to non-English major freshmen at Quy Nhon University. *Journal of Language Teaching*, 18(4), 113-128.
15. Pham, T. (2012), Using semantic mapping to teach ESP vocabulary to final-year finance students at Hanoi Tourism College. *Unpublished master's thesis*, Hanoi University of Languages and International Studies.
16. Qudus, A. (2020), Investigating the effectiveness of semantic mapping on vocabulary acquisition among high school students. *International Journal of Applied Linguistics and English Literature*, 9(1), 37-45.
17. Schmitt, N. (2000), *Vocabulary in language teaching*. Cambridge University Press.
18. Schmitt, N. (2010), *Researching vocabulary: A vocabulary research manual*. Palgrave Macmillan.

Ứng dụng sơ đồ ngữ nghĩa trong giảng dạy từ vựng chủ động cho sinh viên năm thứ nhất không chuyên tiếng Anh tại Đại học Công nghiệp Hà Nội

Tóm tắt: Việc tiếp thu từ vựng là điều rất quan trọng trong việc học tiếng Anh, đặc biệt trong các bối cảnh tiếng Anh được sử dụng như một ngoại ngữ (EFL). Nghiên cứu này đã khảo sát tính hiệu quả của việc sử dụng sơ đồ ngữ nghĩa để tăng cường khả năng ghi nhớ và sử dụng từ vựng chủ động của sinh viên năm thứ nhất không chuyên tiếng Anh tại Trường Ngoại ngữ và Du lịch - Đại học Công nghiệp Hà Nội (HaUI), Việt Nam. Nghiên cứu này lấp đầy khoảng trống trong khía cạnh tiếp thu từ vựng chủ động, trong khi các nghiên cứu trước đây tập trung vào từ vựng thụ động. Nghiên cứu áp dụng phương pháp bán thực nghiệm, so sánh nhóm thực nghiệm được dạy bằng sơ đồ ngữ nghĩa với nhóm kiểm soát sử dụng phương pháp truyền thống. Kết quả cho thấy nhóm thực nghiệm có khả năng ghi nhớ từ vựng và sử dụng từ vựng chủ động trong các bài tập điền từ tốt hơn. Bản đồ ngữ nghĩa được đề xuất như một công cụ hỗ trợ giảng dạy hữu ích cho từ vựng chủ động, đặc biệt đối với sinh viên năm thứ nhất không chuyên tiếng Anh. Đối với việc giảng dạy EFL, nghiên cứu đưa ra các khuyến nghị với các ứng dụng thực tế và nhấn mạnh sự cần thiết phải có thêm nhiều nghiên cứu về tác động dài hạn và các ứng dụng rộng rãi hơn.

Từ khóa: tiếp thu từ vựng; sơ đồ ngữ nghĩa; từ vựng chủ động; sinh viên năm thứ nhất không chuyên tiếng Anh; bán thực nghiệm.