

ENHANCING THE STUDENTS' VOCABULARY THROUGH MORPHOLOGICAL AWARENESS

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ARTICLE INFO		ABSTRACT
Received:	25/5/2025	The current paper details a research study exploring the impact of morphological awareness on the vocabulary development of third-year English language students at School of Foreign Languages - Thai Nguyen University in Vietnam. The study investigates the students' initial level of morphological awareness and examines if there is a relationship between this awareness and their vocabulary growth. A pre-experimental design was used with the instrument namely Morphological Awareness Test, which consists of two main components: the Morpheme Identification Test and the Morphological Structure Test. These two components both include pre- and post-tests, which are to measure the ability to identify and build words using morphemes. The research found that morphology instructions could significantly enhance the students' understanding of words' structure and meaning, and develop the vocabulary as well. The findings indicate a positive impact of morphological awareness on vocabulary development. This also proves that explicit instruction on morphology can be a valuable vocabulary learning strategy for the participants of the study.
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NHẬN THỨC VỀ HÌNH THÁI TỪ GIÚP NÂNG CAO VỐN TỪ VỰNG CỦA NGƯỜI HỌC

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THÔNG TIN BÀI BÁO		TÓM TẮT
Ngày nhận bài:	25/5/2025	Bài báo này trình bày một nghiên cứu tác động của nhận thức về hình thái từ đến sự phát triển vốn từ vựng của sinh viên năm thứ ba chuyên ngành tiếng Anh tại Trường Ngoại ngữ - Đại học Thái Nguyên, Việt Nam. Nghiên cứu khảo sát mức độ nhận thức ban đầu của sinh viên về hình thái từ, và xem xét mối quan hệ giữa loại nhận thức này và sự phát triển vốn từ vựng của họ. Phương pháp nghiên cứu tiền thực nghiệm được sử dụng với công cụ là bài kiểm tra nhận thức hình thái từ gồm 2 phần là Nhận diện hình vị và Cấu trúc hình thái. Cả 2 phần đều có các bài kiểm tra trước và sau để đo lường khả năng nhận dạng và xây dựng từ vựng thông qua hình vị. Kết quả nghiên cứu cho thấy những bài giảng về hình vị học có thể nâng cao đáng kể hiểu biết và khả năng vận dụng của sinh viên về hình vị học, từ đó hiểu sâu về cấu trúc từ. Những kết quả này cũng đã chỉ ra tác động tích cực của nhận thức về hình thái từ đến sự phát triển vốn từ vựng, chứng minh rằng những bài học về hình thái từ có thể được coi là một chiến lược học từ vựng có giá trị đối với những người tham gia nghiên cứu.
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1. Introduction

Vocabulary plays a crucial role in the process of teaching and learning a language. It is considered the foundation of any language, serving as the basis for the development of other language and communication skills such as listening, speaking, reading, and writing [1], [2]. For many researchers, a lack of vocabulary is seen as a sign of lexical disfluency among language learners, not only learners of English. According to Zimmerman [3], there is a clear relationship between a learner's vocabulary size and his or her overall language proficiency. A limited vocabulary becomes a significant barrier for English learners in the process of language acquisition [4].

Despite the undeniable importance of vocabulary knowledge, vocabulary teaching and learning has received relatively little attention. Traditional teaching and learning methods, such as rote memorization and direct translation, have often been favored in the area. Unfortunately, these methods frequently overlook the contextual use of words. Given the volume and complexity of vocabulary in English, most teachers struggle to cover it all in their lessons, and many students find it difficult to master both the words and their meanings within specific contexts. As a result, strategies that empower learners to independently acquire words and word meanings are considered crucial for effective English language acquisition.

1.1. Vocabulary in English language learning

Various scholars have offered definitions to capture the scope and nature of vocabulary. Kashani and Shafiee [5] described vocabulary as "a set of lexemes, including single words, compound words, and idioms." Lessard-Clouston [6] expanded as that "vocabulary can be defined as the words of a language, including single items and phrases or chunks of several words which convey a particular meaning, the way individual words do."

Vocabulary is central to language teaching because without an adequate vocabulary, students are unable to fully comprehend others' ideas or express their own effectively. As Wilkins [7, p. 111] famously stated, "... while without grammar very little can be conveyed, without vocabulary nothing can be conveyed." Furthermore, as noted in [8] and [9], vocabulary growth serves as a strong indicator of a learner's ability to master the four language skills and attain communicative competence. These ideas highlight the crucial role vocabulary plays in students' language learning and overall communicative competence. Consequently, it is imperative to implement effective vocabulary learning strategies to support learners.

1.2. Vocabulary learning strategies

According to several researchers, including O'Malley and Chamot [10], Schmitt and McCarty [11] and Schmitt [12], vocabulary learning strategies are those that help learners effectively acquire, retain, and use vocabulary. Various strategies have been proposed by scholars, such as explicit instruction [13], wide reading [14], and cognitive and metacognitive word learning strategies [15]. Explicit instruction typically involves a direct explanation of word meanings, modelling how to use the word, and providing both guided and independent practice [16]. Wide reading is rooted in literature and allows students to encounter numerous words in context, often with repeated exposure [14]. Cognitive and metacognitive vocabulary learning strategies often involve contextual and morphological analysis [15].

According to [10], cognitive strategies (e.g., translating, analyzing) and metacognitive ones (e.g., planning, organizing) are often used in conjunction, complementing and reinforcing one another. The underlying assumption is that combining multiple strategies tends to be more effective than relying on a single strategy. Oxford created a framework of lexical learning strategies with four categories: Social, Memory, Cognitive, and Metacognitive [17]. Cognitive strategies are "similar to memory strategies, but ... not focused so specifically on manipulative mental processing" [18]. These include techniques such as repetition, using mechanical means to study vocabulary, note-taking, using textbook vocabulary sections, studying by listening, recording a tape of word lists or

labeling their physical objects in L2. Whereas, metacognitive strategies are supposed to be used by students “to control and evaluate their learning, by having an overview of the learning process in general” [18]. In other words, metacognitive involved a conscious overview of the learning process and making decisions about planning, monitoring, or evaluating the best ways to study.

1.3. Morphology and morphological awareness

Morphology is defined as “a branch of linguistics” which studies the structure of words, or the study of morphemes and their arrangement in forming words [19]. Morpheme is the smallest unit in a word which has a certain meaning or a grammatical function [20].

Morphological awareness refers to the conscious understanding of how to use both free and bound morphemes of a language, including derivational and inflectional forms [21], [22]. Carlisle [23] defined that morphological awareness is the ability to reflect on and manipulate the morphemic structure of words, including an understanding of how prefixes, suffixes, and root words combine to create meaning. For English as the Second Language/English as a Foreign Language (ESL/ EFL) learning process, an awareness of inflectional morphemes surely contributes to improved grammatical accuracy, while an understanding of derivational morphemes enhances lexical knowledge. Therefore, morphological awareness plays a key role in learners’ ability to comprehend new words by enabling them to deconstruct complex words into meaningful components and reconstruct those components to form new vocabulary. Numerous studies have explored the practical relationship between morphological awareness and vocabulary knowledge [24], [25], which have become the foundation for the author to conduct this research.

Scott and Nagy [26] described morphological awareness as a metalinguistic tool that enables learners to use words more effectively. Yucel-Koc [27] specifically classified the morphological awareness as a subdivision of metalinguistic tool. Wysocki and Jenkins [28] referred to it as one possible learning strategy applied by ESL/ EFL learners, due to its ability was to enhance their lexical knowledge. Several studies have identified morphological awareness as a key indicator of various language abilities, including reading skills [29], writing skills [30], and vocabulary growth [28]. Such knowledge can be developed through familiarity with word formation processes, particularly morphological processing, which involves adding affixes to word bases.

There have not been many researches on either morphology or morphological awareness or analysis in Vietnam. Most existing studies have focused on vocabulary teaching and learning strategies, and morphology as a linguistic discipline. The first group often discusses the role of vocabulary in language learning and investigates specific vocabulary learning methods such as Blended Learning [31], Quizlet [32], Kahoot! [33], smartphones [34], and reading short stories [35]. The second group focuses on students’ awareness of morphology as a branch of linguistics and approaches to teaching and learning it [36]. To date, no study has applied morphological awareness as a strategy for teaching or improving vocabulary in the Vietnamese context.

This study, therefore, aims to examine the significance of morphological awareness in enhancing vocabulary knowledge of English language learners at School of Foreign Languages – Thai Nguyen University – Vietnam (hereinafter SFL – TNU). The study is also expected to offer valuable pedagogical insights to support vocabulary development at the university level.

2. Research Methodology

This section depicts the methodological framework employed to design the research, which would present the research design, research questions, participants, data collection instruments, data collection procedure, and data analysis.

The research was conducted based on pre-experimental method. According to Thyer [37], there was several types of pre-experimental design, including (1) one-group posttreatment-only design, (2) one-group pretest-posttest design, and (3) interrupted time-series design. The second type was chosen to conduct this research which is described as a structured research, with careful

measurement done over a group of participants having been exposed to the treatment before and after conducting the treatment.

The research was conducted to answer two research questions:

1. What level of English morphological awareness do the students possess?
2. Is there a relationship between the participants' English morphological awareness and their English vocabulary development?

The participants of the study were 99 English Language juniors at the SFL – TNU. They were all native Vietnamese and were tested during the second term of the academic year of 2024 – 2025.

The research instrument employed in the study was the Morphological Awareness Test (MAT) introduced by McBride-Chang et al. [25] to test the participants' morphological knowledge. The test consists of two main components: Morpheme Identification Test (MIT) and Morphological Structure Test (MST). The test was delivered to the participants twice, on the first and fourth weeks of the second term, before and after they finished their Morphology section of the Advanced English Grammar course at the SFL - TNU in the academic year of 2024 - 2025, which can be considered as pre-test and post-test. Four weeks of Morphology instruction was regarded as the morphological awareness treatment.

MIT was designed to collect the data related to the participants' ability to recognize the types of morphemes of complex words (free or bound) and segment those words into smaller units (roots, prefixes or suffixes). For example, the word “insecure” would be segmented into “in” and “secure”. In the test, the participants answered two big questions: 1 - Analyze the types of morphemes, and 2 - Describe the bold suffixes whether they were derivational and inflectional morphemes. Each question contained 15 decontextualized lexical items. Each item was worth 1 point.

MST was designed to measure participants' morphological ability to synthesize morphemes to produce new words - their level of awareness of word structure. For instance, they were asked to attach different morphemes to the root “nature” to make new words like “natural”, “naturalize”, “naturalized”, etc. The test consisted of 3 independent lexical items, and the participants were instructed to add as many morphemes as possible to the root to make different new words. The total score of this test was 35 points which signified the maximum number of possible morphemes in the test items (the first word could generate 14 variations, the second 8, and the last one 13). The data collected were first filed, then analyzed to generate descriptive statistics using JASP 0.19.3.0 software.

3. Findings and Discussion

3.1. Participants' morphological awareness level

The first research question can be answered by some analytical aspects.

Firstly, the reliability as well as other analytical statistics of the MIT and MST delivered to the participants on the first and fourth weeks of the term are calculated and presented in Table 1.

Table 1. Reliability and Descriptive statistics of Morphological Awareness Test

Instruments	Number of items	Coefficient α		Mean		SD	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
MIT	30	0.006	0.861	8.336	20.053	2.418	4.395
MST	3	0.603	0.814	13.374	21.061	3.986	3.319

The pre-test's reliability coefficients α for both tests were either notably low or fairly low - 0.006 for the MIT and 0.603 for the MST - indicating poor and not good internal consistency. In contrast, the post-test's coefficients were substantially higher, at 0.861 and 0.814 respectively, reflecting strong internal consistency. These results suggest that the tests became much more reliable after treatment, with participants responding more consistently, especially to the MIT.

The Mean scores for the MIT were 8.336 (pre-test) and 20.053 (post-test), while those for the MST were 13.374 and 21.061, respectively. These results indicate that participants began with relatively low average scores and showed significant improvement after the intervention. The

increase in Mean values demonstrates that the participants performed considerably better on the post-tests, suggesting that the intervention had a positive effect.

The Standard Deviations (SD) of the MIT increased from 2.418 in the pre-test to 4.395 in the post-test, indicating greater variability in participants' performance after the morphological treatment. In contrast, the SD of the MST decreased from 3.986 to 3.319, suggesting slightly less variability in post-test scores compared to that in the pre-test. This trend supports the reliability and consistency of the instrument across the participants in the post-test.

Table 2. Participants' scores in root, inflectional suffixes and derivational suffixes

Analytic Aspect	Number of items	Coefficient α		Mean		SD	
		Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Root	12	-0.026	0.902	3.669	7.952	1.538	3.444
Derivational	8	0.002	0.827	2.343	5.306	1.295	2.385
Inflectional	7	0.056	0.838	2.051	4.061	1.240	1.994

From Table 2, it is obvious that in the pre-test, the coefficient α values of all the items assessing roots, inflectional suffixes and derivational suffixes range from unreliable (-0.026) to almost unreliable (0.002), and then very poor (0.056). Meanwhile, those values in the post-test indicate either good (0.827 and 0.838) or excellent reliability (0.902). Together with that, Mean scores all doubled or more than doubled from the pre-test to post-test, so did SDs. These results support the conclusion that the test is reliable and affective in assessing distinct morphological knowledge components, and morphological instruction significantly enhanced the test reliability, the participants' average performance and knowledge in all three aspects. The dramatic rise in coefficient α values suggests that participants responded more consistently after instruction, indicating their deeper understanding of the material. The increased standard deviation of the post-test across all areas implies uneven progress - while some participants showed marked improvement, others advanced to a lesser extent.

The above analysis of the statistics indicates that the instrument MAT is a reliable tool for measuring both the ability to recognize/ identify morphemes and the ability to apply existing morphological knowledge to produce new, meaningful vocabulary units. The modest results of the pre-test also serve as evidence of the positive impact of the morphological treatment on learners' morphological awareness. In the 1st week, learners seemed to approach the pre-test instinctively, relying mostly on fragmented and unsystematic linguistic knowledge acquired previously, while by the 4th week - after a systematic instruction in morphology, the participants completed the post-test with higher accuracy and a deeper understanding. The participants' morphological awareness level has indeed improved compared to before; some participants showed significant progress, while others demonstrated moderate improvement, as reflected in the wide score range. The lectures on morphology - or in other words, the morphological treatment - had a clear impact on enhancing participants' level of morphological awareness, although this effect was not the same.

3.2. Relationship between morphological awareness and vocabulary development

The second research question can be answered through the comparison between the pre-test and post-test outcomes of both MIT and MST presented in Figure 1.

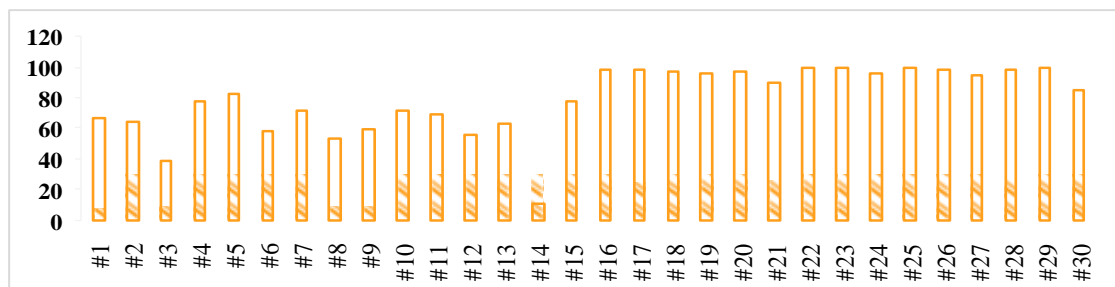


Figure 1. MIT – pre-test & post-test correct answers

Figure 1 compares the pre-test and post-test scores of 30 questions in the MIT. The pre-test result is comparatively low, while the post-test one is much higher. Several questions in the pre-test received the same number of correct answers, which, however, may reflect the correct portrait of the participants' pre-test completion: they finished them carelessly, lack of system, and even under the copy-paste circumstance. After the morphological lessons, the post-test scored improved significantly, with many questions got close 99 correct answers (meaning that all the participants answered the questions correctly). This suggests that, in general, the intervention between the pre-test and post-test had positive effect on the performance of all the participants.

Figure 2 presents the distribution of scores for Q1 in the MST (which has only 3 test items), comparing pre-test and post-test results across four score ranges: 0-3, 4-6, 7-9, and 10-14. In the pre-test, most participants scored within the 2nd range, followed by a significant number in the first. In contrast, the post-test shows a significant shift: The majority of participants scored in the 3rd range, with a notable number reaching the 4th range. This suggests that though the initial performance was pretty low with few participants demonstrating understanding, the participants did improve in morphological structures after the treatment.

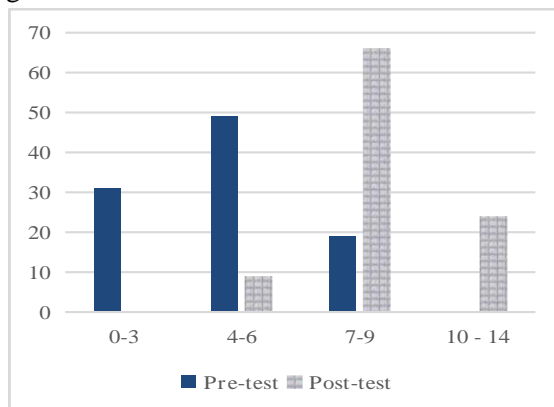


Figure 2. MST – pre-test's & post-test's question 1

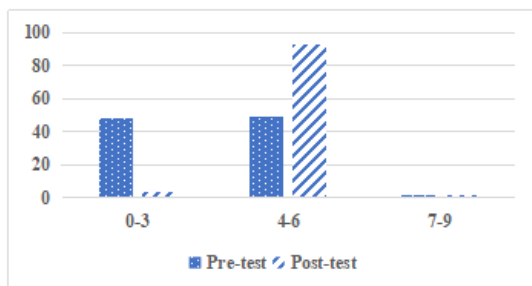


Figure 3. MST – pre-test's & post-test's question 2

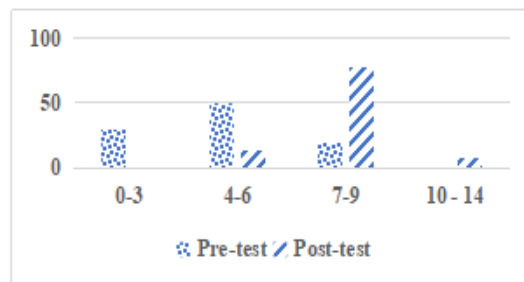


Figure 4. MST – pre-test's & post-test's question 3

Figure 3 shows the distribution of scores for Q2, grouped into 3 score ranges only: 0-3, 4-6, and 7-9 (for the maximum score is 8). Pre-test scores were almost evenly divided between the 1st and 2nd ranges, while the post-test results show an intense concentration in the 2nd, 93 participants in total. This chart shows a moderate learning progress compared to Q1.

Figure 4 illustrates the performance outcomes for Q3, again comparing pre-test and post-test scores across the same four score ranges. The distribution of all the score ranges is very similar to that of Figure 1, with the majority of participants fell within the 2nd range, followed by a substantial number in the 1st range in the pre-test. Post-test results show a huge improvement when 75 participants scored in the 3rd range, and a small number achieved scores in the highest one (10-14). The strong shift toward higher scores in this question confirms the positive effects of the learning instruction.

In general, the outcomes of both pre-test and post-test of the MAT (including MIT and MST) demonstrate that before the morphological treatment, participants' morphological competency was inadequate to deal with the internal structures of words; however, the situation has improved considerably after the treatment. The outcomes also presented that participants performed better in the MST than in MIT, and they had better acquisition of derivational morphemes than that of inflectional morphemes. These findings suggest that, both before and after the intervention, participants had some ability to produce English words, although it is likely that their initial performance on the MST relied more on memory than on morphological understanding. The intervention clearly demonstrated a positive relationship between morphological instruction and improved morphological outcomes. According to [25], language learners' morphological awareness can be counted as a good indicator of vocabulary knowledge. Therefore, it can be concluded that structured morphological instruction can play a vital role in developing learners' linguistic competence and should be considered an essential component in vocabulary instruction, particularly for learners starting with limited morphological knowledge.

4. Conclusion and Implications

The findings of this study provide strong evidence that the four-week morphological treatment significantly enhanced participants' morphological awareness and had good effect on vocabulary development. Morphological awareness should be considered an effective vocabulary learning strategy that enables the students to reflect on and manipulate the morphemic structure of words, and to use words more effectively.

The research also offers valuable pedagogical implications for not only language instructors but also curriculum makers. It is recommended that explicit Morphology should not only be taught as a separate course, but a variety of morphological activities should also be put into practice in all classes of ESL/EFL due to its significance in the process of learning English language skills.

However, the study's findings should be interpreted with caution for it is not yet a proper experimental research. Several aspects haven't been taken into account in this study. Some more future researches on morphological awareness should be done to confirm the positive role of the strategy to develop learners' vocabulary as well as other language skills.

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