Vocabulary Learning through Morphology

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Abstract: This literature review explores the significance of vocabulary learning through morphological instruction for English as an Additional Language (EAL) learners. It highlights the critical role of vocabulary in language acquisition and examines various morphological instructional strategies, including both explicit and implicit methods. This review also examines theoretical frameworks and the impact of morphology on vocabulary development, as well as empirical studies that evaluate the effectiveness of these instructional approaches. Challenges and limitations in implementing morphological instruction were identified along with learner variables and instructional obstacles. The review concludes with suggestions for future research directions and implications for teaching EAL, emphasizing the need for continued exploration in this area.

Keywords: Morphological Awareness, Vocabulary Knowledge, English as an Additional Language

Introduction

Vocabulary acquisition is a fundamental component of language learning, particularly for those who acquire English as an Additional Language (EAL). In understanding vocabulary acquisition, it is essential to remember that the process is not linear but multidimensional, encompassing various components of word knowledge. Research indicates that learners benefit from an instructional approach that integrates morphological awareness, the ability to recognize and manipulate morphemes —the smallest meaningful units of language— (Apel, 2014), which enhances their understanding of individual words and equips them with strategies for deciphering unfamiliar terms through their roots and affixes (Jiang, 2020). This approach aligns with González-Fernández and Schmitt's (2020) findings, which emphasize that vocabulary acquisition is a gradual and interconnected process that enhances both the breadth and depth of learners' lexical knowledge. By fostering morphological skills, educators can facilitate robust vocabulary development and ultimately improve language proficiency and comprehension among EAL learners.

This literature review investigates the role of morphological instruction as a pivotal strategy for enhancing vocabulary learning among EAL learners. Morphological instruction, which focuses on the structure and formation of words, provides unique insights into vocabulary development by enabling learners to understand and manipulate parts of words, thereby expanding their lexical resources. This review outlines the fundamental concepts underlying morphological instruction and explores the connection between word structure and vocabulary development in second language learning. It also categorizes various teaching methods, compares direct and indirect approaches, and identifies studies evaluating their effectiveness in different teaching environments. Additionally, this review addresses the challenges and limitations educators face in implementing morphological instruction, including learner variables and instructional hurdles that may hinder its effectiveness. Ultimately, this literature review highlights unanswered questions and suggests areas for future research to better understand morphological instruction in EAL contexts, thereby improving teaching methods and facilitating effective vocabulary acquisition. Through a comprehensive synthesis of existing literature, this review seeks to contribute to the ongoing discourse on effective vocabulary learning strategies in EAL education.

Importance of Vocabulary in Language Acquisition

Vocabulary constitutes a fundamental building block for any language. Each acquired word facilitates the construction of sentences and the articulation of ideas. Expanding one's vocabulary enhances one’s ability to speak, write, read, and listen as it provides a broader array of tools for communication (Laufer, 2020; Schmitt et al., 2011). Increased vocabulary improves the comprehension of spoken and written languages. For instance, familiarity with common words enables individuals to follow narratives, instructions, or informal conversations more easily, thereby enhancing their understanding of everyday activities (Nation, 2017; 2022). A robust vocabulary enables a clear and precise expression of thoughts, which is crucial in various contexts such as composing an email, narrating a story, or elucidating concepts.

Moreover, robust vocabulary enhances communication skills and facilitates academic success, as it is closely linked to reading comprehension and overall literacy development (Nation, 2022). Furthermore, the relationship between vocabulary knowledge and reading comprehension highlights the vital role of effective vocabulary instruction in academic achievement, particularly among EAL learners. Studies show that students with a strong

vocabulary knowledge typically perform much better on comprehension tests compare to students with lower word knowledge (Brooks et al., 2021; Schmitt et al., 2011; Webb, 2009).Thus, effective vocabulary instruction is crucial for EAL learners as it not only supports their language acquisition but also significantly impacts their academic performance and comprehension skills.

Outside education and employment, a strong vocabulary enhances everyday experiences (Schmitt & Schmitt, 2020). Whether one is perusing the news, savouring literature, or participating in social media, having a broader lexicon enhances your ability to appreciate and engage with the information around you. Ultimately, expanding one's vocabulary is crucial, as it lays the groundwork for effective communication, fosters academic and career success, and equips one to navigate life with confidence and clarity (Schmitt et al., 2017).

This literature review explores the significance of vocabulary learning through morphological instruction for EAL learners. It highlights the critical role of vocabulary in language acquisition and examines various morphological instructional strategies, including explicit and implicit methods. This review also examined the theoretical frameworks and impact of morphology on vocabulary development, drawing on empirical studies that have evaluated the effectiveness of these instructional approaches. This study identifies the challenges and limitations of implementing morphological instruction, learner variables, and instructional obstacles. The review concludes with suggestions for future research and implications for teaching EAL, demonstrating the importance of continued exploration in this area.

Morphological Awareness and Vocabulary Growth

Although early studies predominantly regarded vocabulary learning from a simple linear view of adding one word to another, current investigations are showing how it is actually a much more complex process that significantly benefits from morphological awareness. A review of recent literature points towards a consensus that morphological awareness— recognition and manipulation of smallest unit of meaning—is not just an output of vocabulary size, but instead a direct driver of it (Bauer & Nation, 2020; Jiang, 2020).

This seems a two-way rather than one-way statistics. As pointed out by Wang and Zhang (2024), morphological awareness helps learners understand unknown words, and an expanded lexicon offers raw input for learners to hypothesize about morphological rules. The linkage was based on compelling empirical evidence; in a recent meta-analysis, Cheng et al. (2025) based on 109 studies found a moderate relationship (r =. 43) from morphological awareness to vocabulary in monolinguals, and positive associations are significant, even beyond bilingual cases. There does seem to be a tension in the literature with respect to how this activation might be occurring for different groups of learners. Although it has been argued by researchers (Haomin and Bilü, 2017) that morphological awareness predicts the breadth as well as depth of vocabulary, other studies like Goodwin et al. (2020), suggest that its greatest value is as a compensatory mechanism. For vocabulary-poor EAL learners, morphology becomes a scaffold which assists them to fill reading gaps despite their lexical depth being behind that of their monolingual classmates.

Direct Instructional Mechanism and Methodological Variances

The research supports an explicit morphological approach over implicit exposure in the literature. Nonetheless, there is variation among studies about the best pedagogical approach. The consistent pattern of effects across different contexts—from Chinese ESL learners (Qiao et al., 2021) to Thai EFL students (Matwangsaeng & Sukying, 2023), reflects the fact that explicit provision brings about gains in vocabulary breadth. However, the extent of such learning relied greatly on how the instruction was provided.

Two instructional models that represent current instruction are decompositional approaches (Word Sums) and relational approaches (Word Matrices). The decompositional tasks like the ones in Zhang (2022) work on such a prediction by asking the models to decompose complex words into smaller parts (e.g., turning constructing to con-struct-ing). Although efficient for direct decoding time, this linear approach is however in contrast to the multi-dimensional nature of Word Matrices. Ng et al. (2022) contend that matrices are more successful in representing the semantic relations between words within morphological families, thereby facilitating learners' understanding of the rationality behind English morphophonemic orthography.

Methodological issues in previous research have limited the ability to directly compare what works best. For instance, Crosson et al. (2025) implemented a relatively intensive, in terms of duration but less potent in linguistic content, 16-week quasi-experimental intervention (EL-RAVE) providing instruction on latin roots and observed significant effects on root meaning and orthographic processing. Other studies, in contrast to ours frequently are shorter interventions or correlational data (Farrag & Badawi, 2019). Moreover, although an explicit instruction advantage is apparent for 'morphological problem solving' (Crosson et al., 2021), it is not known whether these modality specific methods of instruction—matrices relative to sums—are more effective for some individuals than others, namely low orthographic proficiency readers.

Morphological Awareness Tasks

These tasks involve learners manipulating the morphemes in words, such as by adding or removing prefixes or suffixes. For instance, learners might be asked to transform "happy" into "happiness" by appending the suffix "-ness" (Matwangsaeng & Sukying, 2023). Another example is removing morphemes from words with affixes, such as instructing the learner to remove the suffix "-er" from "teacher."

Word Matrices

A morphological matrix is an educational tool that systematically arranges words around a shared base, visually illustrating a morphological family by presenting a base morpheme with its corresponding prefixes and suffixes (Ng et al., 2022). This structure emphasizes the uniform spelling and semantic connections of morphemes in linked words, aiding in the comprehension of English's morphophonemic orthography.

Word Sums

This method involves teaching learners to break down words into their component morphemes and synthesize them into new words. For example, learners might be taught to break down the word "constructing" into "con-" + "struct" + "-ing" and then use these morphemes to form new words, like "constructing" (Zhang, 2022). Additionally, educators may show learners the parts "re" + "con" + "struct" + "ion" so the learner can put them together to form "reconstruction."

The digital turn: Computer-Assisted Morphological Interventions

One emerging trend in the literature is the combination of technology in response to this heavy practice load associated with morphological learning. By employing digital interventions, instruction is no longer static but becomes dynamic feedback loops. Lo et al. (2017) stress that CAI is particularly appropriate for reading challenged students, as such a medium can provide instant feedback in an emotionless manner (which it off course not available in traditional classroom setting).

According to Yu and Trainin (2022), personalization is a lexicon that best describes the key asset of digital tools. CAI scaffolds difficulty, taking students from simple tasks of recognition to those of production (e.g., changing "act" to "reaction"). However, a lack is found in the literature concerning how they integrate these tools in larger communicative processes. While Ramalingam et al. (2022), supporting such a claim, it is the case that there remain many studies that covertly measure success as isolated word production and not what can be produced spontaneously in writing or speaking. This suggests that while digital tools do a good job of drilling form and meaning, the third aspect of Nation's (2022) word knowledge framework -skill transfer- matches up with research suggestions relatively little.

The Effectiveness of Morphological Instruction

Research has consistently shown that morphological instruction can lead to significant improvements in both morphological awareness and vocabulary. For example, a study involving Chinese ESL learners found that explicit morphological instruction led to significant improvements in both receptive and productive morphological

awareness, which, in turn, enhanced vocabulary acquisition (Qiao et al., 2021). Another study involving Thai English as a Foreign Language (EFL) learners found that explicit instruction in morphological awareness led to significant improvements in both vocabulary breadth and depth (Matwangsaeng & Sukying, 2023). Goodwin et al. (2020) suggested that morphological awareness substantially increased individual variances in reading comprehension scores. This demonstrated a robust predictive relationship, contributing to the overall variance in reading comprehension, in conjunction with other morphological skills.

Crosson et al. (2025) conducted a quasi-experimental study of a 16-week intervention called EL RAVE involving 192 multilingual middle school students, focusing on academic vocabulary and Latin root analysis. Their study found significant improvements in root meaning, word meaning, and orthographic processing. Similarly, another study measured the effects of learning the meanings of academic words, morphological problem solving of unfamiliar words, and lexical access (Crosson et al., 2021). This study found that the effects of learning the meanings of academic words were similar across conditions. However, the "with roots" condition demonstrated significant treatment effects for morphological problem-solving of unfamiliar words and suggested positive treatment effects on lexical access. These findings partially support the hypothesis that instruction in bound Latin roots contributes to academic vocabulary learning in EL adolescents.

The effectiveness of morphological instruction can be attributed to several factors, including explicit focus on morphemes, provision of opportunities for practice and application, and the use of tasks that require learners to manipulate morphemes in meaningful ways (Goodwin et al., 2012). Morphological knowledge can serve as a compensatory mechanism for ELs, assisting them in overcoming obstacles associated with their limited second language (L2) vocabulary (Goodwin et al., 2020). Although EAL students typically master word reading rapidly, they have poor L2 vocabulary knowledge, which makes their morphological understanding more valuable. Morphology can help bridge the gap between fluent English speakers and English learners by addressing the gaps in vocabulary breadth and contextual sensitivity. Additionally, morphological instruction can be particularly beneficial for learners who may not have had extensive exposure to morphologically complex words in their first language (Menut et al., 2023).

The Role of Individual Differences in Morphological Awareness and Vocabulary Learning

Individual differences between learners can influence the development of morphological and vocabulary knowledge. These differences include factors such as language background, age, and prior language-learning experience (Goodwin et al., 2013). Understanding individual differences is crucial because they can affect how effectively learners acquire morphological awareness and vocabulary knowledge, ultimately shaping their language-learning journey.

Language Background and L1 Influence

The effectiveness of morphological instruction is not invariant; it is significantly influenced by learner variables, namely language background (L1) and age. The "L1 Influence" theme uncovers a mixed picture of transfer. Zhang et al. (2025) and Menut et al. (2023) demonstrate such transfer, but they show that they cannot be used as a gross over-representation of reality. Learners can apply morphological awareness 'transfer' from their L1 into English (which boosts vocabulary learning) but can also compensate for general or specific L1 patterns which may interfere in the formation of English words through negative transfer.

This gap is even more evident when contrasting learners from morphologically rich L1s (like Spanish or Chinese) to those from isolating languages. The research shows that whereas metalinguistic maturity may provide older learners with an advantage (Cheng et al., 2025), younger students need not be denied possible benefits provided the instruction is age-appropriate (Matwangsaeng & Sukying, 2023). An important limitation of existing studies is the absence of longitudinal evidence on how such individual differences interplay with types of instruction across time. As an example, do L1 Chinese speakers gain more from a visual Word Matrix than L1 Spanish speakers who in turn can use a cognate solution? These situational subtleties are often noted but little regulated in intervention research.

Age and Morphological Awareness

Age also influenced the development of morphological and vocabulary knowledge. Research has shown that older learners may have an advantage in developing morphological awareness because of their greater metalinguistic awareness and experience with the language (Cheng et al., 2025). However, younger learners may also benefit from morphological instruction, particularly if it is tailored to their language learning needs and abilities (Matwangsaeng & Sukying, 2023).

Prior Language Learning Experience

Learners' prior language-learning experiences can also influence their morphological awareness and vocabulary learning. Learners with more extensive experience in language learning may have developed greater metalinguistic awareness, which can facilitate their ability to recognize and manipulate morphemes in their L2 (Haomin & Bilü, 2017). In addition, learners who are more exposed to morphologically complex words in their L1 or other languages may have a greater awareness of morphological patterns, which can enhance their vocabulary learning (Wardana, 2023).

Implications for Learning

To develop students' morphological awareness, they can be encouraged to participate in morphological activities such as word analysis and synthesis. These activities include identifying morphemes in words, creating new words by adding or removing morphemes and using the morphemic knowledge to decipher unfamiliar terms (Matwangsaeng & Sukying, 2023; Zhang, 2022).

In addition, learners can receive huge benefits from working with corpora and online materials to explore meaning and use of words. These resources provide pupils with opportunity for meeting morphologically complex words in their contexts, arguably deepening their morphological awareness and enhancing their vocabulary knowledge (Zhang, 2022).

Finally, students should be encouraged to get involved in their own vocabulary learning process through setting goals for vocabulary acquisition, working with word-formed texts and searching for chances of using new words meaningfully (Aniuranti et al., 2022).

Further Research

Future research should investigate the long-term effects of morphological instruction on vocabulary retrieval and retention and explore how different instructional strategies can be adapted to diverse learner profiles in EAL contexts.

Moreover, the integration of technology with morphological instruction presents an exciting avenue for enhancing vocabulary acquisition among EAL learners. Digital tools and applications facilitate interactive learning experiences, allowing students to engage in word analysis and morphological tasks in dynamic environments. For example, gamified platforms can motivate learners to practice morphological skills by engaging in activities that adapt them to their proficiency levels. Research indicates that incorporating technology supports diverse learning styles and promotes collaboration among peers, fostering a community of learners who can share insights and strategies for vocabulary development (Ramalingam et al., 2022). As educators seek to implement these technological advancements, it is essential to ensure that they are tailored to the specific linguistic and cultural backgrounds of their students, thereby maximizing the effectiveness of morphological instruction in various EAL contexts.

Furthermore, the importance of teachers' professional development in the effective implementation of morphological instruction cannot be overstated. Educators equipped with a profound understanding of morphological concepts and instructional strategies are better positioned to foster students' morphological awareness and vocabulary growth (Zhang, 2021). For instance, training programs that focus on integrating morphological

analysis into existing curricula enhance teachers' instructional practices and have a positive impact on student vocabulary acquisition outcomes. Furthermore, collaborative approaches, in which teachers share insights and resources, can create a more cohesive learning environment that supports the diverse needs of EAL learners. As educators engage in continuous professional development, they can adapt their methodologies to incorporate emerging research findings, ensuring that their instructional practices remain relevant and effective in promoting vocabulary learning through morphological instruction.

Conclusion

This review demonstrates that morphological awareness is a critical, not a mere epiphenomenon, part of the process of vocabulary learning for EAL learners. The review of the current literature shows that explicit morphological instruction (delivered through matrix analysis, decomposition tasks, or digital intervention) acts as a compensatory force. This model lets students escape the rote memorization of vocabulary and into analysis that is generative of linguistic form and meaning, promoting both breadth of vocabulary knowledge as well as reading comprehension.

Nevertheless, there are still important gaps and unresolved tensions that require additional analysis despite such encouraging evidence. First, although there has been a good deal of study on the short-term effects of such strategies, very little long-term research on the retention of any morphological item had been reported. It is not currently known whether the students maintain a level of skill in breaking down unknown words over time after an intervention has ended. Second, because the literature is heavily weighted towards learner effects, there is relatively little attention paid to teacher preparedness. As Zhang (2021) points out, it is partly true that the effectiveness of teaching morphological knowledge depends on an educator's own knowledge of morphology; however, few studies explicitly examine the effects of teacher education programs on students' learning outcomes in this aspect.

Table 1: Key Findings on Morphological Awareness and Vocabulary Learning

Study Focus	*Key Findings*	*Citation*
Morphological Awareness and Vocabulary Knowledge	Morphological awareness is positively correlated with vocabulary knowledge in both monolingual and bilingual learners.	(Cheng et al., 2025)
Explicit Morphological Instruction	Explicit instruction in morphological awareness leads to significant improvements in both morphological awareness and vocabulary knowledge.	Matwangsaeng & Sukying, 2023)
The Role of L1 Influence	Learners' L1 can influence their morphological awareness and vocabulary learning in their L2, with both positive and negative effects.	(Menut et al., 2022)
Age and Morphological Awareness	Older learners may have an advantage in developing morphological awareness due to greater metalinguistic awareness.	(Cheng et al., 2025)
Prior Language Learning Experience	Learners with more language learning experience may have greater metalinguistic awareness, facilitating morphological awareness and vocabulary learning.	(Haomin & Bilü, 2017)

Finally, integrated digital tools and communicative skill is under-investigated. Although CAI has been found effective for drilling word forms, the extent to which these digital gains transfer to better performance in writing and speaking in authentic academic contexts remains a question for future research. Filling these gaps is critical as the field moves beyond simply demonstrating morphological salience to elucidating how best to leverage it for a wide range of EAL learners. Further research in these areas will be essential to the development of inclusive, empirically informed pedagogies that prepare EAL learners with the lexical resources they need for academic success in both the short- and long-term.

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