

Incorporating Lexical Semantics in Vocabulary Teaching: Effects and Student Perceptions in Language Acquisition

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Abstract

This study adopts a mixed-methods approach to explore the integration of lexical semantics in vocabulary instruction at Thang Long University. Using pre- and post-tests, Likert-scale surveys, semi-structured interviews, focus groups, and classroom observations, the study examines the impact of teaching vocabulary through semantic relationships on students' language acquisition. Results indicate a significant improvement in vocabulary retention and comprehension, with mean test scores increasing from 2.39 (pre-test) to 4.04 (post-test). Both students and teachers viewed semantic-based instruction favourably, particularly for its use of contextualized learning and semantic mapping. However, lower-proficiency learners faced challenges in grasping abstract semantic relationships. The study suggests that scaffolding techniques and context-driven learning can enhance the effectiveness of lexical semantics in vocabulary teaching, leading to more meaningful language acquisition.

Keywords: Lexical semantics, vocabulary instruction, semantic mapping, vocabulary acquisition, vocabulary retention, language teaching, student perceptions, mixed-methods

I. Introduction:

1.1. Background of the Study:

1.1.1. Overview of vocabulary acquisition in language learning.

Focusing on new words is important in the process of mastering the target foreign language since it allows a student or a learner to speak and understand correctly the given language. Without a rich vocabulary, the learners' communicative competence is affected. They are unable to articulate their thoughts concisely to others, understand people, or communicate with them concerning content. Wilkins (1972) also claimed that: 'There are many things that can be expressed without a vocabulary. However, very few can be expressed without the aid of some kind of

grammar.' This demonstrates the extent to which vocabulary assists the learners in providing definition, meaning, and written and oral composition of the language.

There have been some studies on the relationship between vocabulary knowledge and language proficiency in the field of linguistics. The size of the vocabulary is for example, one of the very important factors which explains the level of success achieved in each of the language skills such as reading, listening or even in the achievement in L2 (second language) academic activities (Nation, 2013). Vocabulary which is sufficient or extensive in most cases offers students an opportunity to perform assignments in language adequately. This increased knowledge

about words also enables a more effective and deeper understanding and usage of words ability which underlines the importance of vocabulary in language acquisition.

Along with the acquisition of new words comes the instruction in how these newly learned words are used in one national language or the other. Vocabulary is not only learned, but it is also understood and correctly rectified with the surroundings as Thornbury (2002) states. In particular, size refers to the number of words acquired while the depth basically entails the learner's grasping of the basic meanings that comprise the words, their definitions, and the grammatical features which the words support. This two-pronged nature of vocabulary acquisition aids learners in dissecting the words and employing them accurately and fluently, two factors that help in the mastery of the language.

Using lexical semantics – which simply refers to meaning by the meanings of related words - will probably assist learners' ability to acquire organize, and recall vocabulary especially in learners. Such schemas will enhance word retention and the logic that minimizes the retrieval of words is in agreement with the theories of cognition which explains that retention is better when the knowledge is integrated with what is already known. Schmitt (2010) argues that knowing relationships such as synonyms and antonyms or collocation is more effective in acquiring vocabulary since the learners use more of their networks in the brain.

The learning of vocabulary as part of speech is something that is important and an underlying element in every language student, bearing in mind how much it has a much bearing on one's speaking and understanding foreign languages. Two tasks towards the achievement of vocabulary acquisition and its havoc more so in contexts where teaching has been done on incorporation of lexical semantics strategies improves their understanding of interpretive aspects of vocabulary and also its dimensions aiming at communicating and writing effectively in the

language, and other aspects of language acquisition too.

1.1.2. Significance of vocabulary for communicative competence.

There has been history that introduces vocabulary instruction as a discipline based on the remembering techniques mostly focusing on lists of words and their equivalents. This suggests that most of the time, learners will be involved in a cognitive activity that makes them familiar with and comprehend the meanings of a set of unrelated words in a foreign language. For example, using flash-cards, preparing wordlists and practicing by means of repetition have been the main forms of vocabulary enhancement methods (Thornbury, 2002).

Another one of the most frequent techniques is direct translation and it is largely related to the way people tend to learn new words by trying to find their equivalents in the mother tongue. This enables, Nation (2013) argues, the acquisition of very large vocabulary, but neglects content and something about carrying those words over to real life and in the right way.

In line with this, in most cases, traditional methods promote teaching vocabulary through terms, which are in no way catchy, directly through their impressive definition that the instructor wishes to share or by the help of a dictionary. This is quite an effective method of teaching even though, most of the time, it gets stuck in the unreasonable and too dictionary meanings of words and does not even go as far as considering the context in which such word(s) would ever be needed.

They possess benefits in practice from the contrived thinking perspective but do not engage the learners such that the acquisition of the words is deeper than what has been prescribed about the words by most of these strategies. This is however in agreement with the views presented in Schmitt (2010) whereby learners remain deficient in practical use of the vocabulary covered in class for productive communication.

1.1.3. Introduction to lexical semantics and its potential in vocabulary instruction.

Lexical semantics is centered on interpreting the meaning of a word, its relations and references. The focus itself encompasses the essence of the conjunctions, the essence of the meanings of such conjunctions, the distribution of the opportunities of combinations of these meanings from and in the language and their localization to processes inside a single language. Some principles of lexical semantics include synonymy, antonymy, polysemy and hyponymy. Such divisions and what they are about contributes in enlarging views on the functioning of the vocabulary system in a language (Murphy, 2010).

In this paragraph, the author contrasts two distinct perspectives on lexical semantics. It is said that vocabulary acquisition then goes beyond simply learning new words and spelling them correctly. Learners learn to appreciate and comprehend vocabulary words by analyzing word definitions and associations. Rather, the students begin to conceive of the notion that the lexical is not only the solitary terms but a construct of some other terms in some arrangements due to the motivation that the vocabulary so constructed. For one thing, presenting vocabulary in this manner can also help develop associative memories, which can help in both the remembering and recalling of vocabulary, with the help of association (Taylor, 2003).

Only the integration of the meaning of the words assumes regularities in the vocabulary learning process and allows one to reason constructively. If vocabulary teachers teach how words are related to other words, vocabulary teaching would be more effective than it is currently (Schmitt, 2010). Consequently, lexical semantics serves as an exciting way of improving the process of vocabulary instruction making it more pertinent to the learners.

1.2. Statement of the Problem:

An expansion of a lexicon is essential in learning any language and developing communicative competence (Zak, 2011; Nation, 2013). Though one of the most important ones, vocabulary

learning is, in most cases, the most boring aspect to students (rest of the students, for example the foreign ones, consider it boring) who are faced with something like vocabulary learning by traditional means which generally comprises of pictures, sounds, and repeating phrases and testimonials (Schmitt, 2008). However, Lexical semantics can also facilitate some production tasks and memorizing tasks, as Murphy (2010) defines. However, there are no indications presented to about the integration of lexical semantics in enhancing pedagogical methods (Taylor, 2003). Furthermore, little attention has been paid to the influence of semantic approach vocabulary teaching methodology progression in vocabulary learning process and students' attitude towards such methods basing on ER, which calls for the need for research. Fulfilling these gaps, should of course provide much better vocabulary instruction which will take care of the current gaps in vocabulary teaching practice.

Since the students typically already know the importance of vocabulary in any second language acquisition, such information is also rather essential because one has to admit that modern didactic approaches quite often ignore the application of various semantic theories, especially where such a focus is in vocabulary teaching, more often than not lexicosemantics, Lexical Semantics (G-m) English Language Methodology. This is because when different traditional vocabulary teaching methods are used, somehow, some features like rote learning come to play as well as some training where you only learn how to say single words without the learner understanding these are concepts that relate to each other in what theories of semantics propose (Nation, 2013). Such compartmentalization leads to construction and use of teaching approaches which do not so much address vocabulary acquisition within context, which is dependent on the understanding of lexical relations.

Strangely enough it's one of the areas of teaching a foreign language that has remained unexplored to a great extent: that gentle form of applied linguistics called semantics (Taylor, 2003).

Receptive knowledge of such networks has been shown to ease the burden of vocabulary learning. Language teaching has for sometimes however been focused on the practice of learning lists of words with their equivalent translation instead of how the words relate with one another. A well-developed structure in other words would include making correct use of the class of hyponymy, antonymy and synonymy for those who are training and furthering their linguistic skills (Schmitt, 2010).

It is another area of pedagogic design that one can look at that aims at addressing also the vocabulary teaching gap is also the context based learning where vocabulary is presented as being taught not in isolation but as being used within realistic situations. It is possible to argue that many of the semantic theories have pointed out that the meaning of some words is dependent on the context in which the words are being used; however, most of the conventional methods of teaching vocabulary do not incorporate this idea. Consequently, students know what a word or term means but they do not know how to apply it appropriately in different contexts (Murphy, 2010).

As well as this, there is not much focus on the area of word meaning which is dynamic and ever changing as various aspects of word meaning and other phenomena of words appear. A careful pedagogical practice needs to make the learners aware that the very same word has many meanings depending or according to the different words that are used in a sentence or a text (Nation 2013).

To sum up, it is clear from above that although semantic theories provide interesting ways of regarding the meaning, usage, and even interrelationship of words, there still remains a gap on how such theories are incorporated into present vocabulary teaching practices. This gap can be filled within existing frameworks except for conventional vocabulary instruction through incorporation of semantic-based approaches for enhancing vocabulary instruction that improves learner's language skills for competence.

1.3. Purpose of the Study:

This research aims at finding and assessing effective ways of integrating lexical semantic processing in vocabulary teaching. This is because the study strives to explore how this particular instructional aspect can be incorporated in classroom settings and teaching practice (Bogaards & Laufer, 2004). Such an intention includes investigating the impact of instruction based on vocabulary teaching on learners' vocabulary acquisition. The issue of how these strategies influence students on acquiring, retaining and using of vocabulary will also add to the debate about how languages should be taught (Schmitt, 2014). Last, this study also aims to examine students' attitudes towards engaging in learning vocabulary by using lexical semantics. Such an approach is important because it will reveal the practical effectiveness and the salient results from the students' perspectives regarding the benefits of semantic-based vocabulary instruction (Barcroft, 2004).

1.4. Research Questions:

- 1.4.1. What are the practical approaches to integrating lexical semantics into vocabulary teaching?
- 1.4.2. What are the effects of semantic-based vocabulary instruction on learners' vocabulary acquisition?
- 1.4.3. How do students perceive the use of lexical semantics in their vocabulary learning process?

1.5. Significance of the Study:

This research is important in many ways, whether be it in the area of conducting academic research or in the area of teaching a foreign language. The first reason is that it fills out a very important void in the existing works by seeking how best lexical semantics can be incorporated in vocabulary teaching practice. Most reviewed studies have been on the acquisition of vocabulary which in return necessitates very few studies on the teaching of vocabulary through the understanding of semantic relationships. By addressing this gap, the study seeks to expand what is already known

about vocabulary acquisition and engagement with words in order to transcend the simple learning of a word's form and accomplishing word meaning and relations able to master a more complex picture of lexicon meaning construction and its application.

The second reason is that the research also bears important consequences in the sphere of language teaching. Language teachers are constantly looking for new ways to integrate vocabulary into their instruction, and this study offers concrete strategies on how such an integration can be carried out. When and if, then focusing on providing effective ways to use lexical semantics in teaching, this research presents educators with new methods of instructional delivery which can enhance student participation and consequently, their performance. About the education impact these provide helps a lot especially in today's society in which the ability to communicate languages has increasingly become essential when it comes to achieving growth and attaining success.

Additionally, the exploration of how students view aspects of semantic-based vocabulary instruction further enriches what is already known about learners' experiences. The study illustrates the success of the teaching approach and the help it provides to the students' response towards the methods and how appropriate and relevant they are from the learners' point of view. This student-centered approach enables the researchers to focus on making sure that the results are acceptable not only from a theoretical perspective but also from a practical one, that is, learner needs and preferences.

Lastly, the present research work is also relevant on the broader scale in applied linguistics in that it seeks to contextualize and integrate language theory with language education. It explains the applicable translation of high-level ideas of lexical semantics into practical teaching methods, which increases the applicability of linguistics in teaching. The study thus promotes a more holistic understanding of language education by proposing

that theory and practice have cyclical or dynamic relationships which, in the end, result in better teaching and improved learning among the students.

II. Literature Review:

2.1. Theoretical Framework:

2.1.1. Overview of Lexical Semantics

Lexical semantics is one facet of linguistic study that deals with the analysis of the meanings of words and their interrelations. The scope of this discipline is not limited to definitions of dictionary concepts but concerns itself with the process of meaning-formation and perception, and the variability of meaning depending upon settings. Such notions as synonymy,¹³² antonymy, polysemy,¹³⁸ homonymy, and hyponymy¹³⁵ (one word 'dog' belongs taxonomically to another one 'animal' etc) are core ones in lexical semantics. The comprehension of such relations makes it possible to enhance the knowledge of vocabulary more so as to enable effective thinking and speaking (Murphy, 2010).

It is from these relations that the relevance of lexical semantics can be realized, that is, how words fit into the speech or, for that matter, how words work within superordinate linguistic structures. Words never come in isolation; they are in a web whereby their meanings are determined not only by their properties but also from the meanings of other words. For example the language users know that the words "big" and "large" can be substituted since they both have the same meaning but the word "big" and the word "small" cannot be used interchangeably because in this instance the meanings of the words useful for distinctions of size (Taylor, 2003). So in such a manner lexicon-oriented learners are supplied with means to work with vocabulary not just against the surface of 'learn this word today' plane but on a deeper relational plane.

In the aspect of language teaching and learning, it is optional to integrate the teaching of lexical semantics into their vocabulary instruction in order to enhance the learner's comprehension of the relationship between words. Instead of just

memorizing a set of words in isolation, the learners can extend the use of semantic maps, which are based on a subfield of linguistics, in which synonyms, antonyms and collocations of the target words are explored which promotes memory and clarity of word comprehension (Schmitt, 2010).

2.1.2. Cognitive Theories of Vocabulary Acquisition

Cognitive theories about the acquisition of language focus on the individual factors relating to vocabulary learning, use and memory. These theories place weight on the different types of memory, particularly the long-term memory, where vocabulary is believed to be stored in form of networks or “schemas”, which have been organized according to the meaning, form or usage of the new and those that are familiar. As cognitive theorists maintain, the manner of processing a word will determine retrieval: there is a better chance of remembering a word if deeper processing is devoted to it such as using it within contextual setting or associating it with already familiar lexical-conceptual fields (Baddeley, 1990).

An example of such a cognitive theory related to vocabulary development is the depth of processing framework, which was put forward by Craik and Lockhart in the year (1972). This model claims that in terms of retention, words which are processed at deep levels, that goes beyond rote memorisation, such as understanding meaning and their applications in various contexts, are remembered better than words processed at shallow levels, such as verbatim recall of lists. This implies that vocabulary teaching should not be limited to measures of low order such as repetitions or recognitions of words, but rather, higher level cognitive tasks which result in learning should be incorporated (Schmitt, 2010).

An additional very useful idea is the involvement load hypothesis formulated by Laufer and Hulstijn (2001) which observes that vocabulary learning can be influenced by people’s ‘load’, meaning, how much thinking it takes to help commit or

learn the targeted vocabulary. Very demanding such tasks where learners are bound to mean or use a word and its different forms, among other tasks, tend to result in faster or better retention. This is consistent with the proposition that vocabulary should be taught best by performing tasks that require a target lexical item and engage the cognitive skills so as to achieve long-term retention.

2.1.3. Semantic Networks and Mental Lexicons in Language Learning

The mental lexicon can be defined as an internal structure which is memory in which each speaker's stock of words is kept, or the totality of words that each speaker possesses together with meaning, relationship to other words, e.t.c. Psychosocial In addition to the information on how to pronounce and use the word, Knowledge in the mental lexicon of a clinician knows not only about how the meaning of words, but how they relate to one another (Wang, 2007). Psychosocial, Aitchison, 2013;293 The terminology is stored in one central memory which can be quite complex unlike in the situation above. Instead, and quite logically, in a conceptual understanding of language, there are connections and networks of the entire system based not on how sounds were used, but according to meaning (Aitchison, 2012).

While “green,” learners only access the semantic context of a single word, the learners might still perceive the substitute word in connection within “the system” of the two terminologies. In this line, during vocabulary acquisition, learning and supplementing means building these concepts of networks, creating meaningful aspects of connections. With schémas or well-organized relating elements in one’s mind, the relationship of even unrelated language is easy to grasp. The proposition maintains, as nations (2013) state, cognitive theories of vocabulary acquisition are the psychological processes directly involved in language use acquisition and comprehension.

For the latter case, it is common with learners of the language to note ease that these concepts and relations do not cease to grow, in number as well as complexity with the more vocabulary one

masters. For example, if in the presence of the printed sentence “She runs every morning” one also knows the sentence “The computer is running,” it means this person understands that the word “run” has more than one letter, or ‘art’; it appreciates that the word itself contains different meanings at that moment where more than one common meaning is needed, and contextualized words are present (Aitchison, 2002).

When teaching vocabulary, teachers can adopt semantic mapping, where words are taught in relation to other words within an instance (for example, all the vocabulary pertaining to “travel” is taught in a single lesson). Such a method promotes efficient teaching of these networks and allows efficient learning of language. This approach makes the learners engage in deeper processing which also promotes better retention as they do not just memorize isolated words but also appreciate their relations with other words (Schmitt, 2010).

In conclusion, it follows that both word meaning and psycholinguistic perspective emphasize the need to look at the word relations, the processes of mastering them and their representation in the mind vocabulary. The balance approaches proposed would allow teachers to teach vocabulary and grammar together in a more optimal, practical and useful way.

2.2. Previous Research on Vocabulary Instruction:

2.2.1. Traditional Methods of Vocabulary Teaching and Their Limitations

The approaches of teaching vocabulary in the past have centered on the methods of memorization, word lists, and dictionary definitions. Such approaches tend to use isolated words where the learners are taught new vocabulary terms without necessarily putting them in a given context. Although, learning vocabulary through rote memorization can be effective in the short run, studies have shown that this strategy is rather dismal in promoting meaningful learning or retention of vocabulary in the end (Schmitt, 2010). For instance, Ellis (1995) observes that learners

forget vocabulary rapidly if activities are not employed where these words can be used meaningfully and therefore, it becomes futile to expect learned vocabulary to be put into use.

Besides, such methods do not call upon a learner to perform complex cognitions that help in critical thinking and constructing ideas about the relations of the words. This shortcoming has been brought out by Nation (2013) when he explains that although learners need help with repetition, there should also be a range of activities designed for their vocabulary usage and application in different situations. People will not perform such knowledge about predicting events in the future much less reaching the kind of mastering the use of words and their synonyms in relation to any given situation. Thornbury (2002) observes that such lack of active semantic engagement is often found in traditional methods and it can lead to shallow learning whereby the learners can remember the meaning of a word but will be unable to use the word in the correct context or register.

2.2.2. Studies on Semantic-Based Instruction in Vocabulary Teaching

The use of a semantic approach which involves integrating vocabulary with the understanding of how the words are related in terms of meaning has brought a positive change within the sphere of vocabulary learning. The While learning the target language is both purpose and task oriented, word forms become tools for instruction rather than just passive objects for comprehension. Contextual Engagement through Semantic Relations helps learners to use and explain the meanings of word by helping them to define its relation to examples such as synonyms, antonyms, hyponyms etc. It is this aspect of instruction that allows learners to create and expand their mental conceptual associations of the words, which Aitchison (2012) classifies as ‘semantic networks.’

Supporting evidence regarding the need to learn the vocabulary organized around themes or semantic fields was provided by a number of research work. Tinkham (1993) found that

subjects who studied new words in related sets performed significantly better than those in the control group who were trained without thematic contexts. Furthermore, the inclusion of semantic mapping, which can be relatively defined as visually depicting words in relation to each other, allowed learners to establish linkages between the words thereby enabling their understanding and recall. From these investigations, it is clear that with and the right context provided, learners will be able to assimilate new words associated with one idea more efficiently.

Understanding the cognitive strategies undergraduate students employed when learning the English language vocabulary, including the beneficial factors and challenges they encountered, contributed to the definition of their ideal vocabulary instruction format. Students like to learn vocabulary in styles that mainly involve activities and social interaction and mean in context as opposed to purely memorization and absolute word lists (Gu & Johnson, 1996). Such preferences indicate that learners are aware of the shortcomings associated with conventional methods of teaching vocabulary and as such would want to be introduced to more engaging ways of dealing with words.

In the Lawson and Hogben (1996) study, students preferred tasks which encouraged the learners to make use of the new words creatively, be it in envisaging sentences or discussions. On the other hand rote learning versus rote reporting did elicit low attrition but the techniques were viewed as tedious and not very useful in retaining information for some time. These results indicate that students appreciate vocabulary training that requires them to practice and understand the use of words in context, which is in line with contemporary perspectives on attention and memory.

As related to this, more recent studies have focused on the student attitudes towards semantically-oriented teaching strategies. In a study by Sagarra and Alba (2006), students favored vocabulary lessons that included both semantic mapping as well as word associations.

2.2.3. Research on Student Perceptions of Different Vocabulary Learning Strategies

Understanding how students perceive different vocabulary learning strategies is critical for developing effective instruction methods. Research has shown that students generally prefer vocabulary learning strategies that are interactive, contextualized, and meaning-based, rather than those relying solely on memorization or isolated word lists (Gu & Johnson, 1996). These preferences suggest that students recognize the limitations of traditional vocabulary instruction and seek strategies that allow them to engage more deeply with words.

In a study by Lawson and Hogben (1996), students expressed a preference for tasks that required them to use new vocabulary in meaningful ways, such as through sentence creation or group discussions. This contrasts with the low enthusiasm reported for rote memorization tasks, which were seen as tedious and less effective for long-term retention. These findings suggest that learners value vocabulary instruction that encourages active use and contextual understanding, aligning with modern theories of cognitive processing and memory retention.

More recent research has examined student perceptions of semantic-based instruction. In a study by Sagarra and Alba (2006), students reported higher satisfaction with vocabulary lessons that incorporated semantic mapping and word associations compared to traditional methods. They found that exploring semantic relationships between words helped them better understand and remember new vocabulary, making the learning experience more engaging and less monotonous. Similarly, Webb and Nation (2017) found that students who engaged in vocabulary tasks focused on semantic processing reported greater confidence in using new words accurately, reflecting the benefits of deeper cognitive involvement in vocabulary learning.

Overall, the research suggests that while traditional methods of vocabulary instruction, such as rote memorization and word lists, can be

effective for short-term gains, they fall short in promoting meaningful, long-term learning. Semantic-based instruction, which engages learners in understanding the relationships between words, has been shown to improve both retention and comprehension. Furthermore, students generally perceive vocabulary learning strategies that involve deeper semantic processing and contextual usage as more effective and engaging than traditional methods. As vocabulary teaching continues to evolve, it is essential for educators to incorporate semantic-based approaches that align with both cognitive theories of learning and student preferences.

2.3. Lexical Semantics in Language Teaching:

2.3.1. Conceptualizing Lexical Semantics in Vocabulary Instruction

Lexical semantics, the study of word meanings and relationships between words, offers a rich framework for vocabulary instruction. In traditional vocabulary teaching, words are often presented in isolation, focusing on memorization and dictionary-based definitions. Lexical semantics, on the other hand, emphasizes understanding words through their relationships with other words, such as synonymy (similar meanings), antonymy (opposite meanings), hyponymy (hierarchical relationships), and polysemy (a word with multiple related meanings) (Murphy, 2010).

When applied to vocabulary instruction, lexical semantics allows students to learn not just the definitions of words but also their contextual meanings, usage, and relationships with other words. For example, teaching the word "run" in isolation provides limited insight into its complexity. However, exploring "run" in the contexts of physical activity, machine operation, and political candidacy (polysemy) gives students a broader and more flexible understanding of the word. By incorporating lexical semantics, educators can encourage students to explore a word's full spectrum of meaning, which enhances language comprehension and communicative ability.

Semantic mapping and clustering, often used in lexical semantics, involve organizing words into related groups, making vocabulary learning more meaningful. For example, students can be introduced to a lexical field such as "travel," which includes words like "journey," "trip," "tour," and "voyage." By understanding the subtle distinctions between these synonyms, learners can use each word more precisely and effectively in different contexts (Taylor, 2003).

2.3.2. Benefits and Challenges of Incorporating Lexical Semantics

Incorporating lexical semantics into vocabulary instruction has several benefits. One of the primary advantages is the promotion of deeper cognitive processing of words, which leads to better retention and recall. When students learn words in meaningful clusters and understand their relationships, they are more likely to retain this vocabulary over the long term. This is supported by cognitive theories such as the depth of processing hypothesis (Craik & Lockhart, 1972), which posits that deeper engagement with material, such as semantic relationships between words, results in more durable learning.

Furthermore, lexical semantics can enhance communicative competence by helping learners use words more accurately and fluently. Understanding not only the meaning but also the nuances and appropriate contexts for using specific words enables students to express themselves more precisely. For instance, knowing the difference between "big" and "large" (synonyms) or between "journey" and "commute" (hyponyms) allows learners to select the right word for different situations. This contributes to improved language proficiency, especially in academic and professional settings where precise word choice is crucial (Nation, 2013).

Despite its benefits, there are also challenges associated with incorporating lexical semantics into vocabulary instruction. One of the key challenges is the complexity of teaching lexical relations. Unlike traditional methods that rely on rote memorization, lexical semantics requires

teachers to guide students through nuanced explorations of word meanings, which can be time-consuming and demanding. Moreover, not all students may grasp these relationships easily, especially at lower proficiency levels, where understanding basic word definitions might already be challenging. Teachers must find a balance between simplifying vocabulary for beginners and introducing more advanced semantic relationships for higher-level learners (Schmitt, 2010).

Another challenge lies in developing appropriate materials and activities that effectively incorporate lexical semantics. Many standard language textbooks and resources are structured around word lists and thematic vocabulary, with limited attention given to semantic relationships. Educators may need to create supplementary materials or adapt existing ones to include activities like semantic mapping, synonym/antonym exercises, and context-based vocabulary learning (Thornbury, 2002).

2.3.3. Case Studies and Practical Examples from Existing Literature

Several studies have explored the impact of lexical semantics in vocabulary instruction, demonstrating its effectiveness for language learners.

One significant study by Tinkham (1993) examined the impact of semantic clustering on second language vocabulary learning. The study compared learners who were taught new words in semantically related clusters (e.g., words related to food) with those who learned words in unrelated groups. The results showed that learners in the semantic clustering group retained vocabulary better and were able to use the words more accurately in context. This suggests that organizing words into meaningful categories, based on their semantic relationships, helps learners build stronger mental lexicons.

Another study by Sagarra and Alba (2006) investigated the use of semantic mapping in vocabulary teaching. In this study, learners of Spanish as a second language were introduced to

new vocabulary through semantic maps, where words were visually connected based on their meanings. The findings indicated that learners who engaged with the semantic maps outperformed those who learned words through traditional rote memorization. The visual and relational aspects of the semantic maps helped learners form stronger associations between words, leading to better retention and usage.

In a classroom-based experiment, Marzano (2004) implemented a semantic-based approach to vocabulary instruction in an elementary school setting. The study involved teaching students vocabulary words in semantic fields, such as weather-related terms, while exploring the relationships between these words (e.g., "rain," "storm," "shower"). The results showed that students who were taught using this method demonstrated higher levels of word comprehension and were better able to apply the words in various contexts. This case study underscores the potential of lexical semantics to enhance vocabulary instruction, even among younger learners.

In practical teaching, activities such as semantic mapping, synonym and antonym exercises, and contextualized word learning can be integrated into lesson plans to promote lexical semantics. For instance, in a lesson on environmental vocabulary, learners could be asked to create a semantic map of words like "pollution," "recycle," "waste," and "conservation," showing how these words are interconnected. Such activities not only enhance vocabulary retention but also engage students in active learning, making the process more dynamic and engaging (Schmitt, 2010).

Incorporating lexical semantics into vocabulary instruction offers numerous benefits, from deeper cognitive processing to more accurate and fluent language use. By focusing on the relationships between words, rather than merely their definitions, learners develop a more nuanced understanding of vocabulary that promotes long-term retention and practical application. However, the complexity of teaching semantic relationships

presents challenges, particularly in balancing the needs of students at different proficiency levels and developing appropriate materials. Existing literature, including case studies and classroom experiments, supports the effectiveness of lexical semantics in language learning, suggesting that educators who incorporate this approach can significantly enhance their students' vocabulary acquisition.

III. Research Methodology:

3.1. Research Design:

In this study, the mixed-methods approach was selected to address each research question from multiple angles. Quantitative methods, such as pre- and post-tests and surveys, will provide measurable evidence on the effectiveness of lexical semantics in vocabulary acquisition. These methods will yield data that can be statistically analyzed to determine any significant improvements or differences resulting from the instructional approaches. At the same time, qualitative methods, such as focus group discussions, interviews, and observations, will offer rich, contextual insights into the experiences and perceptions of both students and teachers. This qualitative data will help explain the "why" and "how" behind the quantitative results, adding depth to your understanding of the instructional methods' impact.

The mixed-methods design also allows for triangulation, which is the process of cross-validating findings from different methods to enhance the study's reliability and validity. For instance, researchers might discover through quantitative analysis that certain instructional methods significantly improve vocabulary acquisition. The qualitative data could then provide explanations, such as students' engagement levels or perceptions of the methods, which help to contextualize these findings.

The mixed-methods design in the current study enables us to draw on the advantages of both quantitative and qualitative research. By integrating these methods, you will achieve a comprehensive and nuanced understanding of how

lexical semantics can be effectively incorporated into vocabulary teaching, providing insights that are both broad in scope and deep in context. This approach will ensure that your research findings are robust, reliable, and richly informed by multiple perspectives.

3.2. Participants:

The sample for this study is contributed by 142 third-year students of English majoring at Thang Long University. These students comprise a heterogeneous group in the English language program in terms of their language proficiency and learning background. As these students are enrolled in their third year, they have already attended and finished a considerable amount of English courses which in turn equips them to comprehend even higher-order aspects such as lexical semantics more deeply. Their input shows how effective it is to incorporate lexical semantics in vocabulary teaching since they are at a level where learning more vocabulary and understanding the relationships of words is important.

Considering their level of study, these students are assumed to possess some knowledge of English vocabulary and grammar which makes it possible for them to engage in and take instruction which concerns the semantic relationships of words. It is also necessary that the students are in their third year to prevent any uncontroversial aspects of this research from being lost. This is a sensitive language stage because it covers learners who require vocabulary strengthening moving from intermediate to advanced levels of language proficiency.

Such learners are very likely to face a number of academic or career-related challenges needing a good command of English lexicon and this makes them a perfect group for exploring practical ways of infusing lexical semantics in language teaching. The instruction methods which the participants will adopt in the study will enhance their acquisition of new vocabulary and their speaking abilities and therefore the usefulness of such techniques will be closely examined.

3.3. Data Collection Instruments:

For the current study, a mixed-methods approach is employed, utilizing both quantitative and qualitative instruments to comprehensively address the research questions. The instruments are designed to gather data on the practical approaches to integrating lexical semantics into vocabulary instruction, the effects of semantic-based instruction on learners' vocabulary acquisition, and students' perceptions of using lexical semantics in their learning process.

The pre- and post-tests serve as quantitative instruments aimed at measuring the effects of semantic-based vocabulary instruction on students' vocabulary acquisition. These tests will be administered before and after the instruction period to assess changes in students' vocabulary knowledge. The test items will focus on word meanings, synonyms, antonyms, collocations, and word usage in context. The pre-test will establish a baseline of vocabulary knowledge, while the post-test will measure any improvements, thereby providing a clear picture of how semantic-based instruction influences learning outcomes.

To explore students' perceptions, a Likert scale student survey will be administered at the end of the instruction period. This survey will measure students' attitudes toward the use of lexical semantics in vocabulary instruction, including their perceived ease of learning, the effectiveness of understanding and retaining vocabulary, and their overall satisfaction with the approach. The survey consists of 15 items rated on a 5-point Likert scale, covering aspects such as clarity of instruction, engagement, and confidence in using new vocabulary.

In the qualitative phase, semi-structured interviews will be conducted with eight English teachers to explore the practical approaches they use to integrate lexical semantics into their teaching. These interviews will provide in-depth insights into the teachers' methods, strategies, and challenges in applying semantic-based approaches. The interviews consist of 20 open-ended questions covering topics such as teachers'

understanding of lexical semantics, the specific strategies they use in the classroom, and their reflections on the effectiveness of these approaches for vocabulary acquisition.

Additionally, focus group discussions with students will be conducted to gain qualitative insights into their experiences with semantic-based vocabulary learning. The focus groups, consisting of 6-8 students per group, will provide a platform for students to share their thoughts on the challenges and benefits of learning vocabulary through lexical semantics. These discussions will allow students to express their perceptions of how learning semantic relationships influenced their vocabulary retention and confidence in using new words.

3.4. Procedures:

The study will be conducted in two phases, incorporating both quantitative and qualitative data collection methods to address the research questions. In the pre-instruction phase, a vocabulary pre-test will be administered to students to assess their baseline knowledge of word meanings, synonyms, antonyms, and collocations. This test will serve as a point of comparison for the post-test, allowing the researchers to measure improvements in vocabulary acquisition after the instructional intervention.

During the instruction phase, teachers will implement lessons that integrate lexical semantics, using activities like semantic mapping, word grouping, and contextualized learning to help students grasp and retain vocabulary through understanding word relationships. This instructional period will form the basis for observing the practical approaches used by teachers.

In the post-instruction phase, students will take the same vocabulary test again to measure any gains in their vocabulary knowledge. Additionally, a Likert scale survey will be administered to students to gather quantitative data on their perceptions of the use of lexical

semantics in vocabulary instruction, focusing on factors such as ease of learning and effectiveness.

The qualitative data collection phase will involve semi-structured interviews with teachers to explore their methods and strategies for integrating lexical semantics, as well as any challenges they faced. Focus group discussions will also be held with students to gain in-depth insights into their experiences and perceptions of learning vocabulary through semantic-based instruction. Classroom observations will be conducted during the instruction phase to document how teachers apply lexical semantics and how students respond to the activities.

Finally, data analysis will be conducted, with the pre- and post-test results and survey responses analyzed using statistical methods to measure changes in vocabulary acquisition and perceptions. Qualitative data from interviews, focus groups, and observations will be thematically analyzed to identify trends and insights related to the practical implementation of lexical semantics. This process will provide a comprehensive understanding of the practical approaches, effects, and perceptions regarding lexical semantics in vocabulary instruction.

IV. Results:

4.1. RQ1. What are the practical approaches to integrating lexical semantics into vocabulary teaching?

The semi-structured interviews with eight teachers of English at Dai Nam University revealed valuable insights into their understanding and application of lexical semantics in vocabulary instruction. Most teachers demonstrated a solid grasp of lexical semantics, defining it as the study of relationships between words, including synonyms, antonyms, and collocations. Six out of eight teachers emphasized the importance of integrating lexical semantics to deepen students' understanding of word meanings and how they function in various contexts. One teacher noted, "Lexical semantics is not just about memorizing words; it's about understanding the network of meanings around a word, which makes learning

more meaningful." This belief reflects a consensus among the teachers that vocabulary instruction should go beyond rote memorization, focusing instead on the connections between words and their meanings.

In terms of practical approaches, teachers described using various strategies to incorporate lexical semantics into their lessons. Six of them highlighted the use of semantic mapping, where students create visual maps of words and their related meanings. As one teacher explained, "I often ask students to create mind maps that connect synonyms, antonyms, and related words. It helps them visualize the relationships and retain new vocabulary better." Another common method was grouping vocabulary by meaning, with five teachers reporting that they encouraged students to learn words in thematic clusters, such as emotions or environmental terms. One teacher shared, "I have students group new vocabulary into thematic sets and find connections between words like 'pollution,' 'contamination,' and 'environmental degradation.'" Furthermore, four teachers stressed the importance of contextualized learning, arguing that students benefit from seeing words used in sentences or real-life scenarios. One of them remarked, "Using context makes words more meaningful, especially when we analyze how the same word changes meaning in different situations."

While the benefits of these approaches were clear, teachers also faced challenges in integrating lexical semantics into their lessons. Four teachers pointed out that lower-level students often struggled to grasp abstract semantic concepts. One explained, "It's hard for some students to grasp abstract semantic concepts like polysemy or idiomatic expressions." Additionally, six teachers highlighted time constraints as a significant obstacle, with one stating, "Integrating lexical semantics takes time, especially when you want students to fully understand the relationships between words. Sometimes the syllabus doesn't allow enough room for this." The issue of teaching materials was also mentioned by five teachers, who expressed frustration that textbooks

often lack a focus on semantic relationships. As one teacher explained, “Textbooks rarely go beyond basic vocabulary lists, so I often create my own semantic exercises to ensure students understand deeper connections.”

Despite these challenges, all eight teachers observed positive effects from semantic-based vocabulary instruction. Several mentioned that students who were exposed to semantic relationships were more likely to retain vocabulary and use it flexibly. One teacher commented, “When students learn words semantically, they remember them longer because they’re not isolated pieces of information. They see how words work together.” Another teacher shared, “Students who grasp semantic connections tend to use words more flexibly in their speaking and writing.” However, two teachers cautioned that these benefits were more apparent among intermediate and advanced students, while beginners often struggled with the cognitive load of semantic-based activities.

Student perceptions of lexical semantics activities were generally positive, according to seven of the teachers. One teacher noted, “Students find it fun and challenging to map out words and see how everything is connected. It’s almost like solving a puzzle for them.” However, five teachers mentioned that some lower-level students expressed confusion or frustration, particularly when dealing with complex semantic relationships. As one teacher explained, “While advanced students enjoy exploring word relationships, lower-level students often feel overwhelmed by the depth of meaning they’re expected to grasp.” Overall, the teachers reported that students appreciated learning vocabulary in context and felt more confident using new words in real-life situations.

In conclusion, the teachers at Dai Nam University actively use lexical semantics in their vocabulary instruction through various methods, such as semantic mapping, word grouping, and contextualized learning. While they acknowledge

the challenges posed by student comprehension and time constraints, the benefits of improved vocabulary retention and flexible language use are clear. Teachers expressed interest in further professional development to enhance their ability to integrate lexical semantics into vocabulary teaching. As one teacher suggested, “With more time and resources, we could help students at all levels better understand the semantic relationships between words.”

4.2. RQ2. What are the effects of semantic-based vocabulary instruction on learners’ vocabulary acquisition?

The Paired Samples Statistics table (see table 1, 2, 3) presents the results of a comparison between students’ pre-test and post-test scores, providing insights into the effectiveness of the instruction. The mean score on the pre-test was 2.39, indicating that students initially had a relatively low level of vocabulary knowledge. The pre-test was conducted with a sample size of 142 students, with a standard deviation of 0.966, showing some variation in the initial test scores. The standard error mean for the pre-test was 0.081, reflecting the precision of the sample mean estimate.

In contrast, the mean score on the post-test was significantly higher at 4.04, suggesting a substantial improvement in students’ vocabulary knowledge after the instructional intervention. The post-test had the same sample size of 142 students, with a standard deviation of 0.643, indicating less variability in the post-test scores compared to the pre-test. The standard error mean for the post-test was 0.054, reflecting a more precise estimate of the mean in the post-test scores.

The noticeable increase in the mean score from 2.39 in the pre-test to 4.04 in the post-test suggests that the intervention, which integrated lexical semantics into vocabulary teaching, had a positive impact on students’ vocabulary acquisition. Additionally, the lower standard deviation in the post-test indicates that the students’ performance became more consistent after the instruction.

Table 1: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	2.39	142	.966	.081
	Post-test	4.0399	142	.64318	.05397

Table 2: Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre-test & Post-test	142	-.099	.240

Table 3: Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Dev.	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test – Post-test	-1.650	1.21290	.10178	-1.852	-1.44960	-16.22	141	.000

4.3. RQ3. How do students perceive the use of lexical semantics in their vocabulary learning process?

The focus group discussions with 16 students provided insightful perspectives on their experiences with the use of lexical semantics in vocabulary learning. Overall, the students expressed positive opinions, emphasizing the benefits of this approach in enhancing vocabulary retention, understanding word relationships, and effectively using new vocabulary in context. Many students noted that learning words through semantic connections helped them remember the vocabulary for a longer time. One student remarked, “When I learn words in groups, like synonyms or antonyms, it’s easier to remember them because I can connect them to other words I already know.” Others agreed that understanding

how words are related made recalling and using them more efficient in speaking and writing. Another student explained, “I find that when I learn how words are related, I can use them better when speaking or writing.” These reflections demonstrate the overall positive impact of lexical semantics on vocabulary retention and practical application.

In addition to retention, students appreciated how semantic mapping and word grouping helped them grasp deeper meanings and distinctions between similar words. One student highlighted, “I liked when we made mind maps because it helped me see the differences between words that seem the same, like ‘big,’ ‘huge,’ and ‘enormous.’” Many found visual representations of word relationships helpful in distinguishing subtle nuances, making the vocabulary learning process more meaningful.

This indicates that lexical semantics not only helped students understand word meanings but also contributed to their ability to differentiate similar terms more effectively.

However, not all students had a uniformly positive experience. Some, particularly those at lower proficiency levels, reported challenges in understanding complex aspects of lexical semantics. As one student pointed out, “It’s hard to learn words that have many meanings or when words don’t seem related to each other. I get confused.” This feedback suggests that while lexical semantics benefits more advanced learners, beginners may find it difficult to cope with the abstract connections between words or polysemy. Additionally, a few students mentioned feeling overwhelmed by the cognitive load of learning too many related words simultaneously. One student shared, “Sometimes, when we study too many related words, it’s hard to keep them all straight in my head. I mix them up.” This reveals the need for more carefully structured lessons that gradually introduce word relationships, especially for lower-level learners.

Several students offered suggestions for improving the integration of lexical semantics in vocabulary teaching. A common theme was the request for more context-based examples and real-life applications of vocabulary. One student suggested, “It helps when we learn words in sentences or real situations, not just on their own. That way, I know how to use them properly.” This highlights the importance of teaching vocabulary not only through semantic connections but also in practical communicative contexts. Some students also recommended more interactive activities, such as group work or games, to make the learning process more engaging. As one student mentioned, “I think more games or group work would make it easier to learn these word connections, instead of just doing exercises alone.” Interactive, collaborative tasks could help lower-level learners better engage with the complexities of lexical semantics.

In conclusion, the focus group discussions revealed generally positive student perceptions of

using lexical semantics in vocabulary learning. Most students noted improvements in vocabulary retention and understanding word relationships, with several highlighting the importance of applying vocabulary in context. However, challenges remain, particularly for lower-level learners who struggled with complex semantic concepts and the cognitive load of learning many related words. Incorporating more contextualized examples and interactive activities could further enhance the effectiveness of lexical semantics in vocabulary instruction, making it a more engaging and accessible approach for students at all levels.

V. Discussion:

The findings from both the qualitative and quantitative phases of the study offer a comprehensive understanding of the impact and practicality of integrating lexical semantics into vocabulary instruction. The combined results indicate that the use of lexical semantics can significantly enhance students' vocabulary acquisition, promote deeper understanding of word relationships, and positively influence students' perceptions of vocabulary learning. However, challenges, particularly for lower-level learners, were also highlighted.

The quantitative data, particularly from the pre- and post-tests, showed a substantial improvement in students' vocabulary acquisition. The mean score increased from 2.39 in the pre-test to 4.04 in the post-test, indicating that the semantic-based instruction had a strong positive effect on students' vocabulary knowledge. This improvement suggests that teaching vocabulary through lexical relationships—such as synonyms, antonyms, and word families—helps students not only memorize new words but also understand and apply them more effectively in different contexts. These quantitative results were further supported by students' perceptions collected through the Likert scale surveys, where a majority of students rated the semantic-based approach as effective and engaging. The results demonstrated that students found the method beneficial for both retention and usage of new vocabulary, aligning

with the measurable improvements in their test scores.

The qualitative data from teacher interviews and focus group discussions further enriched the understanding of the practical approaches and challenges involved in using lexical semantics. Teachers reported a variety of strategies, such as semantic mapping, word grouping, and contextualized learning, that they found effective in helping students grasp complex word meanings. This aligns with the observed improvement in students' vocabulary scores, as these methods seem to have contributed to deeper learning. Teachers, however, also noted challenges such as time constraints and the difficulty of adapting these techniques for lower-level students, reflecting the need for more structured and scaffolded approaches to accommodate students at different proficiency levels.

From the students' perspective, focus group discussions revealed that they appreciated the ability to see connections between words through semantic mapping and word grouping, which enhanced their ability to retain vocabulary. As one student mentioned, "I liked when we made mind maps because it helped me see the differences between words that seem the same, like 'big,' 'huge,' and 'enormous.'" However, lower-level learners found some aspects of lexical semantics overwhelming, particularly when dealing with complex semantic relationships or large sets of related words. This feedback points to a potential area for instructional improvement, where more gradual introduction of semantic concepts and additional contextualized examples could help reduce cognitive overload and make the material more accessible to all students.

The challenges identified by both teachers and students—particularly in relation to lower-level learners—are critical for understanding the limits of semantic-based vocabulary instruction. Although the method proves highly effective for intermediate and advanced learners, beginners may require additional support. For example, teachers could focus on simplifying the

complexity of word relationships, introducing fewer new words at a time, and providing more context-based learning opportunities to help beginners better grasp these concepts.

VI. Conclusion:

In conclusion, the integration of lexical semantics into vocabulary instruction has proven to be an effective approach for enhancing students' vocabulary acquisition and fostering a deeper understanding of word relationships. The quantitative results showed significant improvements in students' vocabulary test scores, while the qualitative findings highlighted the practical strategies teachers use and the generally positive perceptions of students toward this method.

However, the study also revealed challenges, particularly for lower-level learners, who found certain aspects of lexical semantics difficult to comprehend and retain. To overcome these challenges, more structured and scaffolded approaches, such as simplified tasks and context-based learning, should be considered to better support students at different proficiency levels. Additionally, teachers may benefit from professional development opportunities to refine their techniques for integrating lexical semantics, ensuring they can adapt the approach to meet the needs of all learners.

Overall, the study contributes to the growing body of research supporting semantic-based vocabulary instruction, emphasizing its value in promoting long-term retention and practical application of vocabulary. With careful consideration of students' proficiency levels and thoughtful implementation of the method, lexical semantics can play a key role in improving vocabulary learning in the classroom.

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Appendices:

Appendix A: Intervention Design:

The intervention in your study will involve a structured instructional period focused on integrating **lexical semantics** into vocabulary teaching. This intervention will aim to teach students vocabulary in a more meaningful and context-based way, using strategies that emphasize word relationships, such as synonyms, antonyms, hyponyms, and polysemy. The goal is to deepen students' understanding of how words are connected in their semantic fields and how they function within various contexts.

Key Components of the Intervention

1. Semantic Mapping

- **Description:** Students will engage in creating and analyzing semantic maps. These maps visually represent the relationships between vocabulary words, such as synonyms, antonyms, and thematic groupings.
- **Activities:** Instructors will guide students through the process of building semantic maps on specific themes (e.g., travel, emotions, or technology), using vocabulary words that are related to those themes. Students will work in pairs or small groups to create maps and present their connections to the class.

2. Synonym and Antonym Activities

- **Description:** Lessons will focus on helping students explore the differences between synonyms and antonyms, learning when to use certain words based on subtle differences in meaning.
- **Activities:** Exercises will involve matching synonyms and antonyms, discussing why one word is more appropriate than another in particular contexts, and creating sentences using pairs of synonyms or antonyms.

3. Thematic Vocabulary Clusters

- **Description:** Vocabulary will be introduced in clusters based on specific themes or categories, helping students understand how related words fit into a broader semantic framework.
- **Activities:** Teachers will introduce a set of related vocabulary words (e.g., vocabulary related to "health" or "communication") and ask students to group the words into subcategories. Students will then create short dialogues or paragraphs using these words, showing their understanding of how they are connected.

4. Contextualized Vocabulary Learning

- **Description:** Vocabulary will be taught within meaningful, authentic contexts (such as reading passages, dialogues, or real-world examples), instead of being learned in isolation.
- **Activities:** Students will read short texts or listen to dialogues where target vocabulary words are used, and then answer questions or complete tasks that require them to understand how the words are used in context. This will include discussing how words' meanings shift depending on the context.

5. Word Family and Morphological Analysis

- **Description:** This component will focus on teaching word families and examining how prefixes, suffixes, and roots form different parts of speech and meanings.
- **Activities:** Students will analyze word families (e.g., "act," "action," "active") and practice creating sentences using different forms of the words. This will reinforce their understanding of how word forms change meaning and usage.

6. Collocation Practice

- **Description:** Collocations, or words that are commonly used together, will be introduced to enhance natural and fluent language use.

- **Activities:** Students will engage in matching exercises where they pair words with their most common collocates (e.g., “make a decision” vs. “do a decision”). They will then practice using these collocations in conversation or writing tasks.

Duration of the Intervention

The intervention is designed to be implemented over a period of 11 weeks, depending on the schedule of instruction and the intensity of the lessons. The specific structure could look like the following:

- **Frequency:** Two lessons per week.
- **Duration of Each Lesson:** Each lesson will last approximately **50 minutes**.
- **Total Lessons:** The intervention will consist of **22 lessons** in total.

Each lesson will focus on a different aspect of lexical semantics (such as synonym/antonym pairs, semantic mapping, or thematic clusters) and will build progressively on students' understanding of vocabulary relationships. Throughout the intervention, students will be assessed informally through class activities, discussions, and group work, as well as formally through pre- and post-tests.

This intervention will provide students with multiple opportunities to explore vocabulary in a rich, context-based manner, allowing them to develop a deeper understanding of word relationships and use vocabulary more flexibly. The focus on lexical semantics ensures that students not only learn new words but also comprehend how these words interact within the larger linguistic system. The 4 to 6-week duration allows enough time for sustained instruction while being feasible within the academic semester.

Appendix B: A syllabus for integration of lexical semantics into vocabulary teaching

Below is a detailed plan designed to integrate lexical semantics into vocabulary instructions. The plan includes weekly objectives, key activities, and assignments, all aimed at helping students develop a deep understanding of vocabulary through the lens of semantic relationships, contextual learning, and vocabulary use in authentic contexts.

Week 1: Introduction to Lexical Semantics and Vocabulary Learning

- **Objective:** Introduce students to the concept of lexical semantics and its role in vocabulary learning.
- **Key Activities:**
 - Discuss the definition and importance of lexical semantics.
 - Introduce the idea of word relationships (synonyms, antonyms, hyponyms, and polysemy).
 - Pre-test: Administer a vocabulary pre-test to assess students' current knowledge.
- **Assignment:** Reflection task on the importance of word relationships in learning vocabulary.

Week 2: Synonyms and Antonyms

- **Objective:** Help students understand and differentiate between synonyms and antonyms.
- **Key Activities:**
 - Classroom discussion on synonyms and antonyms.
 - Matching exercises (students match words with their synonyms and antonyms).
 - Group work: Students create sentences using pairs of synonyms and antonyms to explore context-based usage.

- **Assignment:** Write 10 sentences using synonym-antonym pairs, highlighting the subtle differences in meaning.
-

Week 3: Hyponyms and Hypernyms

- **Objective:** Teach students about hierarchical word relationships (hyponyms and hypernyms).
 - **Key Activities:**
 - Lesson on hierarchical relationships (e.g., "animal" is a hypernym, "dog" is a hyponym).
 - Semantic mapping: Students create a map with hypernyms at the top and hyponyms branching below.
 - Group presentations on how hyponyms fit into larger semantic fields.
 - **Assignment:** Create a semantic map for a given category (e.g., "transportation"), labelling the hypernyms and hyponyms.
-

Week 4: Polysemy and Homonyms

- **Objective:** Explore words with multiple meanings (polysemy) and homonyms.
 - **Key Activities:**
 - Discuss examples of polysemy and homonyms.
 - Classroom activity: Students identify different meanings of polysemous words (e.g., "run" in different contexts).
 - Group discussion on how homonyms can cause confusion in language learning.
 - **Assignment:** Write short paragraphs using at least five polysemous words in different contexts.
-

Week 5: Word Families and Morphological Analysis

- **Objective:** Focus on word formation through word families and morphology (prefixes, suffixes, roots).
 - **Key Activities:**
 - Lesson on the structure of word families (e.g., "act," "action," "active").
 - Classroom activity: Breaking down words into prefixes, roots, and suffixes to understand how meanings change.
 - Create a word family chart in pairs.
 - **Assignment:** Analyze five words from a given list, breaking them down into their morphemes and creating sentences using each form of the word.
-

Week 6: Collocations and Phrasal Verbs

- **Objective:** Teach students about collocations and the natural combinations of words.
 - **Key Activities:**
-

- Lesson on collocations (e.g., "make a decision" vs. "do a decision").
 - Classroom activity: Match collocations and create sentences using them.
 - Introduction to common phrasal verbs and their meanings.
 - **Assignment:** Write a short story incorporating at least 10 collocations and 5 phrasal verbs from the lesson.
-

Week 7: Contextualized Vocabulary Learning (Reading and Listening)

- **Objective:** Teach students how vocabulary is used in context through reading and listening activities.
 - **Key Activities:**
 - Reading comprehension exercises using authentic texts to identify target vocabulary in context.
 - Listening activity: Play a dialogue or podcast where key vocabulary is used, followed by comprehension questions.
 - Group discussion on how the context changes the meaning of words.
 - **Assignment:** Find a short article or podcast on a chosen topic, identify 10 new words, and explain their meanings based on the context.
-

Week 8: Thematic Vocabulary Clusters (Part 1)

- **Objective:** Introduce thematic vocabulary learning by grouping related words into clusters.
 - **Key Activities:**
 - Choose a theme (e.g., "environment" or "technology") and introduce a vocabulary set related to that theme.
 - Group activity: Students create a thematic word cluster, linking words and discussing their relationships.
 - Discussion on how words within a theme are interconnected.
 - **Assignment:** Write a short essay using 10 words from the thematic cluster.
-

Week 9: Thematic Vocabulary Clusters (Part 2)

- **Objective:** Continue exploring thematic vocabulary, focusing on a new theme.
 - **Key Activities:**
 - Choose a new theme (e.g., "health" or "communication").
 - Class discussion on the new set of vocabulary and how it connects to previously learned themes.
 - Students create dialogues or role-play scenarios using the thematic vocabulary.
 - **Assignment:** Create a role-play script using the new vocabulary cluster in a real-life scenario.
-

Week 10: Semantic Mapping and Advanced Word Relations

- **Objective:** Reinforce and deepen understanding of word relationships through advanced semantic mapping.
 - **Key Activities:**
 - Students create more complex semantic maps, showing deeper relationships between words (e.g., how synonyms, antonyms, and collocations interact).
 - Group activity: Present the maps and explain the relationships between words.
 - Classroom discussion on how understanding these relationships improves language fluency.
 - **Assignment:** Create a detailed semantic map on a chosen topic, demonstrating the relationships between at least 20 words.
-

Week 11: Review and Post-Test

- **Objective:** Review the key concepts learned during the intervention and assess progress through a post-test.
 - **Key Activities:**
 - Review session: Recap all the vocabulary and lexical semantics strategies learned throughout the 11 weeks.
 - Post-test: Administer a vocabulary post-test to measure the progress and retention of the vocabulary taught.
 - Class discussion: Reflect on the entire intervention and discuss which methods were most helpful in improving vocabulary knowledge.
 - **Assignment:** Final reflection essay on how students' understanding of vocabulary has changed over the course of the intervention, using examples of words they have learned.
-

The 11-week intervention is designed to progressively build students' understanding of vocabulary through lexical semantics, focusing on practical strategies like synonym-antonym relationships, thematic clusters, polysemy, and contextual learning. By gradually introducing new concepts each week and reinforcing them through activities, discussions, and assignments, students will develop a deeper, more nuanced understanding of vocabulary. The pre-test and post-test will measure improvement, and assignments will ensure that students actively engage with the vocabulary in meaningful ways.

Appendix 3: Pre-test and Post-test

Below is a design for both a pre-test and post-test to collect data for the experimental phase of your study. These tests are designed to assess students' vocabulary knowledge and their understanding of semantic relationships before and after the instructional period. The tests will include multiple-choice questions, matching exercises, and fill-in-the-blank questions to measure both vocabulary acquisition and comprehension of semantic relationships.

Pre-Test Design

Section 1: Multiple-Choice Questions (10 Questions)

- **Objective:** To assess students' basic vocabulary knowledge and their ability to choose the correct word based on context.
 1. Choose the word that best completes the sentence:
"The CEO delivered a _____ at the annual meeting."
-

- a) speech
 - b) conversation
 - c) dialogue
 - d) narrative
2. Which word is a synonym for "rapid"?
- a) slow
 - b) fast
 - c) careful
 - d) large
3. Choose the correct antonym for "increase":
- a) expand
 - b) reduce
 - c) multiply
 - d) improve
4. In which sentence does the word "bank" mean the side of a river?
- a) She went to the bank to deposit money.
 - b) They sat on the bank of the river.
 - c) The bank is offering a new loan.
 - d) He worked at the bank for years.
5. Which word would best fit in the sentence: "The artist used a _____ of colors to create the painting"?
- a) palette
 - b) melody
 - c) frame
 - d) rhythm

(Additional questions will follow the same format.)

Section 2: Matching Exercise (10 Questions)

- **Objective:** To test students' ability to identify synonyms, antonyms, and related words.

Match the word on the left with its correct synonym or antonym on the right:

1. **Happy** - a) Narrow
2. **Decrease** - b) Joyful
3. **Wide** - c) Strong
4. **Weak** - d) Reduce
5. **Big** - e) Large

(Additional pairs will follow the same format.)

Section 3: Fill-in-the-Blank (5 Questions)

- **Objective:** To evaluate students' ability to use vocabulary words in context.
 1. The scientist conducted an _____ to test the new theory.
 2. She expressed her _____ by writing a letter to the editor.
 3. The _____ led to widespread power outages in the city.
 4. He managed to _____ the company's profits within the first quarter.
 5. The _____ of the mountain was covered with snow.

Post-Test Design

The post-test will follow the same structure as the pre-test, but with slightly different questions to assess improvement while maintaining the same difficulty level.

Section 1: Multiple-Choice Questions (10 Questions)

- **Objective:** To measure any improvement in vocabulary knowledge and understanding of word meanings after the instruction.
 1. Choose the word that best completes the sentence:
"The scientist presented his _____ at the conference."
 - a) theory
 - b) article
 - c) hypothesis
 - d) report
 2. Which word is a synonym for "gigantic"?
 - a) tiny
 - b) small
 - c) huge
 - d) narrow
 3. Choose the correct antonym for "expand":
 - a) contract
 - b) grow
 - c) enlarge
 - d) extend
 4. In which sentence does the word "pool" mean a small body of water?
 - a) He invested in a large pool of resources.
 - b) The children swam in the pool all afternoon.
 - c) She was part of a talent pool at work.

- d) They pooled their money to buy a gift.
5. Which word would best fit in the sentence: "The author uses a _____ of metaphors in his work"?
- a) collection
 - b) book
 - c) series
 - d) line

Section 2: Matching Exercise (10 Questions)

- **Objective:** To assess any improvement in the ability to identify synonyms, antonyms, and related words.

Match the word on the left with its correct synonym or antonym on the right:

1. **Bright** - a) Minor
2. **Increase** - b) Dark
3. **Difficult**- c) Easy
4. **Major** - d) Complicated
5. **Huge** - e) Enlarge

(Additional pairs will follow the same format.)

Section 3: Fill-in-the-Blank (5 Questions)

- **Objective:** To measure students' ability to use newly learned vocabulary in context.
1. The lawyer presented her closing _____ in the courtroom.
 2. The _____ caused the company to reconsider its strategy.
 3. She decided to _____ her position on the issue after hearing the debate.
 4. The _____ of the city offers many cultural attractions.
 5. They worked hard to _____ their goals before the deadline.

Scoring and Analysis

- **Scoring:** Each correct answer in the multiple-choice and matching sections will receive one point. Fill-in-the-blank questions will be scored based on the correct use of vocabulary in context.
- **Analysis:** Compare pre-test and post-test scores to measure vocabulary improvement. A higher score in the post-test would indicate that the instructional methods were effective in enhancing vocabulary knowledge and understanding of semantic relationships.

The pre-test and post-test are designed to evaluate both the initial vocabulary knowledge of the students and the improvement following the instructional period. By analyzing the results, you will be able to assess the effectiveness of integrating lexical semantics into vocabulary teaching, providing valuable data to support your research findings.