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**THE IMPACT OF ENGLISH VOCABULARY PROFICIENCY ON
ACADEMIC ACHIEVEMENT AND LEARNING OUTCOMES**

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Abstract

English vocabulary is a fundamental component of academic language proficiency because students must understand, interpret, and produce increasingly complex language across textbooks, lectures, examinations, assignments, research articles, and classroom interactions. Vocabulary knowledge encompasses not only the number of words a learner knows but also the depth of knowledge associated with those words, including meaning, grammatical behavior, collocations, word formation, and contextual use. Research on second-language vocabulary consistently indicates that lexical knowledge is closely associated with reading comprehension and broader academic performance. Schmitt et al. (2011), for example, demonstrated a strong relationship between the proportion of words known in a text and reading comprehension, emphasizing the importance of adequate lexical coverage. Academic vocabulary is also particularly important because students encounter recurring words across disciplines that are less frequent in everyday communication. Coxhead (2000) identified 570 academic word families that accounted for approximately 10% of the words in her academic corpus, demonstrating the substantial role of academic vocabulary in university-level texts. This article reviews the role of English vocabulary in academic achievement, focusing on vocabulary breadth, vocabulary depth, academic vocabulary, reading comprehension, academic writing, listening, classroom participation, examinations, and learning efficiency. The review indicates that vocabulary should not be regarded as the sole determinant of academic achievement, but as an important linguistic resource that facilitates access to academic knowledge and enables students to demonstrate their knowledge effectively.

Keywords: Academic achievement, vocabulary depth, reading comprehension, academic performance, English language learning.

INTRODUCTION

Language provides the principal medium through which students acquire, organize, communicate, and demonstrate knowledge. In educational environments where English is used as a medium of instruction, students must understand academic English in order to access textbooks, lectures, examinations, assignments, research literature, and classroom discussions. Vocabulary is particularly important because every academic activity involves lexical knowledge. A student may understand basic grammatical structures but still experience difficulty learning from an academic text when a substantial proportion of its vocabulary is unfamiliar. Vocabulary knowledge is multidimensional. It includes the number of words a learner knows, the quality or depth of knowledge of those words, the ability to recognize vocabulary during reading and listening, and the ability to retrieve and use vocabulary during speaking and writing. Schmitt (2014) distinguishes vocabulary size from vocabulary depth and emphasizes that knowing a word involves considerably more than knowing a basic definition. Deeper vocabulary knowledge can include pronunciation, spelling, grammatical behavior, associations, collocations, multiple meanings, and appropriate contextual use.

The importance of vocabulary becomes particularly apparent in academic reading. Students studying at secondary and tertiary levels encounter increasingly specialized and linguistically complex texts. Schmitt, Jiang, and Grabe (2011) investigated the relationship between the percentage of words known in a text and reading comprehension among 661 participants from eight countries. Their findings demonstrated a generally positive relationship between lexical coverage and comprehension and suggested that approximately 98% coverage represents a

useful target for comfortable reading of academic texts. This means that insufficient vocabulary can create a significant barrier to understanding even when students possess reasonable grammatical knowledge. Academic vocabulary represents another important dimension of lexical knowledge. Coxhead (2000) developed the Academic Word List (AWL) from a 3.5-million-word corpus of academic texts. The list contains 570 word families and accounted for approximately 10% of the tokens in the academic corpus, compared with only about 1.4% in a similarly sized fiction corpus. The findings demonstrate why words such as *analyze*, *establish*, *indicate*, *significant*, *interpret*, and *derive* are particularly important for students studying through English.

However, vocabulary should not be considered an independent or sufficient explanation for academic achievement. Academic performance is influenced by many factors, including prior knowledge, motivation, teaching quality, study habits, socioeconomic circumstances, cognitive processes, assessment practices, and access to educational resources. Vocabulary should therefore be understood as one important component of a broader educational system. The purpose of this article is to examine how English vocabulary contributes to academic achievement and to explain the mechanisms through which vocabulary can facilitate reading, listening, writing, speaking, classroom participation, examination performance, and access to disciplinary knowledge.

Vocabulary also has an important role in helping students manage the increasing linguistic demands of higher education. As learners progress from general classroom English to university study, they encounter more abstract concepts, compressed expressions, discipline-related terminology, and recurring academic phrases. Nation (2001) emphasizes that effective vocabulary knowledge involves several dimensions of knowing a word, including its form, meaning, and use, while Nation (2006) shows that substantial lexical coverage is needed for independent comprehension of written English. These findings suggest that vocabulary development should be viewed as a gradual process in which learners expand both the number of words they know and the quality of their knowledge of those words.

Recent corpus-based research further demonstrates that academic vocabulary is not a fixed list that applies equally to every learner or discipline. Gardner and Davies (2014) developed an Academic Vocabulary List from a large academic corpus and demonstrated that academic vocabulary can be identified through frequency and dispersion across academic materials. Durrant (2016) similarly found that academic vocabulary use varies considerably across disciplines and academic levels, while Masrai and Milton (2021) reported that both general vocabulary size and academic vocabulary knowledge contribute to differences in academic achievement. Taken together, these findings indicate that vocabulary instruction should combine high-frequency general English with cross-disciplinary academic vocabulary and, where appropriate, discipline-specific terminology.

2. Conceptualizing English Vocabulary Knowledge

Vocabulary knowledge is commonly discussed in terms of breadth and depth. Vocabulary breadth refers broadly to the number of lexical items a learner knows, whereas vocabulary depth refers to the quality and richness of knowledge associated with those words (Schmitt, 2014). Both dimensions are important for academic learning because students need to recognize a large number of words while also understanding how those words function in particular contexts. Vocabulary breadth is particularly relevant when students encounter academic texts containing thousands of lexical items. A learner with a relatively large vocabulary can recognize a greater proportion of a text without stopping to consult a dictionary. This can make reading more fluent and allow greater attention to be directed toward interpreting arguments, connecting ideas, identifying evidence, and drawing conclusions.

Vocabulary depth, in contrast, allows students to use words accurately and flexibly. For example,

knowing the word *analyze* involves more than knowing that it means "examine." A learner with deeper knowledge may also recognize *analysis*, *analytical*, and *analytically*, understand common grammatical patterns, distinguish *analyze* from related verbs such as *evaluate* and *interpret*, and use the word appropriately in academic writing. Schmitt (2014) reviewed research on vocabulary size and depth and emphasized that the two constructs are related but distinct. Consequently, vocabulary assessment and instruction should not focus exclusively on the number of words students can recognize. Academic achievement also depends on whether students can use vocabulary accurately and appropriately.

Table 1. Major dimensions of English vocabulary knowledge

Dimension	Description	Academic relevance
Vocabulary breadth	Number of words known	Provides lexical access to academic texts
Vocabulary depth	Quality of word knowledge	Supports accurate interpretation and use
Receptive vocabulary	Words recognized during reading/listening	Supports comprehension
Productive vocabulary	Words available for speaking/writing	Supports academic expression
Academic vocabulary	Vocabulary common across academic contexts	Supports academic discourse
Technical vocabulary	Discipline-specific terminology	Supports specialized learning
Morphological knowledge	Knowledge of roots, prefixes and suffixes	Helps infer unfamiliar words
Collocational knowledge	Knowledge of words that commonly occur together	Improves natural academic expression
Contextual knowledge	Ability to interpret words in context	Supports accurate comprehension

3. English Vocabulary and Reading Comprehension

Reading is one of the most important mechanisms through which students acquire academic knowledge. University students, for example, may spend substantial amounts of time reading textbooks, journal articles, lecture notes, reports, and electronic resources. Vocabulary knowledge directly influences their ability to understand these materials. Schmitt et al. (2011) examined how vocabulary coverage relates to reading comprehension and found a generally positive relationship between the percentage of words known in a text and comprehension. Their research suggested that readers need very high lexical coverage to comprehend academic texts comfortably. This finding is important because students who encounter unfamiliar words frequently must devote cognitive attention to identifying word meanings, potentially leaving fewer resources for higher-level comprehension processes.

Vocabulary therefore contributes to reading through several mechanisms. First, knowing more words allows students to recognize a greater proportion of a text automatically. Second, knowing words deeply enables students to distinguish subtle differences in meaning. Third, knowledge of word families and morphology helps students infer unfamiliar forms. Fourth, familiarity with academic vocabulary enables students to recognize relationships among claims, evidence, explanations, and conclusions. Reading and vocabulary also have a reciprocal relationship. Students with stronger vocabulary can generally access more texts, while extensive reading provides repeated exposure to vocabulary in meaningful contexts. Over time, this repeated exposure can strengthen lexical knowledge and contribute to further reading

development.

4. Academic Vocabulary and Academic Achievement

Academic vocabulary refers broadly to words that occur frequently across academic texts and are useful for discussing concepts, relationships, processes, evidence, and arguments. Coxhead (2000) developed one of the most influential academic vocabulary resources, the Academic Word List, from a corpus containing 3.5 million running words from academic texts. The resulting list consisted of 570 word families and accounted for approximately 10% of the words in the academic corpus. The educational significance of the Academic Word List is that it provides learners with a principled starting point for developing vocabulary relevant to university study. Words such as *assess*, *concept*, *establish*, *indicate*, *interpret*, *method*, and *significant* occur across numerous academic disciplines. These words are not necessarily technical terms belonging to one particular subject; instead, they provide the linguistic framework through which disciplinary information is described and discussed.

However, academic vocabulary should not be treated as a completely separate category from general vocabulary. Many words used in academic texts are also encountered in everyday communication, although their frequency and functions may differ according to context. Consequently, effective vocabulary development requires students to build a strong foundation of general vocabulary while progressively developing academic and disciplinary vocabulary. The relationship between vocabulary and academic achievement has also been investigated empirically. Masrai and Milton (2018) examined the contribution of general and academic vocabulary knowledge to learners' academic achievement and reported that general vocabulary knowledge explained a substantial proportion of variation in GPA, while academic vocabulary provided additional explanatory power. These findings indicate that vocabulary is not merely associated with language-test performance but can also be related to broader measures of educational achievement.

5. Vocabulary and Academic Writing

Academic writing represents another major pathway through which vocabulary contributes to achievement. Students are frequently assessed through essays, laboratory reports, research papers, examinations, dissertations, and other written assignments. These tasks require students not only to understand information but also to express it precisely. Vocabulary depth is particularly important in academic writing because different lexical choices can communicate different degrees of certainty, evidence, and interpretation. For example, *suggest*, *indicate*, *demonstrate*, and *establish* are related but do not necessarily communicate identical levels of evidential strength. A student with deeper vocabulary knowledge is better positioned to make these distinctions.

A larger productive vocabulary can also reduce repetition and improve lexical variety. Students can explain relationships among ideas, compare findings, interpret evidence, describe procedures, and formulate conclusions more precisely when they possess an adequate range of academic vocabulary. Academic writing therefore requires students to move from receptive vocabulary knowledge to productive vocabulary use. Knowing the meaning of a word while reading does not necessarily mean that the student can retrieve and use it correctly during writing. Vocabulary instruction should consequently include productive activities in which learners construct sentences, paragraphs, explanations, and arguments using newly learned terms.

6. Vocabulary and Academic Listening

Academic learning also takes place through lectures, seminars, tutorials, presentations, laboratory demonstrations, and classroom discussions. Students therefore require vocabulary

knowledge not only for reading but also for understanding spoken academic English. When listening to a lecture, students cannot always pause the speaker or reread a sentence. Unfamiliar vocabulary may therefore interfere with comprehension immediately. Knowledge of common academic terms can help students identify important concepts, follow explanations, understand transitions, take notes, and distinguish major points from supporting details.

Vocabulary also supports students' ability to interpret lecturer instructions. Expressions such as *in contrast*, *consequently*, *in addition*, *in particular*, *approximately*, and *in terms of* provide important signals about how information is organized. Academic listening consequently involves both vocabulary knowledge and the ability to interpret vocabulary within discourse.

7. Vocabulary and Classroom Participation

Classroom participation requires students to understand what teachers and classmates say and to formulate their own responses. Vocabulary therefore provides an important linguistic resource for academic interaction. Students need words for questioning, explaining, comparing, contrasting, evaluating, agreeing, disagreeing, clarifying, and summarizing. A student may understand a concept but hesitate to participate because of uncertainty about how to express the idea in English. Developing academic vocabulary can increase the range of linguistic resources available for classroom communication.

Participation can also create additional opportunities for vocabulary development. When students use newly learned words during discussion, receive feedback, and encounter the words again in subsequent contexts, their lexical knowledge can become increasingly accessible and flexible.

8. Vocabulary and Examination Performance

Vocabulary influences examination performance through both question comprehension and answer production. Examination questions frequently contain academic command verbs such as *define*, *describe*, *explain*, *compare*, *analyze*, *evaluate*, *justify*, and *discuss*. Students must understand these words in order to determine what type of response is required. For example, *describe* generally requires a different response from *evaluate*. Similarly, *compare* requires students to identify similarities and/or differences, whereas *justify* requires reasons or evidence supporting a position. Students who misunderstand these terms may provide inappropriate answers even when they possess adequate subject knowledge.

Vocabulary also influences the language students use in their responses. Academic vocabulary enables students to formulate explanations, establish relationships, describe evidence, and present conclusions. Vocabulary should therefore be considered an important linguistic component of examination performance, while recognizing that examination results also depend on subject knowledge, reasoning ability, preparation, and other factors.

9. General Vocabulary and Academic Vocabulary

General vocabulary and academic vocabulary should be viewed as complementary components of language development. General vocabulary provides the foundation for understanding everyday and educational language, while academic vocabulary helps students interpret and produce formal academic discourse. Coxhead's (2000) Academic Word List was specifically developed to identify words that occur frequently and broadly across academic texts (Table 2). The list contains 570 word families and accounts for approximately 10% of the words in the corpus from which it was developed.

Students should therefore progressively develop vocabulary through multiple layers. Early instruction should establish a strong foundation of high-frequency vocabulary. As learners advance, instruction can introduce academic vocabulary and subsequently discipline-specific terminology.

Table 2. Layers of vocabulary development

Layer	Main focus	Academic function
Foundation	High-frequency English	Basic comprehension
Intermediate	Expanded general vocabulary	Fluent academic reading
Academic	Cross-disciplinary academic vocabulary	Academic discourse
Disciplinary	Subject-specific terminology	Specialized knowledge
Advanced productive	Precise academic expression	Research and professional communication

10. Vocabulary Instruction and Academic Learning

Vocabulary instruction is most effective when learners encounter words repeatedly and use them in meaningful contexts. Teaching isolated definitions may help students recognize a word temporarily, but deeper learning requires exposure to meaning, form, grammatical behavior, collocations, and actual use. Elleman et al. (2009), in a meta-analysis of vocabulary intervention research, found that vocabulary instruction produced positive effects on passage-level comprehension, although the magnitude of effects varied according to the type of comprehension measure used. This finding suggests that vocabulary instruction can contribute to comprehension but should be integrated with broader reading instruction.

Effective vocabulary instruction can include contextual examples, morphological analysis, word families, semantic relationships, collocations, extensive reading, retrieval practice, writing activities, and discussion. These approaches provide learners with multiple opportunities to encounter and use vocabulary.

11. Morphological Awareness and Vocabulary Development

Morphological awareness involves understanding how words are constructed from roots, prefixes, suffixes, and related forms. It is particularly useful in academic English because many academic words occur in families. For example, students who know *analyze* may also encounter *analysis*, *analytical*, and *analytically*. Similarly, knowledge of *environment* can support recognition of environmental and environmentally.

Morphological awareness allows learners to make informed guesses about unfamiliar words and reduces the need to memorize every lexical form independently. This strategy is particularly useful when students encounter specialized academic texts containing many morphologically complex words.

12. Vocabulary Depth and Precision in Academic Communication

Vocabulary depth contributes directly to precision in academic communication. Consider the statement:

"The treatment changed plant growth."

Although grammatically acceptable, the statement provides limited information. A more precise sentence could be:

"The treatment significantly enhanced plant growth under the experimental conditions."

The second sentence contains vocabulary that communicates the direction and context of the observed effect more precisely. Such lexical precision is important in academic writing because researchers must distinguish observations, interpretations, evidence, and conclusions carefully. Students with deeper vocabulary knowledge can therefore communicate complex ideas more accurately. Vocabulary depth should consequently be regarded as an important complement to vocabulary size.

13. Vocabulary as a Pathway to Academic Achievement

The relationship between vocabulary and academic achievement can be explained through several interconnected pathways. Vocabulary supports reading comprehension because students can process a larger proportion of academic texts. It supports listening because students can recognize important terminology during lectures. It supports writing because students can express concepts using precise academic language. It supports speaking because students have the lexical resources needed for classroom interaction. Finally, it supports examination performance because students can interpret question instructions and formulate appropriate answers. These relationships can be represented as shown in Figure 1.

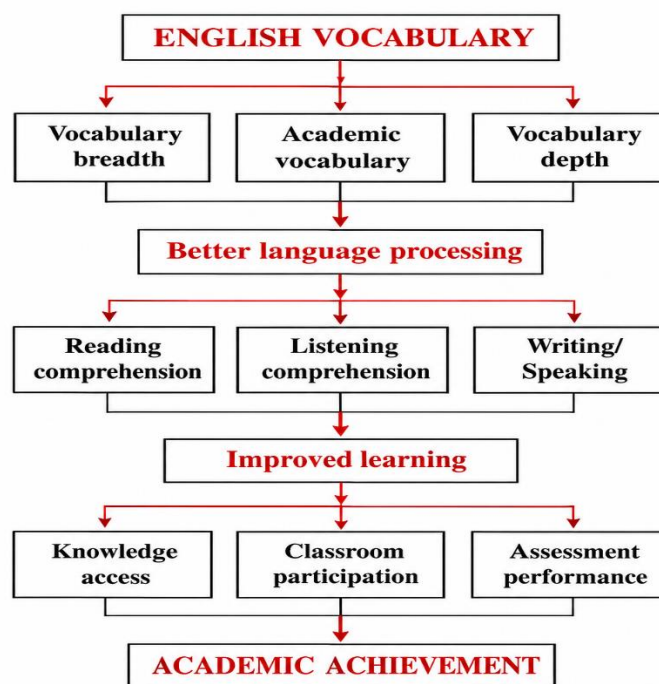


Figure 1. Conceptual framework showing the proposed pathways through which English vocabulary may contribute to academic achievement.

14. Implications for Teachers

Teachers should integrate vocabulary development into regular academic instruction rather than treating vocabulary as an isolated activity. When introducing a new topic, teachers can identify key academic and disciplinary terms and explain their meanings within meaningful contexts. For example, instead of simply defining *analyze* as "examine," a teacher can use the word in a subject-specific sentence such as "Students analyzed the experimental results to determine whether the treatment affected plant growth." This approach simultaneously teaches meaning, grammatical use, and disciplinary context.

Repeated exposure is also essential. A word introduced once is unlikely to become fully established in a student's vocabulary. Teachers can therefore recycle important words across lectures, reading materials, classroom discussions, assignments, quizzes, and examinations. Repeated encounters allow students to strengthen both receptive and productive knowledge. Teachers should also emphasize word families and collocations. Learning *analyze*, *analysis*, *analytical*, and *analytically* together can increase the efficiency of vocabulary learning, while learning expressions such as *conduct research*, *significant difference*, *collect data*, and *draw conclusions* can help students use academic English more naturally.

15. Implications for Students

Students can actively develop vocabulary through extensive reading, systematic review, contextual learning, and productive use. Rather than memorizing isolated definitions, learners can record new words together with example sentences, related forms, common collocations, and disciplinary applications.

A useful learning cycle is encounter → understand → record → review → use → reencounter → retrieve. Through this process, students gradually move from recognizing a word to being able to use it independently. Extensive reading is especially valuable because it exposes students to vocabulary repeatedly in different contexts. Academic learners should therefore read textbooks, research articles, essays, reports, and other materials relevant to their fields. Vocabulary learning becomes more meaningful when students encounter words while acquiring actual disciplinary knowledge.

16. Implications for Higher Education

Universities using English as a medium of instruction should recognize that students may enter higher education with substantially different levels of English vocabulary. Some students may have extensive experience reading English, whereas others may have had limited exposure outside formal classroom settings. Diagnostic vocabulary assessment can help institutions identify students who need additional academic-language support. Such support can focus on general vocabulary, academic vocabulary, discipline-specific terminology, reading strategies, academic writing, and productive communication.

Coxhead (2000) demonstrated the usefulness of corpus-based academic vocabulary resources by showing that the Academic Word List represents a substantial proportion of academic texts. Universities can therefore use corpus-informed vocabulary resources as one component of academic English programs, while adapting vocabulary instruction to students' specific disciplines and needs.

17. Vocabulary Assessment

Vocabulary assessment should measure more than the number of words students recognize (Table 3). Because vocabulary knowledge is multidimensional, assessment should include receptive and productive components. For example, a multiple-choice test can determine whether students recognize word meanings, whereas sentence-completion tasks can assess contextual knowledge. Academic writing can reveal whether students can use vocabulary productively and appropriately. Reading comprehension tasks can determine whether vocabulary knowledge functions effectively during actual text processing.

Table 3. Vocabulary assessment approaches

Assessment approach	What it measures	Academic application
Multiple-choice test	Word recognition	Receptive vocabulary
Definition matching	Meaning recognition	Vocabulary breadth
Contextual gap-fill	Contextual understanding	Academic reading
Word-family task	Morphological knowledge	Academic vocabulary
Sentence production	Productive knowledge	Academic writing
Academic paragraph	Functional vocabulary	Written communication
Oral presentation	Productive spoken vocabulary	Academic speaking
Reading comprehension	Vocabulary in context	Academic learning

A combination of assessment approaches provides a more comprehensive representation of students' vocabulary knowledge than any single test.

18. Challenges in Vocabulary Development

Vocabulary development is challenging because English contains a very large number of lexical

items, many of which have multiple meanings and forms. Students must therefore prioritize vocabulary according to frequency, academic relevance, and disciplinary usefulness. Polysemy is another challenge. Words such as *issue*, *conduct*, *significant*, *model*, and *culture* can have different meanings depending on the context in which they occur. Students therefore need contextual rather than purely dictionary-based knowledge.

A further challenge is the distinction between receptive and productive vocabulary. Students may recognize a word when reading but fail to retrieve it when writing or speaking. This difference explains why vocabulary instruction should include active use rather than recognition alone. Unequal exposure to English also creates differences in vocabulary development. Students who regularly read English books, watch English-language educational materials, communicate in English, or study in English-medium environments may encounter substantially more vocabulary than students whose exposure is largely restricted to classroom instruction.

19. Vocabulary, Educational Opportunity, and Equity

Differences in vocabulary can contribute to differences in students' educational experiences because learners enter classrooms with different amounts of prior exposure to academic English. Students with extensive vocabulary knowledge may process academic texts more efficiently, whereas students with limited vocabulary may need to devote additional cognitive effort to identifying word meanings. This difference should not be interpreted as evidence that students with smaller vocabularies have lower academic potential. Instead, it demonstrates the importance of providing systematic opportunities for vocabulary development. Schools and universities can support students through academic-language courses, extensive reading programs, vocabulary workshops, accessible learning materials, formative assessment, and opportunities for meaningful academic communication. Vocabulary support should therefore be viewed as an educational resource rather than as a remedial label.

20. Research Gaps

Although the relationship between vocabulary and academic achievement has received considerable attention, several research gaps remain. More longitudinal studies are needed to determine how vocabulary development over several years relates to academic achievement. Future research should also distinguish carefully between vocabulary breadth and depth because students may know many words but lack sufficient knowledge of their contextual and disciplinary uses.

Further research should examine differences across academic disciplines because the vocabulary demands of medicine, engineering, agriculture, education, business, biology, and social sciences are not identical. Digital learning environments also require further investigation because students increasingly encounter academic English through online lectures, electronic textbooks, research databases, and digital learning platforms. Future research should additionally investigate productive academic vocabulary because many assessments emphasize recognition while academic success often requires students to produce precise language in writing and speaking.

21. Proposed Conceptual Model for Future Empirical Research

Future empirical studies could examine vocabulary as an independent variable and academic achievement as the dependent variable while considering reading comprehension, academic writing, and classroom participation as potential mediating variables. The independent variables could include vocabulary size, academic vocabulary knowledge, vocabulary depth, and productive vocabulary. Academic achievement could be measured using GPA, examination scores, semester grades, or standardized academic assessments. Important control variables

could include prior academic performance, motivation, educational level, English exposure, and socioeconomic background. A suitable hypothesis for future research would be:

H1: English vocabulary knowledge is positively associated with academic achievement after controlling for relevant learner and educational factors.

Additional hypotheses could investigate whether reading comprehension and academic writing mediate the relationship between vocabulary knowledge and academic achievement.

22. Overall Discussion

The evidence reviewed in this article indicates that English vocabulary is closely connected with academic learning. Vocabulary provides students with access to written and spoken information and gives them the linguistic resources needed to demonstrate their knowledge. The relationship can be understood through several dimensions. Vocabulary breadth determines how much language a student can recognize. Vocabulary depth determines how accurately and flexibly that language can be interpreted and used. Academic vocabulary supports the discourse structures commonly found across academic disciplines, while disciplinary vocabulary provides access to specialized concepts.

Coxhead's (2000) corpus-based research provides strong evidence for the importance of academic vocabulary, as the 570 word families in the Academic Word List represented approximately 10% of the words in the academic corpus examined. Similarly, research examining lexical coverage and comprehension demonstrates that students require a high proportion of known vocabulary to read academic texts comfortably. Schmitt et al. (2011) reported a strong relationship between lexical coverage and reading comprehension, highlighting vocabulary as an important component of successful academic reading.

However, the evidence should not be interpreted to mean that vocabulary alone determines academic success. Academic achievement is a complex outcome influenced by linguistic knowledge as well as prior knowledge, motivation, instructional quality, study behavior, assessment conditions, and broader educational circumstances.

The reviewed evidence also suggests that vocabulary development is cumulative rather than instantaneous. Repeated encounters with words in meaningful contexts can strengthen several components of word knowledge, including form, meaning, grammatical behavior, and contextual associations. Webb (2007) found that increasing the number of encounters with a word produced gains in different aspects of vocabulary knowledge, although complete knowledge may require more than repeated exposure alone. This supports the emphasis in the present review on repeated reading, retrieval, writing, discussion, and contextual use rather than one-time memorization of definitions.

Another important consideration is the distinction between receptive and productive academic vocabulary. University students may recognize academic words while reading or listening but may not be able to retrieve the same words accurately when writing or speaking. Malmström, Pecorari, and Shaw (2018) reported differences between receptive and productive academic vocabulary needs, indicating that academic vocabulary instruction should address both comprehension and production. Similarly, Csomay and Prades (2018) found relationships between academic vocabulary use and aspects of student writing quality, while also showing that vocabulary use varies according to assignment type and rhetorical purpose. These findings reinforce the need to assess vocabulary through multiple modes rather than relying only on recognition-based tests.

The evidence further indicates that academic vocabulary should be selected and taught with attention to disciplinary variation. Gardner and Davies (2014) showed that corpus-based academic vocabulary can provide useful coverage of academic materials, but Durrant (2016) demonstrated substantial differences in vocabulary use across disciplines. Consequently, a university-wide vocabulary program can provide a common academic foundation, but it should

be complemented by discipline-specific lexical support in fields such as science, medicine, engineering, agriculture, and the social sciences. Such an approach may help students connect vocabulary learning with the actual texts, assessments, and communication practices of their academic fields. Overall, the evidence supports vocabulary as an important enabling resource for academic achievement while also indicating that vocabulary should be considered alongside prior knowledge, motivation, instructional quality, and other educational factors.

23. Conclusion

English vocabulary is an essential linguistic foundation for academic achievement. Students require vocabulary to understand textbooks and lectures, interpret examination questions, participate in classroom discussions, write assignments, conduct research, and communicate disciplinary knowledge. The literature demonstrates that both vocabulary breadth and vocabulary depth are important. A larger vocabulary allows students to recognize more of the language encountered in academic texts, while deeper vocabulary knowledge enables them to interpret and use words with greater precision. Academic vocabulary adds another important dimension because students repeatedly encounter cross-disciplinary terms such as *analyze*, *establish*, *indicate*, *interpret*, *significant*, and *method* in academic texts. Academic Word List demonstrates the substantial presence of academic vocabulary in university-level texts, with 570 word families accounting for approximately 10% of the words in the academic corpus used to develop the list. Research on lexical coverage further demonstrates that comprehension improves as the proportion of known words in a text increases.

Therefore, vocabulary development should be integrated into academic education rather than treated as an isolated language-learning exercise. Effective instruction should combine general vocabulary, academic vocabulary, disciplinary terminology, morphology, collocations, contextual learning, extensive reading, productive writing, speaking, and repeated retrieval. Ultimately, academic vocabulary is valuable not simply because students need to know more English words, but because vocabulary provides the linguistic means through which students access information, process knowledge, communicate ideas, and demonstrate academic learning.

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Conflict of Interest

The authors should declare any financial or non-financial competing interests.

Author Contributions

Muhammad Haris Hayat: Conceptualization, methodology, investigation, data collection, data analysis, and writing—original draft. Rubina Shams: Literature review, methodology, data interpretation, and writing—review and editing. Dr. Zainab Younus: Supervision, conceptualization, critical evaluation of the manuscript, and writing—review and editing.

Sundus Faryad: Data collection, literature review, visualization, and manuscript preparation. All authors contributed to the interpretation of the results, critically reviewed the manuscript, approved the final version, and agreed to be accountable for all aspects of the work.

Data Availability

Data is available upon request from the corresponding author.

Ethics Approval

Not applicable.

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