

General and Academic Vocabulary Sizes and Reading Comprehension among the First Year BSED English Students

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Proficiency in the English language comprises a wide range of skills, including listening, speaking, reading, and writing. Among these skills, reading comprehension holds particular importance as it enables students to effectively process and understand written text. An essential factor contributing to successful reading comprehension is vocabulary, which plays a fundamental role in the reading process. This study aimed to explore the relationship between reading comprehension and vocabulary, specifically focusing on general and academic vocabulary commonly used in

English learning and academic settings. The research utilized a descriptive-



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correlational method, employing Pearson's r method to establish a significant relationship between the two variables. The results revealed significant findings for each type of vocabulary and reading comprehension. The learners demonstrated a very high general vocabulary and an above-average academic vocabulary size. Additionally, the learners exhibited an average level of reading comprehension. These statistical findings emphasize the significant relationship between the variables studied, emphasizing their mutual influence. To enhance students' academic performance, the researchers suggest implementing modules comprising diverse activities and exercises to promote the development of both academic vocabulary and reading comprehension skills.

INTRODUCTION

Research emphasizes the importance of vocabulary in enriching reading comprehension skills. A deep grasp of word meanings is vital for readers to adeptly understand texts and extract intended messages (Pourhosein & Sabouri, 2016; Kendeou et al., 2016). Vocabulary stands as a prerequisite in language acquisition and development, forming the foundation for crucial language skills encompassing reading comprehension, listening comprehension, speaking, writing, spelling, and pronunciation (Levesque et al., 2020). A robust vocabulary is key for students' academic triumph, affording them the means to communicate effectively and interact with diverse forms of language. The expansion of their vocabulary equips students with essential tools to direct and comprehend the details of written and spoken texts, fostering accurate and confident self-expression and contributing to overall language proficiency and educational accomplishments (Pourhosein & Sabouri, 2016b; Keuleers et al., 2015).

To effectively address the challenges associated with reading comprehension, educators must prioritize vocabulary instruction (Asyiah, 2017). Proficient vocabulary knowledge is indispensable for students to comprehend academic texts and excel in classroom learning (Gyllstad et al., 2015). Inadequate vocabulary impedes learners' capacity to acquire knowledge and comprehend encountered content. Thus, educators should underscore the growth of vocabulary in conjunction with other language components (Alqahtani, 2015). By providing students with a diverse and extensive vocabulary, educators empower them to engage more effectively with texts, thereby enhancing their overall reading comprehension skills (Ahmadi, 2017; Pourhosein & Sabouri, 2016a; Suk, 2016).

Furthermore, the symbiotic relationship between reading comprehension and vocabulary is evident. Proficient readers typically possess a broader vocabulary acquired through extensive reading that exposes them to a myriad of words and

their contextual usage. Conversely, individuals with limited reading experiences encounter challenges in expanding their vocabulary, hampering their reading comprehension abilities (Graham, 2020; Masrai & Milton, 2018; Warnby, 2023). Vocabulary knowledge contributes to the reading comprehension process through factors such as word semantic recall and the ability to form mental images from the text. A comprehensive understanding of this interplay is imperative for designing effective instructional approaches that foster students' academic development (Stutz et al., 2016; Yapp et al., 2021).

Moreover, the 2018 Program for International Student Assessment (PISA) revealed that the Philippines, among 79 participating countries, scored the lowest in reading comprehension (Schleicher, 2019). In the Philippines, both boys and girls ranked lowest in reading performance among PISA-participating countries, with 80% of Filipino students falling below the minimum proficiency level (Juan, 2019). Several studies emphasize the significance of familiarity with terms or vocabularies in planning development plans for learners' reading and comprehension proficiency (Tomas et al., 2021; Sabatini et al., 2019). These findings highlight the urgent need to enhance reading proficiency and cultivate a natural interest in reading.

In the Philippine context, where English serves as a second language, the importance of adequate vocabulary knowledge in reading comprehension has long been acknowledged. Despite six years of formal English training in high schools, first-year college students are expected to comprehend English textbooks related to their field of study seamlessly. Unfortunately, numerous students, as reported by several researchers, still encounter significant difficulties in comprehending English textbooks (Septiyana et al., 2016).

The Bachelor of Science in Education Major in English (BSED English) program equips students with the knowledge and skills necessary to become effective English educators. The curriculum focuses on developing a strong foundation in the English language, encompassing areas like literature, grammar, writing, and critical thinking. BSED English students are expected to develop competencies in subject matter expertise, instructional skills and more importantly, communication skills. The core curriculum of a BSED English includes the development of vocabulary, a crucial building block for effective communication. However, the shift to remote learning during their senior high school education has presented unique challenges and opportunities for BSED English students as they have adapted to delivering lessons and fostering student engagement through online platforms.

This study endeavors to assess both general and academic vocabulary types and their correlation with reading comprehension. The results will offer insights

for First Year BSED English students for academic purposes. Based on the findings, the researchers propose instructional material to enhance students' reading comprehension skills and elevate their vocabulary levels, contributing to more effective teaching and learning.

OBJECTIVES OF THE STUDY

This study aimed to measure the levels of general and academic vocabulary sizes and their impact on the reading comprehension of first-year BSEd English students at MinSU, Calapan City Campus.

Specifically, it sought to determine the level of vocabulary sizes of the respondents in terms of general and academic vocabulary and the level of reading comprehension of the respondents. It also aimed to determine if there is a significant difference between the level of general and academic vocabulary sizes of the respondents, a significant relationship between the level of general and academic vocabulary sizes and the level of reading comprehension of the respondents, and identify what instructional materials could be proposed for teaching different vocabulary and reading comprehension, based on the results of the study.

METHODOLOGY

Research Design

This study used quantitative research, specifically the descriptive comparative-correlational design. According to Bhandari (2020), quantitative research is the process of collecting and analyzing numerical data. Quantitative research uses measurable data to formulate facts and uncover patterns and research. Descriptive research design describes the nature of the situation, as it exists from the study of the study and to explore the cause of a particular phenomenon. It establishes an association between variables. This involves gathering data that describes the events and then organizing, tabulating, depicting, and describing the data collection.

On the other hand, a descriptive comparative design considers two variables that are not manipulated and establishes a formal procedure to compare and conclude that one is better than the other if a significant difference exists. In addition, correlational research design was used in this study to determine how the independent variables describe or relate to the dependent variables.

Respondents

The respondents for this study were first-year BSED-English students at MinSU, Calapan City Campus. 83 first-year BSEd-English students generated from a population of 105 who enrolled for the school year 2021-2022 were asked to answer a series of questionnaires. The researchers used stratified random sampling to gather respondents for the study.

Instrumentation

The researchers used vocabulary tests and reading comprehension. The first set of tests is the reading comprehension test, which aims to measure the level of students' reading comprehension. The vocabulary test has a total of 60 items in multiple-choice format. The test was comprised of the New General Service List (NGSL) of English words test (30 items) and The New Academic Word List (NAWL) test comprised of 30 items. The second set of tests is the vocabulary test, which is intended to measure the size of the vocabulary of the respondents as well as their knowledge of both general and academic vocabulary.

Scaling and Quantification

The scores of the respondents to the given test that measures the level of general and academic vocabulary sizes and reading comprehension were interpreted using the score tabulation table to get the equivalent percentage. Once interpreted, the proficiency level scaling below will be used to visualize the implications of the result fully.

Table 1

Scale and Descriptions of the Level of Vocabulary Sizes

Equivalent Numerical Value	Description
90% and above	Very High
85-89%	Above Average
80-84%	Average
75-79%	Below Average
74% and below	Very Low

For the reading comprehension test, the researchers also used a 20 Items Test Transmutation Table to transmute the scores and get the equivalent percentage, which is important to determine the level of reading comprehension of the respondents.

Table 2*20 Items Test Transmutation Table*

20 – 100%	15 – 88%	10 – 75%	5 – 63%
19 – 98%	14 – 85%	9 – 73%	4 – 60%
18 – 95%	13 – 83%	8 – 70%	3 – 58%
17 – 93%	12 – 80%	7 – 68%	2 – 55%
16 – 90%	11 – 78%	6 – 65%	1 – 53%

For the vocabulary test, the researchers also used a 30 Items Test Transmutation Table to transmute the scores and get the equivalent percentage which is important to determine the level of general and academic vocabulary sizes of the respondents.

Table 3*30 Items Test Transmutation Table*

30 - 100%	25 – 92%	20 – 83%	15 – 75%	10 – 67%	5 – 58%
29 - 98%	24 – 90%	19 – 82%	14 – 73%	9 – 65%	4 – 57%
28 – 97%	23 – 88%	18 – 80%	13 – 73 %	8 – 63%	3 – 55%
27 – 95%	22 – 87 %	17 – 78%	12 – 70%	7 – 62%	2 – 53%
26 – 93%	21 – 85 %	16 – 77%	11 – 68%	6 – 60%	1 – 52%

Reliability of the Instrument

The reliability of the instrument used in this study was measured through the consistency of responses from the respondents. A test-retest method was used to measure the reliability of the research instruments used in this study. The instrument will be pre-tested by ten (10) non-respondents from the First Year BSEd-English students of Mindoro State University Calapan City Campus. After ten (10) days, the questionnaire was re-administered to the same respondents to determine the reliability of the instrument.

Validation of the Instrument

The three expert critics validated the research instrument to assess its validity and examine the accuracy of its contents and the relevance of the instrument to the research objectives. Their comments and suggestions will be carefully integrated to come up with a final copy of the instrument, which will be administered to the target respondents.

Statistical Analysis

This study used the frequency and percentage distribution, Pearson's r method and the t -test method to analyze the data gathered. Frequency and percentage distribution were used to determine the level of general and academic vocabulary sizes and the level of reading comprehension of first-year BSEd-English students at Mindoro State University, Calapan City Campus. The t -test was used to determine the difference between the levels of academic and general vocabulary among the students. In contrast, the Pearson's r test was used to determine the relationship between the level of general and academic vocabulary sizes and the level of reading comprehension.

Research Ethics Protocol

The researchers considered the decisions and information of the selected respondents from the list of first-year BSED-English students. The researchers sought approval from the target respondents through a consent letter signed by the research adviser. For formality and clarity, this letter included the purpose of the research study and the timeframe of data collection. Since the respondents of this study were picked at random, in consideration, the researchers asked the respondents whether they would take part in the conduct of the study or withdraw themselves from being the respondents after reading the letter. Moreover, the researchers kept the information and responses of the respondents, and they will only be used for the sake of the research. Furthermore, researchers did not manipulate the respondents' pre-existing data to achieve the researchers' objective. All data was analyzed using the research design and statistical tools of the study to obtain factual findings and generate conclusions and recommendations.

Data Collection

In this study, the researchers randomly selected the respondents from the list of first-year BSED-English students of Mindoro State University, Calapan City Campus. Prior to the administration of the test, the researchers asked for the permission of the respondents and then explained the purpose of the study and why they were conducting this kind of survey. Once approved, the researchers

administered the test to the respondents through an online platform. Specifically, researchers administered the vocabulary test through a Google form in order to determine the respondents' general and academic vocabulary sizes. On the other hand, researchers used virtual conferences or Google Meet to administer the test about reading comprehension in order to obtain the necessary data and information. Tabulation of the respondents' answers followed after the tests are submitted. The researchers then applied statistical treatment to the data. After the aforementioned process, the data was thoroughly interpreted to show the results of the study.

RESULTS AND DISCUSSIONS

Level of Students' Vocabulary Sizes in terms of General Vocabulary and Academic Vocabulary

Level of General Vocabulary of the First-Year BSEd-English Students

The respondents achieved a mean score of 25.90, indicating a very high proficiency, as indicated in Table 4. Notably, 60.24% of respondents scored between 26 and 30, signifying a strong awareness of general vocabulary in language learning and daily communication. The high level of general vocabulary proficiency aligns with the findings of previous studies, such as Wero et al. (2021), supporting the notion that students often acquire general vocabulary during academic learning activities and exposure to varied texts. The role of general vocabulary in the reading process is fundamental and crucial for comprehension. Students acquire the meanings of most words indirectly, primarily through making connections from general vocabulary with the more complex vocabulary used in their reading and communication. Additionally, some words are acquired through purposeful and well-structured instructional methods.

Table 4

Level of General Vocabulary of the First-Year BSEd-English Students

Range	Frequency	Percentage
26-30	50	60.24%
21-25	30	36.15%
16-20	2	2.41%
11-15	1	1.20%
6-10	0	0%
1-5	0	0%

TOTAL

83

100

Mean: 25.90

Interpretation: Very High

Level of Academic Vocabulary of the First Year BSEd-English Students

Table 5 provides insights into the Level of Academic Vocabulary among First Year BSEd-English students. The data reveal a solid proficiency, with a mean score of 23.78, categorizing the students' academic vocabulary as "Above Average" according to the interpretation criteria. The distribution of scores indicates that a significant portion of students demonstrate proficiency in academic vocabulary. Notably, 42.17% scored within the highest range (26-30), and an additional 34.94% fell within the range of 21-25. This distribution suggests that a substantial majority of students possess an above-average command of academic vocabulary. The occurrence of scores in the upper ranges suggests that these students are well-equipped with the specialized language required for academic discourse. An above-average academic vocabulary is crucial for comprehending complex texts, engaging in scholarly discussions, and meeting the language demands of academic pursuits. This conforms to the findings of Alghonaim (2020) that academic vocabulary proficiency is a common strength among students pursuing language studies. This consistency highlights the importance of continuously challenging students to expand their academic language skills.

Table 5

Level of Academic Vocabulary of the First Year BSEd-English Students

Range	Frequency	Percentage
26-30	35	42.17%
21-25	29	34.94%
16-20	17	20.49%
11-15	1	1.20%
6-10	0	0%
1-5	1	1.20%
TOTAL	83	100
Mean: 23.78		Interpretation: Above Average

Level of Students' Reading Comprehension

Table 6 shows that the majority of students fall within the range of 13-16, constituting 38.6% of the total sample. This suggests that a significant portion of the respondents possess a moderate level of reading comprehension.

Additionally, 32.5% fall within the range of 9-12, indicating a substantial proportion of students with a slightly lower comprehension level. Meanwhile, the percentages for the 17-20, 5-8, and 1-4 ranges are 19.3%, 7.2%, and 2.4%, respectively. The mean reading comprehension score is 12.95, indicating an average level of comprehension within the sample. While this suggests a relatively balanced distribution of scores, it's essential to delve deeper into the variations within each range to understand the nuances of individual performance. Given the distribution of scores, educators can tailor their teaching strategies to address the diverse needs of students. It conforms to what Munna and Kalam (2021) stated that to enhance reading comprehension skills, educators can consider implementing interactive and varied teaching methods, such as group discussions, reading circles, and the incorporation of diverse texts.

Table 6

Level of Reading Comprehension of the First-Year BSEd-English Students

Range	Frequency	Percentage
17-20	16	19.3 %
13-16	32	38.6 %
9-12	27	32.5 %
5-8	6	7.2 %
1-4	2	2.4 %
TOTAL	83	100
Mean: 12.95		Interpretation: Average

Difference in the Level of Students' General and Academic Vocabulary

The t-test results shown in Table 7 indicate a significant difference between the levels of academic and general vocabulary among the students ($t = 6.462$, $p = .001$). This suggests that the disparity in vocabulary proficiency is not likely due to random chance but is a consistent pattern within the sample. The results show a significant difference, implying that, on average, the students exhibit higher proficiency in academic vocabulary compared to general vocabulary. This could be attributed to the specific language demands of their academic coursework, which may require a more specialized and nuanced use of language.

Table 7

The T-test on the difference in the level of general and academic vocabulary of the first year BSEd-English students

Variables		T	p	Results
Academic Vocabulary	General Vocabulary	6.462	.001	Significant

Relationship between the Level of General and Academic Vocabulary Sizes and the Level of Reading comprehension of the respondents

Table 8 shows the positive correlation coefficients for academic vocabulary ($r = 0.401$), general vocabulary ($r = 0.387$), and the combined academic and general vocabulary ($r = 0.430$) with reading comprehension highlighting a consistent trend. As the size of the students' vocabulary increases, there is a corresponding positive effect on their reading comprehension levels. These findings emphasize the integral role that vocabulary plays in understanding and interpreting written text. The low p-values (all $< .001$) indicate the statistical significance of these correlations. This means that the observed relationships are unlikely to have occurred by chance. The robust statistical significance reinforces the validity of the connections between vocabulary sizes and reading comprehension levels. The higher correlation coefficient for academic vocabulary compared to general vocabulary suggests that, within the context of BSEd-English studies, specialized academic language plays a slightly more pronounced role in predicting reading comprehension. This finding underscores the importance of focusing on subject-specific vocabulary in language instruction.

Table 8

The Pearson's r Test on the relationship between the level of general and academic vocabulary sizes and the Level of Reading comprehension of the First Year BSEd-English students

Variables		R	p	Results
Academic Vocabulary	Reading Comprehension	0.401	.001	Significant
General Vocabulary	Reading Comprehension	0.387	.001	Significant
Academic and General Vocabulary	Reading Comprehension	0.430	.001	significant

CONCLUSIONS

Based on the findings of the study presented in the previous section, the following conclusions are generated. The results show the students' readiness to engage with diverse language materials and academic texts. However, it also implies a responsibility to tailor instruction to challenge and further enrich their vocabulary. In addition, the above-average proficiency in academic vocabulary demonstrated by the respondents is a positive indication of their readiness for academic endeavors. The analysis of the reading comprehension levels among first-year respondents reveals a diverse distribution of scores. Understanding these patterns, can help educators to implement targeted strategies to foster the development of reading comprehension skills, ultimately supporting the academic success of their students. The observed difference in vocabulary levels may have implications for students' overall academic success. Proficiency in academic vocabulary is crucial for comprehension and effective communication in specialized fields. Therefore, addressing this discrepancy could positively impact students' ability to excel in their academic endeavors. Moreover, Pearson's *r*-test results indicate a significant positive correlation between both general and academic vocabulary sizes and the reading comprehension levels of the respondents. Recognizing and leveraging these relationships in educational practices can contribute to more effective language instruction, ultimately fostering improved reading comprehension skills among students. To enhance academic performance, an instructional module containing targeted activities and exercises is proposed to address the specific needs related to academic and general vocabulary sizes, as well as reading comprehension skills, for first-year BSED-English major students.

The module created is composed of two units. The first unit dealt with vocabulary and reading comprehension. Both consist of learning outcomes, followed by a discussion of the lessons supported with updated references, and learning activities. Moreover, the first unit specifically discussed types of vocabulary and its importance. Learning activities include multiple-choice questions asking for the appropriate term to be used in the context of a given sentence. Also, there are activities writing activities asking the students to write specific types of text using a given set of vocabulary. These sets of discussions and activities aimed to address the need for a more collegiate level of vocabulary to be used for a wide variety of formal communication. Likewise, the second unit tackled dealt with different strategies and levels of reading comprehension. Learning activities include reading comprehension in literal, interpretative, and applied levels. These targeted the need for BSED English students with a multifaceted comprehension

toolkit. This includes not just understanding the text itself, but also the ability to analyze its structure, vocabulary, and deeper meaning, all while employing effective reading strategies and preparing to teach them to others.

TRANSLATIONAL RESEARCH

As a result of the study, an instructional module was developed to enhance students' vocabulary and reading comprehension. This module offers a comprehensive review of academic and general vocabulary concepts, incorporating activities, pre-tests, and assessments. Aimed at both teachers and learners, the module serves as a guide for effective English language instruction, fostering vocabulary growth and improved reading comprehension skills in spoken and written contexts.

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