

## TECHNICAL TERMS USED IN GENERAL ENGLISH TEXTBOOKS ACROSS DISCIPLINES

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### ABSTRACT

*The study aimed to analyze lexical items underpinned in the textbooks used in the current teaching of ESP and GE. Using content analysis, a systematic evaluation of texts to examine nuances to bridge the gap between quantitative and qualitative data. This was such of importance, however, difficult to study due to issues of interest like in the study, frequency of lexical items in ESP, and GE textbooks. Results found 13,713 lexical items in Hospitality Management, 17,561 in Criminology, 4576 in Tourism, 7167 in Marine Engineering, and 512 in Information Technology. Furthermore, the overall percentage of ESP lexical items fell in Tier 2 (with multiple-meaning while the least was in Tier 3, specifically on context-specific vocabulary. It is the core of vocabulary learning to ensure English language teaching. It is its goal to help learners better understand language, allowing them to understand others as they want to express themselves as well. This applies not only in speaking but also in writing and reading. Wilkins (1972, p. 111-112) stated that without grammar very little understanding can be acquired and without vocabulary there can be no learning at all. Thus, even without good grammar, so long as you equipped with useful words and expression, one can still manage to communicate. Lewis (1993) argued that "lexis is the heart of language" and that it develops a better fluency and expression in English. He also added the significance to the learners of acquiring a more productive vocabulary knowledge, also, their eagerness to develop their own personal vocabulary strategies. Thus, a proposed bridge model program was recommended to highlight the study findings using the lexicons found from the different respective courses.*

**Keywords:** bridge model, English for general purposes, English textbooks, high frequency words, vocabulary instructions, technical terms

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## INTRODUCTION

At present, the world has considered English as the 'language of business' and is used strictly for business purposes. This proves that there are many similarities between general English and business English. However, the vocabulary used is different and one of its biggest differences is the method of teaching and the targeted audience. They say business English means being acquainted with unmotivated students. They are wrong since teaching business English is highly valued by highly motivated, intelligent professionals for they want to increase their skills especially in business and the international environment. This may also include skills in the following aspects: technical or academic terminology, taking notes, and making presentations. It is the main aim of Business English to meet the specific expectations and needs of the students. Since learners of business English are never complete beginners, there is a need for them to have a deep understanding of the General English Vocabulary to improve their business-related skills.

According to Voltaire in Schmitt (2010), it is difficult to put language into words. It is through teaching vocabulary that students are able to understand and communicate using the English language. He has also added that learning vocabulary allows a learner to use English language according to a specific purpose. Pesina (2014) highlighted lexicon as a core that comprises the most frequent words in vocabulary learning. He asserted that the learners' familiarity to a word depends on the continuous usage or exposure to the words being learned. This helps identify and produce index of word usage or cite the frequency to word or expression. Thus, words that are commonly encountered are considered familiar to the tongue as the learners get to expose themselves to it more often. This makes it easier for the learner to understand the depth of the meaning of a word and the different situation it can be utilized.

## MATERIALS AND METHODS

To Nordlund (2014), educators must not only focus on the importance of textbook analysis but also the effectiveness of the textbooks in the promotion of curricula. It was posited that content, structure, expectation, and language were the key elements in conducting a textbook analysis. Wang (2015) added that in completely learning the language, a learner improves one's vocabulary. The following must be considered: vocabulary size, word association knowledge, collocation knowledge, and morphological knowledge. However, the current researcher focused on one aspect of analyzing available textbooks in ESP in terms of the recurring vocabulary used in the identified textbooks.

This fell under the language component. ESP, as an integral part of learning, allows learners to improve their foundation of words which found to be frequent to the specific field of professions that are aiming for. The researcher utilized random sampling in choosing five (5) textbooks in ESP from the different colleges and universities in Luzon, specifically ESP for Hospitality Management from University A; ESP for Criminology from College A; ESP for Tourism from University A; ESP for Marine Engineering from College B; and ESP for Information Technology from University B. The researcher considered the following guidelines in selecting textbooks to be part of the study. The researcher ensured that the textbooks were currently available and used in teaching English for Specific Purpose (ESP) during the time of the study. The researcher was able to find five (5) ESP textbooks available.

To collect the data needed to address the research questions, the researcher considered the following procedures:

- Identification of Qualified Textbooks.
- Re-encoding of the Textbooks.
- Analysis of Texts through NVIVO.
- Content Analysis.
- the word was appropriate for the tertiary education level (Beck et al., 2002);
- After sorting the words based on the criteria, each word was classified based on the word-tier classification as suggested by Hutton (2008).

## RESULTS AND DISCUSSION

### *Problem 1. The lexical terms found across the disciplines*

This table shows the summary of lexical frequency of the different courses highlighted in this study, which further displays the great number of requisite words to encounter once a learner take this course. Highlighting the group of words that comprises the upper fifty percent of the total number of units found across the lexicon of 37, 218 words in all. Based on the analysis, it can be asserted that utmost number of units are found within frequency count 1-10 with 88.52% for Hospitality Management; 89.5% for Criminology; 89.77% for Tourism; 89.36% for Marine Engineering; and 94.86% for Information Technology. Liu Na and Nation in Pesina & Yusupova (2015) stated that for a learner to be successful in learning the English language, they must acquire of at least 3,000 words for their vocabulary size. This points out the substantial time and cognitive investment in order to acquire the start-up vocabulary needed to comprehend general texts. Round 10,000 to 12,000 English words for a bachelor degree and around 5,000- 6,000 words are expected to be utilized in an active manner with a certain amount of skill. On the other hand, it has been found out that among 37, 218 words, approximately 70-80% of the lexicon may already provide a handful of units representing the different tier of vocabulary. It can be deduced that it is evident that there is the presence of different tiers no matter what profession it may be. This list was generated and was compared to the academic word list developed by Coxhead et al. (2000). This implies that the textbooks lack lexical items matching Academic Word List with great importance on building their vocabulary significantly to their current level. There was great importance in introducing students at the tertiary level in the Academic Word List particularly aligned to their field of interest.

### **S.A.M.M Bridge Model of Vocabulary Instruction**

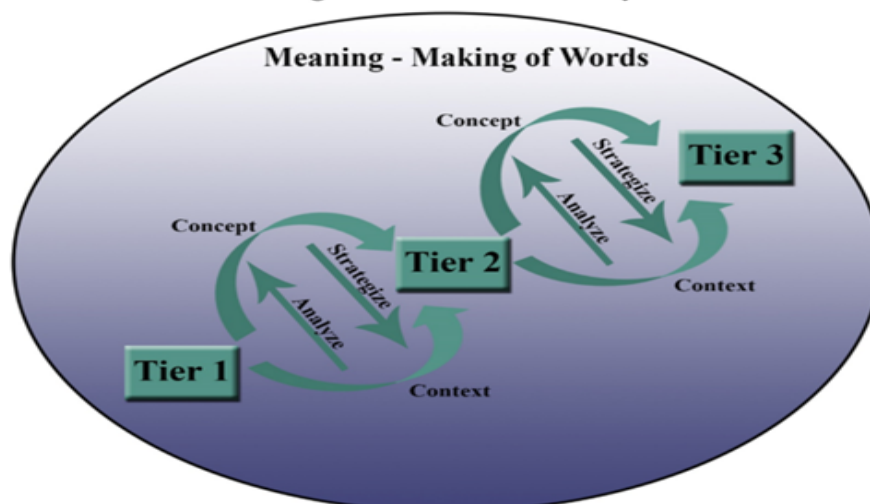


Figure 1. Strategize, Analyze and Make Meaning (S.A.M.M.)

Thus, international texts could be further understood if students were introduced and familiar with the said list. Moreover, considering that target learners are already at the tertiary level, it is reasonable that there are more lexical items under tier 2 implying the maturity of the learners in terms of their vocabulary grasp. There is also a fair number of lexical items for tier 1, revealing a strong foundation on the general language that may be understood by many.

### *Problem 2. The comparison of ESP lexical items based on the following skills: basic vocabulary, multiple-meaning vocabulary, and context-specific vocabulary*

For justification, spoken language is often a continuous stream of speech. For comprehension to succeed, the listener must segment this stream into a sequence of individual words. A substantial literature

has been devoted to determining the degree to which information about word-boundary locations is present in the acoustics of speech (Beck, McKeown, & Kucan, 2008) or dependent upon higher-order contextual factors such as the listener’s interpretation of word meaning and sentence structure (Alfaki, 2014). By identifying the different sources of information, their relative importance, and how they are used in combination, it is thought that a comprehensive theory of word segmentation can be constructed (Bada, 2015). The present study also revealed that the different textbooks were found to use concrete (very specific) nouns. Concrete terms refer to objects or events available to the senses. This is directly opposite to abstract terms, which name things that are not available to the senses. Because these terms refer to objects or events, one can see or hear or feel or taste or smell, their pretty stable meanings. While abstract terms like “love” changes meaning with time and circumstances, concrete terms stay pretty much the same. Success means different things to each one and one could be sure of the meaning of abstract (Evans & Morrison, 2011). General terms and specific terms are not opposites, as abstract and concrete terms are; instead, they are the different ends of a range of terms. General terms refer to groups; specific terms refer to individuals, but there a gap between. A definition states the meaning of a word using other words. This is sometimes challenging. Common dictionaries contain lexical descriptive definitions but there are various types of definitions - all with different purposes and focuses. It is thus usually regarded as distinct from homonym, in which the multiple meanings of a word may be unconnected or unrelated.

**Table 1. Summary of Findings**

Hospitality Management		Criminology		Tourism		Marine Engineering		Information Technology	
Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Count 13,713		Count 7,239		Count 4,575		Count 7,167		Count 5,064	
Count 1 6918	50.44	Count 1 3557	49.1	Count 1 2247	50.20	Count 1 3499	48.8	Count 1 2935	57.9
Count 2 2035	14.83	Count 2 1114	15.3	Count 2 688	15.20	Count 2 1121	15.64	Count 2 770	15.2
Count 3 985	7.18	Count 3 586	8.09	Count 3 338	7.38	Count 3 572	7.98	Count 3 370	7.30
Count 4 656	4.78	Count 4 393	5.42	Count 4 219	4.78	Count 4 388	5.4	Count 4 235	4.64
Count 5 422	3.22	Count 5 242	3.34	Count 5 168	3.67	Count 5 241	3.36	Count 5 168	3.40
Count 6 347	2.53	Count 6 178	2.45	Count 6 118	2.57	Count 6 178	2.48	Count 6 101	1.99
Count 7 255	6.18	Count 7 128	1.76	Count 7 94	2.05	Count 7 125	1.74	Count 7 87	1.71
Count 8 209	1.52	Count 8 126	1.74	Count 8 73	1.59	Count 8 122	1.70	Count 8 51	1.01
Count 9 176	1.21	Count 9 87	1.20	Count 9 59	1.28	Count 9 88	1.22	Count 9 47	0.92
Count 10 136	0.99	Count 10 72	0.99	Count 10 53	1.15	Count 10 71	0.99	Count 10 40	0.78

**Table 2. Example for S.A.M.M. Bridge Model of Vocabulary Instruction**

Terminologies	Basic Vocabulary	Multiple Meaning Vocabulary	Context-Specific Vocabulary	Definition	Translation to Mother Tongue	Sentence

A homonym is, in the strict sense, one of a group of words that share the same spelling and pronunciation but have different meanings. Thus, homonyms are simultaneously homographs (words that share the same spelling, regardless of their pronunciation) and homophones (words that share the same pronunciation, regardless of their spelling). The state of being a homonym is called homonymy (Hsu, 2006). Examples of homonyms are the pair stalk (part of a plant) and stalk (follow/harass a person) and the pair left (past tense of leave) and left (opposite of right). A distinction is sometimes made between "true" homonyms, which are unrelated in origins, such as skate (glide on ice) and skate (the fish), and polysemous homonyms, or polysemes, which have a shared origin, such as mouth (of a river) and mouth (of an animal).

### *Problem 3. The bridge model for vocabulary instructions in English for General Purposes*

The researcher proposed a 'Bridge Model' to enrich the vocabulary of students across disciplines since findings revealed that there was a great need to improve not only vocabulary learning but also instruction. It was also found out that there was a need for vocabulary teachers to explore different strategies in teaching vocabulary among students deviating from conventional ways, like the use of dictionaries. Since this is the most common means of getting the meaning of a word, we cannot do away with it. It is also considered as one of the most important and reliable references for the learners, accessible and readily available. It was found out based on the results from the analysis of Malekpur (2015) that learners use dictionaries to expand their vocabulary knowledge, aside from looking up for new words. Same with bilingual dictionaries. It was also stated that bilingual dictionaries usually provide just an L1 synonym; monolingual dictionaries similar to Oxford's include L2 definitions, including examples, sentences, both synonyms and antonyms, and even pictures. This can truly help the learners better understand the new words acquired.

Thus, revealing the learners' preference for using monolingual dictionaries rather than the bilingual ones. Based on the findings of the study, it is evident that no one method would solely suit the needs of the learners as far as vocabulary enrichment is a concern. There are ample reasons for learner's low or high vocabulary level. Considering the factors under each vocabulary category, tiers 1, 2, and 3, there is one or more methods that can be used to address all these. Considering the 37,218 lexical items, a combination of all five textbooks for specific courses, it has shown how each course requires a different need. For each set of words, the learners are expected to have acquired the necessary skills to understand and trace out the meaning it pertains to. Tier 1 category suggests the learners' foundational knowledge of the general English. Tier 2, on the other hand, assesses the learners' maturity in terms of understanding the real-world experiences. Furthermore, the tier 3 category depends on the career path they take. The different strategies presented, aims to help the learners better understand the knowledge they have acquired throughout their basic education until such time that they are in the tertiary level. It is a sad fact that learners, while they are in their basic education, usually don't understand the point of learning the words that they have acquired. Some may have even learned the concept for the sake of just knowing but not to the point that they understood the manner these words should be used.

On the other hand, the tier 3 category in context-specific vocabulary may further be improved once the learners have fully identified their respective goals, professionally wise. Hence, a bridge model with an acronym of SAMM, (Strategize, Analyze, and Make Meaning Model) was proposed for English educators in handling ESP and GE. Primarily, the bridge model aimed at enriching the vocabulary instruction and acquisitions among students to ensure preparedness and be equipped to communicate in their respective workplaces. There are ways to use this model: from the teacher's perspective and in the student's perspective. English for specific purposes is said to be a new trend in English language and vocabulary knowledge as at the crucial stage in teaching. It is the role of teachers to help students identify themselves in this journey of making themselves equipped with the necessary knowledge need for a specific role. However, it must still be considered that this is not an easy task as this matter has been neglected for several years (Xhaferi, 2010). This model is divided into seven columns. The first column is for the terminologies, this can both be supplied by the teacher and the learner depending on the target goal of the model.

The second to the seventh column is for the learners to supply. The second, third, and fourth columns are intended for the different tiers that would determine the vocabulary knowledge of the learner: basic vocabulary, multiple-meaning vocabulary, and context-specific vocabulary. According to Qian (2002), in terms of reading comprehension, one must be able to measure one's capability to evaluate the depth of one's vocabulary knowledge. It has been revealed that when a learner breaks a word into its morphological component, their knowledge, and comprehension on a particular word-formation show (Keiffer and Lesaux, 2008). It has also been mentioned that morphological interpretation is an important factor in incorporating the understanding of a word, specifically the suffixes, roots, and other morphemes accompanied to one's metalinguistic knowledge and capability in analyzing word meaning. It is the purpose of this model to not only identify the category of a word but most importantly, to prove that a learner is knowledgeable of a word based on its meaning that is classified into different tiers. Snow (2002) also added that in reading comprehension, an interactive and progressive procedure is needed to formulate and extract the meaning of a text.

Nation and Snow (2004) revealed the influence of vocabulary depth's statistical relation to the reading comprehension without the nonverbal, non-wording reading, and phonological capabilities of a learner. Their study affirms the important role of vocabulary knowledge in one's reading achievement and success. Qian's (2002) assessment of both the vocabulary depth on reading comprehension conducted on ESL participants with various L1 backgrounds, which asserts that vocabulary depth and reading proficiency are notably related to each other. Thus, this marks a remarkable contribution to the prediction of one's academic success. In a different context, Mehrpour, Razmjoo, and Kian (2011) proved that vocabulary depth has a great influence over academic reading proficiency and that it contributes towards predicting one's reading comprehension. Furthermore, the fifth column requires students an in-depth proof of their vocabulary knowledge as regards the terminologies given by the facilitator. It has been said that one can determine a learner's vocabulary knowledge based on the following stages: (1) if a learner is unfamiliar with a word; (2) if the word is familiar but the meaning is unknown to the learner; (3) if the learner can translate the word into NL; (4) if the learner can use the word appropriately in a sentence; and (5) if the learner can the word accurately both in meaning and in structure (Paribakht and Wesche, 1993).

Thus, the purpose of this column is for the learners to define a word based on their knowledge. Like the above-mentioned factors in determining learner's vocabulary, a learner can be classified into different characteristics. Thus, the sixth column of the model emphasized the mother tongue foundation of a learner. In these columns, the learner has to provide a translation of the word to its mother tongue language. One's prior knowledge must not be a hindrance for the learner rather should be used to uplift and develop one's understanding of a concept or a text. It must also be remembered that the definition must be aligned with the tier category that the word it is under. Moreover, in the last column, the learner must use the word in a sentence that would further exemplify the definition given on the fifth and sixth columns; and it must also be aligned to the course content.

## CONCLUSION

Based on the findings of the study, the researcher was able to formulate the following:

- There were 37, 218 lexical items observed among the ESP textbooks used in the identified course programs in the Philippines;
- There is an utmost number of units are found within frequency count 1-10 with 88.52% for Hospitality Management; 89.5% for Criminology; 89.77% for Tourism; 89.36% for Marine Engineering; and 94.86% for Information Technology, thus, determining the reasonable need for supplementary instruction to bridge the different tiers for the learners in depth vocabulary knowledge.
- A bridge model with an acronym of SAMM, which stands for strategic analysis of morphological meaning, was proposed for English educators in handling ESP and GSP. Primarily, the bridge model aimed to enrich the vocabulary instruction and acquisitions among students to ensure that they were well-prepared and were equipped to communicate in their respective workplaces.

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