



ISSN (Print) 2596 – 7517

ISSN (Online) 2597 – 307X

FULL PAPER

Investigating the Appropriateness of Vocabulary Input in the Intensive English Course for Saudi Medical Undergraduates: A Corpus-Based Case Study

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Abstract

This corpus-based case study aimed to evaluate the relevance and coverage of vocabulary taught in the intensive English course at Jazan University for first-year medical students. The study compared words introduced in prescribed textbooks against three standard lists: General Service List, Academic Word List, and Medical Academic Word List. A concordance tool was used to analyze 240 words included across reading/writing and listening/speaking materials. Results showed emphasis on general vocabulary from the GSL, with 149 words (5% coverage). Academic coverage was 47 words (8%) from the AWL. However, specialized medical terms from the MAWL received little focus, with only 44 words (7%) introduced. This indicates a mismatch between vocabulary prioritized and students' needs for English-based medical instruction. The study concluded the current course inadequately equips learners with discipline-relevant terminology. Recommendations included supplementing the GSL foundation with targeted MAWL lessons and materials to better prepare undergraduates for their specialized ESP context. This research contributes insights for enhancing ESP curriculum appropriateness through criteria-aligned vocabulary evaluation and selection.

Keywords: Medical English, Corpus linguistics, Vocabulary taxonomy, Saudi tertiary education, Instructional materials analysis, English for specific academic purposes

Introduction

Most English as a foreign language (EFL) students are conscious that expanding their vocabulary is an essential part of their academic studies. EFL learners, particularly those who study English for particular purposes (ESP) need to possess a strong command of vocabulary. According to Paul Nation (2001:187), after students have mastered the 2000–3000 words that are frequently used in English, the learner should direct their vocabulary learning toward more specialized areas. Learning about the various forms of vocabulary, how to use it and particular tactics to aid in vocabulary acquisition is necessary for students to overcome the difficulties associated with specialized vocabulary usage. Concurrently, EFL educators and material writers must be aware of the categories of vocabulary terms and which ones deserve special attention. This is directly associated with what teaching content and classroom activities instructors should prepare for their students and whether these important words be dealt with during a class or a learner's independent study.

In essence, when teaching and learning vocabulary to EFL learners, it is crucial to differentiate between the general and the specialized vocabulary based on the learners' needs as different vocabulary types require specific attention and designated approaches. That is certain vocabulary categories can be prioritized and given more emphasis in teaching and learning than other skills, depending on the goals of the students and the course material.

As part of its education policy, Jazan University adopts the English language as the main medium of instruction. Hence health track students should study their major subjects in the English language. In other words, they must use English to explore scientific knowledge used in their chosen fields of study. This situation raises some important questions such as how much vocabulary should undergraduates develop? (Vocabulary size) and what type of vocabulary is required for academic study?

Generally, selecting appropriate textbooks for language instruction for Arab EFL learners has been a matter of academic controversy. One reason behind this argument is that language instructors are not able to decide when to start ESP teaching. It is believed that in English for Specific Purposes (ESP) classes, learners normally come from a variety of academic backgrounds. Thus the syllabus of these classes is broad and organized thematically or notionally to prepare students for more specialized coursework by providing them with relevant vocabulary, grammar, and discourse experiences. To that end identifying and categorizing academic and disciplinary vocabulary for ESP classes is important for learners, language teachers as well as materials designers. Coxhead (2000) and Nation, (2001), in this regard, have divided the vocabulary of English into four categories:

1. The High Frequency Words are composed of 2,000 words.
2. The Academic Vocabulary List AVL comprises 570 words.
3. Technical vocabulary depending on the subject area.
4. The low-frequency words that very occasionally appear in texts.

According to (West, 1953; Nation, 2012), high-frequency words list consists of 2,000 word families that are indispensable for the general use of language. This list covers a considerable amount of the active words in spoken and written language including the major words such as job, high, left, wood, cloth..etc. besides the minor words like prepositions,

conjunctions, and auxiliary verbs as well as all other function words place in the high-frequency words group.

As for the Academic/sub-technical' words, they are a set of words that is not limited to any specific area of study and cover a broad range of academic texts appear in different disciplines. These words are frequently used in academic texts; though, they are not technical words in any specific field. However, they frequently appear in a variety of formal correspondents and academic contexts such as college textbooks, field-specific periodicals, and guidebooks. Words such as bibliography, abstract, motivation, simplify, explicit, assignment, and capacity. Some experts like (Nation & Webb, 2011; Nation & Waring, 1997), believe that focusing on the high-frequency academic words can confirm that the emphasis is on the academic words that EFL learners frequently come across in their academic study. In addition, It can help students avoid wasting their time in learning enormous amount of irrelevant vocabulary (Durrant, 2009).

The third category of vocabulary is the "technical terms". This group of words refers to words that are exclusively used in a certain academic discipline such as medicine, Engineering, and Business. These words are usually 'discipline-specific' words that have a single conceptual meaning in the discipline (Hiebert & Lubliner, 2008). Example of this group words like anatomy, hematology, and gynecology are exclusively used in medical fields. In fact, these discipline-specific words are mainly Latin and Greek words.

Along the same line, (Dudley-Evans and St John, 1998, cited Kuo, S. M. 2017)) have classified words into three categories:

- a. Words that are used in everyday situations but are commonly used in technical and specialized discussions and descriptions.
- b. Vocabulary can have meanings that are different within disciplines and that are specialized and limited in others. Semi-technical vocabulary should be used to describe the former, whereas technical vocabulary should be used to describe the latter.

In light of these classifications, it is obvious that technical and semi-technical vocabularies are two distinct types of vocabulary. Thus they should be distinguished when teaching vocabulary for EFL learners as they are highly relevant to students studying English for specialized and academic purposes.

The primary concern of the present study is academic vocabulary which has variously been labeled as sub-technical vocabulary, and sometimes as semi-technical vocabulary (Chung, T. M., & Nation, P. 2004). Academic vocabulary is yet to be subdivided into three groups: general service or basic vocabulary, sub-technical and technical vocabulary. EFL teachers and course designers need to decide not only how many lexical items should be incorporated in a language syllabus but also which vocabulary items are required by a specific group of learners. It is assumed that the main strategy of vocabulary building is that learners should first develop the 2000 or General Service Word List (GSL) compiled by West (West 1953, cited Nation, 2012) followed by a set of academic words shared by all academic disciplines. Practically, this includes the 2000-word family, the 570-word family of Academic Word List or (AWL) (Coxhead, 2000) and 819 word families of Medical Academic Word

List (MAWL) (Lei and Liu, 2016). Language instructors and course designers, therefore, have to take into account words that frequently appear in technical contexts when designing instructional material for their students.

According to Flowerdew (2015), the importance of the corpus-based vocabulary list lays in the fact that material designers can be confident that the words they have selected are relevant and beneficial for learners. Besides, it provides standards for teachers to select the materials or course books. Thus, it is a practical and effective instrument. As a result, examining the vocabulary input of the instructional material in an English course, concerning frequency specifically, is valuable to realize what vocabulary is introduced to students and whether the materials are appropriate for a certain group of learners. Such investigations can provide new insights into vocabulary building for EFL learners.

The “Intensive English Language course” is the only undergraduate English language courses offered to Health Track students throughout their study at Jazan University. The course is taught in the first year of their academic study (trimesters). Moreover, the main aim of the IELC, as stated in the course specification, is to prepare the students for academic study in their chosen fields. With this particular aim in mind, it could be claimed that a language course for medical undergraduates should incorporate some specialized vocabulary.

There appears to be a mismatch between the vocabulary being taught in the Intensive English course for first-year medical undergraduates at Jazan University and the specialized lexicon required for their academic disciplines. While the course aims to prepare students for English-medium instruction in their medical fields, it does not distinctly address the technical vocabulary prescribed by standard word lists such as the Medical Academic Word List. Currently, the course materials do not differentiate between general, academic and discipline-specific terminology, treating all types of vocabulary equally rather than prioritizing medical terminology. As a result, students are not developing an adequate foundation in the specialized vocabulary needed to succeed in their English-taught medical studies. A gap seems to exist between the coverage of medical vocabulary in the course and the lexicons demanded by medical academic contexts. The appropriateness and relevance of the vocabulary input presented in the course has not been systematically evaluated using a corpus-based methodology. This study aims to investigate this mismatch by conducting such an evaluation of the course materials.

The main purpose of this study is to identify and classify the type of vocabulary items presented in the intensive English course for first-year medical undergraduates at Jazan University in reference to the three standards lists GSL, AWL, and MAWL. The study also seeks to compare the proportion of the vocabulary items presented in the intensive English course for first-year medical students based on three standard wordlists: GSL, AWL, MAWL to find out their occurrence and coverage. By comparing the lexical items of the two corpora, the study will try to answer the following questions:

1. What type of vocabulary items does the intensive English course for first-year medical undergraduates incorporate?
2. What type of vocabulary items should the intensive English language course for first-year medical undergraduates emphasize?

Literature Review

There is a plethora of published studies locally and internationally describing the importance of vocabulary knowledge as well as vocabulary learning strategies. In the Saudi tertiary context, there have been extensive investigations on the EFL learners' vocabulary size rather than the type of vocabulary required by learners in academic disciplines. For example, Altalhab (2019) conducted a medium-scale study comprising 120 Saudi tertiary students. The study aimed at examining the students' ability to communicate effectively in English. The Vocabulary Size Test (VST) developed by Nation and Beglar (2007) was employed as the tool for data collection. The results of this study showed that the mean vocabulary size of Saudi EFL tertiary students was approximately 3000 words.

In her small-scale study, Taha (2018) explored the correlation between vocabulary size and reading comprehension of 150 EFL learners at Jazan University. She concluded that JU EFL Learners need to increase the size of their English vocabulary to master their reading comprehension and develop other language skills. Her study also revealed that the size of vocabulary affected considerably the learner's reading comprehension ability.

In a similar study, Braima and Nurain (2015) conducted a case study entitled "English Vocabulary Size of Saudi Post-Secondary School Students". They used Nation and Beglar's (2007) Vocabulary Size Test (VST) as a tool to measure the vocabulary size of Jazan University's new entrants. The study concluded that the low level of proficiency in English among the students could be attributed to the students' small vocabulary size.

Another study was conducted by (Altamimi, & Alshehri, 2023) in a Saudi tertiary context in which they investigated the impact of vocabulary size on Saudi EFL learners' reading and listening skills. It is also considered a small-scale study; where only thirty-eight undergraduate EFL learners participated in the study. The Vocabulary Size Test (VST) developed by Nation and Beglar (2007) was the main tool to measure the subjects' vocabulary size. The study results showed that the vocabulary size of the Saudi EFL learners at the university level was 2790 words. The survey also indicated a positive correlation between the scores of the vocabulary test levels and the reading and listening test. The overall result of the study assessed the vocabulary size of Saudi undergraduate EFL learners was around 2790 words, which the researcher considered as a small number that negatively affects the performance of the students in reading, listening, and vocabulary tests. Additionally, the study found that the vocabulary size had a positive effect on reading and listening skills.

In 2011, Asgari et al published a qualitative research paper in the Malaysian context in which they scrutinized the type of vocabulary learning strategies used by Malaysian ESL learners majoring in Teaching English as a Second Language (TESL). The study recommended some strategies such as learning a word through reading, the use of monolingual dictionary, the use of the English language media, and practicing new English words in their daily social interaction as common strategies and the learners are well motivated to use them.

Hessamy (2013) conducted a research in the Iranian tertiary context aiming at examining the impact of oral and written pushed output as two techniques of vocabulary preparation on listening comprehension, active and passive vocabulary learning, and

vocabulary learning strategy use. The data collection process was done through a questionnaire followed by a test. The study found that vocabulary learning through oral pushed output was more effective in developing listening comprehension and active vocabulary learning than vocabulary learning through written pushed output. The result also showed that vocabulary learning through pushed output demonstrated a positive significant impact on vocabulary learning strategy use. As for passive vocabulary learning, the two techniques of treatment did not indicate any major differences.

In light of this brief review of some previous studies, there is a sizable literature on the lexical system in the context of Saudi tertiary education; however, far too little attention has been paid to the appropriateness of vocabulary to EFL students based on their subject of study. It is assumed that researchers have not treated this issue in much detail; therefore, the present study endeavors to fill this research gap.

Methods

A corpus-comparison approach was used in this study to compare the vocabulary items presented in the intensive English course used for first-year medical students at JU based on the three standard wordlists: General Service List GSL compiled by (Bauman and Culligan, 1995), Academic Word List AWL collected by (Coxhead, 1998), and Medical Academic Word List MAWL developed by Lei and Liu (2016) Moreover, the vocabulary items presented in the course books “Academic Progress 4- Reading and Writing” and “Academic Progress 4- Listening and Speaking” were reviewed, analyzed and organized in a tabulation form according to their corpus.

Instruments

The materials used for data collection in this study were the instructional materials prescribed and taught during the first and second trimesters of the academic year (2023-2024). This includes the book series of Academic Progress, fourth edition by Haunes & Maher (2020). This series comprises two textbooks: *Academic Progress 4-Reading and Writing* and *Academic Progress 4-Listening and Speaking*.

Procedures

A concordance was utilized using the Compeat Lexical Tutor CLT as the main tool for corpus analysis used in this study. It is a free online website providing a range of corpus-based tools for analyzing vocabulary items in foreign language learning. The spread sheet software MC Excel was also used to calculate, organize and tabulate data in a spread sheet according to the three standard wordlist references described earlier. The corpus analysis results were examined and in detail.

Results and Discussion

Vocabulary Presented in the Prescribed Textbooks (AP-4)

This section discusses the vocabulary items presented in the two prescribed textbooks used for language instruction for medical students; “*Academic Progress-Reading & Writing*” and “*Academic Progress-Listening & Speaking*” by Laurie Frazier and published by Pearson. The common feature of the two textbooks is that both follow the same layout and

organization. That is, each unit in both books is divided into two main parts labeled “*Focus on Reading*” and “*Focus on Writing*” or “*Focus on Listening*” and “*Focus on Speaking*” respectively. Another regular feature is that each unit begins with a vocabulary section in which all new words are listed and classified according to parts of speech (noun, verb, adjective...etc.). There is another section at the end of each unit that shows a compiled list of all the target vocabularies that are presented throughout the unit.

Table1. Vocabulary Input in AP4 (R&W)

Unit	Topic	Vocabulary Items								
1	Finding the ideal Job	advice	career	challenge	experience	hire	ideal	interview	manager	
		post	resume	reward	salary	setting	skill	training		
2	Creative Thinking	combining	create	curious	encourage	fact	logical	measure	original	
		piece	prove	realize	remember	study				
3	Making Money	arrest	bill	completely	equipment	illegal	ink	logo	packaging	scanner
		prevent	quality	counterfeiter	fake	imitation	label	nervous	pirated	technology
4	Subway Etiquette	annoyed	civilized	elderly	etiquette	greet	litter	pole	push	sneeze
		lock	confused	enforce	expert	impolite	manners	polite	rude	tip
5	Perception	affect	consider	expect	factor	image	joke	perceive	senses	
		anatomy	context	explanation	fascinated	interpret	lenses	perception	surrounding	vision
6	The Heart of a Hero	adventure	defeat	intelligence	marvel	mentor	protect	struggle	dangerous	fail
		journey	marvellous	opportunity	safety	succeed	treasure	bandage	calmly	fever
7	What's Your Medicine	antibiotic	blood	cure	firmly	gently	patiently	relax	shot	swollen
		bandage	calmly	fever	flow	patient	popular	saliva	swelling	treat
8	Endangered Cultures	adapt	ancestor	convince	destroy	endangered	itegrate	powerful	roots	survive
		adopt	connect	custom	doubt	expect	nomadic	protest	settle	unique

Table1. illustrates the vocabulary items presented in the prescribed course book of reading and writing AP4 (R&W). A total of 138 words have been reviewed and counted in the book. They are introduced throughout the eight units of the book. The number of vocabulary items presented in each unit varies from 13 to 20 words. The topic titles of each unit and the vocabulary related to them have also been illustrated. It is worth noting that words have been tabulated and arranged randomly and not in alphabetical order regardless of parts speech.

Table2. Vocabulary Items in AP4 (L&S)

Unit	Topic	Vocabulary Items							
1	offbeat Jobs	career	creative	factory	flavor	income	professional	quit	
		tongue	tiring	concentrate	relaxing	stressful	taste		
2	Where Does the Time Go?	achieve	avoid	distraction	factory	focus	goal	manage	
		reward	strategy	task	waste	negative	pressure	procrastination	
3	Saving for a Rainy Day	borrow	design	earn	equal	exchange	item	member	necessities
		service	spend	stuff	used	valuable	network	provide	
4	What Happended to Etiquette?	appreciate	behavior	conduct	confusing	courteous	document	electronic device	likely
		rude	text	treat	manners	respect			
5	the Souds of Our Lives	affect	annoying	anxious	energetic	environment	hig-pitched	mood	rhythm
		sudden	verse	warning					
6	Everyday Heroes	altruistic	brave	community	courage	genes	ordinary	praise	react
		risk	unselfish	volunteer					
7	Take Care of Yourself	advice	chronic	convince	cure	diagnose	habit	medication	monitor
		motivate	patient	prevent	symptom	treatment			
8	Endangered Languages	acquire	bilingual	disappear	dominant	endangered	eventually	extinct	generation
		linguist	policy	preserve	replace				

Table2. shows the 102 vocabulary items presented in the second prescribed textbook “*Academic Progress4, Listening and Speaking*”. They have been arranged and illustrated according to the unit in which they appear. The topics of the units have also been selected to help understand the genre and the different contexts in which the vocabulary items are introduced. As mentioned before, the book is divided into eight topic-based units. There are usually 11 to 15 new words covering varied words mainly from GSL and partly from AWL. There is additional vocabulary section labeled "Expand Vocabulary" is given at the end of the book. Words in this section are classified under two categories; Vocabulary and Multi-word units. Thirty words are listed under vocabulary and forty-one are multi-word Units, out of this

number only 4 words can be classified as AWL. It is worth noting that the majority of the GSL words appearing in the AP-L&S are a recurrence of GSL presented in the AP-R&W.

Table3. *The Frequency and Coverage of the three Corpora in the AP-4*

Corpus	Frequency	Coverage in AP-4
GSL	149	5%
AWL	47	8%
MAWL	44	7%

Table3. shows the frequency and the coverage of the three standard wordlists introduced in the prescribed textbook “Academic Progress4” (R&W, L&S). It was found that the textbook used for the IEL course covered a total of 240 words; 149 of which are listed on the GSL, 47 words found in the AWL, and 44 words of the MAWL with (5%, 8%, 7%) respectively. 138 words out of the 240 words were found in the book of reading and writing, and 102 words were introduced in the book of listening and speaking.

It is apparent from table3 that the AWL received the highest coverage (8%) but not the highest frequency of the words presented in the textbook AP-4. Though, this result was not in accordance with the 10% coverage of academic texts recommended by Coxhead (2000). However, the result confirmed the general orientation of the book to provide students with the most frequent and relevant words they need for academic studies.

It could be argued that the AWL can help students in setting goals for English for Academic Purposes courses. Nowadays, there are numerous assessments based on the AWL that can be used to find out to what extent learners recognize the meanings of these words and how much the teaching and learning of these words have been achieved.

Another important finding was that words from the GSL covered a considerable proportion in the instructional materials used in the IEL course for first year medical students with frequency of around (149) words were taken from the GSL. This result supports what Nation (2001) suggested that high frequency words in the GSL cover 80% text coverage of most types of reading texts. Dudley-Evans and St. John (1998 cited Abdollahzade, & Barjesteh, 2018), along the same lines, confirm that it is important to develop the GSL words as they are used in everyday life situations as well as in scientific contexts. Nation (2001) believes that developing the 2000 high-frequency words of the English language receives 90% coverage of the English conversation texts and nearly 78% of academic text types based on the needs or goals of a course. There is a consensus among EFL teachers that learners should develop the GSL words at the early stages of foreign language instruction as they will not be able to understand English without them.

It is apparent from the result shown in table 3 that the MAWL received the lowest frequency and the smallest coverage comparing to the other two corpora (44 and 7%

respectively). This result also indicated that the central focus of the learning material used for the IEL course is on developing students' general and academic vocabularies rather than the MAWL vocabularies.

Based on the results shown in table 3, it could be observed that the existing language course taught to first year medical students provides only a very few specialized vocabulary to develop essential written and spoken language needed for their academic specializations. Nation, (2013), in this regard, stated that identifying and organizing the vocabulary required by learners is vital for setting goals for language programs, as well as assessing their academic progress. Therefore, figuring out learners' previous knowledge of vocabulary can help identifying the type of vocabulary they need for academic studies.

Table4. MAWL Words introduced in the Course Book AP4 (R&W/L&S)

achieve adapt affect annoyed antibiotic challenge chronic community concentrate conduct context create design diagnose document dominant energy environment expert factor focus generate goal image interpret label monitor negative nervous perceive perception professional react scanner strategy stressful survive symptom task technology text unique vein voluntary
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The overall results obtained from this corpus analysis could be useful to EFL teachers and material designers who wish to identify what type of vocabulary should be incorporated into a teaching and learning material for first year medical students. The findings could also help EFL teachers to decide whether to tailor new instructional materials or adapt the existing ones.

Conclusion

In this study, an analysis of vocabulary input in the intensive English course for first-year medical undergraduates used at Jazan University was conducted to explore if the English course materials cover the appropriate vocabulary needed for students. The results of the study revealed that the course placed emphasis on vocabulary input on general service list GSL (149 word) out of the total vocabulary (240) words presented in the course. This result indicates that the vocabulary input in the intensive English course provided students with solid foundation in the basics of English words as well as some academic words that could service students in academic reading. It was apparent that the course paid little attention to specialized vocabulary that students need in specific academic disciplines. It could be concluded that the present intensive English course for first-year medical students does not teach the appropriate vocabulary that students need for academic study. Thus the course should be supplemented by additional materials to introduce specialized vocabulary for learners whose level is beyond the GSL and need these vocabularies for future academic study. Thus, EFL teachers should be very selective about what type of English vocabulary to incorporate in a language course for English for specific purpose courses. To that end, language instructors may not need to focus on technical vocabulary that is far more specific to

a particular field of study. Instead, teaching high-frequency words can be useful for both General English and specific-oriented English language courses.

Based on the results of the corpus analysis conducted on the vocabulary items presented in the intensive English course textbooks, the following answers can be provided to the research questions:

1. What type of vocabulary items does the intensive English course for first-year medical undergraduates incorporate?

The analysis showed that the course incorporates a variety of vocabulary items from different categories. It provides foundation in general high-frequency vocabulary through 149 words from the General Service List. It also covers some academic vocabulary through 47 words from the Academic Word List. However, it pays little attention to specialized medical vocabulary, introducing only 44 words from the Medical Academic Word List.

2. What type of vocabulary items should the intensive English language course for first-year medical undergraduates emphasize?

The course would benefit from placing greater emphasis on specialized medical terminology prescribed by word lists such as the Medical Academic Word List. While it is important to develop foundation in general and academic vocabulary, as medical undergraduates the primary language needs of these students relate to their discipline. Therefore, the course should prioritize coverage of terms directly relevant to the medical domain through supplementary materials focusing on the Medical Academic Word List vocabulary. This would better achieve the stated goal of preparing students for English-medium medical instruction.

In summary, based on the results, the course currently lacks sufficient focus on the technical lexicon required for the students' academic specialization in medicine. It needs to emphasize discipline-specific vocabulary to a greater extent.

Based on how the analysis and results of the study relate to the literature review, one could say:

- The findings are largely consistent with previous studies conducted in the local Saudi context, which found that EFL learners generally have small vocabularies that negatively affect their language proficiency. However, this study adds nuance by examining vocabulary type rather than just size.
- International literature highlighted the importance of distinguishing between general, academic and specialized vocabulary. The results reinforce this by showing the materials conflate vocabulary categories rather than prioritizing discipline-specific terms.
- Studies recommending a focus on high-frequency vocabulary to develop foundations are echoed in the course's emphasis on GSL words. However, the literature also stresses the need for ESP courses to introduce technical lexicon, which this course was found lacking.

- The gap identified between vocabulary coverage and medical academic contexts matches literature stating courses must equip learners with the lexicons demanded by their fields.
- Recommendations from the literature review to identify appropriate vocabulary according to learners' disciplines are addressed through this study's systematic corpus analysis of course materials.

Overall, while some aspects align, the results illustrate how the local course could be strengthened to closer reflect vocabulary principles and priorities established in the wider ELT research literature, particularly for ESP. The study thus helps address a research gap and contributes useful insights for local curriculum enhancement. Here are some ways this study addresses a research gap and provides useful insights for local curriculum enhancement:

Research Gap Addressed:

- Previous local studies focused on general vocabulary size, not appropriateness by discipline. This is the first to systematically evaluate vocabulary type in ESP courses.
- It fills the gap of little research specifically examining the intensive medical English course materials through a corpus-based analysis.

Insights for Curriculum Enhancement:

- Reveals a need to distinguish vocabulary categories and prioritize discipline-specific terms for ESP learners.
- Highlights the current lack of specialized medical vocabulary contrary to stated academic preparation aim.
- Provides data to support supplementing courses with technical lexicon lists like MAWL tailored to students' fields.
- Allows evaluating appropriateness and relevance of vocabulary sources according to standard references.
- Indicates course goals and materials require re-alignment with literature-backed ESP principles for vocabulary selection.
- Informs decisions on adapting existing materials versus designing new disciplinary-focused materials.
- Benchmarks vocabulary types/proportions to guide setting achievable, targeted vocabulary learning outcomes.
- Sets baseline for ongoing evaluation and improvement through comparing pre/post student competency in prescribed lexicons.

Overall, the study contributes valuable local data and recommendations to better situate ESP vocabulary learning within the established international research context.

Recommendations

Based on the findings of the study, here are some recommendations:

1. Supplement the existing intensive English course materials with additional vocabulary lessons and activities focused on the Medical Academic Word List (MAWL). This will help students develop more specialized medical terminology.
2. Introduce MAWL vocabulary in a graded, systematic manner throughout the course instead of only incidental coverage. Incorporate term mastery assessments.
3. Distinguish between general, academic and technical vocabulary types in lesson planning and content prioritization. Give priority to vocabulary prescribed for students' fields of study.
4. Develop discipline-specific word banks, word cards, vocabulary notebooks etc. to promote deep processing of targeted medical vocabulary outside class time.
5. Train language teachers on corpus-based approaches and specialized vocabulary lists in medical English to better equip them for contextualized ESP instruction.
6. Conduct regular reviews and updates of course materials using a standardized evaluation framework aligned with identified ESP vocabulary principles from research literature.
7. Consider developing new materials or adapting existing titles that integrate general foundation with specialized streams according to learner needs and stated course objectives.
8. Set clear, measurable vocabulary learning outcomes for different proficiency levels benchmarked to recognized references like MAWL to guide systematic curriculum enhancement.
9. Continuously evaluate changes through pre/post vocabulary testing and monitor students' succeeding performance in English-based medical studies.

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