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# PROFILING VOCATIONAL SCHOOL STUDENTS' WORD KNOWLEDGE LEVEL: A STUDY IN JAKARTA TIMUR 

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#### Abstract

EFL students must acquire 2,000 to 3,000-word levels for general communicative purposes and 4,000 to 5,000 -word levels or more for academic purposes. With such an enormous number of words, teachers must examine students' word knowledge levels through the Vocabulary Level Test (VLT) before teaching and learning to determine relevant learning materials based on students' needs and goals. Many related studies focus


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#### Abstract

on senior school students. However, this study draws on vocational school students as they commonly work after graduation, and the ability to communicate with the English language is needed. Therefore, this study descriptively analyzed the result of the Vocabulary Level Test in 173 vocational school students in all majors. The result shows that more than $70 \%$ of participants successfully answered the 4,000 up to $5,000-$ word level. Meanwhile, the rest of the participants could answer 1,000 to 3,000 words. The relevance of this study is the teachers' consideration and recommendation to create meaningful and valuable teaching and learning materials based on their needs, as well as the students' scores in VLT.


Keywords: word frequency, vocabulary level test (VLT), vocational school

## INTRODUCTION

There is a belief that the more students know words, the better they can fully participate in many communication activities effectively and confidently (Lightbrown \& Spada, 2013); this belief is still relatable up to now as the purpose of communication would not happen when someone has limited number of words knowledge, even though the message that persons uttered is grammatically correct, words is the fundamental part of learning a language. Knowing words is related to their meaning and form, but knowing them is complex because it involves concept, referent, and association based on the context (Milton, 2013). Corpus of Contemporary American English (COCA), the most widely used corpora, captured almost 20 billion words from any genre by the end of 2019 (Times et al., 2020). This indicates that new words have evolved, bringing out different meanings in every communication context. With an enormous number of words, it would be challenging for EFL teachers
to prepare learning materials to make students learn words consistently based on their academic or industrial needs.

On the other hand, it would be impossible for students to master all of the words in such limited time because of external challenges like the massive size of vocabulary mastery expectation, learning time which needs to be spent 3 to 5 minutes per word, the teachers which tend to have other jobs besides teaching and have limited roles in teaching (Nation, 2020). Having rich knowledge of words ties closely to reading, writing, and general language comprehension, and the test is beneficial for academic placement in language teaching programs (Laufer \& Goldstein, 2004). Then, the complex issues regarding learning words becomes a concern, especially regarding the exact range of words students should acquire and learn with the mentioned challenges.

The word family threshold for reading has been used widely and become a primary reference in vocabulary and reading studies. Additionally, combining reading comprehension and sufficient word knowledge is essential for better writing performance (Moon et al., 2019). Besides, the lack of words also impacts speaking ability; the limitation of word knowledge often causes students to use inappropriate words for the given context. That is the issue that students mostly encounter, and the worst; it could make students refuse to speak in English (Al et al., 2021).

On the other hand, there is a current belief that is still widely used by many vocabulary researchers: the specific thousand range of words to learn or word family. A study suggests that to comprehend a reading text, L2 students need to acquire 8.000 word-family knowledge or $98 \%$ of words coverage or at least 4.000 word-family knowledge or $92 \%$ of words coverage as lexical threshold for reading comprehension (Laufer \& Ravenhorst-Kalovski, 2010).

In the academic context, it is mandatory to pass the Cambridge First, EIKEN, GTEC, IELTS, TEAP, TOEFL, and TOEIC, and students are required to achieve around 2,000 to 8,000 words family for passing the listening and reading test, which are equivalent to $98 \%$
lexical coverage (Kaneko, 2020). Support with the idea that strong and significant relationships were established between participants' performance on the IELTS academic reading test and the updated VLT at all levels. A study shows that EFL students can achieve higher scores on the IELTS academic reading test by attaining proficiency in vocabulary at higher levels (Hartono et al., 2021). With this, it is suggested that teaching the most common English words up to the 5,000-word level is a priority for English instructors, particularly those working in EFL.

Currently, teachers and material developers rarely discuss word family frequency to optimize word family frequency as the benchmarking to create learning and teaching materials, especially for reading text (Bergström et al., 2023). Besides, the newest research release gives this study limited references for future research. Vocabulary management seems to have vanished throughout the days, possibly confusing students about what words to learn for their current level. Word frequency for EFL students would benefit teachers, leading to more precise learning and teaching goals. This study would discover more about word frequency and the appropriate level for students to learn based on their vocabulary profiling.

Words with high usage coverage help students communicate effectively, strengthen their knowledge at the primary level, and improve their comprehension or even make it stable (Dang et al., 2022). In other words, words worth learning should frequently be used in daily speech and written text. Word frequency branched into high-frequency, low-frequency, and additional word lists, such as academic and technical ones. High-frequency words have around 2,000-word range, which is assumed to be a realistic number of word frequencies to learn and become core words in casual conversation (Decarrico, 2001). In detail, high-frequency words hold $80 \%$ of daily running texts found primarily in novels, newspapers, speech, and writing, and $90 \%$ up to $95 \%$ in spoken use (Van Zeeland \& Schmitt, 2013). Second, low-frequency words covered 8.000 up to 9.000 -word
families, and people rarely use these words daily (Nation, 2008). Regarding academic purposes, low-frequency learning would take some time and not become an obligation to learn at the high school level. However, teachers can teach low-frequency words by making assumptions based on context or consulting a dictionary. Contradictory, the coverage of word frequency is not restricted at all, which means that some words should not belong to a specific word family. There is still debatable about what is called low-frequency words because they tend to be connected to high-frequency words through inflection, derivation, and compounding, such as "distinctively," "microbiologist," "reusable," "unsweetened," and "screenshot" (Brysbaert et al., 2018). On the other hand, according to Nation (2008), additional word lists like academic word lists and technical word lists only covered $8 \%$ up to $20 \%$ of reading text and less than $2 \%$ used for daily conversation; they need to rely on the context and dictionary to discover the meaning.

It could be seen that high-frequency and low-frequency words have a gap number in terms of word range; the gap is then called mid-frequency words. Mid-frequency words cover around 3.000 up to 8.000 -word families, and students need to acquire mid-frequency words besides high-frequency words to help their reading comprehension (Schmitt \& Schmitt, 2012). Align with research conducted by Laufer \& Ravenhorst-Kalovski (2010), which established a lexical threshold for reading comprehension that students need to acquire $92 \%$ or 4.000 -word family, which belongs to the mid-frequency words, as a bare minimum and high-frequency words covered almost $95 \%$ in the daily text. Besides, in Indonesia's academic context, currently, a study revealed that EFL textbooks, especially for senior high school series, pose a challenging level of difficulty for the learners as they require an extensive vocabulary of around $5,000-6,000$ for $98 \%$ coverage to comprehend the reading texts (Rahmat \& Coxhead, 2021). Therefore, teachers should pay close attention to high-frequency words up to mid-frequency words, even though students still have the probability to reach beyond the 3.000-
word family because of possible factors affected, such as their role in academics, learning habits or their L1 effect (Akbarian, 2023).

The theories of word frequency seem odd currently. Still, teachers should have known about this as their earliest reference but not the only reference to select, create, or develop learning and teaching materials students need. Several programs might help teachers calculate students' word knowledge, like Lex30, WAT (Word Association Test), and VLT (Vocabulary Level Test). However, the most appropriate tool to calculate students' word knowledge for reading comprehension is VLT, and many researchers have used it. Level tests are used to select instructional resources, track vocabulary progress for research or program assessment, and determine acceptable vocabulary learning goals (Stoeckel et al., 2021). VLT measures receptive knowledge rather than productive knowledge. If the test is administered at the novice level, a lack of sensory knowledge and a limited breadth of knowledge may make it challenging to comprehend the information included (Webb et al., 2017).

VLT has been used widely to examine EFL students' word knowledge as it accommodated the vocabulary estimation for certain levels and has not been revised for 17 years or even more (Schmitt et al., 2019). The VLT has been described as the closest approach to a standard vocabulary test available currently (Kremmel \& Schmitt, 2017). The test can be administered individually, with students completing all levels, depending on the test takers' purpose. Implementing VLT would benefit teachers in preparing appropriate learning materials that suit the students based on their vocabulary level, word knowledge and needs (Ha, 2022). VLT focused on the word family as the counting unit rather than the lemma. The disadvantage of using a lemma is that there are more lemmas than word families can measure. The most common 1,000- and 3,000-word families have 3,281 and 9,132 lemmas, respectively. The rationale is that when someone is familiar with one form of a word, they may be
able to grasp an unfamiliar form, for instance, "accuse - accuser accusation," with no effort (Webb, 2021).

VLT selected the British National Corpus/Corpus of Contemporary American English (BNC/COCA) to serve as a standard for the headwords associated with modern English words, which comprise about $85 \%$ of both spoken and written English. This test includes word knowledge for the following categories: 1,000 words (the most frequent $1-1,000$-word families), 2,000 words (the most frequent $1,001-2,000$ words family), 3,000 words (the most frequent 2,001-3,000 words family), 4,000 words (the most frequent 3,001-4,000 words family) and 5,000 words (the most frequent 4,001 5,000 words family).

The VLT has been updated and significantly differs from the prior VLT, such as using additional core words and changing the layout. Moreover, the questions and answers for this type of VLT are downloadable through www.edu.uwo.ca/faculty-profiles/stuartWebb, but still, the users need to make it into user-friendly form as it comes in paper and pencil test-like. The updated VLT still tested the $1,000,2,000,3,000,4,000$, and 5,000 -word family, and each word family consists of 30 items. In terms of scoring, using individual scores would be more meaningful than approximate scoring; each word level has cut-off scores to analyze. As basic reading comprehension needs, the high-frequency level has higher cut-off scores than mid and low-frequency words. In detail, at 1.000, 2.000, and 3.000, the cutting scores would be at 29/30, and the other levels, 4.000 to 5.000 , would be $24 / 30$ for each level (Webb et al., 2017).

Several studies utilized the Vocabulary Level Test (VLT) to examine the vocabulary size of students from secondary school up to university. Some students still need to reach the word-family level for communicative purposes. Another test was done on other private university students majoring in management and business administration; the result is that most students need to reach the lexical threshold for English comprehension (Siregar, 2020; Sudarman \& Chinokul, 2018). Typically, researchers run this test on university
students due to their ease of access and quicker ethics approval process (Schmitt et al., 2019). However, it could be concluded that those who failed to reach the lexical threshold were assumed to have less word knowledge or did not enhance their word knowledge during high school. The study of vocabulary profiling using VLT has rarely been discussed in high school students, especially in vocational schools. Then again, providing students with sufficient word knowledge becomes critical, especially for those who aim to fill the labor market, such as vocational schools.

Brought by the assumption that the chances of employment and salary range are higher than those who graduated from higher school because they have already become accustomed to a particular skill (Choi, 2021), and when their skills are supported with sufficient knowledge of the word, it must be easier for them to cope with situational communication in the industrial context. It would improve their well-being. Therefore, one of the essential skills that vocational school graduates must possess to secure employment and establish long-lasting careers is communication (Meeuwisse et al., 2023). Due to this, providing students with sufficient word knowledge becomes critical, especially for vocational school students who have been prepared to fulfill the labor market or continue their studies in higher education.

This study will discover vocational school students' word knowledge level using the Vocabulary Level Test (VLT). Moreover, this study describes the VLT result as a future outlook based on the student's plans after graduation and the linkage between existing theories and current research. In short, this study will answer two research questions as follows:

1. How is current vocational school students' word knowledge level?
2. How could VLT results affect students' after-graduation planning?
The result of this study would be a benchmarking tool for vocational school teachers to guide their students in acquiring specific word
knowledge levels to deal with communicative purposes in the classroom and after graduation.

## METHOD

A quantitative descriptive approach was used to discover the participants' word knowledge level and its influence towards participants' after-graduation plan. The population of this study was 240 vocational school students in Jakarta Timur and only 173 students participated because of the limited time. In order to make it wellorganized, this study utilized VLT online forms (Google Forms) to collect the data. The result of VLT comes in numeric data as well as using graph and table to elaborate with the existing studies.

To answer the first research question, "How is current vocational school students' word knowledge level?" this study used the updated Vocabulary Level Test (VLT) as the main instrument (Webb et al., 2017). Moreover, to discover the second research question, "How could VLT results affect students' after-graduation planning" this study relied on participants' profiling (participants' decision after graduation), VLT results, and current studies related to word knowledge and VLT.

As a primary instrument, the validity and reliability of test items on VLT were tested on 60 participants. In analyzing the reliability test, the researcher compared the Cronbach alpha score processed using SPSS V 16.0 with the r table score with a significance of $5 \%$ at $\mathrm{n}=50$ ( 10 questions $\times 5$ VLT test variable indicators). The result indicated that the number of test items shifted to 139 items, in detail 29 items for the 1,000 -word level, 28 items for the 2,000 -word level, 28 items for the 3,000 items, 27 items for the 4,000 -word level and 27 items for 5,000-word level, there are 139 test items in totals for all level.

Regarding the scoring, 0 points for the false answer and 1 point for the accurate answers were manually calculated. Meanwhile, the cut-off scoring mentioned by (Webb et al., 2017) is debatable. However, if the test items used in this study were paired with cuttingoff scoring by Webb (2017), the cutting-off score would be -1 score for
1.000 to 3.000 -word levels and -6 score for 4.000 and 5.000 -word levels like the following: 28/29 for 1.000-word level, 27/28 for 2.000-word level, $26 / 27$ for 3000 -word level, 21 / 27 for 4.000 and 5.000 -word level. A study revealed that cutting score is more suitable used to escalate word-knowledge level for the individual test (Ha, 2022a).

However, as there are 173 participants, the calculation of VLT using a formula from (Laufer \& Ravenhorst-Kalovski, 2010) such as the following:

$$
\frac{\text { Total correct answer } x \text { Highest word level tested }}{\text { Total items }}
$$

In addition, the analysis would also rely on the cutting-off score, and the participants' VLT results were branched into vocabulary size. Those who get scores around 500-1.500 words represent the K1 level, 1.500-2.500 K2 level, $2.500-3.500$ K3 level, $3.500-4.500$ K4 level, and 4.500 above the K5 level.

## FINDINGS

## Vocational school students' word knowledge level

The Vocabulary Level Test results of 173 vocational school students have been divided into five vocabulary sizes, K1 to K5.


Figure 1. Vocabulary Level Test Result

The Figure 1 shows that less than half of the participants cannot reach the $\mathrm{K} 4-\mathrm{K} 5$ level half, and more test items represent the result positively. In detail, the K1 level consists of 29 test items, which presented 500 - 1.500 -word families and were reached by $8 \%$ of participants. The result of their VLT shows that most of these K1 participants failed at the 1,000 -word level and above. These participants only got correct answers below 10 and 20 out of 139 test items in all levels.

K2 level has 28 test items, which cover a 1.500 to 2.500 -word family. The table and graph confirmed that $6 \%$ of participants were grouped into the K2 level. Their VLT's results point out that this group was able to answer the 1.000 to 2.000 -word family level test, which scored almost past the cutting score $27 / 28$, yet when it comes to the 3.000 -word family test above, they failed and only scored below 10 out of the cutting score for the 3.000 up to 5.000 -word family test in totals.
$9 \%$ of participants belong to the K3 level; the test items are about 2.500 to 3.500 -word family level. Likewise, at the K2 level, the participants in the K3 level successfully answered the 1.000 to $3.000-$ word family-level tests as they scored almost passing the cut-off score. For the 4.000 to 5.000 -word family-level test items, some participants can make it above the cutting-off score, but most failed.

A massive percentage comes to the K4 and K5 levels. $32 \%$ of participants belong to the K4 level, and $46 \%$ are grouped into the K5 level. This indicates that more than half of the participants can answer the word family-level test items and reach above the cut-off scoring. This result described an excellent sign for vocational schools as public institutions that aim to prepare competent human resources to fulfill the job market professionally and are eager to perform their English language productively in either the industrial or the university.

Therefore, the result demonstrates that the participants grouped into K4 and K5 levels passed the cutting-off scoring for every word family level test. Meanwhile, the participants that belong to the K1
level failed in doing 2.000 up to 5.000 -word family, and the K2 level participants failed in the 2.000-word family and above. In contrast, the K3 level failed in the above 3.000-word family level.

Previous theories stated that high-frequency and low-frequency vocabulary almost correlated with each other because of destructured words. This means the VLT's test could not be the primary reference for examining students' word knowledge level. Each test has less than 30 test items and is not equivalent to thousands of English words that evolved in various oral and written communication contexts. However, this result could become a teacher's concern as $14 \%$ of participants (accumulation from the K1 and K2 groups) could not reach the lexical benchmarking for at least reading comprehension.

The result also indicates that reading comprehension would be their challenging issue; if that is so, when it comes to other skills enhancement, for example, writing, speaking, and listening comprehension, they would face similar or even more difficulties when mastering these skills. In addition, for participants who successfully passed all the cut-off scores, teachers could develop their word knowledge into further word families that would support their English skills. Rather than grouping their students into "unable" and "able" in reading or other skills, which might cause an internal rivalry among the students, which creates an unhealthy learning environment, it better have indiscriminate activities that could encourage students to learn by their built consciousness consistently.

## The effect of VLT results affect students' after-graduation planning

This is an important finding in understanding the participant's vocabulary profiling, which is the participant's plan after graduation. The participants were asked to select one of the four options: working, working \& studying, only studying at university, and still needing to decide.


Figure 2. Participants' After-graduates Planning in General

Figure 2 shows that $51 \%$ of participants decided to do both working while continuing their studies at university, $25 \%$ of participants chose to work only after graduation, $19 \%$ of participants only decided to study at university, and the remaining $9 \%$ have not decided yet. Vocational school students' current belief has shifted lately to choosing to work after graduation as their priority and plan to continue studying at university if they have financial security, have the desire to learn, or become requirements from their workplace; the student's vocational school students in Jakarta chose both as a winwin solution.

It needs further research about their intention after graduation. However, the assumption is that they live in Indonesia's capital city. They would have an excellent opportunity to get a remote working job or become a part-timer, so their time is more flexible as they could study at higher education after working hours. Moreover, those participants who chose only to look at university after graduation should have their initial consideration. Focusing on university study for a bachelor's degree would be more beneficial if their study focus is related to their skills in vocational school so they could develop their skills and get a high salary. Even though it would take time for them
to graduate and look for an appropriate job, some cases found that $80 \%$ of bachelor graduates do not work according to their major.

Table 1.
The Distribution of Participants' Vocabulary Size Based on Their After-Graduation Planning

|  | After-Graduation Planning |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Participants' <br> Vocabulary <br> Size | Not Decided <br> Yet | Working <br> While <br> Studying at <br> University | Only <br> Studying at <br> University | Only <br> Working |
| K1 | 2 | 6 | 1 | 4 |
| K2 | 0 | 6 | 3 | 2 |
| K3 | 1 | 6 | 3 | 5 |
| K4 | 2 | 29 | 7 | 17 |
| K5 | 2 | 41 | 19 | 15 |
| Total | $\mathbf{9}$ | $\mathbf{8 8}$ | $\mathbf{3 3}$ | $\mathbf{4 3}$ |

From Table 1 above, it is interesting that the participants prioritize work after graduation, whatever their vocabulary size group is. This aligns with the primary purpose of vocational school study, which is to prepare their students to fill the job market. In detail, the participants decided on their plan after graduation, either working while studying at university, only at university, or even working. In detail, 9 out of 173 , or $5 \%$ of the participants, have yet to decide from all groups. As $51 \%$ or 88 out of 173 participants were selected to work in the study. It was found that they mostly come from K4 to K5 groups. In addition, $25 \%$ or 43 out of 173 participants continue to work with the majority from K4 and K5 groups. Meanwhile, 33 out of 173 or $19 \%$ of participants choose only to continue to study at university.

A few participants in K1, K2, and K3 vocabulary size groups have yet to decide. However, the rest of the participants have opted and chose to work only or work while studying at university. In this case, the participants in K1 and K2 should become the focus of their teacher to prepare them when it comes to university and working situations, which need at least a 3.000 -word family level for
communicative purposes and more than a 3.000 -word family level for academic purposes, referring to VLT result K1 and K2 participants have insufficient word knowledge level. Meanwhile, for the K3 vocabulary size group, the participants that belong to this group are assumed to have sufficient word knowledge that would help them in industrial or university life. However, teachers could help them enrich their word knowledge through the help of technology or any appropriate learning and teaching materials that would help them enhance their word knowledge or even make them consistently learn words individually until it becomes a habit.

As overall participants were dominantly grouped into K4 and K5 vocabulary sizes, most of those group participants chose to work while continuing their studies at university. With their sufficient knowledge of words, they can communicate orally in a workplace or university situation. They would have more opportunities to learn more words without difficulties as they have passed the lexical threshold for their level, meaning they are ready to learn words at the next level. Supported by their willingness to continue their university studies, these participants would be more than expected if they consistently learned words during their time because they would have a great chance to use their word knowledge in a natural context, which is at the workplace.

## DISCUSSION

The result shows that participants' word-knowledge levels are sufficient to help them comprehend a reading text, with approximately $78 \%$ of participants answering the 1.000 -word familylevel test up to the 5.000 -word family-level test, and the rest of the participants can answer only the 1.000 -word family level test up to the 3.000-word family level test. Whatever the result, the participants' VLT result would benefit them when reading. Rahmat \& Coxhead (2021) mentioned that high school and vocational school students need an extensive vocabulary of 5.000 up to 6.000 -word family or $98 \%$ of running words to read EFL books. Based on the previous study, the
ability to acquire a 5.000 to 6.000 -word family is quite a lot because Laufer \& Ravenhorst-Kalovski (2010) stated that students need to acquire 4.000 word-family or mid-frequency words as Schmitt \& Schmitt (2012) expected. However, it is a sign that the lexical threshold for reading comprehension should be adjusted as, nowadays, reading text for EFL is required above the current belief lexical threshold. Therefore, the only way is for the Vocabulary Level Test (VLT) to be extended into the 6.000 -word family test above to calculate students' word knowledge more precisely.

If the VLT extended into the 6.000-word family, the word list tested should be selected well and reassessed. A review of VLT in their articles titled 'Limitations of Size' and 'Levels Tests of Written Receptive Vocabulary Knowledge' suggests that the VLT are not ideal for reading because of the limited word tested, and he believed that switching word families to lemmas can improve levels test (Stoeckel et al., 2021). On the contrary, the disadvantage of utilizing lemmabased tests is that there are more lemmas than word families can measure. Webb (2021) confronts that the most common 1,000 and 3,000 -word families have 3,281 and 9,132 lemmas because morphologically, lemmas are related to words that have alternations in the forms but still have similar meanings, such as "care," "careful," and "carefully." When the VLT consists of lemmas, the test items in VLT become inadequate in terms of profiling vocabulary size because they may be able to grasp an unfamiliar form without effort (Brezina \& Gablasova, 2015; Webb, 2021).

However, Webb (2021) assumed that a test should include administration, grading, taker tiredness, and the users' time. Meanwhile, it would not be valuable for teachers to test the VLT into a 6.000-word family test, especially when they need good vocabulary learning management. Assessing students' word knowledge up to 5.000 -word families is adequate when the study time is limited. Back to the argument from Kremmel and Schmitt (2019) that VLT only estimates vocabulary size for second language (L2) learners of general or academic English.

The participants in this study reached the previous lexical threshold of 4.000 -word family level for reading comprehension. However, their actual textbook requires more than the threshold, and it would become homework for the teacher to enhance their student's word knowledge based on the current book used in the classroom. Even though teachers have enormous responsibilities, enhancing students' word knowledge level is beneficial for reading comprehension, writing, speaking, and listening. Nowadays, to improve students' word knowledge, several researchers utilize corpora, especially COCA; corpora would lead students to determine the meaning of words based on context through technology assistance. The primary advantage of using COCA is its ability to assist learners in deciding "which word typically pairs with a particular word" through its collocate function. In addition, it might be more beneficial to create targeted exercises and assignments using corpus data (Kocak, 2020; Sinha, 2021). Besides, the respondents reported having no trouble utilizing the online corpus. Even though corpus-based study is user-friendly, teachers still need to incorporate corpora into learning activities to promote students' engagement in the learning process. No study has examined the effect of corpus utilization on learning and teaching vocabulary at the high school level.

The VLT could be used as one of the tools that help teachers draw general conclusions regarding their students' vocabulary knowledge. Then, another test is needed to determine their word knowledge in other skills comprehension, such as Lex30, which is precisely designed for speaking comprehension (Uchihara \& Clenton, 2023), or even a test based on students' needs and purposes. Therefore, remaking and updating the VLT based on the student's school level, needs, and goals would be valuable rather than using general VLT for specific students as access to corpora and economical test design platforms has enabled anybody to create and administer new vocabulary tests. Yet, it needs to be considered when making such a vocabulary test that the interpretation of scoring, which can be
misleading if not tailored to specific learners and settings, as no vocabulary or language tests are universally applicable (Schmitt et al., 2019).

Another consideration is that the participants who reached the lexical threshold for reading comprehension are mostly in Jakarta Timur. In these urban areas, people would rapidly have information and access knowledge by using social media to learn foreign languages. The effectiveness of technology-assisted L2 vocabulary learning is higher when the learner's native language is similar to the target language (Yu \& Trainin, 2022). Students would get more significant benefits from technologically assisted L2 vocabulary learning. Those participants are assumed to have easy access to learning English. They are accustomed to acquiring words incidentally because the L1, which is the Indonesian language, is commonly similar to the English Language except for Japanese or Chinese, whose forms are very different; the English and Indonesian languages are relatively identical in form, so students will not have any trouble reading those words unless they are studying the phonological element. Regarding phonological, a study describing how words functioned, English words are pronounced more complicated than Indonesian language (Andi-pallawa, 2013). On the contrary, it would be different when this study was done in a rural area in which they have limited time and space to learn the word and their local language, which might have affected the way they uttered L1, so the result of their VLT might be different depends on the participants current condition and needs further research.

At a glance, the second research question captured how VLT results could predict participants' success after graduation. The participants that reached K4 and K5 vocabulary levels mostly decided to work while studying at university. Some participants who belong to the K1 to K3 vocabulary level choose only to work or study at university, and others have not decided yet. Those participants who chose to do both would be challenged to improve their word knowledge as their words would be used in both industrial and
academic contexts, in which their comprehension of all communication skills would be better. Positively, when these participants can apply their word knowledge to a specific context, as Choi (2021), they have a better chance of finding work and a greater wage and are one step ahead of college graduates.

In addition, when the participants focus on university, either working or not, their adequate word knowledge helps them in academic settings such as dealing with English proficiency tests like Cambridge First, EIKEN, GTEC, IELTS, TEAP, TOEFL, and TOEIC, which require to achieve around 2,000 to 8,000 words family. Significant relationships were established between participants' performance on the IELTS academic reading test and the updated VLT at all levels; the findings indicate proficiency in intermediatelevel vocabulary explains approximately $50 \%$ of the variability observed in the IELTS reading score (Hartono et al., 2021). Based on their assessment, comprehending 5.000 word-family levels is considered intermediate-level vocabulary or belongs to the midfrequency word family, which is worth teaching by EFL teachers.

Ultimately, all vocational school students prepare for work based on their skills, so communication-related to their industry needs is still required. Meeuwisse (2023) emphasized that communication is an essential skill that vocational school graduates must possess to secure employment and establish long-lasting careers. It aligned with a study on the impact of using English curriculum design based on industry needs (ECBIN) in English teaching in vocational schools to improve Students' English skills for industry-standard working communication. The study implied that Sinetsu Malaysia, Astra International Toyota, Astra International United Tractor, Telkom Indonesia, Astra Honda Motor, and Bank Rakyat Indonesia (BRI) concluded that $61,11 \%$ of business owners concurred that the English curriculum's design, which relies on the communication needs of the sector, is highly helpful in bolstering vocational school graduates' prospects for employment in industry or the job area (The et al., 2022). These benefits would lead the
participants to master communication in the industrial context. The analysis of the vocational education curriculum in the ASEAN Economic Community (AEC) in 2021 explained that many Indonesian graduates "do not yet have adequate English competency since the ASEAN Economic Community (AEC) began in 2015 (Fitriyanti et al., 2021). This indicates that university graduates have weak English language proficiency. Not only do English language abilities need to be strengthened, but other areas as well.

The most important thing teachers must consider is promoting students' learning autonomy in English vocabulary. A study found that students knew the significance of language autonomy (LA) in English vocabulary learning but had little engagement in affective and behavioral attitudes (Tran, 2020). Teachers should engage and demonstrate how to learn language independently through amusing activities like listening to English music and watching captioned films. They should encourage students to organize, create objectives, and self-evaluate their English vocabulary learning. When students are already accustomed to autonomous learning, it would be easier for them to grasp more word knowledge as their fundamental knowledge for communication and beneficial for improving themselves in the workplace.

## CONCLUSION

Vocational school students in Jakarta Timur mostly reached the lexical threshold for reading comprehension: the 4.000-word family frequency or K4 and K5 vocabulary size based on the VLT result. With sufficient word knowledge, they could answer English reading tests such as IELTS, TOEFL, TOEIC, etc. Besides, their achievement would be beneficial for them coping with social communication. However, to significantly improve, teachers must engage students to learn words more extensively and autonomously so they would be accustomed to learning about any learning media. Interestingly, participants who reached the lexical threshold mostly decided to work while studying at the university after graduation.

Their sufficient word knowledge helps them communicate in academic and industrial contexts, especially when well-skilled in the labor market. Moreover, these participants could become workers who meet industrial expectations.

This study also offered the teachers to use VLT as a preliminary test to examine students' word knowledge. Moreover, as a means for students' improvement in learning words, teachers could create their vocabulary test by making use of corpora; with corpora, teachers can adjust the test based on the student's needs and requirements. For example, vocational school students have a specific major for labor skills in accounting. Teachers could find the words on corpora related to accountant skills and create the test based on the words that appeared.

However, this study could be developed into further research that would support and give many ideas related to vocabulary profiling. I recommend further research about students' consciousness and autonomous learning in vocabulary learning. This brought an assumption that when students stopped learning English vocabulary and refused to learn because of its difficulties, their word knowledge would decrease over time. Therefore, when students are conscious of learning, they can learn whatever learning environment they face.

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