

## NEEDS ANALYSIS ON DEVELOPING MOBILE-PHONE BASED LEARNING MATERIALS TO ACCELERATE STUDENTS' MASTERY OF ENGLISH VOCABULARY

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Article Info	Abstract
<b>Article History</b> Received: August 2023 Revised: September 2023 Published: October 2023	<i>Due to their important role of a skilled and productive workforce for the nation's economy and progress, vocational high school graduates need special attention and efforts to improve their quality, including the English communication skill to support the mastery of their area of expertise. Their English mastery is greatly influenced by their mastery of vocabulary. So, developing mastery of English vocabulary needs to be done with various efforts, including utilizing information technology services in the form of mobile phone-based learning materials. In line with this, this research was aimed at conducting needs analysis on developing such materials. The data were collected by using three questionnaires distributed to 76 students of Mechanical Engineering of vocational high schools, 13 English teachers from 6 vocational high schools, and 7 respondents who were vocational high school graduates in five districts/cities in Special Region of Yogyakarta. The research employed the quantitative (descriptive statistics) and qualitative data analysis (interactive analysis techniques). The results of data analysis, which included the list of required vocabulary, forms of activities, and other aspects that reflected the ways how the materials were presented, were then used as a basis for preparing the syllabus, grid, and initial draft of teaching materials. The data also included the types of services offered by the mobile-phone learning.</i>
<b>Keywords</b> Vocabulary learning; Learning materials; Mobile phone;	
<b>How to cite:</b> Sugesti, N., Sugirin, S., Priyana, J., & Wulandari, E. (2023). Needs Assessment on Developing Mobile-Phone Based Teaching Materials to Accelerate the Mastery of English Vocabulary, <i>JOLLT Journal of Languages and Language Teaching</i> , 11(4), pp. 748-761. DOI: <a href="https://doi.org/10.33394/joltt.v%vi%i.9127">https://doi.org/10.33394/joltt.v%vi%i.9127</a>	

### INTRODUCTION

The level of poverty in a country shows its quality of education as it is in the education sector where educated workers are produced. It influences the number of open unemployed (Heckman & Krueger, 2003; Hanushek & Woessmann, 2015; Acemoglu & Autor, 2011; Berman, Bound & Machin, 1998; World Bank, 2019; World Development Report, 2019; United Nations Development Programme, 2015). One of the education sectors that plays a big role in producing skilled and educated workers is vocational schools. The number of skilled and productive workers will increase the economic level of a country by reducing unemployment and increasing industrial growth

Considering the important role of a skilled and productive workforce for the nation's economy and progress, vocational school graduates need special attention and efforts to improve their quality. These cannot be separated from improving the quality of learning in vocational schools, which means improving the quality of graduates. To enable vocational school graduates to become skilled workers who do not only master skills according to their fields, but are also able to communicate internationally (Kim & Jun, 2016; Pražnikar & Ahčan, 2015; Tran, Pham & Nguyen, 2016; Eskandari, Ismail, Karim & Abdullah, 2011), English

language learning at vocational schools is directed at providing the students with the ability to communicate in English orally and in writing to support the mastery of their skills.

The mastery of English at both vocational and other levels is greatly influenced by students' mastery of vocabulary. It is stated by Wilkins (1972) that "Without grammar very little can be conveyed, without vocabulary nothing can be conveyed." Vocabulary, both active vocabulary (used in speaking or writing) and passive (in listening or reading) greatly influences students' ability to use English as a communication tool. Other experts share the similar voices (Nation, P, 2006; Schmitt, N., & Schmitt, D., 2014; Laufer, B.; 2005; Qian, D. D., 2002; Webb, S., 2007). In fact, as an adaptive lesson, English in vocational schools must be adapted to different skill programs. In order that English language learning in vocational schools can prepare graduates according to skill specifications and the needs of the world of work, English language learning should be directed to English for Specific Purposes (Berwick, & Koda, 2017; Tynjälä, 2013; Tynjälä & Heikkinen, 2014; Del Castillo, 2017; Pilcher & Richards, 2017; Wang, 2018; Olivo, 2014; Kinnunen & Jaakkola, 2010). In other words, the vocabulary provided in English language learning for building engineering skills, for example, should prioritize mastery of vocabulary and language competence, including the ability to listen, speak, read and write, which are relevant to that skill, for example describing the blueprint design of a building. However, there are still many English language learning contents in vocational schools that only prioritize teaching aspects and do not support the mastery of different skills and groups of expertise. This widens the gap between the world of education and the needs of the world of work.

One way to increase vocabulary mastery is learning vocabulary through developing mobile phone-based teaching materials to support the acceleration of vocational school students' mastery of English vocabulary via mobile phones. This requires teaching materials that are specifically designed to develop mobile phone-based teaching materials to support accelerated mastery of English vocabulary for vocational school students. The vocabulary covered in these teaching materials is not always what students need in reading academic and non-academic texts that are relevant to the student's specialty program. According to the research by Nation (1990), what English language learners need is mastery of high frequency words. Nation found that 85% of the words in almost all types of text in most fields of science are high frequency words. Therefore, programs to increase vocabulary mastery in order to improve the quality of English learning for vocational school students need to be developed through teaching materials that support accelerated mastery of high frequency words.

Mobile phone-based vocabulary teaching materials have high potential to accelerate students' vocabulary mastery. Not only are they mobile and therefore can be accessed anytime and anywhere, mobile-phone based teaching materials maximize the use of educational contents which are also widely available for free. Apart from that, mobile phone-based teaching materials can also be an alternative when Internet-based teaching materials are hampered by Internet access which is sometimes uneven in every school in Indonesia. By utilizing common features on cell phones, teaching materials can be delivered via SMS or voice text-messaging, or even email, which has become a basic service for almost all cell phones. The availability of various communication network providers, both WAP-based and telecommunications, in Indonesia also adds to the ease of using mobile phone-based teaching materials.

Mobile phones are very suitable to support regular input or exposure to English vocabulary, often with limited amounts. To support English language learning in vocational schools by accelerating the mastery of vocabulary that is directly related to students' areas of expertise, the vocabulary provided via mobile phone is selected through students' needs analysis by prioritizing English for specific purposes, as well as studying the relevant curriculum documents issued by Directorate of Vocational School Education.

This study is focused on the needs analysis in preparing mobile phone-based teaching materials to accelerate mastery of English vocabulary in vocational schools, especially in the field of mechanical engineering. The vocabulary that will be taught is included in the list of 3000 high frequency words due to the following reasons. First, mastering 3000 high frequency words allows vocational school students to be able to read all types of texts with only a little difficulty due to technical terms that are not included in high frequency words (which constitute 15% of all words). Second, teaching materials delivered via mobile phone services will enable year-round learning cheaply for all vocational school students without being tied to time, and can be accessed anytime and anywhere. In short, the aims of the research are measuring vocabulary mastery of vocational school students, identify what words are included in the list of high frequency words that are worthy of being studied by vocational school students for English for Specific Purposes, and identifying the aspirations of vocational school students regarding effective forms of vocabulary learning activities through developing mobile phone-based teaching materials to support the acceleration of vocational school students' mastery of English vocabulary.

## RESEARCH METHOD

This study is categorized into a descriptive survey to figure out the profile of students' needs, wants, lacks, and necessities. Berwick in Urun & Yarar (2015: 2) mentions that needs analysis can be conducted in different ways either inductive or deductive.

### Research Respondents

The research involved 8 English lecturers who were experts in vocabulary teaching and lecturers who were experts in teaching via mobile phone in the English Language Education Department of Universitas Negeri Yogyakarta. In addition, it also vocational school students in the Department of Mechanical Engineering consisting of 76 student respondents of Mechanical Engineering in six vocational high schools in five regencies in Yogyakarta Special Region, thirteen productive subject teachers in six vocational high schools in five regencies in Yogyakarta Special Region, and seven respondents who were vocational high school graduates working in the mechanical field.

### Instrument and Technique of Data Collection

In collecting the data to identify the vocabulary and the process of learning vocabulary through mobile phones (especially the types of tasks and the sequence of presenting the tasks) which effective for vocational school students, three questionnaires were developed. Each questionnaire combined the closed items of Likert scale and open questions. The first questionnaire consisting of 18 questions was distributed to the students. The second one with 10 questions was given to teachers and graduates and 13 questions in the third questionnaire were responded by experts as the validation instrument. Besides, an in-depth interview involving the students, English lecturers, and mobile learning experts by using an interview guide was conducted to explore the vocabulary teaching and learning.

### Data Analysis

In this research, both quantitative and qualitative data were collected to provide a comprehensive understanding of the subject under investigation. The quantitative data, gathered through the use of questionnaires, were subjected to thorough analysis employing descriptive statistics, allowing for a quantitative assessment of various aspects of the study. In parallel, the qualitative data will undergo a distinct analytical approach. These qualitative data sets will be examined using interactive analysis techniques (Miles & Huberman, 1994). These techniques encompass several critical steps, including data reduction, data display, conclusion drawing, and verification. This comprehensive methodology ensures a well-rounded and

rigorous exploration of the research topic, incorporating both numerical and contextual insights for a more holistic understanding of the subject matter.

## RESEARCH FINDINGS AND DISCUSSION

### Research Findings

The following section presents the results of needs analysis from three groups of respondents, namely the students of Mechanical Engineering Department of vocational high schools, the English teachers of vocational high schools, and the graduates of Mechanical Engineering Department of vocational high schools working in the same field. The first finding is about the text types the students often studied during their study. The illustration below is based on the students' responses.

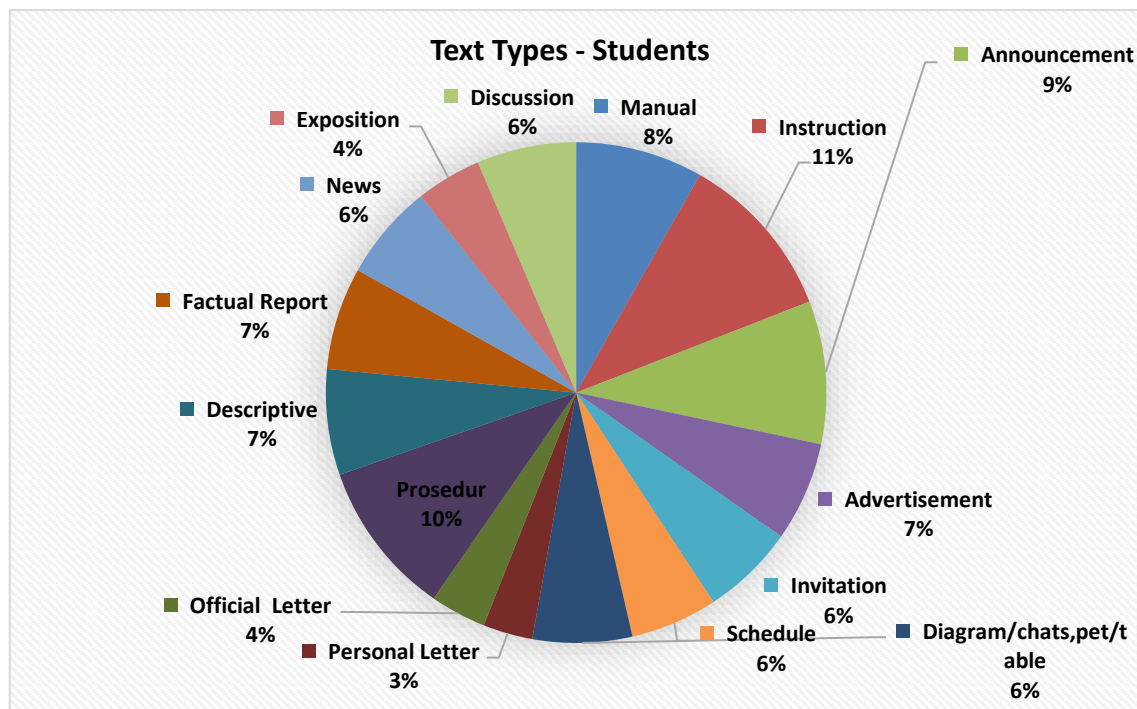


Figure 1. The Types of English Texts According to Students

Figure 1 shows that 11% of the total students stated that they read a lot of instruction texts while studying in the Mechanical Engineering Department. Furthermore, as many as 10% of the total respondents mentioned procedure texts as the type of text they read while attending school in the department. Furthermore, as many as 9% of the total respondents mentioned announcement texts and another 8% stated manual texts. Then, 7% of respondents mentioned descriptive texts, 7% of respondents mentioned advertising text and the other 7% mentioned report text (factual) as the type of text they. After that, discussion texts, news, schedules, diagrams/charts/maps/tables, and invitations were each mentioned by 6% of respondents. Furthermore, 4% of respondents mentioned exposition texts and the other 4% mentioned official letters. Finally, only 3% of respondents stated personal letters as the type of text they dealt with while studying in Mechanical Engineering Department. The responses below were obtained from the English teachers.

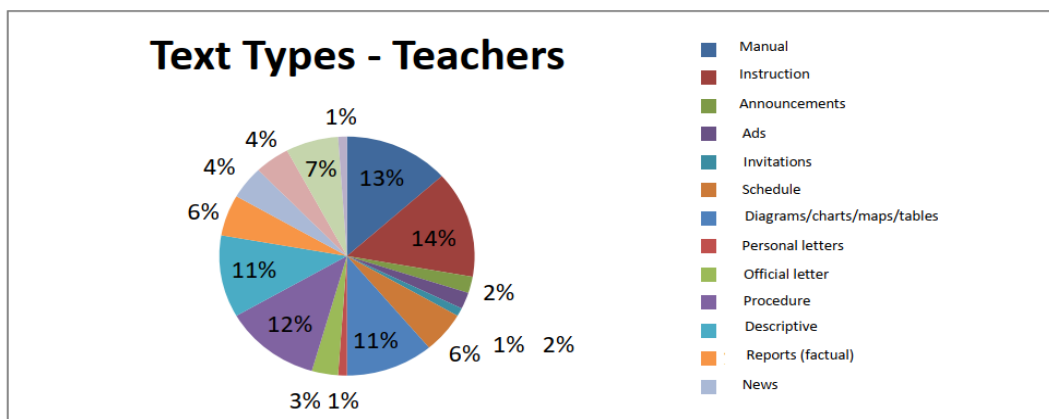


Figure 2. The types of English texts according to teachers

Figure 2 above shows that 14% of the total 13 teachers mentioned instruction texts as the type of English text that most students needed to read. After that, as many as 13% of respondents stated that manuals were other types of English texts. Furthermore, 12% of respondents mentioned procedures. Furthermore, 11% of respondents mentioned diagrams/charts/maps and tables 11% mentioned descriptive text as the type of English text that students need to read. Then, as many as 7% of respondents mentioned discussion texts. After that, 6% of respondents mentioned schedules and another 6% mentioned reports (factual). Then, as many as 4% of respondents said exposition text and another 4% said news text was a type of English text that students needed to read. Furthermore, 3% of respondents mentioned official letters. After that, 2% mentioned announcements and another 2% mentioned advertisements. Furthermore, 1% of respondents stated invitations and another 1% mentioned personal letters. Finally, as many as 1% of respondents proposed online. The next figure illustrates the workers' responses regarding the types of texts.

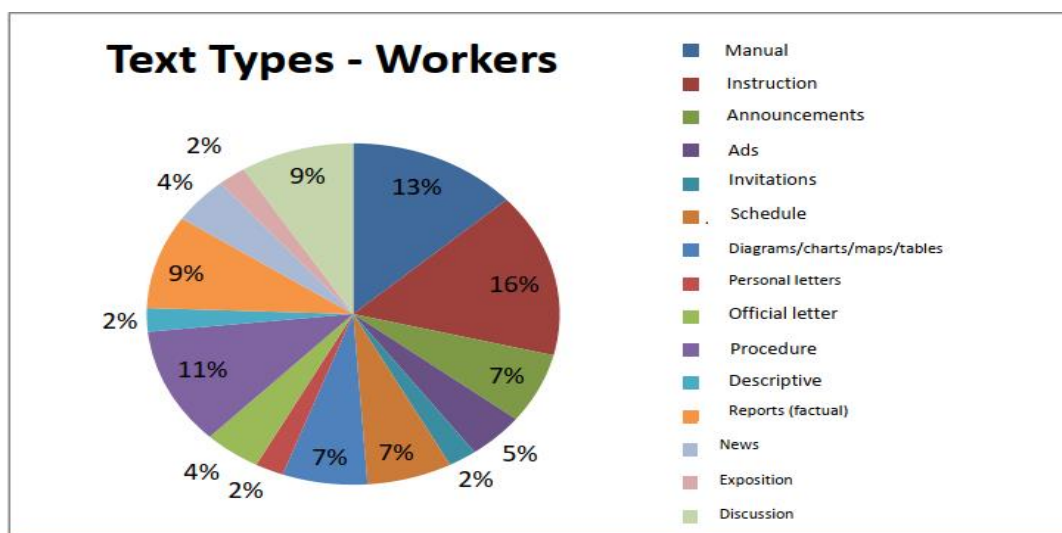


Figure 3 The types of English texts according to workers

Diagram 3 above shows that 16% of the total workers said that instructions were the types of English texts they read most often to complete their tasks in the work environment. Furthermore, 13% of respondents stated manuals and 11% of respondents mentioned procedure texts. Furthermore, 9% of respondents mentioned report texts (factual) and another 9% mentioned discussion texts. Moreover, announcement texts, diagrams/charts/maps/tables, and schedules were each mentioned by 7% of respondents. Besides, 5% of respondents stated advertisements, 4% of respondents mentioned official letters and another 4% mentioned news.

Finally, invitations, personal letters, descriptive texts, and expository texts were each mentioned by only 2% of respondents. From the three diagrams above, it can be concluded that the types of text that are often needed in the Mechanical Engineering Department are instructions, procedures, manuals, diagrams/charts/maps/tables, descriptive texts, report texts, and discussion texts.

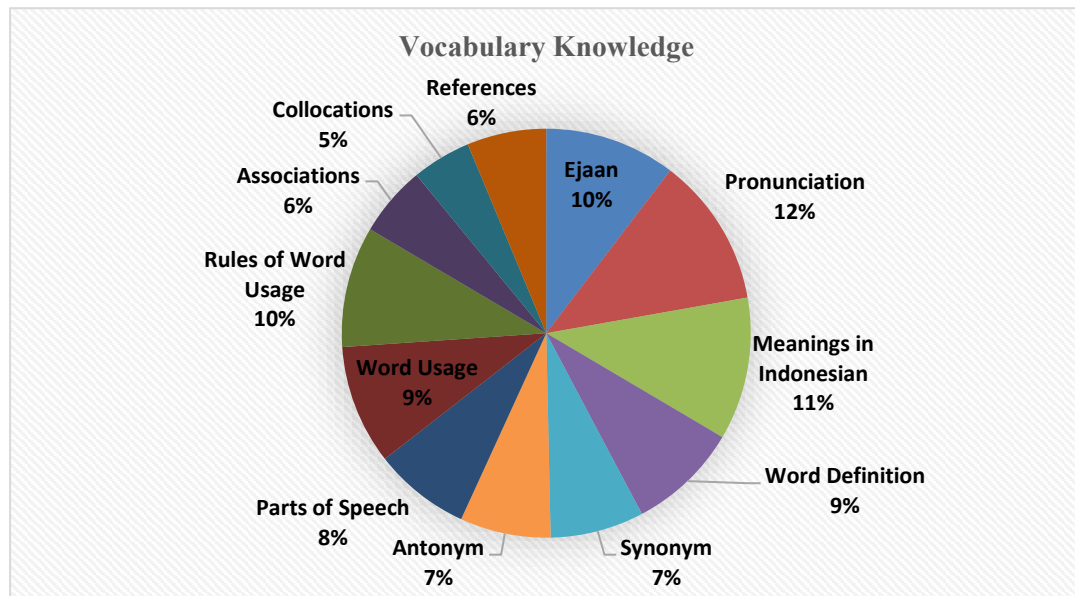


Figure 4. The Students' Expectation from the Mobile Vocabulary-Learning Package

Figure 4 shows that 12% of students thought that they would learn pronunciation from the mobile vocabulary-learning package application. Meanwhile, 11% of students thought that they could also learn equivalents (meanings) in Indonesian. Furthermore, 10% of students expected to learn the rules of word usage and spelling through this application package. % of students thought that the package would enable them to learn word usage and word definitions. Furthermore, 8% of students thought that the package would enable them to learn types of words. Another 7% of students thought that the package would make them learn antonyms and synonyms. Meanwhile, 6% of students thought the package would enable them to learn word references and associations with similar words. Only 5% of students thought that the package would make them learn collocations.

The subsequent facet unveiled by this needs analysis pertains to the specific vocabulary learning activities facilitated by the mobile vocabulary-learning package. This package, as indicated by the feedback and perceptions of the students involved in the study, is regarded as a potentially efficacious tool for enhancing English vocabulary acquisition. In the context of language learning, the effectiveness of vocabulary learning activities is of paramount significance, as an extensive and well-rounded lexicon is fundamental to language proficiency. This aspect underscores the practical utility and perceived value of the mobile vocabulary-learning package, shedding light on its potential as an educational resource for English language learners. Furthermore, it underscores the importance of aligning instructional strategies with learners' preferences and perceived effectiveness to optimize the language learning process, a critical consideration in pedagogical and educational research.



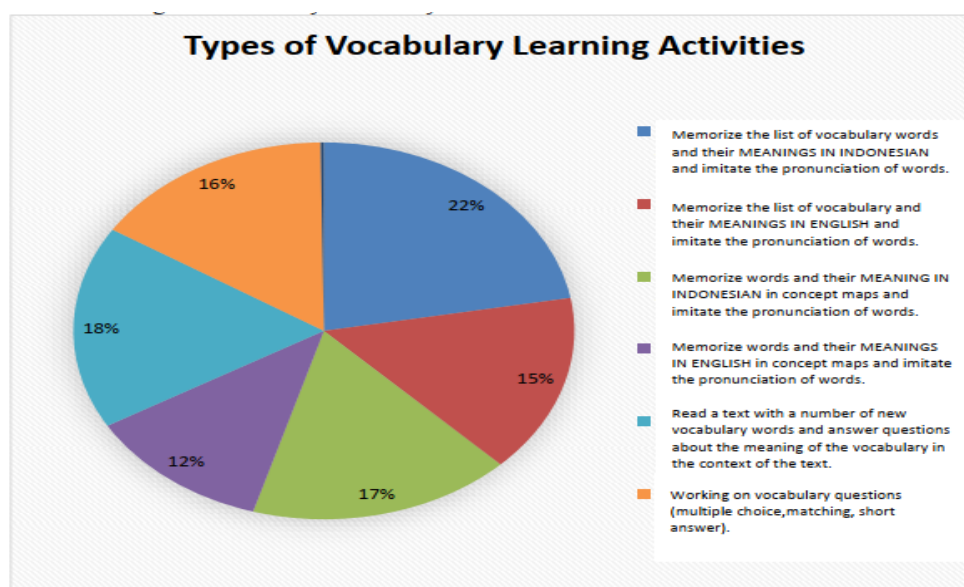


Figure 5. The vocabulary learning activities

It is illustrated above that 22% of students expected the learning activities of memorizing a list of vocabulary and their meanings in Indonesian and imitating the pronunciation of words. Meanwhile, 18% of students preferred to read texts with a number of new vocabulary and answer questions about the meaning of the vocabulary in the context of the text. 17% of students wanted to memorize words and their meanings in Indonesian in concept maps and to imitate the pronunciation of words. Furthermore, 16% of students preferred working on vocabulary items such as multiple choice, matching, and short answers. 15% of students expected to memorize lists of vocabulary and their meanings in English and to imitate the pronunciation of words. Only 12% of students were eager to memorize words and their meanings in English in concept maps and to imitate the pronunciation of words.

A further finding is about the frequency of vocabulary mobile learning should be given to the students.

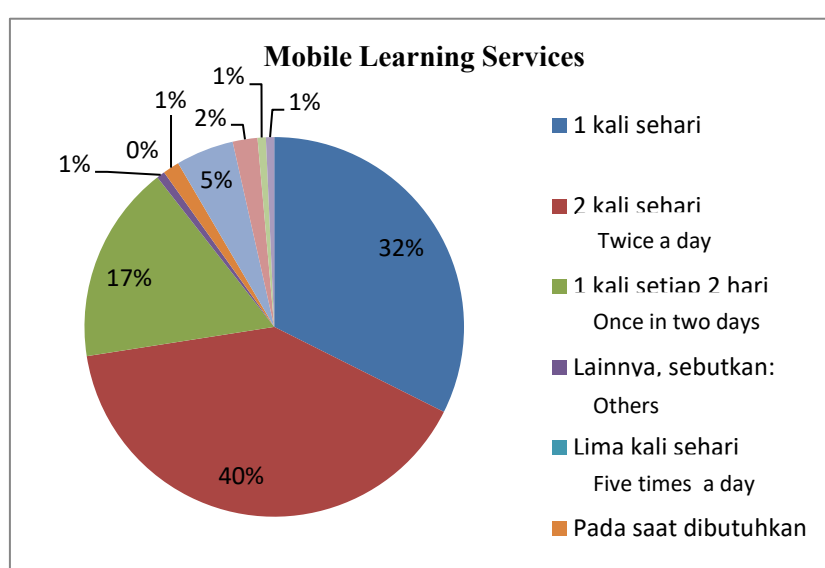


Figure 6. The Frequency of a Word to be Presented

It can be seen in the diagram above that 40% of students expected the services to be provided twice a day. Meanwhile, 32% of students expected the services to be available once a day. 17% of students preferred the services to be given once every two days. Furthermore, 5% of students expected the mobile vocabulary learning services to be provided at any time. 2% of students were likely to prefer the services be provided three times a day. Meanwhile, only 1% of students wanted the services be provided when needed, when they needed them, and provided only as required.

Another feature of this mobile phone vocabulary learning is related to the admin's role. It was revealed that 25% of students expected the admin to explain why an answer was correct. Meanwhile, 19% of students expected the admin to explain why an answer was wrong. Furthermore, 18% of students expected the admin to provide technical facilities (assistance) to users in using the service, and for members to know the correct answers. Furthermore, 11% of students expected the admin to notify them that study materials had just been sent to them. And only 9% of students hoped that the admin provide reinforcement. These facts are presented below.

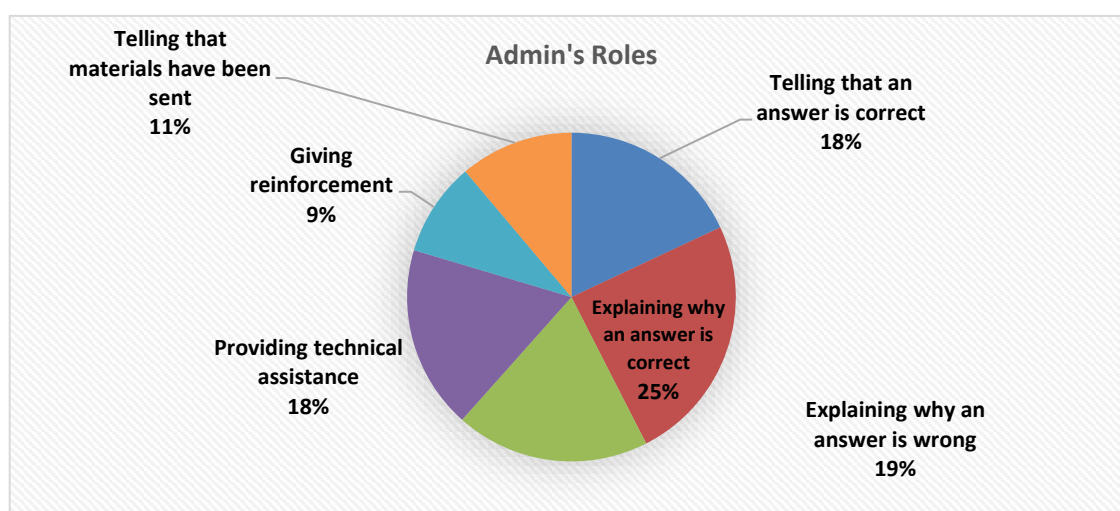


Figure 7. The admin's roles

In addition to the above aspects, the learning time is also important to explore in the needs analysis. It was found out 44% of the students expected the mobile vocabulary learning services to be provided to students preferably between 07.00-12.00. Meanwhile, 32% said between 17.00-22.00. Furthermore, 12% of students mentioned preferably between 12.00-17.00. 6% wanted the services to be available at any time for 24 hours. Only 1% of students mentioned only when needed, at times or times that were conducive, every morning, between 19.00-20.30, between 03.00-05.00 and between 07.00-13.00.

## Discussion

In developing mobile-phone based learning materials to accelerate the students' mastery of english vocabulary, researchers carried out a need analysis focused on students' learning needs. Doing needs analysis is essential to find out the students' learning needs (Geva & Farnia, 2012; Naqsyabandiyah & Dehganitafti, 2023). The findings obtained from the comprehensive needs analysis conducted among students and educators at the Mechanical Engineering Department of a vocational high school, as well as among graduates working in the same field, shed light on crucial aspects of vocabulary acquisition essential for this specialized domain. The results highlight that students preparing for careers in mechanical engineering must acquire a diverse range of specialized vocabulary that is directly pertinent to their professional



responsibilities. This vocabulary encompasses terms and expressions associated with instruction texts, procedural documentation, technical manuals, schematic diagrams, descriptive literature, formal reports, and discussions within the context of their mechanical engineering tasks. Proficiency in this specialized lexicon is imperative for effective communication and comprehension within the professional domain.

Moreover, the analysis underscores the multifaceted nature of vocabulary mastery that these students and professionals must attain (Baiq-Sumarni et al., 2022; Hidayatullah et al., 2022). Beyond mere recognition and understanding, it is essential for them to possess a comprehensive grasp of the vocabulary, which includes but is not limited to: the ability to comprehend the meaning or equivalents of these terms in the Indonesian language (Br Sembiring & Simanjuntak, 2023; Mohammed, 2023), proper spelling and pronunciation (Mora & Levkina, 2017; Nurman, 2021), and a firm understanding of general vocabulary relevant for reading and interpreting mechanical texts. This comprehensive approach to vocabulary acquisition emphasizes the importance of linguistic competence (Rosyada & Apoko, 2023; Situmorang & Simanjuntak, 2023) as a foundational skill in the field of mechanical engineering, not only for effective communication but also for comprehension and application of the intricate technical information that constitutes a significant part of their professional responsibilities. This in-depth understanding of the vocabulary needs of students and graduates underscores the pedagogical and training requirements for equipping them with the linguistic tools necessary for success (Zano, 2022; Mohammed, 2023), in the field of mechanical engineering.

The findings of this study offer valuable insights into the specific language learning needs and expectations of students utilizing a mobile vocabulary-learning package application (Haerazi, 2023; Alkhezzi & Al-Dousari, 2016). One prominent observation is that students express a strong inclination towards utilizing the application to enhance their pronunciation skills. This particular emphasis on pronunciation signifies the acknowledgment of the pivotal role that correct pronunciation plays in effective language acquisition and communication (Avei & Adiguzel, 2017; Haerazi, 2023). Furthermore, the students' expectations extend to a comprehensive understanding of word usage and spelling rules through the use of this application package. The importance they place on this aspect highlights the recognition of the nuanced and intricate nature of language, emphasizing that language learning is not limited to vocabulary alone but encompasses various linguistic dimensions.

Additionally, a substantial percentage of students exhibit optimism regarding the potential of the package to aid them in mastering word usage and word definitions. This inclination underscores their aspirations to gain a deep understanding of lexical items within their given context and is indicative of their recognition of the package's utility for achieving this goal (Kohnke et al., 2019; Haerazi, 2023). Moreover, students perceive the package as a valuable resource for acquiring knowledge related to the different types of words, encompassing antonyms and synonyms. This demonstrates an appreciation for the diversity and richness of language, suggesting that students are actively seeking to expand their vocabulary and language skills through this application. Furthermore, students anticipate that the package can facilitate their understanding of word references and associations with similar words, as well as the acquisition of collocations. These expectations reflect the students' comprehensive view of language learning, recognizing the interplay of words within contexts, and the importance of grasping not only individual words but also their connections and usage patterns (Lai et al., 2020; Kohnke et al., 2019).

The results obtained from the assessment of students' learning needs offer significant insights into the realm of vocabulary acquisition, specifically in relation to the mobile vocabulary-learning package employed in this study (Haerazi, 2023; Alkhezzi & Al-Dousari, 2016). The package's efficacy and potential impact on enhancing English vocabulary acquisition are clearly underscored by the feedback and perceptions shared by the participating

students. Their positive appraisal of the package as a valuable resource for language development signifies its relevance and practical utility in the context of language learning, particularly given the paramount importance of vocabulary in achieving language proficiency. Vocabulary learning activities constitute a fundamental component of language education, as a well-rounded and extensive lexicon serves as the bedrock of effective communication and comprehension.

The findings in this regard emphasize the intrinsic value of the mobile vocabulary-learning package as a tool that not only caters to students' linguistic needs but also aligns with their preferences and expectations for effective learning. In doing so, it highlights the significance of harmonizing instructional strategies with learners' perceived effectiveness, reflecting a pedagogical approach that capitalizes on students' motivations and inclinations (Lai et al., 2020; Kohnke et al., 2019). This alignment between instructional resources and learner preferences is pivotal in optimizing the language learning process and ensuring that pedagogical approaches are attuned to the dynamic needs and aspirations of English language learners. As such, the findings from this study not only contribute to the understanding of vocabulary acquisition but also hold implications for the broader field of pedagogical and educational research, emphasizing the importance of student-centered approaches and the potential of innovative learning tools to foster language proficiency and effective communication.

In the realm of mobile-based learning activities, there exists a set of specific learning provisions that students find crucial for their language acquisition and development (Haerazi, 2023). Students in mobile-based language learning programs express a strong desire for comprehensive and effective resources, primarily consisting of vocabulary lists supplemented with audio pronunciations and meanings in their native language, Indonesian. This inclusion serves as a fundamental scaffolding for their language learning process, aiding them in grasping the correct pronunciation and contextual interpretation of new words. Additionally, students emphasize the significance of concept maps that delve into engaging and relevant topics. These concept maps, when accompanied by vocabulary lists featuring audio pronunciations and meanings in Indonesian, offer an integrated approach to language learning. They enable students to explore thematic concepts while simultaneously building their vocabulary in a contextually meaningful way (Cakmak & Ercetin, 2018; Chen et al., 2019). Furthermore, students place great value on the availability of texts enriched with relevant images. These texts incorporate a significant number of new vocabulary items, and they are designed to encourage students to engage deeply with the language.

Complementing the texts, students seek questions that prompt them to consider the meaning of the newly introduced vocabulary in the context of the text. This interactive approach fosters active engagement and comprehension, reinforcing their vocabulary acquisition and language proficiency (Baiq-Sumarni et al., 2022; Hidayatullah et al., 2022). Another essential requirement identified by students is the provision of vocabulary questions complete with answer keys. These questions, combined with input in the form of vocabulary lists featuring audio pronunciation and meanings in English, enable students to assess their knowledge and understanding of the language (Br Sembiring & Simanjuntak, 2023; Mohammed, 2023). It offers a two-fold benefit by not only expanding their vocabulary but also allowing them to self-assess and monitor their language learning progress. Therefore, the preferences and learning needs articulated by students underscore the multifaceted nature of language acquisition in a mobile-based learning environment. The provision of vocabulary lists, concept maps, image-enriched texts, questions, and answer keys, as outlined by students, showcases their holistic approach to language learning. These elements are instrumental in guiding the pedagogical design and resource development for mobile-based language learning, thereby enhancing the effectiveness of these programs and aligning them with students' linguistic aspirations and educational objectives.

In learning vocabulary through mobile learning services, students need to be facilitated with the essential activities such as memorizing lists of vocabulary and their meanings in Indonesian and imitating the pronunciation of words, reading texts with a number of new vocabulary words and answering questions about the meaning of vocabulary in the context of the text (Haerazi, 2023; Lai et al., 2020; Kohnke et al., 2019), memorizing words and their meanings in Indonesian in concept maps and imitating the pronunciation of words, working on vocabulary questions such as multiple choice, matching, and short answers, memorizing vocabulary lists and their meanings in English and imitating the pronunciation of words, and memorizing words and their meanings in English in concept maps and imitating the pronunciation of words.

The findings of the present study illuminate a noteworthy aspect of language acquisition, specifically concerning students' perception of vocabulary acquisition in the context of English language learning. The study reveals that students express a preference for the repetitive exposure of a word to facilitate its effective mastery. In particular, students find it advantageous if a word is presented two or three times in the learning process. This insight underscores the pedagogical value of reinforcing vocabulary through repetition, highlighting the significance of repeated exposure in the language learning process (Haerazi, 2023; Lai et al., 2020). However, the study also takes into account the practical context of mobile learning services, where resources and content are typically provided once or twice a day. This temporal limitation raises questions about the feasibility of accommodating the students' preference for repeated word exposure within the constraints of mobile learning platforms. It prompts considerations regarding the adaptability of mobile learning resources to align with students' language learning preferences, striking a balance between pedagogical effectiveness and logistical constraints. Furthermore, the study delves into the multifaceted roles of administrators managing mobile vocabulary-learning packages.

The utilization and retention of students in the Mobile Vocabulary-Learning service are influenced by several key factors, as elucidated in this study. One of the pivotal aspects that contribute to the sustained use of this service is the clarity and ease of comprehensibility of the provided instructions (Haerazi, 2023; Lai et al., 2020). In an educational context, clear and unambiguous instructions play a fundamental role in guiding learners through the learning process. The students' recognition of this attribute as significant suggests that instructional design and communication are paramount in ensuring that students engage with and continue to utilize the mobile learning service (Chen et al., 2019; Haerazi, 2023). Moreover, the availability of diverse vocabulary learning activities within the service significantly impacts its appeal and effectiveness. Students place value on the presence of a range of activities that cater to different learning styles and preferences. This inclusivity in vocabulary learning activities acknowledges the heterogeneous nature of learners, emphasizing the need for varied approaches to engage and accommodate their distinct needs and preferences. Another instrumental factor contributing to students' continued use of the Mobile Vocabulary-Learning service is the relevance of the materials to their individual learning needs.

## CONCLUSION

The primary objective of this research is to conduct a comprehensive examination of the specific requirements and preferences of vocabulary learning among vocational school students. To achieve this, the study embarks on a systematic analysis of the students' wants, needs, areas of deficiency, and essential necessities concerning vocabulary acquisition. This comprehensive needs analysis is pivotal in identifying the nuanced elements that influence students' language learning experiences and proficiency levels. The study employs a rigorously validated instrument to carry out this needs analysis. The validation process is a crucial step that ensures the reliability and accuracy of the data collected. The instrument is designed to gauge the respondents' vocabulary mastery needs across multiple dimensions. These

dimensions encompass vocabulary coverage, the types of input they require, suitable learning activities, assessment methods, and the role of administrators, among other pertinent factors.

The results of this needs analysis offer a detailed and nuanced understanding of the students' specific language learning requirements. Subsequently, the findings from this needs analysis serve as the foundational basis for the design and development of a web-based platform. This platform is conceived to provide access to mobile teaching materials, which have been meticulously designed to expedite the vocabulary mastery of vocational school students. By addressing the specific needs and preferences identified in the analysis, this web-based platform aims to contribute significantly to the enhancement of English language proficiency among the target student population. In essence, this research underscores the importance of aligning language learning resources and approaches with the identified needs and requirements of vocational school students. By doing so, it seeks to not only provide tailored solutions but also to augment the effectiveness of language acquisition strategies, ultimately benefiting the students in their pursuit of language mastery and competence in English.

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