

Integrating dictionary on taxation accounting terminology as self-learning kit in English for specific purposes

Luh Nyoman Chandra Handayani¹, Gusti Nyoman Ayu Sukerti², Ketut Arya Bayu Wicaksana³

Accounting Department, Politeknik Negeri Bali^{1,3}
Electrical Engineering Department, Politeknik Negeri Bali²

¹email: nyomanchandrahandayani@pnb.ac.id

Abstract - Specialized tax and accounting dictionaries are useful for vocational students as an independent learning medium, as they facilitate vocabulary mastery and eliminate the need for general dictionary lookups. The focus of this paper is the development of a dictionary of tax accounting terminology as an independent learning medium in the academic reading process and analysis of its implementation. This learning medium was developed using an adaptation of the ADDIE model which consists of five phases: needs analysis, design, development, implementation, and evaluation. This study elaborates on the student's perspective on the product produced in this study, namely a self-learning kit in the form of a tax accounting terms dictionary as well as student experiences in using dictionary applications to support their learning. The dictionary covers 731 data entries with the description of word translation, word class, definition, and sample sentences in English and Indonesian. In addition, users are also provided with 8 self-evaluation exercises in Quizizz which can be accessed via barcode scanning or link. Data analysis in the form of respondents' responses in Google Form was described based on aspects of student feedback after using the dictionary. The descriptions of student perceptions are summarized into aspects of design, content, and usability. Students gave positive responses in those three aspects and highlighted that the dictionary assisted them in improving their vocabulary mastery, and reading comprehension as well as in reflecting on their learning progress through self-evaluation.

Keywords: English for Specific Purpose, dictionary, self-learning kit, taxation accounting

1. Introduction

Considering that vocabulary learning is an important component of language learning, teachers should help students understand that a broad understanding of vocabulary is an important aspect of the learning process. Alqahtani (2015) agreed, pointing out that language learners should do this. acquire sufficient vocabulary knowledge for effective and meaningful prevention communication. Vocabulary acquisition is fundamental to everyone's growth in learning other skills in English. Vocabulary is especially important in English, the language lessons you need to express your ideas. So, it plays an important role. It plays a role not only in everyday conversation but also in scientific communication. Tovar Viera (2017) found that learning vocabulary means learners also learn its meaning and How to use them in different contexts and situations. So, mastering a sufficient number of words and their correct use is essential to communicating well in the target language. One of the methods that can be implemented is for teachers can introduce vocabulary-learning media in the form of dictionaries containing lists of jargon related to specific areas according to students' majors. Learning tools facilitate can facilitate the exchange of information between students about more clearly taught subjects. Furthermore, learning tools aim to make the subject easier and more systematic for students to learn (Hidayat, 2021). Teachers can use learning support media to continuously and independently inform students about learning strategies and vocabulary implementations outside of the English classroom.

This is consistent with statements (Kob, 2019; Hidayat, 2021; Tasrif et al, 2021) indicating a critical need for high-quality, competitive postgraduate degrees. The demand to produce quality and competitive university graduates is currently very high so it is necessary to consider and think about information technology-based learning activities, including evaluation of online learning (Mulya et al., 2020). Another research also emphasized that Quizizz is an alternative to online-based learning assessments (Asria & Putrie, 2021; Zuhriyah & Pratolo, 2020). Because of its ease of use and rapid evaluation, Quizizz is the preferred learning application to support 4.0 Revolutionary Learning. The application provides students with quick access to interactive and enjoyable learning resources (Yan et al, 2018). According to research (Rahayu & Purnawan, 2018), Quizizz is an online assessment tool that allows students to track their progress in learning English as well as the breadth of their knowledge.

In line with the importance of Quizizz as described in the previous statements, the self-study tool developed in this research not only includes a tax accounting glossary but also includes Quizizz, a digital self-assessment tool. Lists of exercises in Quizizz include forms of vocabulary exercises and academic reading comprehension texts. It is thus expected to assist students in developing their understanding of tax accounting terminology and using it coherently in their reading learning process. This study examines the implementation of products developed during the learning process in addition to the development of learning tools. In this way, the perceptions of students' use of independent learning media in the form of dictionaries of tax accounting can be analyzed to improve the quality of English language learning, particularly the comprehension of academic reading texts.

Literature research shows that specialized dictionaries in the field of tax accounting are not widely used in Indonesia. Adnan (2019) pointed out that a printed dictionary was developed containing a glossary and explanations of abbreviations from the fields of taxation, accounting, customs, excise, and tax justice. The dictionary developed in this research is focused on financial accounting terminology and is equipped with a self-assessment tool that students can access. No research has been conducted by other researchers on the effects and perceptions of the use of terminology dictionaries in tax accounting, particularly for improving academic reading comprehension, but some precedents have analyzed the effects of dictionaries on reading learning. Some researchers state that dictionaries can help language learners improve reading competence (Chen, 2012; Shen, 2013). Studies have shown that the use of dictionaries helps learners improve reading comprehension and leads to lexical improvement. Researchers have found that students score better on post-reading comprehension and vocabulary tests

because of the use of dictionaries (Shen, 2013). It is also proven that the use of dictionaries can cause lexical retention when readers search for a word in the dictionary, they pay more attention to the word, thus helping them retain it in memory (Peters, 2017).

Another study by Mokhtar (2013) found that the process of checking the meaning of words in the dictionary helps the success of vocabulary acquisition. The process of efficiency when the teacher integrates the dictionary is accompanied by training in its use strategy (Liu, 2014). Research by Medina and Sergio (2019) reports the effect of integrating the use of a dictionary and a reading strategy approach in learning foreign language reading comprehension. The research used case studies as a research method, and three data collection instruments in the form of reading comprehension tests, field notes, and interviews. The findings show that the reading strategy approach and selective use of dictionaries are a good combination to be integrated into improving the quality of learning to read a foreign language. Based on this description, there is a gap between the topic in this present study and previous studies because those studies did not develop dictionaries for their products to be implemented as part of the research.

On that basis, this paper focuses on the development and implementation of a practical dictionary on tax accounting terminology as a method for supporting professional students' independent learning. The learning medium developed in this study provides a learning tool to the users, who is a professional student with a background in tax accounting. It intends to boost students' range of specific terminologies and comprehension of academic reading texts. The dictionary includes not only tax and accounting terminology equivalents, but also examples of how these terms are used in sentences. Furthermore, the presence of links and barcodes for vocabulary and academic reading exercises that the student can access distinguishes this product from other dictionaries that are already available. Students can access her Quizizz page via a link or barcode in the dictionary section. Students can interact with the system to answer questions and learn about their results. This feature emphasizes that, while the developed dictionary will be printed, it will also include technology integration in the form of online training and evaluation tools, allowing students to engage in technology-based language activities.

2. Method

Based on an adaptation of the ADDIE model (Forest, 2014) this learning medium was created. The development of this learning medium follows the ADDIE model's five phases: needs analysis, design, development, implementation, and evaluation. A needs analysis seeks to examine design requirements in the form of documents and other sources that aid in the determination of solutions to existing problems. This needs analysis also considers professional student needs for data collection content. A need analysis was carried out by distributing an online questionnaire (Google Form) to those interested in learning media and interviewing instructors in charge of the Tax Accountant degree program's Applied English course. Dictionary design and layout are part of the design phase. The dictionary content is also designed at this stage based on the results of the needs analysis and additional features such as vocabulary lists and reading exercises. Creating word lists, example sentences, and vocabulary, as well as reading questions entered into a digital quiz platform, are all part of the development phase. The dictionary is started with a list of collected words and detailed explanations such as meanings, example sentences, and quiz links at this stage, allowing students to measure their vocabulary proficiency and comprehension of scientific texts. During the implementation phase, students were asked to use the dictionary in their learning process to gather their evaluation of the quality of the product. During the evaluation phase, qualitative data were obtained by filling out a google form questionnaire with the type of question scale using the Likert scale and paragraph types, and students' responses were descriptively described.

3. Results and Discussion

The use of dictionaries effectively improves learners' speech recognition (Takahashi, 2012). When compared to monolingual dictionaries, bilingual dictionaries can show differences in reading comprehension (Hayati, 2015). The purpose of this study (Kondal, 2018) is to investigate learners' perceptions of the use of dictionary skills in language teaching. It also emphasizes that learners who use dictionaries can learn outside of the classroom. Using a dictionary allows students to study together while also encouraging learner autonomy. This study has pedagogical implications in that using dictionaries as a learning medium for students with low English proficiency can improve overall language development. Based on these findings, we advise students to be trained in the use of dictionaries so that they understand the proper strategies for using dictionaries as independent learning tools for language development.

The first stage in developing the dictionary was needs analysis in which an online questionnaire was given to students to obtain the requirements that must be met when developing the product. The results of the analysis were used as a basis for assessing current student learning barriers and collecting information on the needs analysis of the learning tool. The students' responses are described in the following figures.

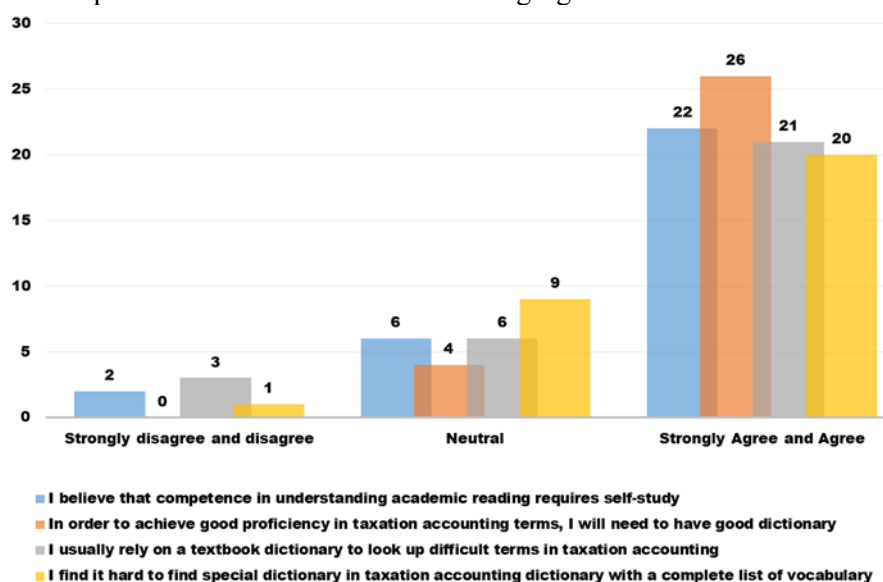


Figure 1 Students' Perspectives on the Role of Dictionaries and Independent Learning

Figure 1 depicts student responses to dictionary use and perspectives on self-study. According to the data, most students (more than half of all respondents) believe dictionaries play an important role in achieving independent learning, particularly when it comes to vocabulary acquisition and comprehension of academic texts. demonstrates that you agree Three of the four statements emphasize different aspects of using jargon dictionaries. In contrast to these three statements, students admitted that a dictionary was required to fully understand tax and accounting terminology (26 students or 86.7%), and students typically used printed dictionaries to understand unfamiliar terms (21 students or 70%). Finding a professional tax accounting dictionary that covered all terms was difficult (20 students, 66.7%). In addition to these factors, students (22 students or 73.3%) agreed that self-directed learning was required to improve their academic reading proficiency.

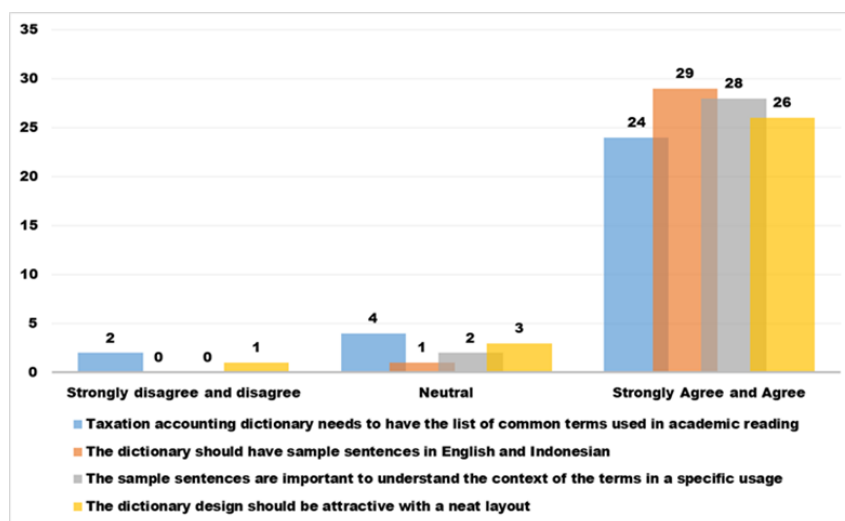


Figure 2 Students' Perspectives on the Development of a Dictionary of Tax Accounting Terms

According to Figure 2, the majority of students responded positively to the need assessment statement. Twenty-six of her thirty students, or 80.7%, responded that the tax and accounting dictionary to be developed has an appealing and appealing design. The majority of respondents (more than 70%) chose a scale of 4 to 5 for her other three statements. In terms of content, 24 students (70%) felt that the dictionary should include the most frequently used tax terms. Scientific terms or academic texts are frequently used. Concerning sentence usage examples, 29 students (96.7%) responded that sentence examples should be provided in both English and Indonesian. The majority of students (28 students or 93.3%) agreed that providing example sentences is important for understanding the context of using terms in a specific field. Based on the responses in the need analysis stage, it can be concluded that students as potential users expected that the self-learning tool has an attractive design, complete terms, and examples of the real use of terms in the context of tax accounting.

After the initial stage of needs analysis, the next stage is the design which includes designing the outline and layout of the dictionary. At this stage, the process of designing dictionary content was carried out based on the results of the needs analysis. Furthermore, an additional feature in the form of vocabulary exercises via the digital platform Quizizz was included to provide a specific characteristic to the learning tool being developed. The next phase is the development stage which included writing a list of words, sample sentences as well as vocabulary, and reading questions that will be inputted into the Quizizz digital platform. At this stage, the dictionary began to be completed according to the 731 lists of terms that had been collected along with detailed explanations such as the Indonesian translation, definition, example sentences in English and Indonesian, and Quizizz links or barcodes that students could use to measure their vocabulary mastery. Figure 3 shows the dictionary layout that has been equipped with a barcode and a self-training link via Quizizz.

During the development stage, the dictionary was reviewed then the content was revised accordingly. The next phase is the implementation stage in which the dictionary was implemented in the learning process. In the final phase, i.e., the evaluation stage, student perceptions in the form of descriptions were obtained by filling out a google form questionnaire with the type of question scale using the Likert (McLeod, 2019) scale and paragraph types.

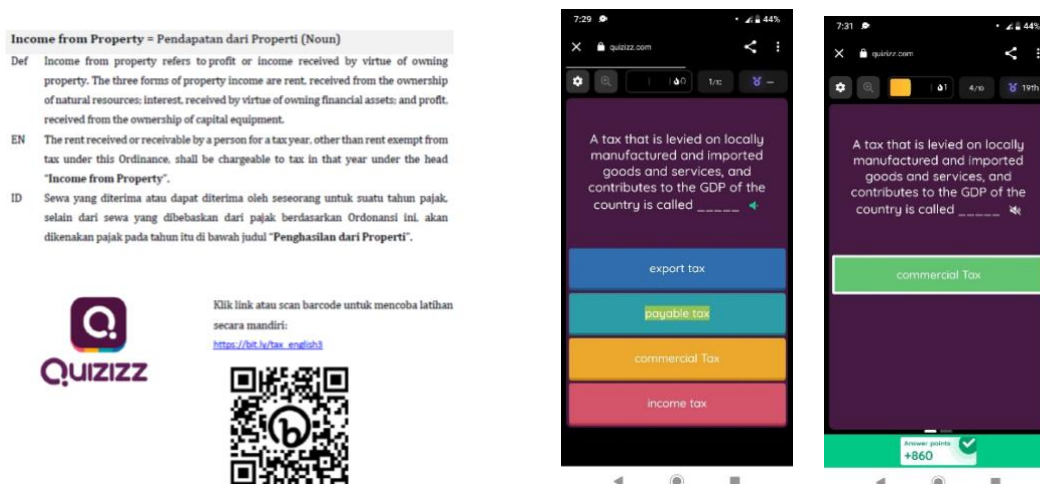


Figure 3 The Dictionary Content and Quizizz Page View

This subchapter discusses the student's perspective on the self-study kit in the form of a tax accounting terminology dictionary, as well as the student's experience using the dictionary application to support their learning. Based on aspects of student feedback after using the dictionary application, data analysis in the form of respondents' responses to an online survey is described. Design, content, and usability aspects of student perceptions are summarized in the following descriptions.

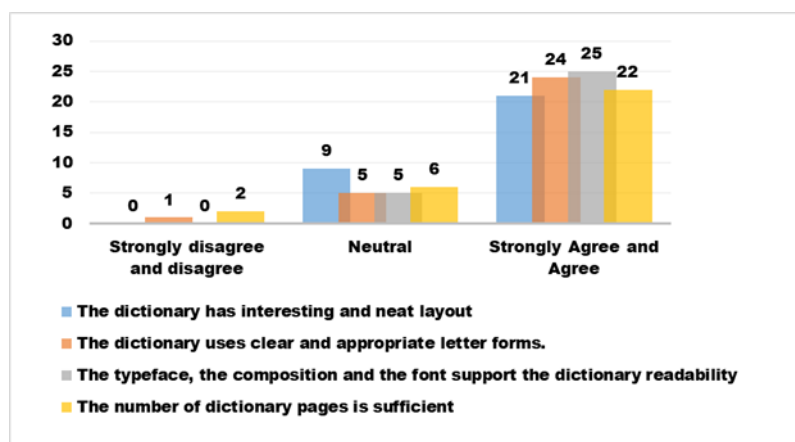


Figure 4 Students' Perspectives on Design Aspects

Figure 4 depicts students' attitudes toward dictionary design. The majority of respondents said yes. Out of 30 respondents, 21 students, or 70%, agree or strongly agree that the developed dictionary has an appealing and tidy appearance. Furthermore, 24 students (80%) agreed that the dictionary uses a clear and concise letter format, and 25 students (83.3% of respondents) agreed that the type and composition of letters in the dictionary make it easier to read. Concerning the number of pages in the dictionary, the majority of students (22 people, 73.3%) responded that the number of pages is adequate.

Numerous studies in the field of English teaching show a link between vocabulary knowledge and reading comprehension quality. Zhang and Anual (2010) investigated the role of vocabulary in reading comprehension among 37 Singaporean high school students studying English. A vocabulary test is used to assess a student's knowledge of words. The student's vocabulary knowledge correlated with her reading comprehension at the 2000-word and 3000-word levels, according to the results. This suggests that vocabulary knowledge and English

reading comprehension are closely related. This is also consistent with previous research [30, 4], which used vocabulary scores to predict academic reading levels.

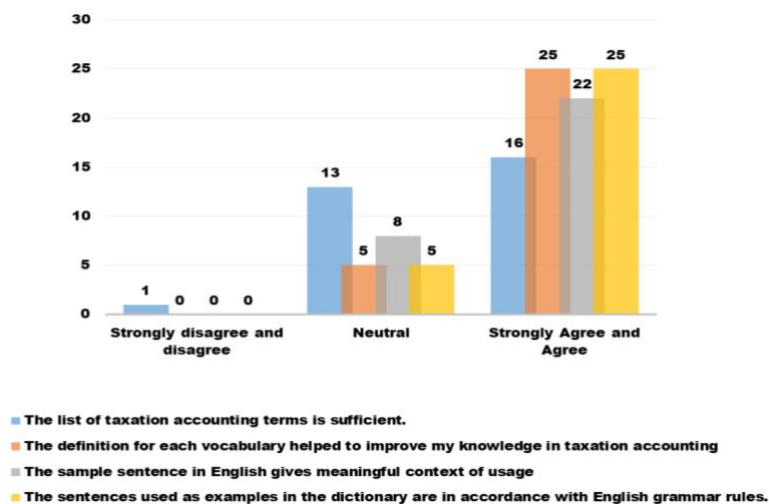


Figure 5 Students' Perspectives on Design Aspects

According to the data in Figure 5, students responded positively to the four statements listed in the questionnaire. The majority of respondents chose a scale of 4 and 5 for the four different statements about the dictionary's content (agree and strongly agree). This demonstrates that students value the variety of content available in the dictionary. In response to the first statement about the number of vocabularies listed in the dictionary, 16 students or 53.3% agreed or strongly agreed that the dictionary had adequate vocabulary lists. The majority of the students (25 people, or 83.3%) agreed that the definitions for each vocabulary helped them improve their knowledge of tax accounting. In response to the statement that sample sentences help students understand the context of using vocabulary, 22 students (73.3%) selected a positive scale of 4 and 5. Finally, 25 students (83.3%) responded positively by selecting agree or strongly agree with a statement that the sentences used as examples in the dictionary follow English grammar rules. A recent study on foreign language learning found a strong positive correlation between vocabulary knowledge and reading comprehension. A study (Rashidi & Khosravi: 2010) investigated the role of lexical depth and breadth in reading comprehension. To assess the depth and breadth of their vocabulary knowledge, thirty-eight high school students took a word association test and a vocabulary test.

Figure 6 depicts students' perceptions of a dictionary's usability. According to the graph above, more than half of the respondents agree or strongly agree with the statements in the questionnaire. A total of 24 people, or 80%, rated the statement that example sentences in Indonesian help students understand vocabulary as 4 or 5. The same proportion of respondents agreed that the breadth of terms in the dictionary could encourage students to study independently. In response to the statement that the dictionary's contents can stimulate students to think critically about taxation issues, as many as 20 people (66.7%) chose a scale of 4 and 5. For the next three statements, more than 70% of respondents agreed with statements about dictionary content that would help improve vocabulary range in technical terms (83.3%), dictionaries help them better understand tax accounting reading texts (76.7%), and Quizizz exercises help students evaluate understanding independently (86.7%).

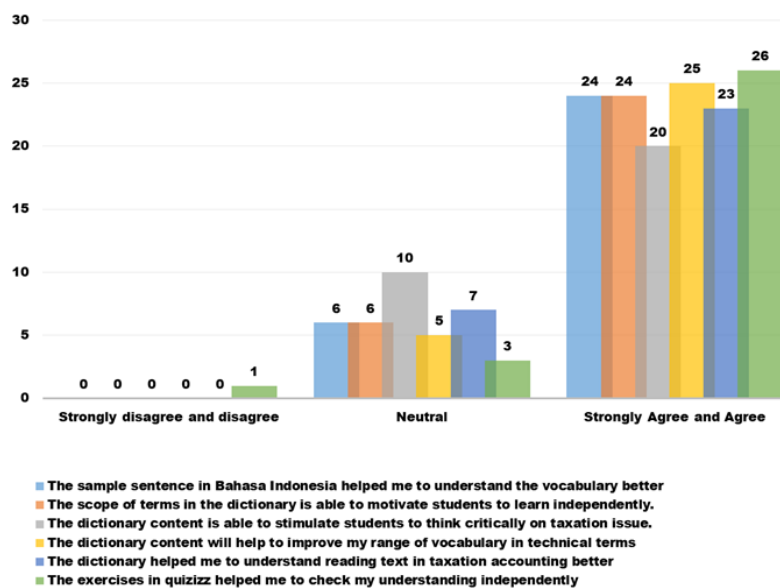


Figure 6 Graph of Student Perception on Usability Aspects

According to students' responses, the contents provided in the dictionary could help them in acquiring and evaluate their vocabulary knowledge. Quizizz assisted the review of the vocabulary and thus, repeatedly enhanced students' comprehension of the concepts. Schmitt (2010) claims that only ten encounters with vocabulary can result in significant gains because repetition influences incidental vocabulary learning. According to his findings, learners who encounter an unknown word more frequently in informative contexts demonstrate significantly greater gains in vocabulary knowledge than learners who encounter a new word less frequently. This is consistent with the findings of Soleimani et al. (2022), who discovered that repeated exposure to vocabulary leads to significant EFL vocabulary gains. Despite this, there is an unknown boundary between a recognized word and a fully understood and learned the word in the process of incidental vocabulary learning. As a result, some kind of systematic approach is required to ensure vocabulary acquisition, which can be accomplished through intentional learning (Björgevinnsson, 2012). It is consistent with the findings of Zhang and Teng (2012), who found that intentional learning plays a significant role. Students must receive input in the form of explanations and clear instructions, as well as practice the language they have learned, to produce a successful output (Birkner, 2016). The importance of input, information processing, and output in second language learning has gradually been recognized.

When answering paragraph-type questions, students also provide a positive perspective, as seen in the following quote.

- In my opinion, the existence of an English taxation dictionary helps students to find information or materials more easily. In addition, students can also directly master the material in English. Easy search will increase interest in learning.
- We as students majoring in tax accounting can think critically about taxation issues and help improve my knowledge in the field of tax accounting
- In my opinion, learning English using a tax dictionary can make it easier for me to find new and unfamiliar vocabulary. In addition, we can also increase knowledge about taxation through the available dictionary with a fairly complete vocabulary in the field of taxation.

When answering paragraph-type questions, students also provide a positive perspective, as seen in the following quote.

- In my opinion, what needs to be improved is to add vocabulary or add material to the dictionary. Maybe the dictionary that has been made can be poured into the application

and not only in the form of an e-book. By being improved in the form of an application we can quickly and easily if you want to find new vocabulary. And it is hoped that the dictionary that has been designed can be used by all students of the Bali State Polytechnic.

- In my opinion, what needs to be improved is the addition of some vocabulary in tax accounting.
- I would like to suggest making groups of words that have the same meaning or words that are related to one another. For example, Accumulated Depreciation of Buildings, Accumulated Depreciation of Soil, etc. So it will help us to find the meaning of other subjects.
- I think the things that need to be improved are more tax accounting words being more complex and providing some quotes about tax or motivation on each page of the word.

Students' constructive feedback was mentioned in the areas of content, design, and format. Students proposed broadening the scope of vocabulary, improving their designs, and developing them into applications.

The results of this study show a relationship between depth, breadth, and reading comprehension. Students with greater depth and breadth of vocabulary showed better proficiency on reading comprehension tests. A study (Farahani, 2016) examined the relationship between depth of lexical knowledge and the use and success rate of lexical inference strategies in Iranian learners. The results of this study demonstrate a significant association between depth of lexical knowledge and usage of lexical inference strategies. In other words, people with deep vocabulary knowledge used certain lexical inference strategies more often than those with less vocabulary knowledge, and they were more successful at guessing the meaning of unfamiliar words with this strategy. Thus, primary attention should be paid to the growth of language learners' vocabulary knowledge.

4. Conclusion

This study results in a self-learning kit in the form of a tax accounting term dictionary application developed using the ADDIE method (analysis, design, development, implementation, and evaluation). The dictionary includes not only a list of vocabulary and word definitions but also examples of how terms are used in English and Indonesian. The dictionary also includes self-administered practice questions, which can be accessed through the Quizizz digital platform. The findings showed that students had a favorable opinion of the dictionary application developed in this study in terms of design, content, and usability as well as their experiences when using dictionaries in learning. More research is needed to broaden the range of terms entered as data so that users are exposed to a more complex vocabulary. A dictionary with pronunciation methods can also be created to help users correctly pronounce the terms in their vocabulary list. To obtain a more complex range of results or findings, the evaluation phase can also be performed with other experimental designs and the addition of additional variables. Dictionaries can be transformed into digital applications for more interactive use by students to support more modern integration processes.

References

- Adnan, A. (2019). *Kamus Pajak: daftar singkatan istilah perpajakan, akuntansi, bea dan cukai, serta peradilan pajak disertai dengan penjelasan*. Yogyakarta: Andi.
- Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education, International Institute of Social and Economic Sciences*, 3(3), 21-34. doi:10.20472/TE.2015.3.3.002
- Asria, L & Putrie, D.R. (2021). Students' Perception of Mathematics Education on the Use of the Quizizz Platform as an Online-Based Learning Outcome Evaluation Media, *MATH LOCUS: Journal of Mathematics Education Research and Innovation*, 2(1), 34-43. <https://doi.org/10.31002/mathlocus.v2i1.1466>.
- Birkner, V. A. (2016). Revisiting input and output hypotheses in second language learning. *Asian Educ. Stud.* 1:19. doi: 10.20849/aes.v1i1.18

- Björgvinsson, L. A. (2012). Incidental and instructional vocabulary. Available at: https://www.academia.edu/3321504/Incidental_and_Instructional_Vocabular_Acquistision (Accessed January 3, 2022).
- Chen, Y. (2012). Dictionary use and vocabulary learning in the context of reading. *International Journal of Lexicography*, 25 (2), 216-247. 2012.
- Farahani, F. (2016). The relationship between depth of vocabulary knowledge and EFL learners' lexical inferencing strategy use and success. Unpublished master thesis. Shiraz Azad University.
- Forest, E. (2014). ADDIE Model: Instructional Design, Available: <http://educationaltechnology.net/the-addie-model-instructional-design/>.
- Hayati, M.A. (2015). A comparative study of using bilingual and monolingual dictionaries in reading comprehension of intermediate EFL students, *The Reading Matrix*. 5(2), p. 331-353.
- Hidayat, H. et.all. (2021). The empirical analysis of electronic engineering education students, *International Journal of Online & Biomedical Engineering*, 17(9).<https://doi.org/10.3991/ijoe.v17i09.25679>.
- Kob, C. G. C., Shah, A., Shamsuddin, H., & Norizan, N.A.A. (2019). The Effect of using Learning Kit Material among Students. *International Journal of Recent Technology and Engineering (IJRTE)* ISSN: 2277-3878, Volume-7 Issue-6S2.
- Kondal, B. (2018). The Benefits of using Dictionary Skills among the Third Year Pharmacy Students. *International Journal of Management and Social Sciences*. 7. 1-6. 2018.
- Liu, L. (2014). The integration of dictionary use strategy training into basic English class". *Theory and Practice in Language Studies*, 4 (10), 2138-2143.
- McLeod, S. A. (2019, August 03). *Likert scale*. Simply Psychology. www.simplypsychology.org/likert-scale.html
- Medina, L. & Sergio, A. A. (2019). Effects of Reading Strategy and Dictionary Instruction in an Undergraduate Foreign Language Reading Comprehension Group. *Folios*, (50), 127-138. <https://doi.org/10.17227/folios.50-10226>.
- Mokhtar, A., Mohd, R., and Omar, M. (2013). The role of dictionary strategy in passive vocabulary knowledge acquisition of Net Generation students. *Journal for the Study of English Linguistics*, 1 (1), 8-20.
- Mulya, R., A. Ambiyar, A., & Wakhinuddin, W. (2020). Evaluation of Moodle-Based Online Learning in the Operating System Course. *Education, Journal of Education*, 18(1), 39-49.<http://dx.doi.org/10.31571/edukasi.v18i1.1653>.
- Peters, E. (2017). Manipulating L2 learners' online dictionary use and its effect on L2 word retention, *Language Learning & Technology*, 11, 36–58.
- Rahayu, I. S. D. & Purnawan, P. (2018). The use of quizizz in improving students' grammar understanding through self-assessment. *Advance in Social Science Education and Humanities Research*. Vol 254. Retrieved March 5, 2019, from https://www.researchgate.net/publication/334422905_The_Use_of_Quizizz_in_Improving_Students'_Grammar_Understanding_through_Self-Assessment.
- Rashidi, N. & Khosravi, N. (2010). Assessing the role of depth and breadth of vocabulary knowledge in reading comprehension of Iranian EFL learners, *Journal of Pan-Pacific Association of Applied Linguistics*. 14(1), 81-108.
- Schmitt, N. (2010). *Researching Vocabulary: A Vocabulary Research Manual*. Great Britain: Palgrave Macmillan.
- Shen, Z. (2013). The effects of vocabulary knowledge and dictionary use on EFL reading performance, *English Language Teaching*, 6 (6), 77-85. 2013.
- Soleimani, H., Mohammaddokht, F., and Fathi, J. (2022). Exploring the effect of assisted repeated Reading on incidental vocabulary learning and vocabulary learning self-efficacy in an EFL context. *Front. Psychol*. 13:851812. doi: 10.3389/fpsyg.2022.851812.
- Takahashi, C. (2012). Impact of dictionary use skills instruction on second language writing. Retrieved from <https://tesol.columbia.edu/article/impact-of-dictionary-use>.
- Tasrif, E., Saputra, H.K., Kurniadi, Hidayat, D. H. & Mubai, A. (2021). Designing Website-Based Scholarship Management Application for Teaching of Analytical Hierarchy Process (AHP) in Decision Support Systems (DSS) Subjects. *International Journal of Interactive Mobile Technologies*, 16(9). <https://doi.org/10.3991/ijim.v15i09.23513>.
- Tovar Viera, R. (2017). The importance of vocabulary knowledge in the production of written texts: A case study on EFL language learners. *Revista Tecnológica ESPOL*, 30(3), 89-105.
- Yan, S., Zalika & Mei, S.Y. (2018). Implementing quizizz as game based learning in the arabic classroom. *European Journal of Social Science Education and Research*, 5(1), 194–198.<https://doi.org/10.26417/ejser.v12i1.p208-212>.
- Zhang, D., and Feng Teng, M. (2012). The associations between working memory and the effects of multimedia input on L2 vocabulary learning. *Int. Rev. Appl. Ling. Lang. Teach*.
- Zhang, L.J. & Annual, S.B. (2010). "The role of vocabulary in reading comprehension: the case of secondary school students learning English in Singapore". *RELC Journal* 2008; 39 (1), 51-76.
- Zuhriyah, S & Pratolo, B.W. (2020). Exploring students' views in the use of quizizz as an assessment tool in english as a foreign language (EFL) class. *Universal Journal of Educational Research*, 8(11), 5312-5317.<https://doi.org/10.13189/ujer.2020.081132>.