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## The Utilization of Printed and Online Dictionaries among Junior High School Students

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Abstract: This study explores the utilization of printed and online dictionaries by junior high school students in remote areas of Indonesia, focusing on their experiences, challenges and impacts on language acquisitions. In digital era, students access resources differently. The research highlights both the strengths and limitations of each dictionary type and concludes that internet-enabled dictionaries, for instance, are easy to use and have many features, while insufficient internet or devices are major concerns. However, the authors argue that while printed dictionaries are useful for definitions, they are often outdated and lack sufficient copies. The results indicate that teachers need to provide specific educational assistance to students, especially in the areas of digital literacy and skills of using the dictionaries. Such modification, which utilizes both printed and online dictionaries, would make an ideal learning experience in responding to the different learning preferences and requirements of students as well as enhancing language comprehension and skills in vocabulary and communication in this digital age.

Keywords: Printed Dictionary; Online Dictionary, Dictionary Usage

## 1. INTRODUCTION

As the digital revolution swishes across Indonesia, the education landscape in remote communities faces unique challenges. In the bustling city of Ambon island, junior high school students in remote regions find themselves navigating a changing landscape when it comes to accessing reference materials like dictionaries. This article aims to confirm the impact that both printed and online dictionaries had on users. According Aleeva and Safiulla (2016) using a traditional printed dictionary requires concentration and logical thinking. Conclude that a printed dictionary helps students have concentration in learning and also logical thinking to produce a word in learning. It will aid students in expanding their vocabulary, thereby enhancing their proficiency in English. Besides, in modern era the technology also have improvement in digitalization. Such as online dictionary in many versions that will be used in tablet, smartphone or computer used. According to Abdu and Jamal (2023) 'Digital technology has made dictionaries not only reasonable but also varied and integrated'. These included the use of online dictionaries designed for mobile leaning that will help students to learn easily.

Numerous studies have been conducted to clarify the particular characteristics of utilizing online dictionaries as opposed to print ones. However, there are still many gaps that have not been filled yet. There are; Limited Internet Access: UNICEF report, 2024 "on internet access among children and young people aged 25 years or younger shows that

globally, around 2.2 billion, or two thirds of children and young people worldwide, do not have internet access at home, with substantial inequalities observed by socioeconomic backgrounds." Students without reliable internet connections cannot utilize online dictionaries effectively. Especially the students in remote areas, they have difficult access for using internet connections. Because there is no internet access for the students at school, and they also have no more budget to buy internet data. Lack of Devices; According to a report by OECD, 2023 "the digital divide in education is a significant issue. The report highlights that students from different socioeconomic backgrounds often have unequal access to digital devices like smartphones and computers. This disparity means that not all students can effectively use online resources for learning, which can exacerbate educational inequalities1. The report emphasizes the need for equitable access to digital resources to ensure all students have the same opportunities for learning." Some students may not have smartphones or computers to access online resources. Not all the students come from the same family background, so not all the students are using smartphones or computers on their own. Navigational Skills: Errol M. O'Neill, 2019 "students who lack familiarity with technology often struggle to use online dictionaries effectively." Students might struggle with navigating online dictionaries if they lack familiarity with technology. Some students who have smartphones or computers are able to use the technology, but how about the students who do not have devices? They cannot operate the online dictionary. Understanding Features; According to Carolin Müller-Spitzer, 2014 "many online dictionaries offer advanced features like audio pronunciations and example sentences, but students often lack the necessary skills to use these features effectively". Many online dictionaries have features (like audio pronunciation or example sentences) that students may not know how to use. Insufficient Copies; According to Chiu and Gi-Zen Liu, 2013 "limited access to printed dictionaries can hinder students' vocabulary retention and learning." There may not be enough printed dictionaries for all students, leading to sharing and limited individual access. Outdated Information; according to -Ling Chiu and Gi-Zen Liu, 2013"using outdated printed dictionaries can hinder students' learning. The study found that students who rely on outdated dictionaries may miss out on current definitions and usages, which can negatively impact their understanding and retention of vocabulary." The researchers suggest that providing students with up-to-date resources is crucial for effective learning because some printed dictionaries may not have the most current definitions or usages, which can hinder learning.

By delving into the utilization patterns, strengths, and limitations of both printed and digital dictionaries, this article seeks to provide valuable insights for policymakers, educators, and community leaders invested in ensuring equitable access to learning resources. As technology continues to shape the educational landscape, understanding the evolving role of dictionaries can help bridge the gaps and empower all students in Ambon's remote regions to thrive. Based on the mentions factors above, the study aimed to find the impact of printed and online dictionary among junior high school in remote area; (a) what factors the preference for both printed and online dictionary among junior high school students?; (b) How can teacher best support students in utilizing both types of dictionary effectively?

#### 2. LITERATURE REVIEW

## The Use of Printed and Online Dictionary in Teaching English

The recent studies have emphasized the beneficial outcomes brought forth by the inclusion of digital content within language learning but more specifically for vocabulary and reading literacy of the learners. Dennis Laffey in 2019 was interested in the learning of vocabulary by intermediate level Korean university students through the use of freely available online dictionaries (FAODs) and printed glosses. The results showed a positive learning effect for FAODs and that they were as effective as printed glosses and were better than the use of context, which was not reliable for the learners. This points out the feasibility of having digital dictionaries, which are simple to obtain, as well as easy to use and equipped with features that are beneficial in the learning of vocabulary.

In a related development, Xu Yingxin and others in 2024, found that interactive added an extra dimension to the language skills development of EFL learners and made it possible for tailor made approaches with different feedback mechanisms to be put in place that ensure meeting the individual student's requirements. This research also highlights the need to construct and manage such online language classrooms that will use technology in a creative manner for the purpose of language learning. Consistent with this line of research, Ni Putu Eka Candra and Ni Made Ratminingsih (2024) "the use of digital multilingual thematic dictionaries significantly improved students' literacy skills, including their ability to read and write, which is built from vocabulary." The results assume variables as they indicate that the conduct of teachers can change if they include both printed and unaided mediums in the lesson.

Additionally, a systematic literature review performed in 2020 explored the application of digital assistants, online dictionaries among them, in the literature education as a second language approach. This scrutiny, in this context, was focused on how the availability of digital tools helps to enhance and make the process of learning more approachable for the students by enabling them to engage with the text of the works closer to the core. Through the use of various multimedia formats and online interaction, tutors enlarge students' comprehension and appreciation towards literature which leads the students to better thinking skills and engagement on the subject. In general, these investigations in a broad sense demonstrate the effectiveness of digital resources for enhancing vocabulary development, reading comprehension, and motivation for the language learning process. With the changing times, the language integration of these digital tools into the curriculum not only facilitates the teaching but also prepares students for a global context in the future. With these new ways, teachers can enhance the experience of students from different backgrounds and create a more engaging and effective environment for learning languages.

Alaa Alahmadi and Anouschka Foltz, 2020 said dealing with the dictionary use as a factor for vocabulary acquisition. The outcome of the research showed that it increased the vocabulary size among some learners, who consulted dictionaries to find out the meanings of unfamiliar words, far more than the ones who never consulted it, but depend just on contextual clues. Thus, it is stated that dictionary acquisition benefits the students in better comprehending and remembering new words, which is necessary for one's language acquisition process. According to research published in the International Journal of Lexicography in 2024 by Balázs Fajt, Mátyás Bánhegyi, and Katalin P Márkus, dictionary usages constitutes an integral component of L2 (second language) learning at all levels. In their study, they contend that learners should be encouraged to use dictionaries independently and autonomously since the opportunity for assistance or access to language teachers or more proficient speakers may not always be available. This finding also shows that the motivation for learning significantly impacts the use of dictionaries because students who are more motivated are thus more likely to use dictionaries in their study of the language.

#### Benefits of Print Dictionaries.

As L2 (second language) learners' students need to have dictionaries to help them find some difficult words while studying. Zuraina Ali, 2021 found that "students had positive attitudes towards using paper dictionaries for vocabulary learning and retention. The physical engagement with the dictionary aids in understanding and memorizing vocabulary." Benefits of Printed Dictionaries; Tactile Experience: Many users prefer working with a physical dictionary. The practice of turning pages can also enhance the ability to remember things and make the whole procedure feel to be more engaging. No Distractions: Printed dictionaries present a peculiar manner of studying as they do not contain notifications, webpages, or other distractions associated with digital devices. Comprehensive Reference: Printed dictionaries also tend to be designed in such a way that users can locate information in them without difficulties especially in formal environments where the use of screens may be prohibited. Visual Learning: Movements like that make it easy to remember where the word is placed in the page and where the definition can be found. The printed pages have even more to offer since the user feels the actual pages. Accessibility: But still, even with mobile phones or tablets, there is a need for printing supplies, as they are still offline sources of information for people without stable access to the World Wide Web.

#### **Benefits of Online Dictionaries**

Li Jin and Elizabeth Deifell (2013) highlighted that "online dictionaries edited by linguists are considered reliable sources. They maintain current definitions, pronunciations, and usage of language elements, ensuring that learners have access to accurate and up-to-date information." There are some benefits that online dictionaries offer which correspond to language learning and its use. The most important of the benefits, is concern, is the trustworthiness of the dictionary as it is edited by linguists who maintain current definitions, pronunciations and usage of other language elements. Online dictionaries Available Anytime, Anyplace; An Online dictionary is a fantastic tool for someone who does not have the time to search for words in a printed version as they have numerous words and definitions connected to their web connection. Ever In Demand; A more appealing alternative to the affordable printed variety is digital dictionaries, which are updated on a regular basis and make it possible for users to access usage guides and definitions of words that may be newly created or ignored by the print edition. Multi Media Elements: It is possible to help in pronunciation learning and retention through other media

offered by many websites like online dictionaries with narrated pronunciations, sample sentences, and some pictures explaining the word meaning. Hinya Ozawa (2016) noted that "online dictionaries can scaffold language learning both within and outside the classroom. They provide immediate access to definitions, synonyms, antonyms, and example sentences, enhancing learning efficiency." Finders Keepers; More efficient than looking for specific words in a book that has pages filled with long text, is the convenience offered by the search features in the online dictionaries which helps in relative word searching. Games and Other Methods; It may be engaging to subscribe to online dictionaries that have features that include word of the day, puzzles and even word lists which are also very effective in vocabulary acquisition.

Both print and online versions of dictionaries are helpful to increasing the knowledge of the language in its consumers. One may say that paper based dictionaries have a charm since one can get away from annoying notifications, but on the contrary an online dictionary is more advanced and relevant to nowadays. It usually depends on one's personality, how they learn or what is their goal in between the two types of dictionaries is often the case.

#### 3. RESEARCH METHOD

Dennis Laffey (2019) compared "the effects of freely available online dictionaries and printed glosses on vocabulary acquisition. The study found that both online and printed dictionaries were effective in aiding vocabulary acquisition, with online dictionaries offering additional benefits such as audio pronunciations and multimedia elements." This study focuses on the importance of both printed and online dictionaries for language students and users. In order to accomplish the aims of the study, a descriptive qualitative research design will be utilized, which will seek to capture detailed and vivid accounts of the users' preferences, experiences, and perceptions towards the two types of dictionaries. The primary aim of this investigation is to find out how language learners when asked find and utilize printed and online dictionaries with respect to the popularity of these resources in learning and how effective these resources are in enhancing learning and comprehension. This study will contribute to the existing body of knowledge by providing information that will be useful to teachers, publishers and developers of language tools.

#### 4. METHODOLOGY

Qualitative methodology using questionnaires is an approach that focuses on gathering in-depth insights into participants' thoughts and experiences through open-ended questions. This method typically employs a semi-structured format, allowing for flexibility in responses while encouraging detailed answers. Sampling is often purposive, targeting specific groups relevant to the research question, and data collection can occur through various formats such as online surveys or interviews. Here the researcher provides to use questionnaire consisted of 20 questions for 30 students as the participants.

## 5. RESULT

The questionnaires are consisted of 20 statements that are 10 questions about printed dictionary and 10 questions about online dictionary. After fulfill the scale, the questionnaire will be count based on the score of each statements. Scale 1 = never, 2= rarely, 3= occasionally, 4= often and 5= Sometimes. There are the statements with the result of the scale.

Statement 1: "I use an online dictionary to check the meaning of words." There are 15 students (50%) marked "Often" or "Sometimes." This indicates that half of the students regularly rely on online dictionaries, suggesting a strong trend towards digital resources for understanding vocabulary. Statement 2: "I use a printed dictionary because it provides many meanings." Responses 25 students (83.3%) chose "Often" or "Sometimes." This high percentage reflects a significant appreciation for the depth and variety of meanings available in printed dictionaries, indicating that many students value comprehensive definitions.

Statement 3: "I don't use a printed dictionary because the meanings of the words I search for are sometimes not accurate." Responses: 10 students (33.3%) agreed with this statement. This concern about accuracy suggests that while many students still use printed dictionaries, some are hesitant due to past experiences with inaccurate definitions.

Statement 4: "I use an online dictionary to check the pronunciation of a word." Responses: Only 5 students (16.7%) indicated "Often." This low percentage suggests that while online dictionaries are available for pronunciation, many students may not prioritize this function or may prefer other learning methods for pronunciation.

Statement 5: "I don't use a printed dictionary because I can't hear the pronunciation of a word." Responses: 17 students (56.7%) agreed, highlighting a significant limitation of printed dictionaries. This suggests that many students recognize the importance of auditory learning and feel disadvantaged without access to audio pronunciations.

Statement 6: "Online dictionaries are easier to use than printed dictionaries." Responses: 18 students (60%) agreed. This indicates a favorable view towards the user-friendliness of online dictionaries, aligning with the digital skills of younger generations who may find navigating apps and websites more intuitive.

Statement 7: "Printed dictionaries are easier to use than online dictionaries." Responses: 17 students (56.7%) agreed. This suggests that a portion of students still finds comfort and simplicity in traditional formats, indicating a divide in preferences based on individual experiences.

Statement 8: "Online dictionaries have clearer word definitions than printed dictionaries." Responses: 10 students (33.3%) marked "Often." This reflects that while some students appreciate the clarity of online definitions, there is still a considerable number who may find printed definitions just as clear. Statement 9: "Online dictionaries can help me find words faster than printed dictionaries." Responses: 17 students (56.7%) agreed. This reinforces the idea that students value the efficiency of online dictionaries, which allow for quick searches compared to the manual process of flipping through printed pages.

Statement 10: "I use a printed dictionary because it is easy to use." Responses: 23 students (76.7%) agreed, indicating a strong belief in the straightforwardness of printed dictionaries. This shows that many students still feel comfortable with the tactile experience of using a physical book.

Statement 11: "I use a printed dictionary because it doesn't require an internet connection." Responses: 18 students (60%) agreed. This highlights a practical advantage of printed dictionaries, especially in areas where internet access is unreliable.

Statement 12: "I don't use an online dictionary because I don't have a phone." Responses: 20 students (66.7%) agreed, indicating a substantial barrier for many students in accessing online resources. This suggests that lack of technology is a significant hurdle in utilizing digital dictionaries.

Statement 13: "I don't use online dictionaries because I don't understand how to use them." Responses: 20 students (66.7%) agreed, revealing a considerable level of discomfort or unfamiliarity with online dictionary tools. The statement need for educational support to enhance digital literacy among students.

Statement 14: "I feel that online dictionaries are more up-to-date compared to printed dictionaries." Responses: 15 students (50%) agreed. This suggests that half of the students recognize the dynamic nature of online resources, which can quickly incorporate new words and meanings.

Statement 15: "I feel that I learn new vocabulary faster by using an online dictionary." Responses: 22 students (73.3%) agreed, indicating a strong belief in the effectiveness of online dictionaries for vocabulary acquisition. This reflects a positive attitude towards digital tools in enhancing learning. Statement 16: "I use a dictionary when doing English assignments." Responses: 28 students (93.3%) confirmed usage, highlighting a high dependence on dictionaries for academic tasks, emphasizing their role in students' educational practices.

Statement 17: "I use a printed dictionary because it is cheap." Responses: 19 students (63.3%) agreed, suggesting that cost remains an important factor in students' choices, particularly in a school setting. Statement 18: "I prefer using online dictionaries because they keep up with technological advancements." Responses: 10 students (33.3%) agreed, indicating that a smaller segment of students is aware of and values the benefits of digital tools in education.

Statement 19: "I use a printed dictionary because it helps me acquire a lot of vocabulary." Responses: 10 students (33.3%) agreed, reflecting that while there is appreciation for printed dictionaries, this sentiment is not as strong as for online tools.

Statement 20: "I prefer using an online dictionary to acquire a lot of vocabulary." Responses: 15 students (50%) agreed, indicating a balanced perspective on the effectiveness of both dictionary types for vocabulary learning.

The factors that contribute to the junior high students' choice of using either the printed or the online dictionary are many in number. For many of the students, printed dictionaries are dictionaries of many meanings as 83.3% showed that they appreciate the elaboration and numerous definitions given. It was also noted that 76.7% find printed versions of dictionaries to be less complicated which informs their preference towards such formats. Other factors of importance are also considerations where it was noted that 60% disposed of printed dictionaries because they do not need internet connection and this helps

out in areas where the access to internet is not strong. Membership is also important in this regard as for 63.3% of fellow students concerning the cost of printed versions of the dictionaries they consider them to be usable.

On the contrary, students prefer online dictionaries since they can search for a word and save a lot of time as 56.7% of students reported. Additionally, half of the respondents feel that the online dictionaries are more recent, which is important for evolving language. The large majority of students (73.3%) think that using online resources allows them to acquire vocabulary more quickly, which testifies to their good attitude towards the use of modern aids in the class. Teachers can help to develop this students' ability to work with both types of dictionaries by implementing both resources in the lessons.

## **APPENDIX**

# Postgraduate of English Language Education Study Program Pattimura University

## **Questionnaire:**

## The Utilization of Printed and Online English Dictionaries among Junior High School Students

Name	<b>:</b>	Age	<b>:</b>	Class	:

VII

**Instructions** : Please check  $(\sqrt{})$  the box that corresponds to your answer.

**Assessment Description**:

1= Never 2=Rarely 3=Occasionally 4= Often

## 5=Sometimes

		Frequency Levels				
No	Statements	Never	Rarely	Occasionall y	Often	Sometime s
		1	2	3	4	5
1.	I use an online dictionary to check the meaning of words.					
2.	I use a printed dictionary because it provides many meanings.					
3.	I don't use a printed dictionary because the meanings of the words I					

	search for are sometimes			
	not accurate.			
4.	I use an online dictionary to check the pronunciation of a word.			
5.	I don't use a printed dictionary because I can't hear the pronunciation of a word.			
6.	Online dictionaries are easier to use than printed dictionaries.			
7.	Printed dictionaries are easier to use than online dictionaries.			
8.	Online dictionaries have clearer word definitions than printed dictionaries.			
9.	Online dictionaries can help me find words faster than printed dictionaries.			
10.	I use a printed dictionary because it is easy to use.			
11.	I use a printed dictionary because it doesn't require an internet connection.			
12.	I don't use an online dictionary because I don't have a phone.			
13.	I don't use online dictionaries because I don't understand how to use them.			
14.	I feel that online dictionaries are more upto-date compared to printed dictionaries.			
15.	I feel that I learn new vocabulary faster by using an online dictionary.			
16.	I use a dictionary when doing English assignments?			
17.	I use a printed dictionary because it is cheap.			

18.	I prefer using online dictionaries because they keep up with technological advancements.		
19.	I use a printed dictionary because it helps me acquire a lot of vocabulary.		
20.	I prefer using an online dictionary to acquire a lot of vocabulary.		

Adopted By Mr. Thossapon Pothiphoksumphun

#### 6. DISCUSSION

Jack Halpern, 2013 mentioned that "print dictionaries are often perceived as more user-friendly and comfortable to use compared to digital ones." The tangible nature of flipping through pages provides a sense of comfort and familiarity. Students exhibit a variety of strengths and weaknesses in their use of printed and online dictionaries, which significantly impact their language learning processes. One of the most prominent strengths of printed dictionaries is their ability to provide comprehensive and detailed definitions. Many students value the depth of information they offer, which often includes multiple meanings, usage examples, and nuanced explanations. This thoroughness can enhance students' understanding of language, particularly in academic settings where precise comprehension is crucial. Furthermore, the tactile experience of using a physical book can aid in memory retention, as the act of turning pages and engaging with text can reinforce learning.

However, printed dictionaries have notable weaknesses that can hinder their effectiveness. A significant limitation is the absence of auditory support for pronunciation, which is increasingly important in language acquisition. Amantha Jata Robin and Azlina Aziz (2022) highlighted in "their study that digital tools significantly improve vocabulary acquisition. They noted that students accustomed to the immediacy of digital resources might find the time-consuming process of searching for words in printed dictionaries frustrating, which can discourage consistent use and impact overall vocabulary development." Many students find it challenging to learn correct pronunciations without hearing them, leading to potential misunderstandings in communication. Additionally, the time-consuming process of searching for words in a printed dictionary can be frustrating,

particularly for students who are accustomed to the immediacy of digital resources. This may discourage them from using printed dictionaries consistently, impacting their overall vocabulary development.

In contrast, online dictionaries present several strengths that cater to the needs and preferences of modern students. One of the primary advantages is the immediacy of access to information. Students can quickly search for definitions, synonyms, antonyms, and example sentences, which enhance their learning efficiency. Emma Ferrett and Stefan Dollinger (2020) noted that "the ability to access these resources on various devices, including smartphones and tablets, allows for greater flexibility in learning, making it easier for students to use dictionaries on the go." The inclusion of audio pronunciations in many online dictionaries is another significant benefit, enabling students to develop their pronunciation skills more effectively. Moreover, the ability to access these resources on various devices, including smartphones and tablets, allows for greater flexibility in learning, making it easier for students to use dictionaries on the go.

Despite these advantages, online dictionaries also have their weaknesses. One major challenge is the issue of technology access; not all students have reliable access to smartphones or the internet, which can limit their ability to utilize online resources. Additionally, some students may struggle with navigating digital tools, leading to frustration and reduced engagement. The overwhelming amount of information available online can also create confusion, as students may find it difficult to discern credible sources from unreliable ones. This underscores the importance of fostering digital literacy skills to ensure that students can effectively utilize online dictionaries.

Experts recommend a blended approach that combines the strengths of both printed and online dictionaries to provide a more comprehensive language learning experience. By encouraging students to use printed dictionaries for in-depth study and online dictionaries for quick references and auditory support, educators can create a balanced resource environment that caters to diverse learning styles. Additionally, integrating training on digital literacy can help students navigate online tools more effectively; addressing some of the barriers they face in using these resources.

Ultimately, recognizing and addressing the strengths and weaknesses of both printed and online dictionaries is essential for enhancing students' vocabulary acquisition and overall language proficiency. By leveraging the unique benefits of each format and providing support to overcome their limitations, educators can empower students to make informed choices in their language learning journeys. This balanced approach not only

enriches students' understanding of vocabulary but also equips them with the skills necessary for effective communication in an increasingly digital world.

## 7. CONCLUSION

The study on the utilization of printed and online dictionaries among junior high school students in remote areas of Indonesia reveals significant insights into their preferences, challenges, and the overall impact on language learning. Students demonstrate an inclination towards online dictionaries due to their accessibility and interactive features, yet this is often hampered by limited internet connectivity and a lack of digital devices. Conversely, while printed dictionaries are valued for their comprehensive definitions and reliability, issues such as outdated information and insufficient copies hinder their effectiveness.

The findings emphasize the necessity for targeted educational support from teachers to enhance students' dictionary skills, particularly in navigating online resources and understanding the diverse functionalities of both dictionary types. The integration of digital literacy training is crucial in empowering students to utilize online tools more effectively, addressing barriers related to technology access and familiarity.

Ultimately, a blended approach that combines the strengths of both printed and online dictionaries can provide a more comprehensive learning experience. By leveraging each format's unique benefits, educators can foster an inclusive environment that accommodates diverse learning styles and needs. This balanced strategy not only enriches students' vocabulary acquisition but also equips them with essential skills for effective communication in a rapidly evolving digital landscape. As such, continued efforts to improve access to and instruction on dictionaries in remote regions are vital for enhancing language education and bridging educational inequalities.

Future research should consider conducting longitudinal studies to track the long-term impact of increased access to digital dictionaries on vocabulary acquisition and language proficiency among students in remote areas. Comparative studies could be valuable in examining differences between demographic groups, such as urban versus rural students, to understand how socioeconomic status and technology access influence dictionary usage and learning outcomes. Additionally, investigating the effectiveness of integrating technology in classrooms would be beneficial, focusing on how educators can leverage both printed and online dictionaries to enhance learning experiences.

Digital literacy programs specifically designed for junior high students should also be explored, assessing their effectiveness in improving students' confidence and ability to navigate online resources. Qualitative research delving into students' experiences and perceptions regarding dictionary usage could provide rich insights, while cross-cultural studies might reveal how cultural factors impact dictionary preferences and language learning strategies. Examining the role of mobile learning applications that incorporate dictionary features could further highlight their potential in facilitating vocabulary acquisition. Lastly, gathering teachers' perspectives on the effectiveness of printed versus online dictionaries in their teaching practices would help shape better instructional strategies and resource allocation. Addressing these areas can significantly contribute to a deeper understanding of dictionaries' roles in language education and inform policies aimed at improving educational outcomes across various contexts.

#### REFERENCES

- Adi Waloyo, A., Prastiyowati, S., & Rizki Pahlevi, N. (2021). The use of internet-based dictionary in reading activity for English language education department students. AMCA Journal of Education and Behavioral Change, 1(2), 33–40. https://doi.org/10.51773/ajeb.v1i2.98
- Alahmadi, A., & Foltz, A. (2020). Exploring the effect of lexical inferencing and dictionary consultation on undergraduate EFL students' vocabulary acquisition. *PLOS ONE*, 15(6), 1–25. <a href="https://doi.org/10.1371/journal.pone.0236798">https://doi.org/10.1371/journal.pone.0236798</a>
- Ali, Z. (2021). The use of paper dictionaries on L2 vocabulary learning and retention. <a href="https://doi.org/10.26555/adjes.v8i2.21717">https://doi.org/10.26555/adjes.v8i2.21717</a>
- Al-Kadi, A., & Ali, J. K. M. (2023). Multiplication of dictionary uses in the age of digital transformation. *Issues in Language Studies*, 12(2), 158–173. https://doi.org/10.33736/ils.5350.2023
- Balázs, F., Bánhegy, M., & Márkus, K. P. (2023). The interrelationship between EFL learning motivation and dictionary use. *International Journal of Lexicography*, *36*(2), 143–158. https://doi.org/10.1093/ijl/ecaa010
- Dahlan, M. A. (2023). Dictionary use and vocabulary acquisition: A review. *Dahlan Journal of English Studies*, 122–134. https://doi.org/10.26555/adjes.v8i2.21717
- Dewi, N. P. E. C. (2024). Improving sixth grade students' language literacy by utilizing digital multilingual thematic dictionary. *Journal of English Pedagogy, Linguistics, Literature, and Teaching*, 277–292.
- Ezeh, N. G., Anyanwu, E. C., & Onunkwo, C. M. (2022). Dictionary as an effective resource in teaching and learning of English as a second language: Complementing instructions. *English Language Teaching*, *15*(4), 108. <a href="https://doi.org/10.5539/elt.v15n4p108">https://doi.org/10.5539/elt.v15n4p108</a>

- Laffey, D. (2019). Comparing the effects of freely available online dictionaries and printed glosses on vocabulary acquisition. *English Teaching*, 74(2), 27–49. <a href="https://doi.org/10.15858/engtea.74.2.201906.27">https://doi.org/10.15858/engtea.74.2.201906.27</a>
- Liu, L.-L. C.-Z. (2020). Effects of printed, pocket electronic, and online dictionaries on high school students' English vocabulary retention. *Springer*, *15*(3), 619–634. <a href="https://doi.org/10.1007/s10579-020-09585-4">https://doi.org/10.1007/s10579-020-09585-4</a>
- Müller-Spitzer, C. (2014). Using online dictionaries. In C. Müller-Spitzer (Ed.), *Using online dictionaries* (pp. 1–143). De Gruyter. <a href="https://doi.org/10.1515/9783110341287">https://doi.org/10.1515/9783110341287</a>
- O'Neill, E. M. (2024). Online translator, dictionary, and search engine use among L2 students. In D. T. Dr. Ehsan Namaziandost (Ed.), *The reflections of positive psychology in computer-assisted language learning (CALL)* (pp. 154–177). Computer Assisted Language Learning Electronic Journal.
- OECD. (2023). Shaping digital education. In OECD, Enabling factors for quality, equity. OECD Publishing.
- Pikilnyak, A. V., Stetsenko, N. M., Stetsenko, V. P., Bondarenko, T. V., & Tkachuk, H. V. (2020). Comparative analysis of online dictionaries in the context of the digital transformation of education. In *CEUR Workshop Proceedings* (Vol. 2879, pp. 70–81). CEUR-WS. <a href="https://doi.org/10.55056/cte.204">https://doi.org/10.55056/cte.204</a>
- Shaofeng, L., & Prior, M. T. (2022). Research methods in applied linguistics: A methodological imperative. *Research Methods in Applied Linguistics*, *I*(1), 100008. <a href="https://doi.org/10.1016/j.rmal.2022.100008">https://doi.org/10.1016/j.rmal.2022.100008</a>
- Trinh, T. L. A., Tran, T. K. N., Vo, T. B. N., & Huynh, T. T. S. (2021). The difference effects of paper dictionaries vs. online dictionaries. *AsiaCALL Online Journal*, 12(3), 28–38. https://asiacall.info/acoj
- UNICEF. (2024). Remote learning and digital connectivity. UNICEF DATA.
- Xu, Y., Kaur Swaran Singh, C., Judge Charanjeet Singh, R., & Bailey, R. P. (2024). The digital classroom: Systematic review of use. *International Journal of Learning, Teaching and Educational Research*, 1–26. https://doi.org/10.26803/ijlter.23.10.1