

## The Effects of Picture Dictionaries in Promoting Vocabulary Development of EFL Learners at Tertiary Level

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### Article information

Submission	08/07/2023	Revision received	19/08/2023
Acceptance	11/09/2023	Publication date	20/10/2023

### Keywords:

Teaching English,  
teaching vocabulary,  
vocabulary  
improvement,  
picture dictionary,  
higher education

**Abstract:** A large body of research has been carried out on integrating picture dictionaries in EFL classes globally; however, a gap in the literature has been noticed on their effects at the tertiary level in the Iraq context. To address this issue, this paper, for the first time in the literature, focuses on the effects of the Oxford Picture Dictionary on 50 students' vocabulary expansion at a private university in Erbil, Iraq. Participants were determined through a simple random sampling method. A mixed methods research design was employed to collect data via a questionnaire, two vocabulary exams, and an interview. SPSS 26 and NVivo applications were used to analyze and categorize data accordingly. Quantitative data, via independent and paired samples t-test, revealed that experimental group students increased their marks significantly regarding vocabulary enhancement, while the progress was insignificant in the control group. Likewise, via content analysis, qualitative data unleashed that picture dictionary-enriched instruction sharpened learners' pronunciation, spelling, listening, reading, and speaking skills and drove them to learn more ambitiously. The outcomes indicated that picture dictionaries can be used effectively to reap their benefits in various aspects as supplementary material in main course lessons.

### Anahtar Sözcükler:

İngilizce öğretimi,  
kelime öğretimi,  
kelime hazinesi  
geliştirme,  
resimli sözlük,  
yükseköğretim

### Resimli Sözlüklerin Üniversite Düzeyindeki EFL Öğrencilerinin Kelime Gelişimine Etkisi

**Özet:** Resimli sözlüklerin dünya çapında EFL sınıflarına entegrasyonu konusunda çok sayıda araştırma yapılmıştır, ancak literatürde bunların Irak bağlamında üçüncül seviyedeki etkilerine ilişkin bir boşluk fark edilmiştir. Bu konuyu ele almak için bu makale, literatürde ilk kez, Irak'ın Erbil kentindeki özel bir üniversitede 50 öğrencinin kelime dağarcığının genişletilmesi üzerindeki Oxford Resimli Sözlüğünün etkilerine odaklanmaktadır. Yaşları 18 ile 23 arasında değişen katılımcılar basit tesadüfi örnekleme yöntemiyle belirlenmiştir. Bir anket, iki kelime bilgisi sınavı ve bir görüşme yoluyla veri toplamak için karma yöntem araştırma tasarımı kullanılmıştır. Verilerin analiz edilmesi ve buna göre sınıflandırılması için SPSS 26 ve NVivo uygulamaları kullanılmıştır. Bağımsız ve eşleştirilmiş örneklem t-testi yoluyla nicel veriler, deney grubu öğrencilerinin kelime dağarcığı geliştirme açısından notlarını önemli ölçüde artırdığını, kontrol grubunda ise ilerlemenin önemsiz olduğunu ortaya koydu. Aynı şekilde, içerik analizi yoluyla nitel veriler, resimli sözlüğün zenginleştirilmiş öğretimi, öğrencilerin telaffuz, heceleme, dinleme, okuma ve konuşma açısından keskinleştirdiğini ve onları daha hırslı bir şekilde öğrenmeye yönlendirdiğini ortaya çıkardı. Sonuçlar, resimli sözlüklerin ana ders derslerinde yardımcı bir materyal olarak çeşitli açılardan fayda sağlamak için etkili bir şekilde kullanılabileceğini göstermiştir.

**To Cite This Article:** Kara, S., & Kucuk, T. (2023). The effects of picture dictionaries in promoting vocabulary development of EFL learners at tertiary level. *Novitas-ROYAL (Research on Youth and Language)*, 17(2), 80–94.  
<https://doi.org/10.5281/zenodo.10015826>

## 1. Introduction

English functions as a lingua franca, allowing citizens of different countries to communicate globally. According to Statista (2023), approximately 1.5 billion people utilize English as a mother tongue or second language. Likewise, more than 65 % of websites have been operated in English throughout the world. Additionally, the percentage of scientific publications in English is over 80 (Di Bitetti & Ferreras, 2017). Furthermore, the global influence of English has been observed in trade, aviation, tourism, and industry. It is unambiguous that English is a central hub to be able to communicate universally, land a lucrative job upon graduation, interpret the world more accurately, and increase the chance of being promoted (Aysu, 2019). In this respect, education plays an integral role in developing students' linguistic competence so they will be equipped with the required skills by gaining proficiency in English. Considering the advantages of learning English, education stakeholders emphasize teaching it with modern methodologies engagingly.

Using visual aids (e.g., videos, animations, presentations, podcasts, diagrams) has received increasing attention in language learning and teaching as these aids offer an innovative, inspiring approach to teaching English (Patesan et al., 2018). Similarly, they foster interaction among learners, facilitating peer learning and increasing students' self-confidence. In addition, audio-visual aids increase the frequency of hands-on activities, allowing learners to grasp details through active practice. The underlying reason to integrate audio-visual aids into English classes is that they help learners match words with images or sounds so they can retain much information to be used simultaneously once needed. Another significant benefit of using audio-visual aids is that they accommodate the needs of many students to learn more appropriately by embracing both visual and auditory learners. Additionally, audio-visual aids are various, which allow the teachers to choose any materials flexibly, so the most convenient materials can be embedded into lessons to break the monotony and increase the learning rate of the students (Wazeema & Kareema, 2017). It can be stated that visual aids have fundamental roles in revolutionizing the way education is handled.

Picture dictionaries (PD hereafter) have been at the forefront as one of the most effective visual aids in English language learning settings at different stages ranging from nursery to tertiary level (Suniasih et al., 2020). A PD defines the meaning of words in the form of illustrated images. They are designed in terms of themes or topics. The thematic design may include family, sport, house, fruit, and vegetables. In contrast, the topic-based design includes car parts, ordering food in a restaurant, buying tickets at a train station, and calling customer care of a telecommunication company for unstable internet coverage. They offer several advantages to teaching English in a fun and effective way for English teachers. The unnatural world in the classroom has been enriched with PD because they are used to bring real-world events into the classroom atmosphere. PD has numerous features like reading aloud, playing relevant games, and taking related quizzes, enhancing students' learning (Wulandari et al., 2021). In this respect, they develop macro-skills and encourage the learners to improve their micro-skills. Prominent publishers such as Oxford, Heinle, Merriam Webster's, Longman, and Cambridge University Press have realized the potential of PD in the language learning process and released their products to accommodate the needs of the learners and educators, respectively.

Vocabulary is the building block of language learning as it is directly related to other skills in English (August et al., 2005). In other words, mastery of English cannot be envisioned without knowing how to use words appropriately. To name a few, learners with insufficient

vocabulary may not comprehend listening texts precisely. Similarly, learners with inadequate word power may not forge connections between threads in a reading passage. Likewise, learners with low vocabulary retention may not compose meaningful sentences in conversations. In addition, learners who have difficulty using different forms of vocabulary in a sentence may not master writing. Moreover, expanding word power is needed to enhance grammar and pronunciation performance. Two types of vocabulary stand out, which are active and passive. The former refers to knowing the vocabulary and using it in context without hesitation, whereas the latter refers to having difficulty composing sentences in conversations related to certain words with which learners are familiar (Vu & Peters, 2021). There are some web-enhanced techniques to increase the number of active vocabulary in learners' minds. For instance, downloading applications that feature vocabulary quizzes, PD, e-books, movies, videos, and online dictionaries to gradually expand word power and retain memory in the long term. It can be argued that vocabulary plays an essential role in improving learners' skills considerably, and web-enhanced tools have been widely used to enhance learners' capacity accordingly.

### 1.1. Literature Review

Although the history of the English dictionary dates back to the 1600s, launching English PD did not start till the second quarter of the 20<sup>th</sup> century (Wulandari et al., 2021). Some pioneering attempts have been made to spread the popularity of them in the 20<sup>th</sup> century. To name a few, Garnette Watters and Stuart Courtis published their work in 1948 titled *The Picture Dictionary For Children*, which encompassed 5079 words and 1442 pictures. Subsequently, Margaret Parke released a picture dictionary for primary students. After that, Merriam-Webster's *The Visual Dictionary* was published in 1986, prompting other major publishing companies to invest in this field after noticing its unprecedented commercial success. Since then, Oxford, Longman, Cambridge, Pearson, and National Geographic PDs have been launched to teach English with well-designed illustrations in monolingual or bilingual formats.

Well-known scholars have postulated various benefits of PD. To name a few, Marion (1964) asserts that PDs help learners recognize words, internalize phonetic rules, and grasp structural analysis. In addition, Zawawi and Pillai (2022) attest that PDs allow learners to match photos with words to recall them easily during conversations. Likewise, Dziemianko (2022) points out that PDs increase students' proficiency in English by bridging the gap between acquired and unknown words in a contextualized format. Similarly, Sharif (2012) states that PDs improve students' literacy substantially with a well-defined plan because the degree of difficulty has been arranged correspondingly. Additionally, Iversen (2021) contends that PDs appeal to students' various senses through audio and visual-enriched materials, increasing their enthusiasm to enhance their learning. In addition to previous scholars' perspectives, Sihombing (2018) also elucidates that PDs offer numerous opportunities for educators, students, and parents as they are user-friendly to navigate.

Myriad studies have been conducted to measure the effects of PDs in English language learning settings at different stages of education. To illustrate, Suniyasih et al. (2020) conducted a study on primary school students in Indonesia, revealing that PDs are beneficial to expanding students' vocabulary capacity, increasing their motivation to learn English, and boosting their speaking performance. They also found that students learned how to figure out the meaning of the words under certain themes and extract them once needed. Another significant study was conducted by Othman et al. (2022) on adult learners in Malaysia, which

revealed that PDs help learners increase their vocabulary knowledge in a welcoming atmosphere. They also elucidate that PDs sharpen students' learning in terms of making associations between words and images. In addition, Yoshida (2018) reports that mobile-assisted language learning tools, including PDs, enable learners to record their voice, test their accuracy, and take relevant quizzes, so they have various endeavors to improve their pronunciation skills in the US context. Likewise, Hunt and Beglar (2018) assert that PDs encourage learners to increase their proficiency in reading because they lay the background to learn keywords and comprehend reading passages accurately in the Japanese context. Similarly, Lacina's (2008) study unearthed that PDs train learners to develop a good ear for English listening. He elaborates that PDs are accompanied by audio and videos that are comprehensible enough to improve students' listening at an American university. Ekmekci's (2014) study also highlighted that the vocabulary retention rate of the learners at a tertiary level in Turkey increase once words, definition, and corresponding photos are taught harmoniously. Settar Abid's (2017) study in the Iraq context revealed that using online dictionaries that offer images increases the vocabulary breadth of the learners, so this enhanced capacity improves their overall English performance directly.

On the other hand, some studies have illustrated several drawbacks of PDs over picture-free dictionaries. To name a few, Alhaisoni (2016) conducted a large-scale study in Saudi Arabia on EFL teachers and students, which revealed that online dictionaries were more helpful than PDs because they offer more sentences, collocations, and thesaurus rather than only displaying the word and the image. Similarly, Barneva et al.'s (2003) study unearthed that exposure to so many images can be overwhelming for students, so balancing the words and images can help reduce the drawbacks of PDs. They also assert that PDs should be used as supplementary material in line with students' progress because textbooks offer more comprehensible input.

### **1.3. The Present Study**

To the researcher's knowledge, no study has investigated the effects of picture dictionaries on language preparatory school students' vocabulary enhancement at a tertiary level in Iraq. To this end, the present study was conducted to fill this gap in the literature. Correspondingly, the following research questions were formulated:

1. Do picture dictionaries lead to vocabulary enhancement for EFL learners?
2. Do picture dictionaries affect EFL learners' overall performance in English classes?

## **2. Method**

### **2.1. Research Design**

This study employs a mixed-methods approach to answer the research queries. The mixed-methods design was chosen to reap the benefits of both quantitative and qualitative research methods and to gain a deeper comprehension of the research problem (Abowitz & Toole, 2010). Specifically, the explanatory sequential mixed-method design was employed to combine both designs harmoniously (Draucker et al., 2020). In this regard, descriptive research methods were utilized to collect quantitative data via a questionnaire and two vocabulary exams.

Second, qualitative data were gathered to support the findings through semi-structured participant interviews. In the final stage, quantitative data were compared with qualitative ones to determine whether they complied with each other.

## 2.2. Participants

One hundred students (fifty-two females and forty-eight males) enrolled in an intensive English language learning program at the language preparatory school of a private university in Erbil, Iraq. In the academic year 2021-2022, the school offered a well-established, nine-month, twenty-five-hour-per-week program. Their courses included four skills that were augmented by web-based language learning aids. The program's ultimate objective was to raise students' levels to C1. In other words, every effort was made to develop students' skills substantially, allowing them to express their ideas in written and verbal formats without much difficulty. Their lessons were designed to foster communicative competence to achieve these objectives progressively. Instructors and administrators collaborated to track and evaluate the student's development in this regard. A simple random sampling method was selected to determine the population's participants. One hundred students, whose names were saved in a software application with a specific number, were enrolled in this program. The software application then randomly selected fifty students to serve as participants. Twenty-six of them were male students, while twenty-four of them were female students. Their ages ranged from eighteen to twenty-three. Their departments also ranged from civil engineering to business and management. Simple random sampling is extensively used in the social sciences because it allows researchers to select samples objectively (Sharma, 2017).

## 2.3. Data Collection

The data collection process lasted twelve weeks in this study. All participants signed the consent forms before proceeding to other stages. Four students did not volunteer to join the study, so they were replaced with new members. Upon choosing the participants, a comprehensive workshop was held to meticulously elaborate on the nature of the study. Furthermore, all students received a sample lesson in a PD-enriched format to shape their ideas on PD-enriched instruction. Students were given the freedom to ask any questions in their minds. Later, they were categorized either in the control or experimental group. Questionnaires, interviews, and exam questions were formed by the language preparatory school research committee and approved by the university research center after analyzing the items' validity and reliability tests separately. Cronbach Alpha was measured to check the internal consistency of items in the questionnaire. The result in the pilot study was .83, suggesting that items were reliable enough to implement in the subsequent phases. Additionally, the items in the vocabulary exams were checked and proofread in terms of accuracy, relevancy, and degree of difficulty.

Data were collected in Main Course lessons. All students were exposed to instruction through *Scope 1* textbook, leveled A2. They took a vocabulary test as a pre-test to record their prior performance before the intervention. However, the difference was including or excluding PDs in each group. Control group students received traditional instruction, while experimental group students' lessons were enriched with the Oxford Picture Dictionary. It has a well-reputed series that displays illustrations of over 4000 words in a meaningful context. In addition, it has a holistic approach to developing the learners' reading, critical thinking, and pronunciation skills. The dictionary has been designed thematically, including traditional and modern topics in harmony, such as job search, soft skills, medical conditions, digital literacy, daily routines, and describing things. Students in the experimental group studied a unit in *Scope 1* and expanded on a relevant topic in the Oxford Picture Dictionary. For example, after covering types of houses in *Scope 1*, they studied housing in PD and supported each other with novel words on the same topic. The activities in the Oxford

Picture Dictionary included role-playing, dictation, and taking related vocabulary quizzes specifically designed for each topic. This cycle continued throughout the study.

## 2.4. Data Analysis

For the analysis of the participants' responses to the questionnaire and vocabulary exams, descriptive analysis was done via SPSS 26. On the other hand, NVivo software was used to transcribe and categorize the interview data under certain themes. Independent samples and paired samples t-tests were used to make interpretations according to vocabulary exam results. The former is used to compare the means of two groups, whereas the latter is employed to measure the difference between two variables in the same subject (Cronk, 2019).

Table 1.

*Data Collection Procedures*

Weeks	Procedures	
	Group 1	Group 2
1	A Common Workshop	
2	A Common Pre-test Vocabulary Exam	
3-10	Traditional Instruction	PD-enriched instruction
11	A common questionnaire	
12	A common interview	

As illustrated clearly in Table 1, the students who participated in a workshop took two vocabulary exams, a questionnaire, and an interview regardless of whether they were in a control or experimental group. However, the type of instruction differed significantly, which was traditional in the control group and PD-enriched in the experimental group.

## 3. Findings

This section was divided into three categories: findings related to the questionnaire, vocabulary exams, and interviews.

### 3.1. Questionnaire

The questionnaire sought certain implications of PD-enriched instruction. As seen in Table 2, the satisfaction rate on PD enriched instruction was relatively high, ranging from 4.74 to 5. To illustrate, analysis of Item 1 showed that the instruction was engaging; 95% (n=45) of the students strongly agreed, and 10% (n=5) chose to agree. On the other hand, no student chose other options. Additionally, results related to Item 2 revealed that PDs yielded better results in improving students' vocabulary knowledge. 94% (n=47) of the students chose strongly agree, and 6% (n=3) of the students chose agree. However, no student chose other neutral, disagree, or strongly disagree options. The results related to Item 3 also revealed that PDs were beneficial to gradually declining spelling mistakes. 80% (n=40) of the students chose strongly agree; 14 % (n=7) of the students chose agree; 6% (n=3) of the students chose neutral. On the other hand, no student chose the remaining options.

Table 2.

*The Analysis of the Questionnaire*

Items	M	SA		A		N		D		SD	
		%	f	%	f	%	f	%	f	%	f
PD-enriched instruction was engaging.	4.90	95%	45	10%	5	0 %	0	0%	0	0%	0
PD-enriched enriched instruction increased my word power.	4.94	94%	47	6 %	3	0%	0	0%	0	0%	0
PD-enriched instruction helped me reduce my spelling mistakes.	4.74	80%	40	14%	7	6%	3	0%	0	0%	0
PD-enriched instruction helped me improve my pronunciation skills.	4.82	94%	47	0%	0	2%	1	2%	1	2%	1
PD-enriched instruction enhanced my self-confidence in speaking.	4.80	92%	46	2 %	1	2%	1	2%	1	2 %	1
If a new opportunity arose, I would join such a study again.	4.86	94%	47	0 %	0	4 %	2	2 %	1	0%	0
The instructor covered the lessons in professional conduct.	5	100%	0	0%	0	0%	0	0%	0	0%	0

Item 4 findings hinted that PDs can be used as a means to enhance students' performance in terms of pronunciation. 94 % (n=47) of the participants chose strongly agree. 2 % (n=1) of the students chose neutral, disagree, and strongly disagree, respectively. On the other hand, no student chose the agree option. As displayed in item 5, PDs were regarded as an instrument to increase self-confidence while speaking. 92 % (n=46) of the participants chose strongly agree, and 2% (n=1) of them chose other options, respectively. As uncovered in item 6, the percentage to join another PD-enriched instruction is over 86 %. 94 % (n=47) of the participants chose strongly agree; 4% (n=2) of them chose neutral; 2 % (n=1) of them chose disagree. On the other hand, no student chose the neutral option. The last item in the questionnaire was evaluating the instructor's performance, which was praised without any hesitation. All participants appreciated the performance of the instructor.

### 3.2. Descriptive Analysis of Vocabulary Exams

Participants' pre-test and post-test vocabulary exams were compared in terms of control and experimental group, which can be observed thoroughly below.

#### 3.2.1. The Findings of Independent Samples T-test

Table 3 shows no significant difference in students' pre-test scores (.873,  $p > .05$ ). The students' vocabulary knowledge level in the control and experimental groups was similar before PD-enriched instruction.

Table 3.

*T-test Results for Independent Groups Performed for Pre-test Scores*

Group	N	Mean	SD	df	t	p
Experimental Group	25	57	13.229	48	-.161	.873
Control Group	25	56.40	13.191			

Table 4.

*T-test Results for Independent Groups Performed for Post-test Scores*

Group	N	Mean	SD	df	t	p
Experimental Group	25	81.40	14.600	48	-.161	.873
Control Group	25	61.60	14.180			

In Table 4, a significant difference was observed in students' post-test scores (.000,  $p > .05$ ). The students' vocabulary knowledge levels in the control and experimental groups differed significantly after the PD-enriched intervention period.

### 3.2.2. The Findings of Paired Samples T-test

Table 5 indicates a significant difference between the post-test (81.40) and pre-test (57) mean scores of students in the experimental group based on vocabulary exams as p-value, .000, was less than .05 significance level. In other words, the experimental group students' progress was adequate to be considered statistically significant.

Table 5.

*Paired Samples T-test Results for Experimental Group*

Group	N	Mean	SD	df	t	p
Post	25	81.40	21.032	24	-5.801	.000
Pre	25	57	14.180			

Table 6 shows no significant difference between the post-test (65.60) and pre-test (56.40) mean score of students in the control group based on vocabulary exams as p-value, .010, was higher than .05 significance level. In other words, control group students did not increase their scores to reach a statistically significant point.

Table 6.

*Paired Samples T-test Results for Control Group*

Group	N	Mean	SD	df	t	p
Post	25	65.60	14.600	24	-.2.777	.010
Pre	25	56.40	13.191			

### 3.3 Interview Findings

The qualitative findings from semi-structured one-on-one interviews with students studying with Oxford Picture Dictionary enriched instruction are analyzed below. To respect their privacy, participants are attributed labels as (St1), (St2), etc. Table 4 depicts the emerging themes in relation to the following questions:



1. What are some distinguishing qualities of PD-enriched instruction?
2. Do you think that PD-enriched instruction helps you expand your vocabulary knowledge?
3. Does PD-enriched instruction change your attitude toward learning English positively?

Table 7.

*The Themes, Categories, and Codes Gathered through One on One Interview*

Main Themes	Categories	Codes
1. User-friendly features	Mobile devices	1.1.A handy software with interactive 1.2.Easy to navigate, 1.3.Offering printed and soft forms simultaneously
2. A sense of achievement	Increased vocabulary knowledge	2.1.Absorbing more vocabulary 2.2.Recollecting the words
3. Comprehensive	Elaborative	3.1.Various topics
4. Developing multiple skills	21 <sup>st</sup> -century skills	4.1.Foundational literacy and competencies
5. Contextual learning	dialogues	5.1.Peer learning and collaborative endeavors 6.1.Engaging classes 6.2.Boosting self-confidence
6. Motivation	Inner drive to learn	6.3.Leveled exercises 6.4.Appealing to different learning styles 6.5.Feeling more concentrated

The first fundamental theme that emerged from the qualitative analysis in Table 7 is being user-friendly. All participants state that it is convenient to exploit the Oxford Picture Dictionary either paper-based or electronic. They express that they like mostly using smartphones and tablets as learning materials:

*I am in favor of learning English with mobile devices as more features can be used to attract my attention and enhance my learning accordingly. (St2)*

A great majority of the students indicate that engaging with tablets and smartphones gives them a sense of accomplishment and authority in their own learning.

*I am into expanding my knowledge with interactive vocabulary games. Thus, the I-tool of the Oxford Picture Dictionary enriched my learning with various engaging games. (St3)*

All students express that integrating mobile devices into learning grants freedom for learners to command the process according to pace.

*It is a great feeling to learn flexibly so I can bridge the knowledge gap in my free time or learn further to absorb all the words of the book in a shorter period than my classmates. Additionally, navigating through pages flexibly helped me save time and energy while using the online version of the dictionary. (St5)*

The second essential theme that arose from the qualitative analysis is feeling a sense of success. All participants state that their capacity to learn novel words has expanded exponentially. They express that they have less difficulty composing sentences in conversations and essays.

*I have expanded my word power dramatically, so it helps me pause less frequently, thereby increasing my fluency in English. In addition, I can write more creatively and persuasively, thanks to figuring out keywords in the PD. (St6)*

A great majority of the students indicated that recalling related vocabulary increased their enthusiasm to be more successful in the days to come.

*Figuring out words' meaning, usage, spelling, and pronunciation in a thematic way relieved my stress of recalling them once needed in multiple situations. (St8)*

Subsequently, all students elucidate that learning new words has increased their success rates in other skills.

*When I learn new words, I can transfer this knowledge to other skills such as reading, listening, and speaking because a PD offers a holistic approach to improving our English. (St 10)*

The third significant theme that arose from the qualitative analysis is offering a comprehensive platform to learn a number of words under common themes. All participants state that themes are comprehensive enough to learn all related words about specific topics.

*I used to look up dictionaries to learn some unknown words about specific topics, which was time-consuming and tiring for me. However, all related words are given in the PD, which helps me save a considerable amount of time. (St11)*

A great majority of the students also indicate that learning some technical words may prompt them to express their ideas more elaborately in their departmental courses.

*I have learned many technical words that will form a solid background before taking classes in my department next year. (St12)*

Subsequently, most students reiterate that they become more sociable after being exposed to PD-enriched instruction.

*Learning new words comprehensively widened my social circle. For example, I want to discuss some issues about health literacy with my local or foreign friends in class or on social media platforms respectively. (St13)*

The fourth noteworthy theme that emerged from the qualitative analysis is developing multiple skills. All participants state that the themes and sub-topics are designed to develop various skills in a well-established manner.

*The dictionary activities developed my literacy in many aspects, so I learn how to use English effectively in 4 domains and learned fundamental details on ICT, media, health, scientific, civic, and financial literacy. (St14)*

A great majority of the students also indicate that they are equipped with certain competencies.

*Throughout the study, which is conducted based on the Oxford Picture Dictionary, we have learned how to think critically, solve chronic problems, unleash creativity, and exchange information in a collaborative atmosphere. (St15)*

Subsequently, a great majority of the students reiterate that they developed good traits:

*I know how to think about some issues and take the initiative, which will gradually pave the way for assuming leadership skills. (St16)*

The fifth key theme that arose from the qualitative analysis is contextual learning. All participants stated that being exposed to such instruction fostering collaboration by doing exercises in a contextualized concept enhanced their performance dramatically.

*Reading dialogs, participating in role-playing activities, and creating a concise story on illustrations as a team member help us learn from each other in a welcoming atmosphere. In addition, we make connections between words and images more accurately if we learn the language in a contextualized format. (St17)*

The final theme that arose from the qualitative analysis is motivation. All participants state that their inner drive to learn more enthusiastically has been active in all phases.

*The classroom atmosphere was excellent for learning engagingly. In addition, the lecturer provides ample opportunity to boost our self-confidence. (St23)*

Most students also indicate that leveled design, triggering various learning styles, and being alerted to learn continuously increased their motivation.

*The design of the topics from easy to challenging ones reduces my language learning anxiety. Also, visual and auditory materials and joining some role-playing or presentation activities break the monotony to keep us alert from the beginning till the end of the lesson. (St25)*

#### **4. Discussion and Conclusion**

This study aimed to contribute to existing research on students' perceptions and vocabulary enhancement through the Oxford Picture Dictionary by employing a questionnaire based on a 5-point Likert scale, two vocabulary exams, and a semi-structured interview. In this respect, each research instrument unleashed essential points to be considered consecutively below.

Most participants asserted that PD-enriched instruction was engaging, which was in line with Dziemianko's (2022) study. In addition, most participants elucidated that PD-based instruction empowered them to figure out the meaning of novel words and use them actively. This finding was consistent with Suniyashih et al.'s (2020) collaborative study. They point out that PDs can positively transform the learning atmosphere, so learners' vocabulary enhancement is assured accordingly. Another critical point to be emphasized in the questionnaire was that participants reduced their spelling mistakes while typing, listening, and reading given words. Tucker Cohen et al. (2001) attest that PDs support learners to be more proficient in writing through various endeavors and exercises, as illustrated clearly in the teacher's book. Furthermore, the findings in the questionnaire unearthed that learners' pronunciation skills dramatically improved as they were exposed to instruction to read, listen, speak, and write with a well-developed lesson plan. Stevenson (2010) states that PDs provide various opportunities to develop learners' pronunciation skills because the activities are enriched with audio-version materials. In addition, participants contended that the PD-

enriched curriculum fostered communication in class, thereby boosting their speaking performance substantially. Adelson-Goldstein and Shapiro (2015) postulate that PDs trigger learners to uncover their imagination and create unique stories on given illustrations, so they are driven to gradually unlock their potential in speaking. After that, most of the students reiterated that they were regretful not having joined such a practical study. Miller (2017) suggests that PDs increase learners' enthusiasm to learn more ambitiously.

The findings in the vocabulary exams highlighted noteworthy points as well. Comparing the pre-test and post-test results, according to descriptive statistics in independent samples and paired samples t-test, students who followed the instruction in accordance with PDs outperformed in terms of increasing word power. In other words, students who received traditional instruction did not increase their vocabulary marks significantly compared to the dramatic rise in the other group. Barat (2009) states that PDs are hidden treasures to increase learners' vocabulary knowledge so they can use them to support other macro and micro skills in the subsequent years.

The final data collection instrument was a semi-structured interview, which also shed light on crucial points to be interpreted. To illustrate, the PD was regarded as user-friendly because it offers interactive software and online and printed versions. Thus, it is handy to take advantage of online features with mobile devices or read in a traditional paper-based form. Kamil and Mahamad (2016) elucidate that PDs offer flexibility to take advantage of in an online or traditional format. Another critical point is that the PD increased the sense of success by allowing the retention and recall of the given words easily with the help of catchy illustrations. Iversen (2021) points out that the success rate in recalling words increases as learners are exposed to words with related illustrations. In addition, participants reported that showing the words comprehensively helped them close the gap between known and novel words in many topics, so their background knowledge to remember and use keywords was enlarged accordingly. Stevenson (2010) states that PDs are comprehensive enough to learn a wide variety of keywords at once, increasing the chance of vocabulary mastery. After that, participants argued that they developed their 21<sup>st</sup>-century skills substantially, such as various literacies and competencies, which aligned with Adelson-Goldstein and Shapiro's (2015) study. Subsequently, contextual learning was mentioned as another motivating factor to activate peer learning or pair-work activities through dialogs. Cardoso (2006) attests that PDs may have far-fetched positive effects on learning as they are designed to teach English in context. The final theme that emerged in the interview was motivation, which was triggered through engaging, fun, and worthy activities. The participants stated they were driven to learn intrinsically as they enjoyed learning in a well-balanced syllabus. Oktaviana (2009) asserts that PDs can be used actively to motivate students because they apply to different learning channels with numerous features.

Overall, the findings collected by three instruments employing the principles of a mixed methods research design suggest that using the coursebook and PDs in a balanced way yields better results than following the lessons with only the coursebook. It was observed that the gain of experimental group students, whose main course lessons were enriched with the Oxford Picture Dictionary, was more significant than that of control group students, whose lessons encompassed the activities of the course book. Likewise, students' overall attitudes towards learning English were more positive in the experimental group. Conversely, the control group students' attitudes towards learning English were not as satisfactory as the experimental group. Consequently, integrating a suitable PD into the English curriculum can

substantially transform the learning and teaching atmosphere by enhancing learners' performance, motivation, and attitudes.

One of the limitations of the present study is that participants were limited to 50, which can be increased to get more reliable data, thereby increasing the chance of generalization of the results. Additionally, the data collection process lasted 12 weeks, which can be prolonged to measure the difference more precisely. Likewise, only the students of language preparatory school were included, which can be extended with other stages at the university, so a multi-faceted approach can be adopted to illustrate the effects of PD-enriched instruction on freshman, sophomore, junior, and senior-level students.

### Note on Ethical Issues

The authors confirm that ethical approval was obtained from TISHK International University Research Center (Approval Date: 7/5/2022).

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