

MULTIPLICATION OF DICTIONARY USES IN THE AGE OF DIGITAL TRANSFORMATION

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ABSTRACT

Dictionaries have become a ubiquitous tool in academia, extending beyond their common and essential purposes of checking spelling and meanings. This paper investigated the usage of dictionaries by 107 English learners in the Saudi context during their university studies, based on data collected from an opinion poll. Findings showed that learners use electronic and paper-based dictionaries for limited purposes. Besides surveying the dictionary type (online and paper-based), the study argues for a broader approach on their usage beyond checking spelling and meaning. The study considers dictionaries as valuable resources that facilitate second language learning by developing a multitude of skills, including spelling, vocabulary, grammatical usage, pronunciation, and semantic features of the target language (e.g., synonyms, antonyms, polysemy, and collocations). The study recommends that a dictionary should be used not just as a supplementary tool but as essential source for English language programmes, with dictionary-based tasks incorporated across the curriculum to promote sustainable language education.

Keywords: e-dictionary; digital age; EFL learners; language learning; paper-based dictionary

Introduction

The word “dictionary” typically evokes an image of a thick alphabetically arranged book containing the words of a language. However, dictionaries of various types and sizes have become increasingly prevalent across levels of education for teaching and learning English as a second or foreign language (Ana, 2013; Juwita et al., 2020; Knight, 1994; Wolter, 2015; Zhang, 2021). Digital technology has made dictionaries not only affordable but also varied and integrated. These integrated dictionaries are designed for mobile learning and can be installed on hand-held devices, allowing easy, on-the-go access. Modern dictionaries have evolved into valuable learning tools that enable users to explore various aspects of a language beyond spelling or meaning of words.

Despite a significant amount of research on dictionaries in language education (Ana, 2013; Boonmoh, 2021; Juwita et al., 2020; Liu, 2015; Wolter, 2015), there is no clear definition of what a dictionary is in the digital age. Electronic dictionaries, which are now commonplace in academia, offer various uses beyond the traditional spelling and meaning check (Alhaisoni, 2016; Ambarwati & Mandasari, 2020; Ana, 2013; Boonmoh, 2021; Laufer & Hill, 2000; Pothiphoksumphun, 2019). However, previous studies have focused on surveys with limited numbers of participants, often only outlining the differences between monolingual and bilingual dictionaries and mainly reporting uses related to spelling and lexical meaning. Other studies have compared online e-dictionary to paper-based dictionaries (Ambarwati & Mandasari, 2020; Boonmoh, 2021; Karczewska & Sharp, 2018; Wei & Chang, 2022) with little consideration of other dictionary-based linguistic aspects. It is important to recognise the full potential of modern dictionaries and the viability of both paper-based and electronic dictionaries.

The fact is that the potential uses of modern dictionaries exceed the existing research volume, and it is important to identify and explore these in light of the digital affordances and multiliteracies of the twenty-first century (Kalantzis & Cope, 2016; Lankshear & Knobel, 2006). The well-established literacy based on traditional reading and writing has outlived its date now, and there should be multi-uses of modern dictionaries to meet the corresponding recency of multimodal literacies (Kalantzis & Cope, 2016; Kress, 2012; Lankshear & Knobel, 2006; Liu, 2015) that the present study brings to the foreground. An increasing amount of literature devoted to employing dictionaries in learning foreign languages indicates that technology-using learners and teachers are driven by the digital alternatives of many similar products, including electronic dictionaries, encyclopaedias, Google translate, and, now, the ChatGPT. These technology-oriented users tend to discard paper-based dictionaries, and the issue has mounted to a real phenomenon that remains under-researched and deserves further exploration. The increasing uses of dictionaries need to be examined closely rather than merely taking it for granted that dictionaries are in use. It is vital to re-examine the uses of both electronic and paper-based dictionaries and explore how they level up learners’ performance in English learning and linguistic repertoire.

This endeavour goes beyond the scope of prior research to unfold underestimated uses of modern dictionaries, directing attention to more linguistic potential enabled by proper utilisation of various modern dictionaries that Saudi EFL learners tend to employ in their university studies. The study attempts to answer the following research questions:

1. What are the types of dictionaries Saudi EFL learners commonly use in their studies at the university level?
2. What do Saudi EFL learners typically use modern English dictionaries for?
3. Is there any statistically significant difference between students' uses based on gender, major, level of study, grade average, and dictionary type?
4. What are Saudi EFL learners' perceptions of dictionary uses beyond spelling and word meaning?

Review of the Literature

Theoretical Background

The current investigation of new uses of dictionaries takes its theoretical impetus from the new literacies of the twenty-first century, multimodality and digital literacy, which have stimulated new methods of meaning-making (Kalantzis & Cope, 2016; Kress, 2012; Lankshear & Knobel, 2006; Liu, 2015). The emergence of these concepts is intricately linked to meaning-making in the digital age. Advocates of multimodal literacy argue that meaning is not exclusively bound to what lies in the so-called dictionaries but in the mind of modern man. It is a matter of the 21st-century mindset. In the given new literacies, meaning is multiplied in the dimensions of content, form, space and time (Lankshear & Knobel, 2006; Liu, 2015). Darvin and Hafner (2022) contend that “with the evolution of AI, machine learning, big data, speech and facial recognition technologies, we are being read online by both human and nonhuman interactants in ways that are often concealed and thus require new, emergent digital literacies” (p. 865). Dictionaries designed for literacy in the conventional sense attend to words, i.e., alphabetic literacy. Nevertheless, learners with a cyberspatial mindset now approach things differently (Lankshear & Knobel, 2006).

The emerging multiliteracies have given rise to a multitude of dictionaries, including e-versions of the common dictionaries (e.g., Macmillan, Oxford, Longman) and some other forms of dictionaries such as photo dictionaries, encyclopedias, and Google Translate (Boonmoh, 2021; Dziemianko, 2022; Laufer & Hill, 2000; Liu, 2015; Karczewska & Sharp, 2018; Lankshear & Knobel, 2006). The recent advancement of modern life exceeds the ability of one book to contain all the vocabulary in place, so boundless webpages can be a container that accommodates the enormous vocabulary of modern virtual life (online) and its intersection with face-to-face reality.

Successive attempts have yielded valuable insights into the use of dictionaries for vocabulary and meaning (Dziemianko, 2022; Wolter, 2015; Zhang, 2021), which constitute only a subset of the diverse functions of modern dictionaries. A substantial

body of research has examined dictionary uses in various domains, including pronunciation (Juwita et al., 2020; Metruk, 2017), reading (Boonmoh, 2021; Knight, 1994) and spelling, word meaning, and collocations (Alhaisoni, 2016; Wolter, 2015). For instance, Ambarwati and Mandasari (2020) examined possible uses of the Online Cambridge Dictionary (OCD) for pronouncing vocabulary in an Indonesian university (Universitas Teknokrat Indonesia). The study concluded that OCD is reliable in enhancing vocabulary and improving learners' pronunciation in contexts where English is not used natively. Highlighting the multiplication of dictionary uses may draw learners and their teachers' attention to innovative uses beyond conventional uses. It is also important for teachers to guide students to such uses.

To this effect, there is a need to construct a theoretical model for e-lexicography, which remains an urgent yet lacking task in the current digital revolution. The current study discusses meaning from a holistic viewpoint that juxtaposes verbal definitions with complementary multimodal resources endured in Liu's (2015) contention. The study extends its scope to include a dictionary's verbal and nonverbal uses in the current digital era.

Previous Studies

While there have been many studies on the common uses of dictionaries, the potential applications of modern dictionaries have yet to be fully explored. Previous studies provided insightful ideas on the salience of dictionaries in learning English as a second or foreign language, but there is a lot more to discover. In this literature review, some of the most relevant studies on the use of dictionaries in language learning are outlined. Boonmoh (2021) explored how dictionaries and online tools, such as Google Translate, facilitate reading and help learners perform better in reading tasks in the Thai context. The study found that learners frequently use dictionaries for nouns, verbs, and adjectives, with online dictionaries and Google Translate being the most popular options, particularly with learners of the digital generation.

In a similar vein, Ana (2013) explored Gambian EFL learners and their attitudes toward English dictionaries. The results showed that a majority of learners preferred bilingual dictionaries, which was unexpected. Additionally, they stated that they were not taught how to use dictionaries. Instead, they mainly used online dictionaries to learn lexical meanings and spelling, with little attention paid to pronunciation (Laufer & Hill, 2000; Metruk, 2017; Wolter, 2015). Ana's findings are not at odds with other inquiries in similar contexts. For instance, Pothiphoksumphun (2019), reporting from Bangkok, found that dictionary users argued for online dictionaries to check word meanings quickly, a finding endorsed by Wolter (2015), who also reported a preference for online dictionaries over paper-based dictionaries.

Another line of studies published between 2013 and 2016 had similar themes. For instance, Alhaisoni (2016) explored the views of 99 native and non-native speakers regarding their use of dictionaries. The results showed a preference for bilingual dictionaries, online dictionaries, and Google translate platforms (Karczewska & Sharp,

2018). Participants used dictionaries, regardless of their types, mainly for obtaining lexical information, such as word meanings and spellings. Some participants had other interests, such as pronunciations, collocations (Wolter, 2015), and illustrative examples. Fageeh (2014) examined the effectiveness of using online dictionaries to improve vocabulary and students' attitudes toward vocabulary learning. Through an experimental and control group, Fageeh found that students who used online dictionaries learned vocabulary more effectively than those who used traditional dictionaries.

In the Saudi context, however, three relevant studies can be included in this review for their insightful findings. Alhatmi (2019) investigated the dictionary uses, strategies and types of dictionaries preferred by Saudi EFL learners, showing that EFL students use dictionaries mainly to search for new words. They prefer online dictionaries to paper-based ones and bilingual dictionaries to monolingual ones. Similarly, Hamouda (2013) studied how Saudi EFL students use dictionaries and the types of dictionaries they prefer. The study found that Saudi EFL students prefer online dictionaries and use dictionaries mostly to find the meaning of words and neglect the other important uses of dictionaries. Likewise, Al-Darayseh (2013) investigated the uses of dictionaries by Saudi EFL students, the type of dictionaries they use, and the difficulties they face. The study found that students use dictionaries most to find the meaning of words and check their spellings, while they rarely use dictionaries for other purposes.

In summary, the findings of previous studies help to advance research on dictionary uses in the age of digital transformations. The present inquiry builds on the previous findings to uncover more uses that modern dictionaries have made possible based on evidence collected from learners in the Saudi context. This study argues that the prevailing view that dictionaries are meant for spelling and word meaning is now complicated by many more uses of digital dictionaries. In this sense, a dictionary is construed as a mine of information that could be manipulated for English learning and teaching in several ways, and the multi-uses of modern dictionaries can meet the requirements of multimodal literacies. Besides extending previous work on dictionary uses, it unlocks more potential uses that digital dictionaries have made possible. It determines whether EFL learners recognise such potential or retain the common uses of spelling and checking meaning. It examines the types of dictionaries the learners tend to use, justifies their uses, and, more importantly, explores how learners and teachers enlarge the uses of dictionaries to take in morphological and semantic purposes, and much more.

Method

The study set out to unveil the uses of modern dictionaries in EFL learning with a focus on the Saudi setting. The study relied on learners' perceptions and uses collected via a survey of close-ended and open-ended questions to pair the quantitative and qualitative research paradigms, keeping in mind answers from the respondents' standpoint. In a research design of mixed methods, closed-ended questions not only prompt respondents' memory and indicate expected responses but also help the researcher control the scope

of answers. On the other hand, the open-ended questions are infused in a mixed method-based research design (Creswell, 2013; Dörnyei, 2007) to identify issues unanticipated by prompted questions. Because close-ended questions are criticized for being suggestive and leading, open-ended questions are given alongside the prompted questions to reduce the bias of prompted questions and allow the informants to answer in their own words. As Burns (2003) asserted, this “provides opportunities for unforeseen responses obtainable through closed questioning” (p.131).

Data were elicited from 107 learners at two Saudi Universities. They were recruited voluntarily using a convenience sampling technique based on their availability at the time of the study and their willingness to take part in an online survey. The researchers and instructors at the university announced a call for potential participants to take part in an online survey, and 107 participants showed up and filled in the Google Form. Their background information is displayed in Table 1. They are students aged between 19 and 22 pursuing a degree at the Colleges of Arts in two universities in the KSA.

Table 1
Background Information of the Sample (EFL Learners) (N=107)

Variable		Number	Percentage
Gender	Female	60	56.1%
	Male	47	43.9%
Level of Study	1st Year	43	40.2%
	2nd Year	7	6.5%
	3rd Year	26	24.3%
	4th Year	31	29.0%
GPA	Pass	1	0.9%
	Good	18	16.8%
	Very Good	41	38.3%
	Excellent	47	43.9%
Specialization	English	78	72.9%
	Other	29	27.1%
Affiliation	University of Bisha	88	82.2%
	Taibah University	19	17.8%

The primary data collection tool was a questionnaire composed of 28 close-ended items on a five-point Likert scale ranging from strongly agree to strongly disagree. The purpose of the questionnaire was to measure the magnitude of learners’ uses of paper-based and electronic online dictionaries. It was developed in light of previous studies on dictionaries (Alhaisoni, 2016; Ana, 2013; Boonmoh, 2021; Dziemianko, 2022; Pothiphoksumphun, 2019), covering some issues on how learners view dictionaries in

their studies and specific uses, particular attention was given to considerations such as the language level of the participants, brevity, and clarity of the questions.

Governed by the nature of the study, this opinion poll consisted of five sections, as shown in Table 2. The first section aimed to discern the different backgrounds of the respondents, including their gender, level of study, academic accumulative score, specialisation and affiliation. The second part focused on the dictionaries they use, such as Oxford, Macmillan, and Cambridge, and whether they prefer paper-based or electronic dictionaries. The third section elicited information about the specific purpose of their uses from the learners' standpoint. It disclosed the informants' perceived benefits, including the linguistics and learning activities they accomplished via dictionaries, whatever their types and size.

The fourth section elicited information about the learners' opinions about dictionaries. It measured the learners' attitudes/opinions on the issue in focus. The last part included four open-ended questions to obtain qualitative data that complemented the previous section's quantitative data. This part probed suggestions/comments on dictionaries.

Table 2
Description of the Questionnaire

	Part I	Part II	Part III	Part IV	Part VI
Part	background information	Types of Dictionaries	Specific use of Dictionary	attitudes towards Dictionary	open-ended questions
Questions	1 – 5	6 -7	8-20	21-28	29-32
Total	5	2	13	8	4

Validity, Reliability, and Piloting

The content and style of the questionnaire were based on general guidelines to produce a simple yet standardised tool and achieve its purpose and avoid drawbacks that downsize its effectiveness. It included, besides the main body, a short introduction requesting the informants to participate in the study, explaining the study's goals and confidentiality. It also provided some instructions on how to move through the questionnaire step by step. Because it was meant for a body of respondents of the digital age, it was designed via Google Form to facilitate and increase the response rate. The introduction was followed by a yes-no consent question "Do you want to complete the questionnaire for research purposes?" If they selected "yes", they would be automatically directed to complete the questionnaire; if they selected "no", they would be directed to close the questionnaire window. The questionnaire items were clustered around themes

using simple language and short and uncluttered items so that respondents were not “overwhelmed with a large daunting document” (Burns, 2003, pp. 129-130).

Prior to administering the questionnaire, validation and piloting measures were taken to ensure its appropriateness, length, and clarity of instructions. This pre-implementation phase involved seeking feedback from five experts to evaluate the content validity, criterion-related validity, and construct validity of the survey. The input obtained from these experts allowed the researchers to refine the instruments and produce near-final versions. Having the expert validation completed, the initial version was piloted to “ensure that questions are interpreted independently, easily and unambiguously” (Burns, 2003, p. 129). It was administered to a group of 25 EFL students at English major students. The feedback from this initial pilot study enabled the researchers to make a final version with no apparent glitches, revamp, and fine-tune the questions. The resultant data at this phase included the reliability of Cronbach’s Alpha for the perception scale, which was .88, adequately valid for using the instrument. Hence, a final version was attested for implementation on the ground.

Before conducting the study, the researchers explained the purpose of the investigation in the KSA to the authorities in charge of the College of Arts and the English Language Department and got their approval to conduct the study. The dean of the College of Arts sent the questionnaire to English language instructors to distribute to their students via WhatsApp groups or the Blackboard platform. The instructors sent the Google Form survey to their students and requested them to respond to the questionnaire. The researchers received 107 voluntary responses.

The responses for the close-ended items in the questionnaire were analysed, and the means, standard deviations and percentages were calculated. One-way ANOVA was run using IBM SPSS 23. To gain additional insights, responses to the open-ended questions were subject to deductive content analysis, following Creswell’s (2013) content analysis guidelines. All the participants’ answers to the open-ended question were synthesized and sorted out, beginning with detailed data on general themes. An initial list of categories ended up with a few focused themes potentially meaningful to the study; they were brought in for interpretation without distorting or misrepresenting the data. Some illustrative quotations were added to the analysis section to reinforce the quantitative findings. They mainly relate to the dictionary concept and use.

Findings

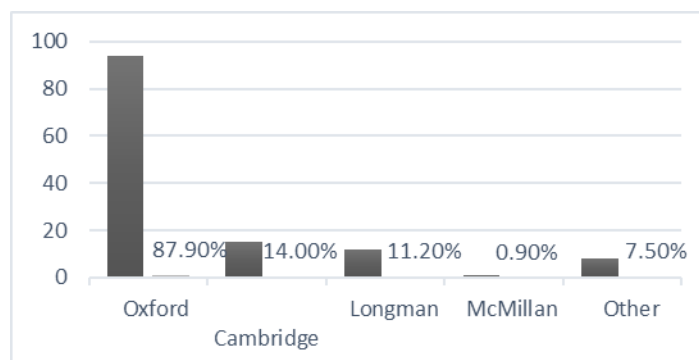
The findings are arranged in this section according to the sequence of the research questions.

Dictionaries Commonly Used by Saudi EFL Learners

Figure 1 shows that the Oxford dictionary is the most commonly used (88%), followed by Cambridge (14%), Longman (11.20%), and Mcmillian (1%) dictionaries. The participants

listed more than one dictionary at a time. Alongside these dictionaries, about 8% of the participants stated that they referred to other types of modern dictionaries, including Google Translate and encyclopaedias, which serve as modern lexicography of word categorisation, meaning, and definitions.

Figure 1
Dictionaries that EFL Learners Commonly Use



Common Uses of Modern English Dictionaries

As displayed in Table 3, the participants stated that they use dictionary to look for the meaning of words (M=4.65, SD=.64), followed by phonetically transcribed (Mean=4.32, SD=.95). The participants also used dictionaries to check different meanings that a word may have (homonyms) (M=4.28, SD=.82), listen to how words are pronounced (M=4.27, SD=.97) and to check spelling (M=4.12, SD=.88). Other uses were rated lower than these including the American vs. British English words, old usage of words/phrases, grammatical aspects, explanation on idiomatic expressions/proverbs, literary uses of certain words/phrases, formal and informal uses of certain words/phrases. The mean scores of these uses ranged between 3.58 and 3.97, showing that the participants were less conscious of these less-frequently used yet significant merits of dictionary utilisation.

Table 3
The Frequencies of Actual Dictionaries Uses

I use dictionaries to....	N	Mean	SD
check American vs. British English Use or words	107	3.58	1.22
check the old usage of the words/phrases	107	3.64	1.40
check grammatical aspects	107	3.74	1.28
get an explanation of idiomatic expressions/proverbs	107	3.89	1.08
check literary uses of certain words/phrases	107	3.89	1.18

check formal and informal uses of words/phrases	107	3.97	1.16
read examples	107	4.02	1.07
check spelling	107	4.12	.88
listen to how words are pronounced	107	4.27	.97
check different meanings that a word may have	107	4.28	.82
check how words are phonetically transcribed	107	4.32	.95
check the meaning of words.	107	4.65	.64

Note: Scale is 1=Never to 5=Always

Differences Between Students' Uses of Dictionaries

This section presents the results on the differences between students' uses of dictionaries based on gender, major, level of study, grade average, and dictionary type. The results of One-Way ANOVA are arranged in Table 4 through Table 8 in accordance with these variables.

Table 4

Results of One-Way ANOVA regarding Uses of Dictionaries by Gender

Gender	N	Mean	Variance	F	p
Female	60	3.50	1.34	0.01	.93
Male	47	3.48	1.26		

Table 5

Results of One-Way ANOVA Regarding the Uses of Dictionaries by Major

Major	N	Mean	Variance	F	p
English	78	3.40	1.43	1.79	.18
Other	29	3.73	0.89		

As shown in Tables 4, 5, and 6, there were no significant differences by dictionary major (p -value= 0.726). Similarly, there was no significant difference due to gender ($F=.01$, $p=0.93$) or major ($F=1.79$, $p=0.18$) and gender. Likewise, no significant differences were found for dictionary medium ($F=.32$, $p=.73$).

Table 6

Results of One-Way ANOVA Regarding Values of Dictionaries by Dictionary Medium

Medium	N	Mean	Variance	F	p
Online	43	3.41	1.47	0.32	.73
Paper-Based	10	3.34	1.56		
Both	54	3.57	1.14		

Regarding the level and average grade, their corresponding ANOVA results are tabulated in Tables 7 and 8. At this point of analysis, it is to be noted that none of the demographic variables came out significant except for Year in school. Year 4 students had a lower appreciation for dictionaries than less advanced students ($F=4.24$, $p<.02$). Years 1 and 2 were combined because of the small number of year 2 students. Year 4 students had a lower appreciation ($M=3.0$) for dictionaries than less advanced students (Mean (1,2) =3.66, Mean (3) =3.74) ($F=4.24$, $p<.02$).

Table 7

Results of One-Way ANOVA Regarding the Uses of Dictionaries by Level

Year in School	N	Mean	Variance	F	p
Years 1 & 2	50	3.66	0.97	4.24	.016
Year 3	26	3.74	1.35		
Year 4	31	3.00	1.51		

Table 8

Results of One-Way ANOVA Analysis Regarding the Uses of Dictionaries by Average Grade

Grade	N	Mean	Variance	F	p
Good	18	3.37	1.33	0.21	.81
Very Good	41	3.45	1.31		
Excellent	47	3.56	1.56		

Note: One subject was excluded because there was only one to report "Poor" as an average grade.

The last research question elicited perceptual data regarding the dictionary uses beyond the conventional uses – spelling and word meaning. Table 9 shows that the mean scores of the participants' views ranged from 2.25 to 3.66, showing a medium rate. It could be interpreted that they generally view the dictionary as a tool for meaning and spelling checks more than the other uses outlined in the table. Relying on responses outlined in Table 9, the participants generally hold a view that a dictionary is a tool for meaning and spelling checks more than the other uses.

Table 9

Participants Perceptions towards Dictionary Uses

Dictionaries...	N	Mean	St
are good tools to collaborate with other peers	107	3.37	1.40
encourage learning new aspects of the language	107	3.66	1.51

are boring and demotivating	107	2.25	1.19
are helpful to learn words derivations	107	3.51	1.45
are helpful to learn words' synonyms and antonyms.	107	3.51	1.46
help me have self-confidence in using the words/phrases	107	3.32	1.42
sound like personal tutors to me	107	3.29	1.42

Discussion

As seen in Table 3, dictionaries can be used for several purposes. Most uses are skewed towards vocabulary, either by checking spelling or meaning (Wolter, 2015). With reference to the common uses of dictionaries as perceived by the participants, it is to be noted that dictionaries can be used even for some other purposes that the respondents in this study seem to be incognizant with. Juwita et al. (2020) and Metruk (2017) argued for using dictionaries for pronunciation, Boonmoh (2021) and Knight (1994) for reading skills. Still, an advanced learner's dictionary could be used for morphological and semantic aspects beyond the spelling and meaning of certain words.

There are some points to consider in the dataset on which the present inquiry builds its argument. First, the learners hold a positive view towards dictionaries in their studies. Nonetheless, they seem not to use dictionaries to the maximum. In an open-ended question regarding additional information relevant to the survey, Participant 5 commented:

Going more profoundly in the world of print and online dictionaries, diversification in several research areas to find out about vocabulary and its opposites to gain more information.

This shows that the participant is aware of the neglected purposes of dictionaries other than vocabulary and meaning. For technology-based dictionaries of different types and sizes alongside conventional dictionaries, Participant 53 commented that she learned various uses of dictionaries she was unaware of before answering the questionnaire. It means that the dictionary is known for spelling and vocabulary, but this questionnaire familiarised her with different uses of the dictionary that were unknown to her.

Data from the open-ended question in the survey clarified more on the attitudinal results. Some respondents thought there was no need for paper-based dictionaries because online dictionaries can do the job even better. For instance, Participant 77 commented that

No need for paper-based dictionaries at this time because Apps and websites are in remarkable and permanent development and have become successful alternatives to dictionaries.

Contrarily, Participant 86 believes that paper-based dictionaries are helpful for accessing the required information, but using them takes time. Some other participants

commented on their preference for online and paper-based dictionaries. Participant 69 preferred online dictionaries because it is fast for searching specific words. However, this participant viewed a paper-based dictionary as good when searching for words in alphabetical order. Participant 10 added that online dictionaries are easier when finding out certain words. Participant 106 referred to printed dictionaries because they are available without the need for the Internet, which is not always accessible.

The results outlined in the tables show that although dictionaries are mines of learning materials, they are hardly used beyond spelling and meaning in the context at hand. The discussion above provides strong convergent evidence for using dictionaries for spelling and meaning, as in the previous studies of Alhaisoni (2016) and Boonmoh (2021). It also extends Knight's (1994) and Boonmoh's (2021) findings on dictionary uses for reading and pronunciation (Juwita et al., 2020).

The attitudinal responses regarding dictionaries illustrate that electronic and paper-based dictionaries lack uniform descriptions. When the participants were first asked about using a dictionary, 38% replied "no". This may be because the concept of a traditional dictionary has changed in the mind of the current generation. As mentioned in the introductory part of this paper, when mentioning the word "dictionary", what comes to the mind of many is the traditional thick page-oriented book in which words are arranged alphabetically. When students were asked about other purposes for using dictionaries beyond those in the questionnaire (Question 1), the participants provided several purposes which were, for the most part, similar to the ones in the questionnaire, such as looking up new words and checking pronunciation). This may be due to confusion on the learners' part regarding the dictionary concept and uses.

With the innovations and increasing multimodal elements that shape digital reading and writing (multiliteracies), the concept of a dictionary has become rather clumsy. Despite variations of usage, there is still a flawed understanding of the concept of meaning-making imposed by the new literacies of the twenty-first century (Darvin & Hafner, 2022; Kalantzis & Cope, 2016; Kress, 2012; Lankshear & Knobel, 2006). According to the emerging literacy concept, meaning is a combination of linguistic and nonlinguistic (semiotic) elements that constitute successful and vivid commutation, mixing words with images and some other elements of meaning-making.

In another question about other tools or Apps, 8% of the participants (see Figure 1) stated that they used dictionaries other than those mentioned in the questionnaire, including the Oxford wordpower, dicbox, Dict plus, Reverso Context, Duolingo, EWA, Farlex, Vocabulary.com, One Look Dictionary, Urban dictionary, which are all technology-based. This shows that Saudi EFL learners are strongly influenced by digital learning and use advanced technology to learn the English language.

For electronic versus paper-based dictionaries, when students were asked if they prefer online dictionaries to printed ones, their responses were divided into three groups: those who prefer both printed and online dictionaries, those who prefer online to print ones and those who prefer printed dictionaries to online ones. Each group has some reasons. Those who prefer online to printed ones believe that online dictionaries are easy

to access and update, find the words easily and thus save time. These features are unattainable in printed ones. Additionally, they are not only available everywhere and every time but also usable again and again very easy to search for many things at a time. Those who prefer the printed ones, despite their weight, believe that they can be used at times of internet outages or power shortages. The third group prefers both. This group was divided into two subgroups. The first subgroup is those who prefer both and see no differences. They stated that when one is available, it suffices. The second subgroup is those who prefer both but think online dictionaries are better than printed ones.

Given the findings, the study supports existing claims that electronic dictionaries are advantageous to the current digital generation (Alhaisoni, 2016; Ambarwati & Mandasari, 2020; Ana, 2013; Boonmoh, 2021; Laufer & Hill, 2000; Pothiphoksumphun, 2019). Nevertheless, the potential of internet-based dictionaries has yet to be fully utilised. The study questioned the concept of a dictionary in the mind of the current generation of learners, directing their attention toward new uses of dictionaries. It lays the foundation for dictionary-based learning, which has been underestimated in numerous EFL contexts. It underpins implications for teachers who may want to use dictionaries for multiple purposes beyond the conventional uses — spelling and word meaning (Alhaisoni, 2016; Boonmoh, 2021).

To span other language aspects, a modern dictionary should be more than a reference book of word meaning and categorisation. Course developers may incorporate tasks and dictionary-based activities in EFL materials and programmes. They could be used to check word usage in terms of formality and informality. Advanced dictionaries are also good for teaching morphemic structures and semantic aspects of words, such as synonyms, antonyms, homophones, homographs, colloquialisms, and idiomaticity.

On a related note, the growing area of multiliteracies and multimodality has aroused new outlooks on how to invigorate conventional literacies and communication that involve not only words but also other modes – videos and images. Perhaps the recent advancement of new literacies exceeds the capacity of a dictionary to contain all the vocabulary in place, so boundless webpages can be a container that accommodates the enormous vocabulary of virtual life and its intersection with face-to-face reality. This is an area that should receive adequate research in light of the findings of the study at hand.

Conclusion

The study sheds light on the significant uses of modern dictionaries in learning and teaching English in the Saudi EFL context, which is in an Arab setting. Besides the commonly used features such as spelling, meaning, and phonetic transcription, the study examines other features such as grammatical, morphological, and semantic aspects that contribute to learners' overall linguistic repertoire. However, these aspects of uses were mostly undervalued in the Saudi context when this study was carried out. Due to the limitations in space and time, the present study could not include all these variables. However, it highlights the need for further research using data from multilingual contexts.

An important topic for further research is capturing the effect of mindful dictionary uses on learners' overall performance. To examine this, a sample of learners could be grouped into heavy, moderate, and light users of dictionaries, and their correlation could be analysed using ANOVA to determine the effects of dictionary uses on learners' success in different aspects of the target language.

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