# Online Collocation Dictionary in L2 Writing: How Learners Use and Perceive Its Effectiveness

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Abstract—This study examined how Vietnamese advanced language learners used and perceived the effectiveness of the Oxford online collocation dictionary as a supportive tool in their L2 writing. Eighty-one English major students were asked to do a writing task and were encouraged to use this dictionary to search for collocations that they want. Their use of the dictionary to look-up collocations while doing the writing was observed by using the recording sheets. Immediately after completing the writing, the participants were asked to do the questionnaires. Eight of the participants were then invited to participate in semi-structured interviews. The results of the recording sheets showed that learners approach the dictionary for help with collocations of adjective-noun and verb-noun grammatical patterns most frequently. They made very limited use of the dictionary to look-up collocations of noun-noun and adverb-adjective pattern. The results of the questionnaires and thematic analysis revealed that learners are very positive towards the use of the dictionary. However, non-plentiful content, lack of pronunciation and suggestions of look-up words are drawbacks and are expected to be improved.

Index Terms—dictionary use, collocation use, learners' perceptions, L2 writing, online dictionary

#### I. INTRODUCTION

The pedagogical value of the dictionary as a source of information for language learning has long been emphasized by lexicographers (Wright, 1998; Hornby et al., 1974; Sinclair, 1987). Different kinds of specialized dictionaries focusing either on the scope or the coverage of subject (e.g., medical or legal dictionaries) or a specific aspect of language (e.g., dictionaries of idioms, proverbs, and collocations) have been compiled taken specific users' needs into account (Bogaards, 2003). There have been quite a lot of studies investigating learners' dictionary use and perceptions to different kinds of dictionaries (e.g., paper/electronic dictionaries, monolingual/bilingual/bilingualized dictionaries) (Cubillo, 2002; Fan, 2000; Nesi, 2014; Chan, 2011; Jin & Deifell, 2013). Those studies on the use of dictionaries for collocation look-ups suggest that learners did not gain much (Dziemianko, 2014; Laufer, 2010). The ineffective use of general dictionaries for collocation look-up is attributable to several reasons, the first and most frequently mentioned of which is learners' lack of collocational awareness, even those at advanced level (Herbst, 1996; Laufer & Waldman, 2011; Nesselhauf, 2003). Other reasons include either these dictionaries do not contain many collocations even those that frequently occur or learners cannot find collocations that they want to look for since they are hidden in examples (Laufer, 2010; Benson, 1990). In recognition of the importance of collocation use to language learning and learners' failure in using dictionaries for collocation look-up (Laufer, 2010), lexicographers have constantly improved the presentation of collocations in general dictionaries (Benson, 1990). The improvement is in the direction of making collocations prominent typographically (by colour or bold print) and organizationally (by grouping them into boxes) (Dziemianko, 2014; Herbst, 2010).

If as Herbst (2010, p. 225) puts it, 'the difficulty for foreign learners is not to understand what weak tea is but to actively produce weak tea and not feeble tea or light tea', learners' approach to dictionaries will be more on encoding rather than decoding purposes. As such, efforts of presenting collocations prominently seem not enough. Decision on what collocations to be included and how they are presented are probably of no less importance. These are the two main challenges that lexicographers had to deal with when compiling the dictionaries (Lea, 2007). According to Lea (2007, p. 267), the principle for making the decision on what collocation to be included could not 'be based solely on frequency, nor on statistical significance' from a large data base but was informed by both of these. The decision was also informed by judgements of editorial board concerning the usefulness of collocations, which was understood as unpredictability to learners (Lea, 2007). The unpredictability as a central character of collocation, however, has aroused concerns since it is an uneasy job for the lexicographers, who are from different linguistic and cultural backgrounds to learners, to decide if a collocation is predictable or not (Nakamoto, 1992). It is undoubted that the significant difference between general dictionaries and collocation dictionaries is the number of collocations included though.

With regard to the second issue, how collocations should be presented, Hottsmonn (1991) formulated principles which suggest that collocations need to be presented at the base entry. This is based on the argument that when generating a collocation learners will start with a base and then look for a collocate to complete the phrasal meaning. The Oxford online collocation dictionary (OOCD) is adhered to the rule (Lea, 2007). Collocations in this dictionary are grouped according to lexical-grammatical structure. For instance, at a noun entry which is also the base of combinations

containing nouns, collocations are arranged into structural sets such as adjective + noun, quantifier + noun, verb + noun, noun + verb, noun + noun, preposition + noun, and phrases. Within each grammatical structure category, collocates are presented according to semantic sets of similar meanings (see Figure 1). This way of presenting collocations is believed to be useful in encoding (Lea, 2007; Heid, 2004). Collocations in some general dictionaries (e.g., OALDCE8, LDOCE5, CALD4, COBUILD7, and MEDAL2) (see Figure 2), though prominent by being highlighted or presented in boxes (LDOCE5, MEDAL2), are practically impossible to find quickly, if at all, by learners (Burkhanov, 2003). They are often 'hidden' because Hausmann's (1989) principles concerning presenting collocations at the entries of bases are not applied (Burkhanov, 2003). In the microstructure of general dictionaries, they are placed within the demonstration not in the definition part in the microstructure (Bahns, 1991), and as Benson (1990 p. 23) notices their treatment is 'inconsistent and incomplete'.

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stress noun
1 state of tension
ADJ. acute, considerable, extreme, great, high, severe Separation is a time of high emotional
stress. | excessive | greater, increased | low | daily the daily stress of teaching | emotional, mental,
psychological, social | economic, financial The high mortgage payments put them under severe
financial stress.
QUANT. level Many workers experience a high level of stress in their daily life.
VERB + STRESS cause, create A divorce causes children great emotional stress. | avoid, remove |
add to, increase | reduce, relieve | be under, experience, have, suffer (from) He's been under a
lot of stress lately. | cope with, handle, manage, stand, take He's had to give up his job as leader
of the project? he just couldn't take the stress.
STRESS + VERB bring sth about/on an illness brought on by stress
STRESS + NOUN level high stress levels | control, management Staff are encouraged to go on
stress management courses.
PREP. under ~ He broke under stress and had to leave.
PHRASES a source of stress An overcrowded workplace can be a major source of stress. | a
symptom of stress Tiredness is one of the most common symptoms of stress.
<sup>2</sup>emphasis that shows importance
ADJ. enormous, great | particular, special | equal | undue
VERB + STRESS lay, place, put I must lay great stress on the need for secrecy.
PREP. with the ~ on a study of child development, with the stress on acquisition of social skills | ~
on There's been a lot of stress on getting drug sellers off the streets.
<sup>3</sup>emphasis on a word, syllable, etc.
ADJ. main, major, primary, strong | secondary, weak | sentence, word
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Figure 1: The OOCD Entry for the Word stress

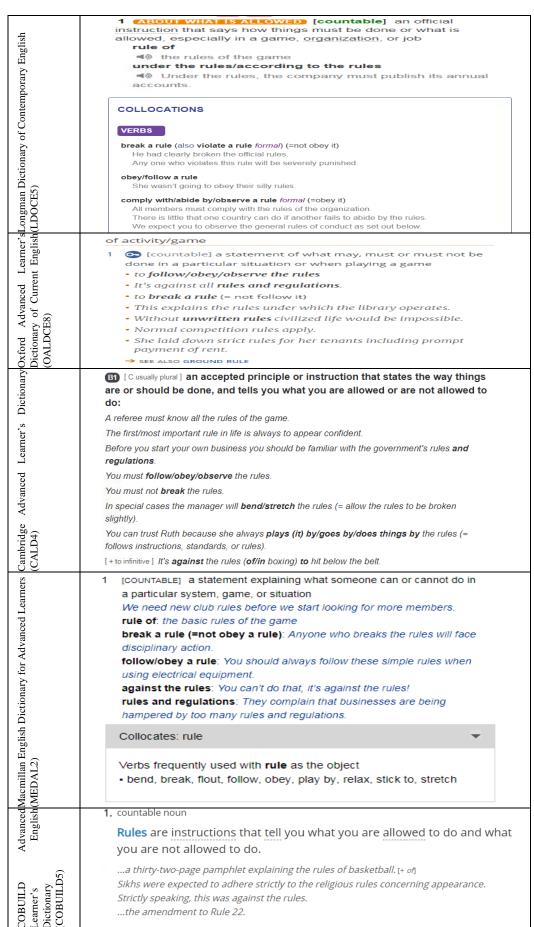


Figure 2: Collocations at the Entry Rule in Some Online Dictionaries

Besides identifying the differences in the presentation of collocations in a collocation dictionary and general dictionaries, it is important to examine features that are media-related. At macrostructural level which refers to the procedure of accessing entries (Béjoint, 1983), electronic dictionaries are highly evaluated in terms of search speed (Hua & Woods, 2008). In a study on learners' use and perceptions of online dictionaries, Jin and Deifell (2013) also found from the data generated from a group of 250 participants of different language backgrounds (e.g., Arabic, Chinese, French, Italian, Japanese, Russian, and Spanish) that 74,9% of learners are positive about free access, fast search speed, and ease of use. It is undeniably true that electronic dictionaries liberate the user from alphabetical searching skill (Atkins, 2015; Nesi, 1999). At microstructural level, electronic dictionaries are not space bound. As such, a word can be stored in different classification system; full forms can be used instead of their abbreviations. However, it seems that some online dictionaries have not utilized this potential. They are reported to be incomplete and 'lacking contextual information and grammatical explanations' (Jin & Deifell, 2013 p. 12). Jin and Deifell (2013) also found that pronunciation, which is inherently absent from all printed dictionaries, is the most highly appreciated feature. In terms of inter-structural level, external links and cross references are claimed to be among the most prominent benefits of online dictionaries. There have been quite a lot of studies investigating learners' dictionary use and perceptions to different kinds of dictionaries, but little is known about learners' look-up behaviours and their evaluation on the effectiveness of the use of collocation dictionaries. This study, therefore, aimed at providing a portrait of how learners use the OOCD, which is aimed at serving learners' encoding purposes (Bogaards, 2003; Nuccorini, 2003), and how they evaluate the dictionary.

The study attempted to answer the following research questions:

- 1. How do the students use the Oxford Online Collocation Dictionary to support their use of collocations in L2 writing?
- 2. How do the learners evaluate the use of this dictionary in support of collocation use in their L2 writing?

#### II. METHODS

## A. Research Design

In an attempt to monitor the use of the OOCD under as natural conditions as possible the author asked learners to write a 350-word essay on a given theme in 45 minutes with the support of this dictionary. Learners were allowed to use other dictionaries if they wished to; however, they were encouraged to use this dictionary for all collocation check-ups. In order to provide a portrait of how learners used the dictionary to support their writing, the author chose what Atkins and Varantola (1997) call a 'paper approach' to record step by step what was going on when learners turned to the dictionary. The use of observation with recording sheets (see Appendix A) allowed us to gather similar information as well as every single move of quite a big group of participants, and more importantly, information that could only be obtained when spelled out by participants would be less likely to be missed. Besides recording information in order to portray how the process occurred, including what entries users were looking for, whether or not they were able to find what they were looking for, whether they used the dictionary being considered in combination with other dictionaries, and how they evaluated each search, the author asked some more questions to gain insights into learners' use of the dictionary, such as the purpose of each check-up, whether or not the participants knew how to use the collocations that they found from the dictionary, or what types of collocations sent them to consult the dictionary.

To address the research question about learners' evaluation of the OOCD as a supportive tool, the author used Likert scale attitude questionnaires which comprise a series of 17 statements. In an effort to gain in-depth understandings the reasons underlying their attitude towards the OOCD, the author used semi-structured interviews after the questionnaire data were collected. The interviews aimed to explore the likeable, dislikeable, and desirable features about the dictionary. They were conducted informally face-to-face. Eight participants were chosen for the interviews based on their choice of future use of the OOCD (statement 10 in the questionnaires). To gain a broad range of student perspectives on the use of the OOCD to support writing, the author chose participants equally from the four choices of the Likert scale.

## B. Setting and Participants

The study was conducted at a university in Ho Chi Minh city, Viet Nam. Participants of this study were students at the Faculty of English Linguistics and Literature. The majority are female. They include 81 second-year English major students at, on average, upper intermediate to advanced level. They all had completed integrated language skills, reading with writing and listening with speaking, in the first three semesters and had passed an English proficiency test designed at around upper intermediate to advanced level.

## C. Data Collection Methods and Analysis

Before the start of the writing activity, the author gave instructions on how to record the recording sheets carefully to all the students. To resolve the possible drawbacks of this method of observing students' use of the dictionary-learners not behaving normally-, the author asked them to approach to OOCD as naturally as possible and emphasized its importance to the results of the study. In so doing, the problem of learners' unnatural use of dictionaries might be

resolved, or at least minimized. The participants were arranged to work in pairs, one partner using the OOCD, the other recording every check-up on the recording sheet. The purpose of so doing was to make sure that no collocation check-up would be missed, and more importantly, that those doing their writing would not be distracted. Participants in charge of recording dictionary use were to be arranged to sit behind their partners, who were supposed to do their writing at the time in order to ensure the minimum possible interference. Most of the information was completed by the participants doing the writing right after they had finished their written work, except for column 2 (what headwords were checked up) and column 7 (whether the dictionary users used the OOCD in combination with other dictionaries). The participants were requested to exchange roles after the first half of the participants had finished their writing.

Every time the OOCD was used for checking up, the headword would be recorded. As the OOCD could only be used to check for collocates of a word if users remembered its spelling, sometimes participants had to start with an English-English dictionary. If they started with an English-English dictionary for spelling checking, this step was not recorded. Neither was it recorded if the participants used Vietnamese-English dictionary to look for an equivalent word to express an idea. If, after consulting the OOCD, participants turned to other dictionaries for the same headword, it needed to be noted down as being used in combination with others. After all the participants had completed their writing and recording sheets, they were provided with Likert scale questionnaires. The author made herself available for answering any questions regarding the content of the questionnaires. Paper-based questionnaires, distributed in person, seemed to be the most direct and effective way to collect immediate responses from the participants. All 81 questionnaires distributed were collected.

After the questionnaires were collected, the author made arrangement for the interviews, which took place the day after. The author emailed the participants some guiding questions beforehand. In this way, they had time to prepare answers or could make notes on what they wanted to share in the interviews. The face-to-face semi-structured interviews were recorded by the author with the approval of all participants. Each interview took between 20 to 25 minutes during which the author asked them questions about how they evaluate the use of the dictionary as a supportive tool, what they like, dislike and desire the dictionary to be changed, and if they have any difficulties in using the dictionary to support their writing.

To find the frequency and percentage of agreement-disagreement among the participants regarding the survey questions, the author used descriptive statistical analysis on SPSS to process the data. Information from 81 questionnaire papers was imported into SPSS. With regard to recording sheets, they contain both quantitative and qualitative data. As well as recording how learners used the OOCD as a supportive tool, they gathered statistical information on types of collocation, the percentage of successful look-ups and evaluation of satisfaction with individual look-ups, based on a five-point Likert scale from *very dissatisfied* to *very satisfied*. The data were processed partly using SPSS and partly using NVivo. NVivo was used to process the only qualitative question in the recording sheets (question 8: Further comments/Why did you use other dictionaries? If yes).

## III. FINDINGS AND DISCUSSION

The author tackled the two research questions by combining findings from the analysis of the survey, the recording sheets and the interviews. The answer to the question about how learners use the dictionary is presented in two sections as follows:

## A. When Learners Approach the Dictionary for Help

The participants reported that they often used the OOCD as an assisting tool whenever they do a piece of academic writing (72.7%); more than one-quarter of them (27.3%) only occasionally used it. In response to this same question in the interviews, seven out of eight replied that they use the dictionary every time they write, but the extent of their search depends on the individual writing task. The participants sometimes approach the dictionary not because they do not know collocations to express an idea but to look for a different way of expressing it to avoid repetition. Another wise reason for consulting the dictionary is to look for a hint for an idea rather than a collocation to express some intended idea. One participant shared that 'I sometimes search the dictionary for a hint rather than looking for a word to express an idea that I have already had in my mind.'

Findings from the recording sheets suggest that most of the look-ups (94.3%) were done while students were doing their writing. The learners tended to approach the dictionary for help immediately when need be rather than at the end when the writing was finished. Three of the participants from the interviews shared that looking for collocations immediately when they get stuck is their habit. This reason seems to be closely associated with a feeling of certainty that was shared by most of the participants. It helps them feel confident that what they have written is correct and complete. One student reported that *I often consult the dictionary immediately when I get stuck. Using it to look for collocations right away reassures me*. The interview data also shows that the time constraint for in-class writing is another reason why they tend to consult the dictionary while writing. Having no spare time for drafts induces them to search for help to complete every sentence of the writing. Two of the interview participants also shared that they only search at the end of the writing for collocations in which one of the elements is optional, such as adjective-noun, adverb-adjective, or adverb-verb, and this was to add something or to check if combinations they had used were correct.

Findings from the recording sheets also show that on average learners use the dictionary four times for looking up collocations when doing the writing. The highest number of check-ups in an essay was eight and the lowest was one. More check-ups (54.3%) were done to look for collocates to construct collocations than for checking if the collocations they intended to use were correct (43.8%). They approached the dictionary for help with collocations of adjective-noun pattern the most (40.6%). 68 out of 315 check-ups (21.6%) were of verb-noun collocations. Table 1 below summaries the number of collocations of each pattern looked up from the recording sheets.

TABLE 1
DISTRIBUTION OF THE COLLOCATION PATTERNS LOOKED UP IN THE OOCD

Collocation patterns	Verb-noun	Noun-verb	Adjective-	Noun-noun	Noun-of-	Adverb-	Adverb-	Total
			noun		noun	verb	adjective	
Number of look-ups	68	43	128	10	15	35	16	315
Percentage	21.6%	13.7%	40.6%	3.2%	4.8%	11%	5.1%	100%

From the recording sheets the author found that there were twelve cases in which the learners used the OOCD to search for another way of expressing ideas. For most of these cases the participants responded quite clearly to the purpose of the look-ups except for the second *stress* in recording sheet 27B. *Minimize stress* was used after that search, and the participant only wrote on the recording sheet 'to look for synonyms'. It was probably used to avoid repeating avoid stress or handle stress, which the participant had used before in the writing.

## B. How Learners Use the Dictionary to Look for Collocations

The learners did not have problems with the alphabetic search, which is a skill needed to use paper dictionaries effectively (Koren, 1997). The interview data show that to look for a collocate to complete the intended phrasal meaning, after typing in a base word, learners scan through the list of collocates provided quickly. As two of the participants shared in the interviews, this is quite an easy step since collocation patterns are all set in red capitalised letters. Collocates of similar meaning are grouped together and are in bold. They can quickly locate the position of words of some particular part of speech.

All informants responded that they often used the dictionary together with other dictionaries - an English-English, English-Vietnamese dictionary or a thesaurus to look for meanings of collocates. This seems consistent with the survey data, with 67.7% participants responding thus. Data recorded from the recording sheets nevertheless shows a quite different picture. In only 32 out of 315 look-ups (10.2%) do learners use this dictionary together with other dictionaries. This is understandable since their responses from the interviews and surveys were just their general estimations without considering some factors such as topic of the writing, the kind of writing (academic or free writing), and writing conditions (with or without time constraint). As one participant shared, due to the limited time span of this writing, when searching for collocates of a word in the OOCD, she often opted for a collocate that she already knew rather than consider choosing other collocates that she did not know. When doing assignments at home, in contrast, to enhance the writing she often considered choosing 'strange words' (collocates) after searching for their meanings from other dictionaries. Another participant shared that, when time allowed, in order to avoid repeatedly using some combination she used a thesaurus to look for another way of expressing the same idea. (S7: I don't want to use repeatedly the same collocation and because the dictionary only provides a limited number of collocates of a headword, I looked for synonyms of a collocate from thesaurus.) This 'creative' strategy is somewhat risky since obviously combining words based on synonyms of collocates suggested by the OOCD might lead to an unacceptable combination. Synonyms of words do not necessarily convey exactly the same meaning, so this strategy might lead the learners astray by opting for a synonym that is not appropriate in a certain context (East, 2008). S5 expressed her worry of being distracted from her writing: I tried not to look at another dictionary because I'm afraid that if I use this dictionary with another dictionary I might get distracted from my writing. But sometimes when I could not find a suitable collocate, I have to use an English-English dictionary.

Flow of thought is deemed another factor affecting how learners use the dictionary. When writing with new ideas continuously coming to mind, they will leave a blank and then go back to find words to complete the idea. Conversely, if they have not come up with what to write next, they will consult the dictionary to find collocates to accomplish the phrasal meaning. Some even shared their 'strategies' for dictionary use:

S3: I try to avoid that habit (looking for collocations while writing) since it sometimes distracts my writing. I train myself to use the dictionary after finishing the writing. I reread it and use the dictionary to add collocates where possible.

S8: I use the OOCD while writing...actually it depends on the flow of thought. If at that time no new ideas come to mind, I will stop to look up collocations from the dictionary to complete that sentence. If, however, the flow of thought continues, I will leave a space and come back to search for a word to fill out later. It is often with collocations of which one element is not required like adjectives in adjective-noun, Adverb in adverb-adjective and adverb in adverb-verb collocations. In this way, I can avoid being distracted.

The answer to the question about learners' perception relates to three aspects: assessment of satisfaction, perceived effectiveness, and accessibility and ease of use.

#### C. Assessment on Satisfaction

Findings from the recording sheets show that students are satisfied with more than three quarters (77.4%) of the results found in the dictionary. The satisfaction assessment was also based on their responses to the questionnaire survey regarding different aspects pertaining to using the dictionary to search for collocations. In particular, as can be seen in Table 2 below, 89% of the participants felt confident when expressing ideas in writing, and 93.9% of the participants believed that the dictionary helped them expand their collocation knowledge. Almost all of the participants shared that they would use the dictionary to support their writing in the future. The high proportion of participants (86%) reporting that they would introduce the dictionary to their peers also proves that they highly appreciate the dictionary as an assisting tool.

		Т	TABLE 2								
	STUDENTS' SATISFACTION TOWARDS OOCD USE										
ITEMS	VARIABLES	N	STRONGLY	AGREE	DISAGREE	STRONGLY					
			AGREE	%	%	DISAGREE					
			%			%					
5	Confident in expressing ideas	79	14.2%	74.8%	11.0 %	0%					
6	Helpful for expanding collocation knowledge	81	63.6%	30.3%	6.1%	0%					
7	Use more collocations	81	33.3%	57.6%	9.1%	0%					
8	Help improve my writing	81	48.5%	42.4%	9.1%	0%					
9	Prefer the OOCD to other dictionaries	81	24.6%	57.2%	18.2%	0%					
10	Use the OOCD to assist my writing in the	81	50.5%	46.5%	3.0%	0%					
	future										
11	Recommend using the OOCD to my friends	81	40.5%	45.5%	14.0%	0%					

Learners' high level of satisfaction about the use of the dictionary as a supportive tool for collocation search was confirmed by the interview data. All the interview participants were of the same opinion that the OOCD is a useful tool and that they feel confident when using it to support their writing (S1: It helps me to prevent translating Vietnamese to English word for word. It's also quite convenient for a student like me to find a natural expression of a word; S2: It's really useful; it saves me time in writing ... Finding and discovering one collocation make me more confident because I know that I'm in the right direction...; S5 (recording sheet): It is convenient. When I search the word stress, I can find many useful collocates that I can use later.) For the purpose of collocation check-ups, the encouraging assessment is understandable since the focus of this specialized dictionary is on collocations whereas there is a basic lack of collocations in other general British monolingual dictionaries (Hottsrnonn, 1991, p. 230), or they are hidden in examples (Laufer, 2010).

Two of the participants expressed their trust in the dictionary since it is provided by a famous publisher, Oxford University Press, especially when comparing it to other sources for collocation search like "hello chao" or "google translate" (S4: it is a reliable source for collocation check-up since it is compiled by a famous publisher). 90.9% of the participants in the survey thought that their writing would improve due to enhanced collocation use and that they would use more collocations if they could use the dictionary to assist with their writing. From the interview data, one participant shared that the dictionary offers a wide choice of native-like lexical collocations, which could help her avoid repetition in her writing (S5: it makes my writing more natural like the way native speakers write; it also helps me avoid repetition in my writing). Another participant also shared that she is in the habit of learning new words and the dictionary is a good source of collocations to learn from. However, it should be noted that the results of this study do not provide evidence as to the effectiveness of the dictionary.

The results from the survey data also show that preference for using this dictionary over others for collocation look-up was high among the students (81.8%). However, they also reported in the interviews some negative attitudes towards the dictionary. A reason for not preferring this dictionary to others is sometimes a waste of time; they shared their expectation of the dictionary to have the meanings of each collocate group presented. S6 noted that 'it would waste me more time if I did not find the collocates that I wanted, or if I found some collocates but did not know their meanings.' This suggestion is worth considering since evidence from a study by Cao and Deignan (2019) looking at learners' use of the OOCD to support their collocation use in L2 writing shows that learners did not always use collocations found from the dictionary contextually appropriately. Providing meaning of each collocate group is also expected to help reduce search time for their meanings in other dictionaries. In this way, the dictionary could be helpful to learners at lower levels, whose vocabulary store is more limited.

Another no less important factor contributing to the students' dissatisfaction is the dictionary not providing descriptions of pronunciation of headwords. Though this neither directly affects nor is necessary for their collocation use in writing, it literally is a drawback to dictionary users for their other receptive skill, speaking. It is true that, as can be seen in Figure 3 below, pronunciation description is not given. One compared it with other dictionaries:

S1: It does not provide pronunciation description of all headwords. It could be ok if I use it for writing purpose but for speaking skill it is a disadvantage. Other dictionaries provide not just pronunciation but indicate differences in pronunciation between British and American English. Learners at this level, like me, can read the phonemic transcription, so human voice articulating words is not very necessary.

## stress noun

1 state of tension

ADJ. acute, considerable, extreme, great, high, severe Separation is a time of high emotional stress. | excessive | greater, increased | low | daily the daily stress of teaching | emotional, mental, psychological, social | economic, financial The high mortgage payments put them under severe financial stress.

## suffer verb

<u>ADV.</u> a lot, badly, greatly, severely, terribly This area suffered very badly in the storms. | needlessly Thousands of children in the world today suffer needlessly.

## difficult adj.

<u>VERBS</u> be, look, prove, seem, sound | become, get It is getting more and more difficult to find a job. | make sth The fog made driving very difficult. | find sth

Figure 3: OOCD Search of stress, suffer, difficult

#### Perceived effectiveness

Looking at the effectiveness of the dictionary use rating across all participants gives the results shown in Table 3 below. As can be seen in this table, most of the participants (94%) contended that they can easily look up collocates of a word from this dictionary. Though lower, recording sheets recorded 80.9% of times participants found the collocations that they wanted to express their ideas in writing. Interview data also validated this. Two participants shared that most of the time they found collocations that they wanted to use (S2: When I want to find a verb for success, I can use achieve, obtain, or have ... a lot of collocates I can use. It is very useful when you are at intermediate or advanced level in IELTS.)

Another participant shared that the dictionary is effective in that in one search she could find different collocates that can go with a headword, so she could use them later in her writing to avoid repetition. For example, when searching for the word *stress*, she came across the collocation *level of stress*, which, as she reported, was made use of soon after that. Finding several useful collocations in one search could be seen as an advantage of the OOCD over other general dictionaries.

TABLE 3

Items	Variables	n	Strongly agree	Agree	Disagree	Strongly disagree	
1	Easily look up collocates of a word	81	27.3%	66.7%	6.0 %	0%	
			Always	Often	Occasionally	Never	
12	Get instructions on collocation use	81	21.2%	51.5%	24.2%	3.1%	
13	Get information needed	81	0%	69.7%	27.3%	3%	
14	Use the dictionary in combination with other dictionaries	81	9.1%	57.6%	30.3%	3%	

However, more than a quarter of the participants (27.3%) responded that they only occasionally or even could not find instructions on how to use collocations through examples. This coincides with the result of the observation data (see Table 4 below), which showed that in nearly a quarter of the searches (22.2%) participants did not find instructions on collocation use. The percentage of responses to this question (85.4%) is not really high though. This is because, as the author explored in the interviews, although they could not find examples illustrating how the collocations they found were to be used, they knew how to use them grammatically correctly by looking at other examples.

TABLE 4
SUMMARY OF FINDINGS FROM RECORDING SHEETS

Items	Questions	Yes	No	Missing
3	Did you find the word you were looking for?	256	51	8
		81.3%	16.2%	2.5%
5	Did you find instruction on how to use it?	199	70	46
		63.2%	22.2%	14.6%
6	Did you use the OOCD in combination with other	32	283	0
	dictionaries?	10.2%	89.8%	

The survey data showed that 30.3% of the participants only occasionally or even never found the information they wanted. 57.6% of the participants responded that they had often used the collocation dictionary in combination with other dictionaries, mainly to look for meanings of collocates. This could relate to non-plentiful content, a dislikeable feature about the dictionary that participants shared in the interviews. Three of the participants said that they were not

very satisfied with content of the dictionary because it is not rich. It only has a limited amount of words; it does not contain academic words like *abnormal*, *anomalous*, *acquire*, or *face* (a verb) and many more words that they learn in SAT and GRE. Also, for each word that it presents, it provides fewer meanings than other general dictionaries. An example that one participant used to illustrate the point is the word *policy*. The OOCD gives two meanings, while in the Oxford Advanced Learner's Dictionary *policy* has three meanings:

OOCD: 1. Plan of action

- 2. Insurance contract
- OALD: 1. A plan of action agreed or chosen by a political party, a business;
  - 2. A principle that you believe in that influences how you behave;
  - 3. A written statement of a contract of insurance

The participants expressed their concern, stating that the dictionary does not provide many collocates that can accompany the headword being considered. Failure to present combinations that they believe to be used by native speakers confuses them. They also suggested that it can hinder their creativity in combining words. S1 shared:

S1: It (the OOCD) just lists down some of the most common combinations. I know that native speakers use some combinations that are not in the dictionary. I feel that the OOCD hinder my creativity. I don't know if I can combine some new adjectives that I've learned with a noun or not, so I sometimes get confused and not comfortable when I use a collocation from the dictionary.

Their concern regarding content of the dictionary is undeniably true. There is a substantial difference in the number of word combinations and examples between the online dictionary and its installed electronic version. The online dictionary provides around 150,000 combinations and 50,000 examples while the electronic collocation dictionary presents over 250,000 combinations and over 75,000 examples (McIntosh, 2009). According to Benson (1989b), it does not provide learners with collocations that are predictable. However, the decision of which collocations are predictable and which are not is not always easy to make since lexicographers are often from different linguistic and cultural backgrounds from learners. In reality, learners are still struggling with collocations that lexicographers consider 'predictable', such as see a doctor (Nakamoto, 1992), or improve (public) transportation, improve the traffic, improve life, reduce exhaust fume, and internal factors (Cao & Deignan, 2019). It seems important for the dictionary users to know that compared to the installed electronic version the online dictionary provides fewer word combinations and examples. Learners can rely on it as a facilitator to look for suggestions for collocations, but should not restrict themselves to the collocations provided.

Lack of examples to illustrative how a collocation should be used is also one of the factors that make the dictionary less effective. Having no illustrative examples sometimes contributed to the users' perplexity. One participant shared on the recording sheet that 'There is no example in some cases, so I don't know if I use the combination found in the dictionary appropriately in meaning in a particular context.' Regarding this, the author argues that the dictionary has given a fair number of examples as illustration for usage. There are almost always examples for each semantic set; in cases that there are not, the collocations are quite straightforward to use. Learners are supposed to be able to construct them based on their syntactic knowledge without difficulty. Take, for example, the headword challenge in Figure 4 below. Adjectives that can collocate the noun with its first meaning sth new and difficult are many, but there is only one example provided. Similarly, in the case of challenge as a verb, one group of adverb collocates (e.g., successfully, unsuccessfully) is given without examples to illustrate. However, for learners at upper intermediate level upwards the use of these collocations is deemed quite simple. They only need to combine them based on their syntactic knowledge. This argument is backed up by a response from the interviews, stating that there is no difficulty in using collocations provided by the dictionary in terms of syntactic structure. However, the suggestion should not be ignored since an online dictionary does not have space restriction as a paper dictionary does. With good planning it can provide learners with more examples, or at least one for each collocate group, without detracting from clarity and accessibility.

```
challenge noun
1 sth new and difficult
ADJ. big, considerable, enormous, great, huge, radical, real, serious, significant, strong
difficult, tough | major, main | fresh, new | exciting, interesting | economic, environmental,
intellectual, political, technical, technological Liszt's piano music presents an enormous technical
challenge.

VERB + CHALLENGE be, pose, present | face, meet, respond to, rise to, take on/up The gallery
has risen to the challenge of exhibiting the works of young artists. He has taken on some exciting
new challenges with this job.
CHALLENGE + VERB face sb the challenges facing nurses in casualty
^{2} that shows that sb refuses to accept sth
ADJ. serious | direct | effective | legal
<u>VERB + CHALLENGE</u> be, present, represent The demonstration represents a direct challenge to
the new law.
PREP. ~ to a legal challenge to the president's power
<sup>3</sup> invitation to compete
ADJ. leadership, title his title challenge to the heavyweight champion
                 <u>ENGE</u> issue, mount plans to mount a leadership challenge within the party |
accept, take up I accepted his challenge to a game of chess. | beat off, fight off Our team will have
to fight off the challenge from better trained teams.
PREP. ~ from a challenge from the other political party
challenge verb
1 question whether sth is right/true
ADV. directly The newspaper was directly challenging the government's legitimacy. | seriously |
effectively She was effectively challenging the whole basis on which society was run. | successfully
The story was completely untrue and was successfully challenged in court.
PREP. on She challenged him on his old-fashioned views.
<sup>2</sup> invite sb to compete, argue,
ADV. seriously No one has seriously challenged the champion. | successfully, unsuccessfully
PREP. for She was poised to challenge for the party leadership. | to The count challenged him to a
```

Figure 4: OOCD Search of the Word challenge

#### D. Assessment on Accessibility and Ease of Use

Table 5 below presents the survey results pertaining to learners' evaluation of accessibility and ease of use. Findings show that language learners can access the dictionary easily when the internet is available (91%). This is also what six of the interviewees like about the dictionary, stating that the dictionary can be accessed from any technological device and can be opened very quickly, while for other electronic dictionaries it often takes a little while. This finding is in agreement with Chon (2009), who showed that the availability of the online dictionary also helps learners to get rid of the burden of carrying with them bulky paper dictionaries or installing an electronic dictionary on their technological devices ready for use. Yet learners can only access it if the internet is available. To some others, this turns out to be a drawback since internet is not available everywhere. Even if it is available it does not always guarantee fast and efficient access. Internet speed decides how fast a look-up is. In reality the participants in this research at times experienced slow and interrupted searches, which might have affected their flow of thought.

The online collocation dictionary could be a solution for the problem of time involved in flicking through the dictionary pages and subsequent disruption of the flow of writing which concerned students in Dziemianko's study (2010). This could encourage learners to do more exploratory browsing (Nesi, 2000) and so learners can learn more from the language input (Laufer, 2010). However, concerns that information that can be retrieved so quickly and painlessly from electronic or online dictionaries will be forgotten easily (Nesi, 1999) are not irrational and therefore need to be further researched. Faster searching time could be their general assessment based on their intuition of the time for a word being looked up to appear on the screen compared to the time to find it in a paper dictionary. If the author consider the check-up time as the whole process starting from a word being typed in until a collocation is found, learners' responses to this feature could have been different.

TABLE 5
ACCESSIBILITY AND EASE OF USE

Items	Variables	N	Strongly agree	Agree	Disagree	Strongly disagree
2	With internet availability I can access	81	50.5%	40.4%	9.1 %	0%
	this dictionary easily					
3	Save time for each check-up	81	63.7%	36.3%	0%	0%
4	The layout of meanings, grammatical use and frequently used expressions is user-friendly	81	20.2%	64.6%	15.2%	0%
			Always	Often	Occasionally	Never
16	I have difficulty in making a choice of collocates found	81	12.1%	21.2%	54.5%	12.2%
17	It takes me time to look for collocates from other dictionaries	81	15.2%	27.3%	48.5%	9.0%

84.8% of survey participants responded that the layout, grammatical use and frequently used expressions are user-friendly. Responding to this question, three interview participants shared that the dictionary is clear and well-organized. This could be an element contributing to the high level of satisfaction with the dictionary discussed earlier. The use of different colours, uppercase/lowercase letters, or words in bold or italic help them scan for the position of the part of speech of words that they want to look for fast and easily. Also, the arrangement of words with similar meanings together assists them in using collocations regardless of the limited number of examples. One participant shared 'It puts collocates of similar meaning together. Even if you don't know meanings of some collocates, you can find it in that group they have similar meaning and figure out meanings of words in that group.'

However, finding from the interview showed that its interface is also an aspect that needs to be improved. Compared with other webpages that also assist English learners, one participant assessed that it is quite plain and tedious, not professional. She supposed that if there were more pictures to illustrate, it would be more attractive, and hence could help learners learn more easily. However, the author believes that there is no need to expand the dictionary in that way because the audience the dictionary is aimed at are upper intermediate to advanced level, and more importantly its primary purpose is to provide collocates for productive use rather than providing meanings of headwords.

87.8% of the participants reported in the questionnaires that they have difficulty in making a choice of collocates for a headword, so sometimes it takes time to look for collocates from other dictionaries (according to 91% of participants). As one of the participants stated, she has almost no difficulty in using grammatically correct collocations found in the OOCD in her writing. What matters is that she does not know the difference in meaning between collocates instead. Another difficulty that participants sometimes experienced in using the dictionary is that when typing in a word in the search box, it does not provide a list of words suggested based on the first initial letters of the word being searched.

The presentation of the noun-noun collocation in the dictionary is an issue that needs examining. If, as confirmed by the dictionary compilers, the presentation of collocations in the dictionary is at the base entry, which learners will think first, then the presentation of noun-noun collocation seems not to comply with the rule. Vietnamese learners, in order to express an idea like ch  $\acute{n}h$   $s\acute{x}ch$   $gi\acute{x}o$  duc (education policy), tend to start thinking of the second noun policy (ch  $\acute{n}h$   $s\acute{x}ch$ ), which is not the base. This means that in order to search for a noun-noun collocation, learners have to remember which of the two nouns is the base. One participant shared that It's a bit confusing. I think it's (N-N) collocation different from others (collocation patterns). Like for the case of a bunch of flower, it's clear that you start searching with flower, but for this case (work experience) we don't start with experience, which is the main noun.

#### IV. CONCLUSION

Findings from the study show that learners were generally positive towards the use of the OOCD for collocation searching. The majority of learners felt more confident that their collocation use is native-like and believed that the dictionary helped them expand their knowledge of collocations. They approached the dictionary for help most frequently with collocations of adjective-noun pattern, followed by the verb-noun pattern. However, lack of plentiful content was found to be one of its limitations, alongside with lack of pronunciation and suggestions for looked-up words. When introducing the dictionary to the learner, it is believed to be important for the teacher to give them sufficient training on how to make full use of it. They need to emphasize to the learners that the dictionary provides support with possible collocations; nevertheless, the list is not exhaustive. Awareness-raising about what the dictionary can offer is significant since in this study failure to do that caused unnecessary confusion for the learners. Evidence from the study also showed that the dictionary sometimes failed to provide learners with information that they needed to use collocations correctly in meaning. Therefore, it would be a good idea for the dictionary compilers to provide the learner with the meanings of collocate groups. Another possible solution for this is that they might consider creating links between this dictionary and the Oxford Advanced Learner's Dictionary in providing the meaning of each collocate. One important limitation that the author was fully aware of is the possible impacts of her role as a teacher in this study. Playing the two roles at the same time, to some extent, affected the participants' responses to the questionnaires, interviews, and behaviour towards the dictionary. Many attempts were made to minimize them as the author mentioned above; however, it is hard to say for certain how far those resolutions worked.

Findings of the study show that learners highly evaluate the dictionary as a supportive tool although it was not found to bring about positive results (Cao & Deignan, 2019). Cao and Deignan (2019) found that more odd collocations occur when learners writing with the dictionary support than without. However, in that study they only looked at impact of the dictionary on learners' collocation use in L2 writing whereas in reality learners not only consult the dictionary when they are doing the writing but also expand their store of vocabulary in their learning process. Accordingly, an investigation of learners' collocation competence after a period of using the dictionary would be interesting to carry out. Research in that direction is worth conducting since in the longer term learners are expected to be able to use collocations confidently without relying on any supporting tools. Also, most of the general dictionaries contain collocations and the presentation of collocations in these dictionaries is constantly improving. It, therefore, would be interesting to carry out research comparing the effects of the use of general dictionaries and this specialized dictionary on learners' collocation competence, as well as their perceptions of the dictionaries.

#### APPENDIX. RECORDING SHEET

Dictionary user's number:

1								2	3		4	5	6	7	∞
What entry were you looking up?	What types of collocations were you looking for?					What types of collocations were you	Did you find the word you were looking for?		Why did you look up the word?	Did you find the instruction on how to use it?	Did you use OOCD in combination with other dictionaries?	How satisfied were you with what you found?  Choose the scale from 1-5 with  1: very dissatisfied to 5: very satisfied	Other comments/why did you use other dictionaries? If yes		
	V-N	N-V	Adj-N	Adv-V, V-Adv	Adv-Adj	N-N	N-of-N	Others		Checking (C)	Finding (F)				
Discuss (v)				1					Y	V		Y	N	4	

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