



THE EFFICACY OF KIBBITZER IN SOLVING SPECIFIC LANGUAGE PROBLEMS AMONG ESL UNDERGRADUATES



 Nurul Aimi Azmi¹

 Tan Kim Hua²⁺

 Imran Ho Abdullah³

 Hazita Azman⁴

^{1,2,3,4}Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, Selangor, Malaysia.

¹Email: nuaimiazmi@gmail.com Tel: +60134873180

²Email: kimmy@ukm.edu.my Tel: +60192735440

³Email: imranho@ukm.edu.my Tel: +60389213032

⁴Email: hazita@ukm.edu.my Tel: +60389215356



(+ Corresponding author)

ABSTRACT

Article History

Received: 3 December 2020

Revised: 5 January 2021

Accepted: 22 January 2021

Published: 11 February 2021

Keywords

Kibbitzers

Corpus-based approach

Near synonyms

Data-driven learning

Language problems

English as a second language (ESL).

The corpus-based approach is known to be beneficial in developing teaching materials for language learning and teaching. Kibbitzers, which are language modules, are developed using an indirect corpus-based approach and they address specific language problems. The modules are meant for self-paced, self-accessed and independent study. In this study, the efficacy of Kibbitzers in disambiguating pairs of near synonyms which are generally confusing to learners who are investigated. The two key research questions are: a) Is Kibbitzer useful in disambiguating the meaning of pairs of near synonyms? b) How can a Kibbitzer assist learners to differentiate pairs of near synonyms? Thirty two (32) English as Second Language (ESL) undergraduates in Malaysia were recruited to test the use of it. The results indicated that the overall use of Kibbitzers is statistically beneficial for ESL learners. The features incorporated in Kibbitzers helped learners by offering examples from concordance lines, links to Corpus Banks and presenting explanations in a creative way. This helped clarify how a language item should be used in a specific situation enormously. Potential Kibbitzer developers and classroom practitioners who may want to incorporate Kibbitzers in their language classrooms will find the results useful in addressing specific language problems.

Contribution/ Originality: This study contributes to the existing literature of indirect corpus approach in language learning and teaching. It is one of very few studies which have investigated the efficacy of Kibbitzers in addressing specific problems related to differentiating pairs of near synonyms in the Malaysian ESL learner context.

1. INTRODUCTION

Data-driven learning (DDL) is known to be one of the approaches in language teaching which utilizes corpora. In DDL the main objective is to understand patterns throughout all language levels. While doing so, students become researchers. Through their research, language students can see how typically an aspect of language is used, which in turn informs how they can use it in their own discourse and writing. Over 20 years ago, Johns (1991) pioneered DDL and coined the term in his article "Should you be persuaded: Two examples of data-driven learning." Recently major books credit Johns as the initiator of the approach (Bennett, 2010; Reppen, 2010). Johns' unique approach to data-driven learning has intrigued other researchers and students to explore more. Johns would explore the errors of his students' written work using corpus data where he referred to his specific DDL approach as kibbitzing. In his classroom, John integrates the use of Kibbitzers. Kibbitzer is a term used to indicate language

modules which are developed using an indirect corpus-based approach with the aim to address specific language problems. These modules are meant for self-paced, self-accessed and independent study.

Like John, , numerous other researches have also integrated DDL in various parts of language teaching and learning, such as error correction in writing (Luo & Liao, 2015) teaching of grammar (Lin & Lee, 2015) reading (Hadley & Charles, 2017) vocabulary acquisition (Karras, 2016; Lee & Lin, 2019) and vocabulary teaching (Barabadi & Khajavi, 2017). Vyatkina (2016) indicated that paper-based DDL materials seem to be more effective than conventional approaches for teaching student new collocations at a lower proficiency level. Teachers have established DDL as a creative and fascinating approach to grammar teaching (Lin & Lee, 2015). Conversely, Hadley and Charles (2017) suggested that a softening of the DDL technique will ensure improved outcomes with lower-proficiency learners.

Yunus and Awab (2014) claimed that the direct use of DDL can harm students in so many ways. Yunus and Awab (2014) quoted (Johns, 2002) saying that, “the direct use of concordance data poses many challenges: scientific, linguistic, logistical, pedagogical and philosophical.” Maddalena (2001) gathered from her study that concordances created from a related corpus should not be used directly with students in Japanese high school. Therefore Chambers (2005) has proposed a point for future research involving other educational sectors, likely in the context of teacher-prepared concordances rather than direct access. Moreover, Yoon and Jo (2014) revealed that relatively fewer reports have been recorded on the application of indirect corpus usage in the classroom.

On the basis of the suggestions of past studies, this study attempts to discover the usability of an indirect corpus approach module called Kibbitzer in addressing pairs of near synonyms among English as Second Language (ESL) undergraduates in Malaysia.

Reppen (2010) explained about two Kibbitzer pages which are developed by Tim Johns and the MICASE Kibbitzer “both of these sites use corpus-based research to provide information for teachers and for advanced language learners to use to help inform their language choices. Both sites often use the format of providing KWICs to expose the user to a large number of examples of the target form”. Previous Kibbitzers developed by Johns tend to examine the types of issue that arise when revising the written work of ESL students. Reppen (2010) indicated that the structure of Johns’ original Kibbitzers usually begins with an excerpt from students’ text, which is then contextualized in the example. The structure of the Kibbitzer ranges from providing explanations from the concordance line to providing answers through a separate link, which helps in explaining how an item can be used in a specific situation. However, this Kibbitzer does need additional effort from instructors and developers to turn into a ready-to-use language tool (Reppen, 2010). Using Kibbitzers help learners observe the process of researching evidenced vocabulary to arrive at situations where a word or phrase is usually used. Situations here apply to the context of semantic, syntactic, and discourses.

In his first Kibbitzer, Johns mentioned that a good dictionary also points to connotational features, but even if the examples given are accurate, the foundation for a trustworthy generalization might not be sufficient. “For example, COBUILD gives only two examples for incessant–incessant warfare and incessant demand for change and two for steadfast–steadfast in his praise and steadfast dedication. The dictionary examples might well give the learner a ‘feel’ for the connotations of the two words: but those connotations ‘leap’ unforgettably from the concordances,” he further justified.

2. MATERIALS AND METHODS

2.1. Research Questions

This study is guided by two main research questions:

1. Is Kibbitzer effective in disambiguating the meaning of pairs of near synonyms?
2. How does Kibbitzer help learners in distinguishing pairs of near synonyms?

2.2. Research Design and Sampling

This case study applies three methods to obtain the data. First is a pre- and post-tests, which consists of two sections. In the first section, the participants are asked to write short sentences, and in the second section, they are asked to answer gap-filling questions with appropriate word from a list of pairs of near synonyms. For the second set of data, the participants are asked to answer an open-ended questionnaire, which mainly comprises questions regarding participants' experience after using Kibbitzers. The last set of data is obtained from a focus group interview where the participants are asked questions regarding their perceptions after utilizing the Kibbitzer.

By purposive sampling participants who are ESL undergraduates from various specialties in the National University of Malaysia (UKM) are selected. The participants who showed interest were selected based on similar characteristics, such as must be 19–25 years old, and possessed Malaysian University English Test (MUET) score of Bands 2–5 and from various faculties of UKM. Most of the Malaysian undergraduate students underwent MUET before entering Malaysian universities' undergraduate program; thus, this will be the indicator of the participants' English proficiency. Band 1 indicates the lowest level proficiency, whereas Band 6 indicates the highest. This study is relevant to the participants as undergraduates are required to pass English language subject as a part of their degree program. A total of 32 participants are selected, and the participants profile is provided in [Table 1](#).

Table-1. Profile of Participants.

Demographic	Frequency	Percent (%)
Gender		
Male	13	40.6
Female	19	59.4
Total	32	100
Age		
19	1	3.1
20	8	25
21	8	25
22	9	28.1
23	5	15.6
24	1	3.1
Total	32	100
MUET		
Band 2	2	6.3
Band 3	9	28.1
Band 4	18	56.3
Band 5	3	9.4
Total	32	100
Courses		
Actuarial Mathematics	1	3.1
Anthropology and Sociology	3	9.4
Developmental Science	1	3.1
Electrical Engineering	2	6.3
English Language Studies	9	28.1
Facilities Maintenance Engineering	1	3.1
Finance	2	6.3
History	3	9.4
Linguistics	1	3.1
Malay Language Studies	1	3.1
Marine Sciences	1	3.1
Mass Communication	1	3.1
Material Science	1	3.1
Mechanical Engineering	1	3.1
Nursing	1	3.1
Science and Mathematics	1	3.1
Teaching ESL	2	6.3
Total	32	100

2.3. Procedure

The first procedure of this study is the pre-test. In the pre- and post-tests, two sections of questions require the participants to create short sentences for each of the near synonyms determined. For the second section, the participants are asked to answer gap-filling questions with the most appropriate items from the list. The pre- and post-tests aimed to test the participants' knowledge on pairs of near synonyms. Examples of the pairs of near synonyms include assure and ensure, further and farther, and suggest and recommend. These pairs of near synonyms are obtained from a pilot study conducted prior to this research. The participants of the pilot study include ESL schoolteachers, university instructors, and undergraduate students. Based on the pilot study, the most confusing pairs of near synonyms are listed and are used as the main items on the tests. The tests are conducted for approximately 30 minutes.

The answers are then collected, and two raters who are ESL teachers will determine the participants' results. The participants who answered every item in the test correctly are deemed as pass, whereas those who did not answer all the questions correctly are deemed as fail. In case the two raters cannot reach consensus, a third rater will help in determining the result.

The second procedure begins after the pre-test where the participants are each given developed Kibbitzers that focus on the specific pairs of near synonyms mentioned above. The participants are given exactly 7 days to independently read and comprehend the Kibbitzer. Extra links and information are also provided in case the participants need more information from the Kibbitzers.

A week after the pre-test, the participants will undergo a third procedure, which is the post-test. Each participant is given exactly 30 minutes to write short sentences and fill in gaps with appropriate answers. During the test, the students will answer independently without any external help. Next, the participants are asked to answer an open-ended questionnaire regarding their experience and perception after utilizing the Kibbitzers. Lastly, a 30-minute focus group interview is held with a group of 6 participants each. This focus group interview aims to summarize the participants' overall experiences after the treatment.

2.4. Instrument

2.4.1. Kibbitzer

The developed Kibbitzer addresses issues in relation to the usage of pairs of near synonyms. As mentioned earlier, the list of confusing pairs of near synonyms are obtained from a pilot study. Some examples of topics and words that have been described are 'in my mind and on my mind', assure and ensure', 'further and farther, and 'suggest and recommend'. One of the pairs of near synonyms (i.e., assure and ensure) is also listed in the Longman dictionary of common errors. Near-synonyms are defined by [Murphy \(2003\)](#) as items that have similar but not identical meaning. [Sun, Huang, and Liu \(2011\)](#) revealed that language teachers usually prepare students to use two essential techniques to recognize the definition of unknown words: (a) the capability of guessing and (b) the ability to use the dictionary efficiently. Thus, this study proposes to utilize Kibbitzers as a language tool to address the problems related to pairs of near synonyms.

The structure of the developed Kibbitzers comprises an introduction that provides background details of the words. Then, another section provides concordance lines as examples of how the words are used in different contexts as shown in [Figure 1](#) and [Figure 2](#). Additionally, brief explanations are provided with tables and graphics related to the language items. At the end of the Kibbitzers, exercises and activities are provided as shown in [Figure 3](#). Sample answers are also provided to help the participants check their comprehension independently. The examples of contents which can be found in the Kibbitzers used by the participants in this study are illustrated as in [Figure 1, 2 and 3](#).

The structure and content of a Kibbitzer is different from other language learning tools. Traditionally, language learners use books and dictionaries to address language problems. However, Kibbitzers are different in

terms of the presentation of data. Particularly, Kibbitzers use corpus-based research to provide information and help inform language learners on their language choices. For example, Tim Johns and the MICASE Kibbitzer use the format of providing KWICs to expose language learners to a large number of examples of the target form. Corpora provide a rich source of authentic instances of language use (Barabadi & Khajavi, 2017).



Hi! I am your guide for this section. Let us come along!
Below are the examples for the usage of the word: **Assure**.

price. The mood of deregulation is tempered only by reference to the need to assure the public of the competence of providers of legal services. The debate which the
in order to diagnose problems and develop, implement and evaluate remedies, or to assure oneself that all is well. It is assumed that the evaluation of particular pract
suitable and necessary for attaining the aim of the quotas... which is to assure to each member state a share of the Community's total allowable catch, determined
company can not proceed without the position being established beyond doubt. Can your council assure my company that when carrying out the proposed review un
have done enough by superintending himself the execution of the document and by attempting to assure himself by means of questions or explanation that she know
is now regarded as mistaken. In a reply Hay and Hammond (1992) assure readers that they are not guilty of dualism or rampant individualism. The experiential appro
discover at first hand the delights of owning your own Highland retreat, I can assure you there is absolutely no commitment. And there is the pleasure of a relaxing
one pound will strike you as a remarkable offer right now. We can only assure you that, as the years go by, you'll be more and more
of about 12 irrigation training institutes in a large developing country in South Asia to assure their long-term sustainability, including the promotion of technology tran
measles may be passed on easily at school, but NOT HIV. You can assure your child that kissing and hugging are not dangerous. Nor are sharing cutlery,
and the odd Swedish blonde. I was worried about the latter but I can assure you here that there is little cause for concern. The thermal shock of zero
sheet up to the Northern Lights. They give me a reindeer hood that they assure me will be warmer than my silk and fleece and wool. They do not

Let us refer back to the definition of **Assure**:

(Def.) To tell someone confidently that something is true, especially so that they do not worry.

Figure-1. Example of Concordance Line in Kibbitzers.



Next, let us look at the usage of the word: **Ensure**.
Below are the example of the usage of the word.

added:' We are gravely concerned about the incident and have taken steps to ensure that, by additional training and regular monitoring, the safety of schoolchild
line could technically cope with the Enron power, a new line was needed to ensure the system ran according to laid-down standards. During the two-year gap bet
. To this end the CPL has won a little victory in its efforts to ensure that the cat is not put out with the milk bottles. Having espied precisely
a right to be able to breathe properly. If that does not happen we ensure the continuation of the social and physical ills so prevalent in society today.'
travel up the A701 or the A74 (soon to be renumbered M6) to ensure that our letters will bear their distinctive Scottish postmark without being made to feel like
and always freely passed on, although there is a charge to private hospitals to ensure that the full cost of collection, testing and processing is recovered by the Ni
grape, or vineyard, in New Zealand,' he began, 'to ensure that there is the right amount of grape exposed to the sunlight, is to
a friend at all times -- these are the boys and girls that really will ensure you get to make the most of your holiday. You're never alone with
discover different islands. Your Clubrep will, as ever, be on hand to ensure everyone makes the most of their trip and will point you in the right direction
check and re-check the information about accommodation and resorts both at home and abroad to ensure that it is correct at the time of going to press Dec (198
Bel. We want you to choose the Club to suit your needs, to ensure that you get the very best from your holiday. For this reason, the
and flowers. The large and very enthusiastic entertainments team create a welcoming atmosphere and ensure that there are plenty of activities to keep everyone
your stay and prior warning may not be given. Obviously Club managements try to ensure that this work is carried out with the minimum of inconvenience to gu

Now let us refer back to the definition of **Ensure**:

(Def.) To make something certain to happen.

Figure-2. Example of Concordance Line in Kibbitzers.



Have I understood enough? Let us test our understanding with these exercises!

Fill in the blanks with **Assure** or **Ensure**.

1. I _____ you that you'll be warm enough.
2. These blankets _____ that you'll be warm enough.
3. Mauricio saved money from every pay check to _____ he could buy gifts for his family at the end of the year.
4. I _____ you that I have been honest about the money I spent.
5. Roast Brussels sprout mixture on sheet pan for 12 to 15 minutes, shaking pan about halfway through to _____ even cooking.

Figure-3. Example of Exercises in Kibbitzers.

2.5. Data Analysis

The data collected from the pre- and post-tests are quantitatively analyzed using IBM SPSS through a descriptive statistic method. The analysis of the participants' scores from the pre- and post-tests will indicate the effectiveness of the treatment.

The data obtained from the open-ended questionnaires are analyzed by means of a content analysis, which is a qualitative interpretation of the participants' answers to the questions presented by grouping of codes and the theme for pattern recognition (Hsieh & Shannon, 2005). The goal of this analysis is to present comprehensive descriptive explanations to the questions. The codes are then classified and grouped together using Microsoft Excel.

The various codes gathered are then counted and divided by the number of participants resulting in percentages. These percentages indicate the amount of time similar ideas are presented by the participants. Likewise, the focus group interviews are also transcribed and analyzed accordingly. Major themes indicated from the developed codes are discussed in the section of the findings.

The final step of the data analysis begins contextualizing the findings of the data. This procedure is particularly important to address the research questions and form data interpretation. In this final stage of data analysis, the data presented are supported by extracts, tables, and graphs (Peel, 2020).

3. RESULTS AND FINDINGS

3.1. Pre- and Post-test Scores

The scores from the pre- and post-tests indicate a slight increase in the participants' post-test score (1.56%) compared with the pre-test scores (1.16%) as indicated in Table 2. In the pre- and post-tests, pass signifies that the participants answered all the items in the test correctly, whereas fail signifies otherwise. After a week of self-paced learning treatment using the Kibbitzers, the data signify a slight increase in the participants' post-test scores. Thus, this treatment has a positive influence on some of the participants. That is, the content of the Kibbitzers have helped the participants in distinguishing pairs of near synonyms and accurately apply them in the post-test.

A paired sample t test conducted shows the sig. (2-tailed) value of less than 0.001 as shown in Table 3. Thus, a statistically significant difference exists between the mean of pre- and post-test scores.

Table-2. Pre- and Post-test Scores.

	N=32			
	Pre-test		Post-test	
	Count	Percent (%)	Total	Percent (%)
Fail	27	84.4	14	43.8
Pass	5	15.6	18	56.3
Total	32	100.0	32	100.0
	M (%)	SD (%)	M (%)	SD (%)
Score	1.16	0.369	1.56	0.504

Table-3. Paired Samples Test

		Paired Differences					t	df	Sig. (tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test Score Post-test Score	-0.406	0.560	0.099	-0.608	-0.204	-4.104	31	<.00

3.2. Past Methods of Learning Pairs of Near Synonyms

The findings from the questionnaires as shown in Figure 4 indicate that before using the Kibbitzers or in other words before the treatment, the participants have various ways of handling problems regarding ambiguous words. The most prominent method (40.6%) is using the Internet. Some of the websites mentioned include Google, Google Translate, Grammarly, and YouTube. Most participants who used the Internet used the Google search bar to distinguish pairs of near synonyms. Google is one of the most popular search engines that are easily accessible via mobile phone or computer. Most of the undergraduate students own a mobile phone and have access to mobile Internet; thus, using Google is one of the fastest ways to gain new knowledge and information. In this case, Googling will take considerably less time rather than using a dictionary (15.6%) or asking for help (12.5%). Moreover, 25% of the students opt to handle word problems by using their background knowledge. In a Malaysian context, students started learning ESL no later than 6 years old. Thus, these undergraduates have at least 8 years of prior knowledge on English language, and the second mostly used method will thus be to use their intuition. One of the participants will try to use each word in a sentence, “If it sounds weird in a sentence, then I guess it’s incorrect.” Lastly, the participants also use examples and practices (9.4%). Some participants find examples of how the words are used in sentences, and others try to learn by listening.

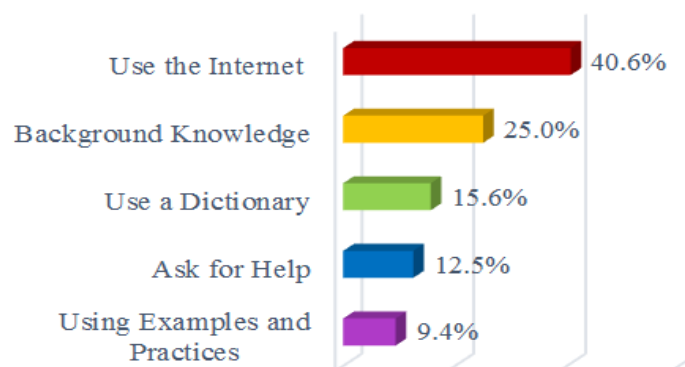


Figure-4. Past method of learning near synonyms.

3.3. Usability of Kibbitzers in Addressing Pairs of Near Synonyms

The second part of the questionnaire discusses the usability of Kibbitzers in addressing problems related to pairs of near synonyms as shown in Figure 5. Mainly, 66% of the participants prefer using Kibbitzers, and 38%

thinks otherwise. Most of the participants who prefer Kibbitzers reveal that the contents is clear and comprehensible. One participant claims that Kibbitzers provide clear meaning, and the explanations given are clearly-stated.

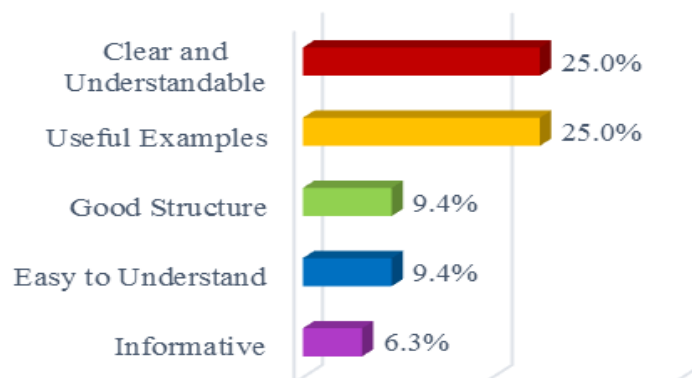


Figure-5. Prominent Features of the Kibbitzers.

Likewise, examples given are useful (25%) as they are given in various contexts, and readers can determine which exact word to use and in which situation. Kibbitzers also have a good structure (9%) and are easy to understand (9%). In the focus group interview, majority of the participants view Kibbitzers as simple and easy to maneuver around. In comparison with other language learning tools, the simple structure of Kibbitzers makes it easier for the participants to understand and discover answers to language problems. They express good feedback after utilizing and reviewing the content of Kibbitzers. Mainly, the participants are satisfied with the structure of Kibbitzers, which is simple, thereby making it easy to use.

“The content from the Kibbitzer, such as the concordance lines makes it easier for learners to understand. Moreover, the Kibbitzer highlights the key points that can help learners differentiate between two words.” (Participant 1)

“The explanation and examples that were provided makes it easier to understand.” (Participant 3)

Furthermore, the use of images helps grab the attention of the participants toward the content. Some participants indicate that Kibbitzers are fun and interesting. In other words, Kibbitzers help them to read enthusiastically, resulting in easy comprehension. Next, 6% indicate Kibbitzers as informative, as they can gain new knowledge and understand more despite their low prior knowledge on specific items. The abundance of examples that are extracted from the concordance line of corpus data banks are known to be a prominent feature. This feature is shown from the excerpts extracted below.

“I love it that they also provide the context of the words, and with what proposition the words are typically used with.” (Participant 2)

“I think Kibbitzer has its own advantage in presenting solutions and explanations involving language problems as there are an abundance of examples regarding the words and phrases.” (Participant 3)

Evidently, the participants are conscious and optimistic on the outcome after using Kibbitzers and learning through it independently. One participant also emphasizes that by studying individually, learners will improve their confidence and commitment as a student, as well as disciplining their attitude in information seeking. Thus, majority of the participants acknowledge the effectiveness as they have had a pleasant learning experience utilizing Kibbitzers.

“We may develop our motivation and responsibility as a student as well in disciplining our attitude in seeking knowledge.” (Participant 4)

3.4. Suggestion to Improve the Usability of Kibbitzers

The participants further identify the areas they feel are required to improve the usability of Kibbitzers to help future learners as shown in Figure 6. First, 25.0% of the participants feel that Kibbitzers should have a simpler structure. For example, one participant suggests for Kibbitzers to be more precise and have lesser word count. Having a large number of concordance lines in the Kibbitzers might be overwhelming for some students. Some noteworthy suggestions are to integrate a minimalistic design on the Kibbitzers.

“Because even for me, personally it can feel overwhelming to look at all the information. The content is great, but it can be so much to take in sometimes”. (Participant 2)

“Make it simple. And the design too. Personally, I would prefer minimalist design”. (Participant 6)

“I agree with Participant 6, plus maybe because there would be a lot of information put in the Kibbitzer, maybe a cleaner and minimalist look would be a better fit”. (Participant 2)

However, as mentioned previously, Kibbitzers have various structures that are not fixed. Thus, various developers have different ways of presenting their data, which results in various forms of Kibbitzers. Some tend to focus more on examples, whereas some focus more on the explanation.

Another important suggestion is to have more explanations (25.0%) and more examples (20.8%). Different from what some of the participants have mentioned before, others prefer to have more explanations and examples on their Kibbitzers. By having more explanations and examples, learners can fully grasp the meaning, structure, and use of words in various contexts. Next, 4.2% suggest future developers to avoid using jargons. Some of the jargons include words such as corpora and concordances. Many of the participants do not have background knowledge in corpus linguistics or corpus-based approach learning. The participants of this study are only indirectly using corpus-based approach. Thus, using jargons might weaken readers' confidence in using Kibbitzers as they are unable to understand them.

In addition to the findings from the open-ended questionnaires, the participants from the focus group interview reveal the most prominent point of discussion. Some of the participants express the need for a teacher's assistance, as they need reassurance as to whether their intuition and understanding of the subject is right or otherwise. Such notion is shown from the excerpts extracted below.

“I agree with Participant 1's opinion. We can learn on our own. But I still need a teacher to guide me. As I said earlier, Kibbitzer is a simplified learning module. So, with the teacher's explanations about certain problems, I can have a better understanding”. (Participant 6)

“As for me I still lean on teacher's guidance more as sometimes I am not secured with my own comprehension. Kibbitzer acts more like a simplified note rather than a self-learning tool, in my opinion”. (Participant 5)

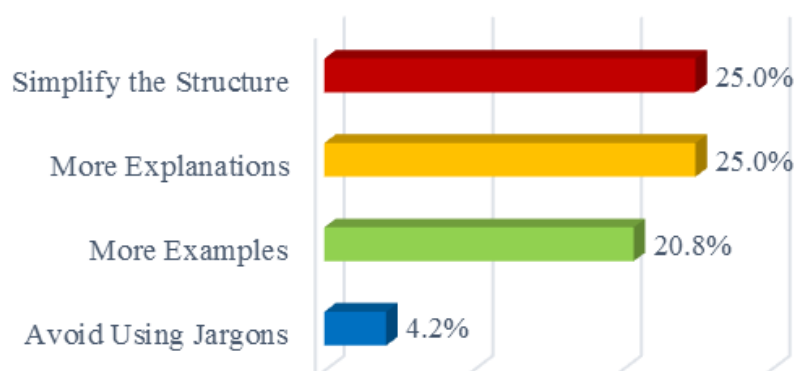


Figure-6. Suggestions to Improve the Usability of Kibbitzers.

4. CONCLUSION

To conclude this study, it is revealed that a majority of participants are in favor of using Kibbitzers to address problems related to pairs of near synonyms. The effectiveness of the Kibbitzers can be supported by the statistically

significant difference between the mean of pre- and post-test scores. This study also supports findings from other works, which are in favor of using DDL approach in addressing language problems (Lee & Lin, 2019; Lin & Lee, 2015; Quinn, 2015; Vyatkina, 2016).

The Kibbitzers help participants in distinguishing near synonyms by presenting examples in various contexts, thereby allowing readers to determine which exact word to use in which situation. The abundance of examples regarding words and phrases that are extracted from concordance line is the main reason that helped the participants overcome this specific problem.

However, some elements of the Kibbitzers are needed to be addressed, especially the structure and presentation of the module. More Kibbitzers with more topics to address specific language problems must also be developed. This type of intervention can be of great help for most ESL students who are now having online distance classes because of the pandemic. This is important because COVID-19 has had a major impact on the society (Tan, Farashaiyan, Sahragard, & Faryabi, 2020) which includes educational settings.

Changes should be introduced to the pedagogy of education and teaching English as indicated in (Tan et al., 2020). For example, ESL teachers and instructors can personally develop Kibbitzers that are appropriate and suitable for each student in their class. Teachers can analyze students' writings, and from there they can determine students' errors and develop personalized Kibbitzers that address such problems.

Another important note is to have teacher's assistance that comes with Kibbitzers as mentioned in the findings. Past studies (Barabadi & Khajavi, 2017; Yoon & Jo, 2014) also support the crucial role of teachers in guiding learners' self-discovery of language rules. Teachers have an important role in deciding the progress and failure of any subject in schools since they form a central component of classrooms and educational settings in general (Philip, Tan, & Jandar, 2019).

This study adds to the body of knowledge of DDL, specifically the use of Kibbitzers in addressing specific language problems. Future study might look into the formulation of an established framework to improve the development of Kibbitzers. The findings from this study indicated the potential for future teaching materials developers and classroom practitioners who may want to integrate Kibbitzers in their language classroom and by extension, encourage learners to migrate to a self-paced, self-accessed and independent mode of learning.

Funding: This research is supported by Universiti Kebangsaan Malaysia Strategic Research Grant coded KRA-2018-005.

Competing Interests: The authors declare that they have no competing interests.

Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES

- Barabadi, E., & Khajavi, Y. (2017). The effect of data-driven approach to teaching vocabulary on Iranian students' learning of English vocabulary. *Cogent Education*, 4(1), 1-13.
- Bennett, G. R. (2010). *Using corpora in the language learning classroom: Corpus linguistics for teachers*. Michigan: University of Michigan Press.
- Chambers, A. (2005). Integrating corpus consultation in language studies. *Language Learning & Technology*, 9(2), 111-125.
- Hadley, G., & Charles, M. (2017). Enhancing extensive reading with data-driven learning. *Language Learning & Technology*, 21(3), 131-152.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Johns, T. (1991). Should you be persuaded: Two examples of data-driven learning. In T. Johns & P. King (Eds.), *Classroom Concordancing*. *English Language Research Journal*, 4, 1-16.
- Johns, T. (2002). KIBBITZER 1 Connotation: Incessant v. steadfast. Retrieved from: <https://lexically.net/TimJohns/Kibbitzers/K1%20%20Incessant%20v%20steadfast.pdf>.

- Karras, J. N. (2016). The effects of data-driven learning upon vocabulary acquisition for secondary international school students in Vietnam. *ReCALL: The Journal of EUROCALL*, 28(2), 166–186.
- Lee, P., & Lin, H. (2019). The effect of the inductive and deductive data-driven learning (DDL) on vocabulary acquisition and retention. *System*, 81, 14–25.
- Lin, M. H., & Lee, J.-Y. (2015). Data-driven learning: Changing the teaching of grammar in EFL classes. *Elt Journal*, 69(3), 264–274. Available at: <https://doi.org/10.1093/elt/ccv010>.
- Luo, Q., & Liao, Y. (2015). Using corpora for error correction in EFL learners' writing. *Journal of Language Teaching and Research*, 6(6), 1333–1342. Available at: <https://doi.org/10.17507/jltr.0606.22>.
- Maddalena, S. R. (2001). An investigation into how corpus analysis may be used in the second language classroom to solve some of the problems surrounding non-native speakers' understanding of seemingly synonymous words. Retrieved from: <https://files.eric.ed.gov/fulltext/ED458795.pdf>.
- Murphy, M. L. (2003). *Semantic relations and the lexicon: Antonymy, synonymy and other paradigms*. Cambridge: Cambridge University Press.
- Peel, K. L. (2020). A Beginner's guide to applied educational research using thematic analysis. *Practical Assessment, Research, and Evaluation*, 25(2), 1–15.
- Philip, B., Tan, K. H., & Jandar, W. (2019). Exploring teacher cognition in Malaysian ESL classrooms. *3L: Language, Linguistics, Literature®*, 25(4), 156–178. Available at: <https://doi.org/10.17576/3l-2019-2504-10>.
- Quinn, C. (2015). Training L2 writers to reference corpora as a self-correction tool. *Elt Journal*, 69(2), 165–177. Available at: <https://doi.org/10.1093/elt/ccu062>.
- Reppen, R. (2010). *Using corpora in the language classroom*. New York: Cambridge University Press.
- Sun, K.-T., Huang, Y.-M., & Liu, M.-C. (2011). A WordNet-based near-synonyms and similar-looking word learning system. *Journal of Educational Technology & Society*, 14(1), 121–134.
- Tan, K. H., Farashaiyan, A., Sahragard, R., & Faryabi, F. (2020). Implications of English as an international language for language pedagogy. *International Journal of Higher Education*, 9(1), 22–31.
- Tan, K. H., Woods, P., Azman, H., Abdullah, I. H., Hashim, R. S., Rahim, H. A., Idrus, M. M., Mohd. Said, N., Lew, R., Kosem, I. (2020). COVID-19 insights and linguistic methods. *3L: Language, Linguistics, Literature®*, 26(2), 1–23.
- Vyatkina, N. (2016). Data-driven learning for beginners: The case of German verb-preposition collocations. *ReCALL*, 28(2), 207–226.
- Yoon, H., & Jo, J. (2014). Direct and indirect access to corpora: An exploratory case study comparing students' error correction and learning strategy use in L2 writing. *Language Learning & Technology*, 18(1), 96–117.
- Yunus, K., & Awab, S. (2014). The impact of data-driven learning instruction on Malaysian law undergraduates' colligational competence. *Kajian Malaysia*, 32(1), 79–109.

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of English Language and Literature Studies shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.