Exploring the Effects of input flood vs input enhancement on learners' use of Collocations in their writings

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The research is derived from a dissertation by the researcher entitled "The effectiveness of incidental versus direct collocation training in enhancing recognition and production of vocabulary and writing quality".

Abstract

Collocational knowledge is one of the competences that may scaffold and frame the students' ability to write correct meaningful sentences. This research inspected the effects of input flood and input enhancement on learners' use of collocations in their writings. It investigated the acquisition of first secondary school students of the following forms of collocations: verb + noun (e.g., do damage). The design of this study is primarily quasi-experimental. A pretest-posttest control group design is used. The study adopts a group of strategies to probe their effectiveness in enhancing lexical collocation and quality of writing. First secondary school students were exposed to various collocations included in passages and sentences of the training program that lasted for two months in Omar Bin Abdul Aziz Secondary School for Boys, Doha, Qatar. The researcher discussed the study results concerning the difficulty of acquiring and measuring the collocational knowledge of the students who learn a second language. The study suggested implications for achieving acquisition of a second language.

Key words: input flood, input enhancement, collocations, writing, implicit teaching.

المستخلص

تعد الكتابة إحدى المهارات الأساسية لتعلم اللغة ويجب أن تكون ذات أهمية واهتمام كبير لكل من المعلمين والطلاب في الوقت نفسه ، إنها مهارة صعبة أن المتعلمين ، سواء الناطقين الأصليين أو غير الناطقين بها ، قد يفتقرون إلى الكفاءة اللازمة لجعلهم متعلمين جيدين.

إن معرفة المتلازمات هي إحدى هذه الكفاءات التي قد تدعم وتؤطر قدرة الطلاب على كتابة جمل صحيحة وذات مغزى. استكشف هذا البحث آثار تدفق المدخلات وتحسين المدخلات على استخدام المتعلمين للمتلازمات في كتاباتهم. لقد استكشف هذا البحث في اكتساب طلاب الصف الاول في المدارس الثانوية للأشكال التالية من المتلازمات: فعل + اسم (يسبب ضرر). تصميم هذه الدراسة هو في الأساس شبه تجريبي. يتم استخدام تصميم مجموعة التحكم في الاختبار القبلي والبعدي. تتبنى الدراسة مجموعة من الاستراتيجيات للتحقق من فعاليتها في تعزيز تعليم المتلازمات وجودة الكتابة. تعرض طلاب المرحلة الثانوية الأولى لمجموعات مختلفة تضمنتها فقرات وجمل من البرنامج التدريبي الذي استمر لمدة شهرين في مدرسة عمر بن عبد العزيز الثانوية للبنين ، الدوحة ، قطر. قام الباحث بتقييم القدرة المهنية للطلاب. أدى تحسين المدخلات + تدفق المدخلات إلى إتقان مهارات التجميع في كتاباتهم. ناقش الباحث نتائج الدراسة الخاصة بصعوبة اكتساب وقياس معرفة المتلازمات للطلاب الذين يتعلمونها لغة ثانية. اقترحت الدراسة الآثار المترتبة على تحقيق اكتساب لغة ثانية.

الكلمات المفتاحية: تدفق المدخلات ، تحسين المدخلات ، التجميعات ، الكتابة ، التعليم الضمني.

Introduction

The area of collocations is of a major importance to second language learning. Collocational knowledge plays a central role in helping learners achieve native-like fluency in a foreign language (Rogers, 2018). Also, Daskalovska (2015) assures the importance of studying collocations to enhance learning English. She explains that since knowledge of collocations is vital for appropriate and fluent use of language, learning collocations should have a central place in the study of vocabulary.

There are some factors affecting collocational acquisition. From the results reached by Fan (2009), he indicated that the performance of the Hong Kong students in collocational use might be adversely affected by their L1, L2 as well as their inadequacy in the lexis and grammar of the target language. This point of view is very important when teaching collocations in the Arab world for the EFL students as the Arabic language is completely different from the combination of the English collocations. Several studies referred to the difficulty, faced by EFL learners in using collocations in speech and writing, such as McCarthy et al (2010), Marco (2011), Alsakran, (2011), Takač and Lukač (2013), Antle (2013), Dzimianko (2014), Nurmukhamedov, (2014), Lan, & Yang, (2020, December), Yang, et al (2020), and Yerzhanova et al (2021). Such studies state that EFL learners make collocational errors as in (make damage). Thus, a basic question arises about how to improve our students' quality of writing and help them avoid collocational mistakes.

Context of the problem

Secondary school students receive no training in lexical collocations that could help enhance recognition and production of vocabulary in the target language. Consequently, students' performance in writing is negatively influenced. While observing Omar Bin Abdel Aziz Secondary School students and from discussions with the teachers of the English department, the researcher has found that:

- Most students have little-if any-exposure to training on collocations and consequently their performance is negatively affected.

- Students learn vocabulary mostly through the instructed methods alone and as a result, they are unlikely to acquire a word store enough for producing language.
- Most students are unaware of the strategies required to help them learn collocations.
- Teachers lack training on how to teach collocations inside classrooms.

Study problem:

Most English students at secondary schools lack the adequate training required for the development of lexical collocations. The learners' skills of writing are highly negatively affected due to the lack of training. The present study investigated the effectiveness of input flood vs input enhancement on learners' use of collocations in their writings. It also offered some insight into the correlation between collocation competence and writing quality among EFL learners.

Study hypotheses

The study investigated the following hypotheses:

1. There is a statistically significant difference at .01 between the mean scores of the first experimental group and the control group in the collocation posttest in favor of the first experimental group due to Input Flood (IF).
2. There is a statistically significant difference at .01 between the mean scores of the first experimental group in the pre and post of the collocation test in favor of the posttest due to Input Flood (IF).
3. There is a statistically significant difference at .01 between the mean scores of the second experimental group and the control group in the post test of collocations in favor of the second experimental group due to Input Enhancement (IE).
4. There is a statistically significant difference at .01 between the mean scores of the second experimental group in the pre and posttest of collocations in favor of the test of collocations due to Input Enhancement (IE).

Study significance

1. The present study addresses two different approaches in teaching collocations – IE and IF - that may contribute to enhancing the quality of writing.
2. The training to be presented through the suggested program-hopefully-could improve the quality of writing among secondary school students.
3. The present study investigates the effect of the input flood and input enhancement on learning collocations among secondary school students for improving their writing.

Terminology
Collocations

The etymology of the word 'collocation' is that it comes from the Latin verb "collocate", meaning 'to place together'. The morphology of the word is that it has two units: 'co' and 'location'. 'Co' means 'together' and 'location' means 'place'. Therefore, 'collocation' means 'locate together'. Thus, collocations have to do with the way words go together. Brezina, McEnery, & Wattam, (2015) stated that collocations illustrate how words go together.

The definition that is adopted in this research is that "co-occurrence of words combining or coming together in a way characteristic of language" by (Oxford Advanced Learner's Dictionary of Current English, 1974), and "a habitual arrangement or conjoining of particular words", (e.g. green as grass; pass the buck) (The Macquarie Dictionary, 1991). These definitions have been chosen because they express the co-occurrence of words and collocations implies not only placing words side by side but also have that kind of relationship that characteristic one of the linguistic phenomena in the language. Additionally, these definitions are related to the collocations that are studied in the book of the secondary stage, year ten, unit 5, page 53 which deals with a "Whistled Language" text, such as: tell the difference, tell secrets, say something, say thank you.

Methodology
Design

The design of this study is primarily a quasi-experimental design. A pretest-posttest control group design is used. The study adopts a group of strategies to probe their effectiveness in enhancing lexical collocations and quality of writing. The control group consists of 30 pupils and the two experimental group consists of 30 pupils each.

Participants

The participants of the current study consisted of 90 pupils who are students in the first year at Omar Bin Abdul Aziz Secondary School for Boys, a governmental school in Doha, Qatar. The sample was: two experimental groups and a control group. Each group included (30) students. The age range of the participants is between 15 and 18 years. The study was carried out during the second term of 2020/2021 semester.

The first group was taught using the incidental (Input Flood) method and the second experimental class was taught using the explicit (Input Enhancement method. The control group learned collocation without any intervention of the researcher.

Delimitations

This study focuses on only verb + noun collocations and not on other types of collocations because this type of collocations is very frequent in English and are problematic for secondary students (Vural, 2010). Another reason for choosing verb + noun collocations is that most of the previous research was done on verb + noun collocations and that gives the researcher the opportunity to compare the results of the present research to the results of the previous studies. The researcher designed a training program which developed the students' collocation knowledge and improved their collocation performance.

Instruments

The instrument of this study is a Pre/Post Test. EFL learners' familiarity with verb + noun collocations were taught on both the productive level and the receptive level. Also, the researcher conducted interviews and meetings with teachers and students, which helped him

to estimate the level of students' collocation competence and design the training program.

Theoretical framework

This section is assigned to reviewing the importance of collocations in language use, explaining the concept of input flood vs input enhancement.

The importance of teaching collocations

Durrant & Schmitt (2010) explained that studying collocations is useful for learning formulaic language because all word combinations such as collocations occupy the largest chunk of the vocabulary. Also, dictionaries provide the most common collocations of each word (Petkovska & Neshkovska, 2019). Bazzaz & Samad (2011) add more reasons for learning collocations: a) contributes to the learners' comprehension and production, b) students become aware of the common lexical errors and mistakes. In addition, Pellicer-Sánchez (2017) explains that teaching and learning collocations is important for mastering knowledge of different types of multi-word units for achieving high levels of language proficiency and fluency of a second language, and for achieving the quality of writing.

Input flood vs input enhancement:

Input flood is the artificial increase of occurrences of a target form in a text (Polio, 2007). Input flood aims to give EFL learners extra exposure to specific target forms. It is a type of instruction that can help EFL learners' vocabulary acquisition. Han et al. (2008) stated that input flood builds the salience of the second language via artificially designed recurrence. Input flood is one of the feasible beneficial ways for EFL learners to develop their collocation ability and their quality of writing. Input flood is an implicit method of teaching collocation and is thought to be effective by a few researchers such as Öztina (2009) and Zaferanieh & Behrooznia (2011). It should be mentioned that a few researchers support input flood method. Several studies - such as Ellis, 2002; VanPatten, Williams, & Rott, 2004 - referred to the effectiveness of input flood and showed that repetition is a vital element for achieving EFL learners' competence. Chen and Truscott (2010) stated that EFL learners need to repeat unknown vocabulary a few times.

Input enhancement is another method for teaching collocations. It is the teaching method aiming to enhance the input to EFL learners and draw their attention to specific combined words for quick understanding (Smith, & Truscott, 2014). Drawing EFL learners' attention is achieved through focusing on the target items. Several studies have used colorizing of the target forms (Loewen & Inceoglu, 2016), bold print (Indrarathne & Kormos, 2017), capitalization (LaBrozzi, 2016) and underlining (Ha, 2010). The aim is to make the enhanced forms more likely to be noticed by the learner. This results in improving collocation competence and the quality of writing.

Chen and Truscott (2010) conducted a study on Chinese students learning English. The learners were exposed to 10 unknown English words several times. The two researchers conducted seven tests and found that repetition had a valuable impact on learners' results at the receptive and productive level. Szudarski and Carter (2016) examined Polish learners' competence of adjective + noun and verb + noun collocation. They used two teaching strategies: input flood only and a combination of input flood and input enhancement. The results showed that reading with input enhancement led to a significant improvement in the quality of writing and collocation production and recognition while input flood only did not improve learners' collocational performance.

Not long ago, Toomer and Elgort (2019) explored learning of collocations using input flood only and reading with input enhancement. The experimental group read (9) texts with (15) collocations in counterbalanced conditions. and their gains were measured with a cued form recall and form recognition immediate and delayed posttest. The results showed that reading with input enhancement led to better writing and collocation production and recognition than input flood only.

Thus, investigating the impacts of these strategies can give us beneficial information about their success. Therefore, the present study aims at examining the effect of input flood versus input enhancement on the quality of writing and the acquisition of English collocations.

Treatment

This research was undertaken with the aim of comparing the effectiveness of input flood versus input enhancement concerning learners' recognition and production of vocabulary and writing quality.

The control group received no instruction about how to approach the newly encountered collocations or how to improve their writing quality. The essential difference between this group and the other ones was that they did not receive the proposed training program.

First Experimental Group (Input Flood)

Then, the incidental (Input Flood) training group was enrolled in class 10\3. The main goal was to learn collocations unintentionally. In this group, students were told that they were going to develop their reading and writing skills and to enhance learning English not just studying collocations. Students were encouraged to indirectly use these collocations while answering the questions.

Second Experimental Group (Input Enhancement)

The direct (Input Enhancement) training group,30 pupils in class 10\5, were informed that they were going to learn more about collocations. The researcher started by presenting different sections of the training program such as identifying collocation, the importance of studying collocations, how to study collocations. They were informed that the training program aimed at promoting their collocational knowledge.

The 90 learners received the pre/post-test. Test takers' performance was corrected and analyzed. Also, to test the hypotheses of the study, the researcher made use of several statistical analyses. Last, the researcher analyzed the results of this study using several statistical methods such as IBM and SPSS.

Results

To check the effectiveness of input flood and input enhancement in improving writing quality two hypotheses were tested using descriptive and inferential statistics.

First: The results of the first hypothesis:

The first hypothesis states that "there is a statistically significant difference between the mean scores of the first experimental group and

the control group in the collocation posttest in favor of the first experimental group due to Input Flood (IF) as a method for teaching collocations and good writing.".

To verify the validity of this hypothesis, the t-test was used to reveal the significance of the differences between the mean scores of the first experimental group and the control group in the collocation posttest. The following table shows the results of this test:

Table (1)

Results of the t-test the mean scores of the first experimental group and the control group in the post-test of collocation

	ariable	Control group (posttest)		First experimental group (posttest)		T value	Effect size	
		Mean	Std. Deviation	Mean	Std. Deviation		Eta square	Cohen's d
Collocation test	Collocation recognition	9.43	2.80	13.17	0.95	8.93	0.579	1.79
	Collocation production	8.16	3.83	12.63	1.94	8.56	0.558	1.47
	Writing quality	9.33	1.90	16.03	1.16	11.21	0.684	4.26
	total	26.92	7.67	41.83	2.95	9.74	0.621	2.57
All values of "T" mentioned in the table are statistically significant at the level (0.01) Degrees of freedom (df) for values in the table = 58								

From the table we can see that the mean score for the control group is 9.33 while for the first experimental group is 16.03. It is clear that input flood strategy has great effectiveness in developing writing quality of the first experimental group.

Second: Results of the second hypothesis:

The second hypothesis states that "there is a statistically significant difference between the mean scores of the first experimental group in the pre and post of the collocation test in favor of the posttest due to Input Flood (IF) as a method for teaching collocations and good writing."

To verify the validity of this hypothesis, the **t test** was used to reveal the significance of the differences between the mean scores of the first experimental group in the pre and post measurements of collocation test. The following table illustrates the results of this test:

Table (2)
Results of the t-test between the mean scores of the first experimental group in the pre and posttest of collocation

Variable		First experimental group (Input Flood)				T value	Effect size	
		Pretest		Posttest				
		Mean	Std. Deviation	Mean	Std. Deviation		Eta square	Cohen's d
Collocation test	Collocation recognition	9.37	2.40	13.17	0.95	9.73	0.765	2.08
	Collocation production	8.00	3.09	12.63	1.94	11.43	0.818	1.79
	Writing quality	8.77	2.29	16.03	1.16	16.54	0.904	4.00
	total	26.13	7.02	41.83	2.95	15.56	0.893	2.92

All values of "T" mentioned in the table are statistically significant at the level (0.01)

Degrees of freedom (df) for values in the table = 29

Mean score for the pretest is 8.77 while in the posttest 16.03. This indicates that input flood strategy has great effectiveness in developing writing quality of the first experimental group.

Third: The results of the third hypothesis:

The third hypothesis states that "there is a statistically significant difference between the mean scores of the second experimental group and the control group in the post collocation test in favor of the second experimental group due to Input Enhancement (IE)".

To verify the validity of this hypothesis, the Independent Samples t-Test was used to reveal the significance of the differences between the mean scores of the second experimental group and the control group in the post collocation test. The following table illustrates the results of this test:

Table (3)
Results of the t-test between the mean scores of the first experimental group and the second experimental group in the posttest of collocation

Variable		Control group (posttest)		Second experimental group (posttest)		T value	Effect size	
		Mean	Std. Deviation	Mean	Std. Deviation		Eta square	Cohen's d
Collocation test	Collocation recognition	9.43	2.80	15.90	0.80	10.28	0.646	3.14
	Collocation production	8.16	3.83	14.97	1.61	9.29	0.598	2.32
	Writing quality	9.33	1.90	17.67	0.99	18.73	0.858	5.51
	Total	26.92	7.67	48.53	2.36	11.99	0.712	3.81
All values of "T" mentioned in the table are statistically significant at the level (0.01)								
Degrees of freedom (df) for values in the table = 58								

The results indicated that input enhancement has great effectiveness in developing writing quality of the second experimental group.

Fourth: Results of the fourth hypothesis:

The fourth hypothesis states that "there is a statistically significant difference between the mean scores of the second experimental group in the pre and post applications in favor of the post application due to

Input Enhancement (IE) as a method for teaching collocations and good writing."

To verify the validity of this hypothesis, the t-test was used to reveal the significance of the differences between the mean scores of the second experimental group in the pre and post measurements to collocation test with its dimensions. The following table illustrates the results of this test:

Table (4)

Results of the t-test between the mean scores of the first experimental group in the pre and posttest of collocation

Variable		Second experimental group (Input Enhancement)				T value	Effect size	
		Pretest		Posttest				
		Mean	Std. Deviation	Mean	Std. Deviation		Eta square	Cohen's d
Collocation test	Collocation recognition	8.93	2.38	15.90	0.80	16.10	0.899	3.93
	Collocation production	8.20	2.94	14.97	1.61	14.07	0.872	2.86
	Writing quality	9.17	2.04	17.67	0.99	20.24	0.934	5.30
	Total	26.30	6.28	48.53	2.36	19.03	0.926	4.69

All values of "T" mentioned in the table are statistically significant at the level (0.01)

Degrees of freedom (df) for values in the table = 29

Mean score of the second experimental group in writing is 9.17 and 17.67 in pre and post-test, respectively. This indicates that IE has great effectiveness in developing writing quality of the second experimental group.

Such results may be attributed to the training program which enhanced learners' collocation knowledge and writing quality.

Discussion

The teaching method of Input Enhancement outperformed Input Flood in enhancing the quality of writing. The findings of the current study are consistent with the findings of other researchers who have reported the efficiency of IE approach of teaching collocations such as: El-Dakhs & Charlot-Muhammad, 2018; Kartal & Yangineksi, 2018; Pellicer-Sánchez, 2017; Saeedakhtar & Haghjoo, 2016).

The superiority of the IE approach over IF, in this research, may be attributed to several factors:

- First, the nature of the age of participants who prefer to receive the target items in a clear way.
- Second, the systematic nature of the IE which was based on identifying, modelling, and guided and independent practice.
- Third, the poor background of Arabic-speaking learners about the target collocations is an obstacle which limits acquiring new collocations using the input flood approach which required higher and independent skills of learning and make Arabic-speaking learners tend to adopt the Input Enhancement approach which seems to use the direct and clear methods of teaching.

These three interrelated elements altogether might interpret the results obtained in this study which assisted students digest the strategies taught, apply them successfully in different tasks and adopted the IE approach.

Importantly, one of the most recurring strategies found in the qualitative data was that the participants in the control group resorted frequently to the guessing strategy in their transactions of the meanings of collocations. This suggests that in the absence of clear indicators and attention-grabbing techniques for the contextual factors, participants have no choice but to depend on guessing.

Thus, mastering collocations enhances EFL learners' English skills of writing. So, it must be emphasized that writing is a major skill of communication and of a great value in learning a foreign language.

Teaching implications

The findings of this study can be useful in the field of language pedagogy. Such findings can be used by language teachers and researchers in a pedagogical context to make decisions concerning teaching collocations via IE or IF or both to function effectively in the target language. This study can help to develop collocation learning and build up students' word power. Also, this study can equip learners with tools that can be used in formal education. Furthermore, in-service teachers should be given a room to be trained on such approaches to develop their students' skills of writing English correctly.

Importantly, the use of flooded and enhanced materials should be further emphasized in teaching collocations. English teachers should be prepared well to tackle such materials in their classrooms. Consequently, the trainers of teachers and the educational system should emphasize the role of the materials of input flood and input enhancement and their contribution to collocation competence and the quality of writing. Curriculum developers should include such materials in the curriculums of English language to improve both collocation competence and the quality of writing among EFL learners.

Limitations & future research

Regarding the present study limitations, it should be said that a generally limited number of texts with low frequency of target items leads to low generalizability of the results. So, future research can be done with larger number of texts. Also, the data were collected by only quantitative means, which can limit the interpretation of the results. Future research can address this limitation by collecting data via other tools such as observations, think-aloud protocols, and stimulated recall. Hence, learning collocations would be better enhanced. In the present study, the researcher did not have access to female students. So, a similar research can be applied to female learners. Also, the learners of the present study were all secondary students. Hence, similar studies can be conducted with other educational stages. Moreover, in this study, only a limited number of collocation items were flooded and enhanced. Therefore, a similar study can employ further collocation items and formulaic language suitable for secondary stage.

Conclusion

In the Arabic-speaking EFL context, a little attention is paid to teaching collocation and investigating its role in improving writing. It is so important to identify what types of materials and activities can lead to improving writing competence. The current study demonstrated the effects of input flood and input enhancement in improving first year secondary EFL learners' writing. In addition, the recent study investigated the perceptions of the students about the effectiveness of input flood and input enhancement procedures. The study statistical results showed that both input flood and input enhancement improved learners' writing ability. However, there was some difference between the outcomes of input flood and input enhancement in favor of IE. The learners of the two experimental groups had positive opinions about the effectiveness of the materials of both input flood and input enhancement on enhancing their writing.

References

Abdellah, A. S. (2015). The effect of a program based on the lexical approach on developing English majors' use of collocations. Journal of Language Teaching and Research, 6(4), 766-777.

Alsakran, R.A. (2011). The Productive and Receptive Knowledge of Collocations by Advanced Arabic-Speaking ESL/EFL Learners. Master Thesis. Colorado State University Fort Collins.

Altenberg, B., & Granger, S. (2001). The grammatical and lexical patterning of MAKE in native and non-native student writing. Applied linguistics, 22(2), 173-195.

Antle, J. B. (2013). Teaching collocations. In N. Sonda & A. Krause (Eds.), JALT 2012 Conference Proceedings (pp. 346-354). Tokyo, Japan: JALT.

Bazzaz, F. E., & Samad, A. A. (2011). The Use of Verb Noun Collocations in Writing Stories among Iranian EFL Learners. English Language Teaching, 4(3), 158-163.

Brezina, V., McEnery, T., & Wattam, S. (2015). Collocations in context: A new perspective on collocation networks. International Journal of Corpus Linguistics, 20(2), 139-173.

Chen, C., & Truscott, J. (2010). The effects of repetition and L1 lexicalization on incidental vocabulary acquisition. Applied Linguistics, 31(5), 693-713.

Durrant, P., & Schmitt, N. (2010). Adult learners' retention of collocations from exposure. Second language research, 26(2), 163-188.

Duy, V. V., & Peters, E. (2021). Incidental learning of collocations from meaningful input: a longitudinal study into three reading modes and factors that affect learning. Studies In Second Language Acquisition.

Dziemianko, A. (2014). On the presentation and placement of collocations in monolingual English learners' dictionaries: Insights into encoding and retention. International Journal of Lexicography, 27(3), 259-279.

El-Dakhs, S., Abdel, D., Amroun, F. P., & Charlot-Muhammad, M. (2018). What Works Better for Collocation Learning-Explicit

Instruction or Incidental Learning? A Case Study of Arab Female Undergraduate Learners of English. Electronic Journal of Foreign Language Teaching, 15(1).

Ellis, N. C. (2002). Frequency effects in language processing: A review with implications for theories of implicit and explicit language acquisition. Studies in second language acquisition, 24(2), 143-188.

Fan, M. (2009). An exploratory study of collocational use by ESL students–A task based approach. System, 37(1), 110-123.

Ha, J. B. (2010). Textual enhancement and learner preference in the learning of english articles. 언어학 연구, (17), 295-312.

Han, Z., Park, E. S., & Combs, C. (2008). Textual enhancement of input: Issues and possibilities. Applied linguistics, 29(4), 597-618.

Hulstijn, J. H. (2011). Incidental learning in second language acquisition. Chapelle, CA.

Indrarathne, B., & Kormos, J. (2017). Attentional processing of input in explicit and implicit learning conditions: An eye-tracking study. Studies in Second Language Acquisition, 39(3), 401-430.

Kartal, G., & Yangineksi, G. (2018). The Effects of Using Corpus Tools on EFL Student Teachers' Learning and Production of Verb-Noun Collocations. PASAA: Journal of Language Teaching and Learning in Thailand, 55, 100-125.

LaBrozzi, R. M. (2016). The effects of textual enhancement type on L2 form recognition and reading comprehension in Spanish. Language Teaching Research, 20(1), 75-91.

Lan, Y., & Yang, Y. (2020, December). Scaffolding Learners' Understanding of English Collocation Usages in Electronic References. In 2020 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE) (pp. 1-6). IEEE.

Laufer, B., & Waldman, T. (2011). Verb-noun collocations in second language writing: A corpus analysis of learners' English. Language learning, 61(2), 647-672.

Loewen, S., & Inceoglu, S. (2016). The effectiveness of visual input enhancement on the noticing and L2 development of the Spanish past tense. Studies in Second Language Learning and Teaching, 6(1).

Marco, L., & José, M. (2011). Exploring atypical verb+ noun combinations in learner technical writing. International Journal of English Studies, 11(2), 77-95.

McCarthy, M., O'Keeffe, A., & Walsh, S. (2010). Vocabulary matrix: Understanding, learning, teaching. Andover, UK: Heinle Cengage Learning.

Nina Daskalovska (2015) Corpus-based versus traditional learning of collocations, Computer Assisted Language Learning, 28:2, 130-144, DOI: 10.1080/09588221.2013.803982

Nurmukhamedov, U. (2014). Collocation look-up strategies for second language writers. In A. Coxhead (Ed.), New ways in teaching vocabulary, revised (pp. 164-167). Alexandria, VA: TESOL International Association.

Öztuna, S. (2009). Effects of input flood and negative evidence on learning of make/do collocations: A study with seventh grade Turkish EFL students (Master's thesis, Anadolu Üniversitesi).

Pellicer-Sánchez, A. (2017). Learning L2 collocations incidentally from reading. Language Teaching Research, 21(3), 381-402.

Petkovska, V., & Neshkovska, S. (2019). THE IMPORTANCE OF COLLOCATIONS IN ACQUIRING ENGLISH AS A FOREIGN LANGUAGE. International Journal of Education TEACHER, 9(18), 15-27.

Polio, C. (2007). A history of input enhancement: Defining an evolving concept. Assessing the impact of input enhancement in second language education, 1-17.

Rogers, J. M. (2018). Teaching Collocations. The TESOL Encyclopedia of English Language Teaching, 1-7.

Saeedakhtar, A., & Haghjoo, R. (2016). The Role of Explicit Instruction in Learning L2 Collocations.

Schmitt, N. (2010). Researching vocabulary: A vocabulary research manual. Springer.

Smith, M. S., & Truscott, J. (2014). The multilingual mind: A modular processing perspective. Cambridge University Press.

Szudarski, P., & Carter, R. (2016). The role of input flood and input enhancement in EFL learners' acquisition of collocations. International Journal of Applied Linguistics, 26(2), 245-265.

Takač, V., & Lukač, M. (2013). How word choice maters: An analysis of adjective-noun collocations in a corpus of learner essays. Jezikoslovlje, 14, 385-402.

Toomer, M., & Elgort, I. (2019). " The development of implicit and explicit knowledge of collocations: A conceptual replication and extension of Sonbul and Schmitt (2013)": Erratum.

VanPatten, B., Williams, J., Rott, S., & Overstreet, M. (Eds.). (2004). Form-meaning connections in second language acquisition. Routledge.

Vural, E. (2010). Explicit and incidental teaching of English verb-noun collocations in an EFL context. Anadolu University Graduate School of Educational Sciences. Anadolu,Turkey.

Yang, C. T. Y., Chen, H. H. J., Liu, C. Y., & Liu, Y. C. (2020). A Semi-automatic Error Retrieval Method for Uncovering Collocation Errors from a Large Learner Corpus. English Teaching & Learning, 44(1), 1-19.

Yerzhanova, A. Y., Baizhanova, G. A., Kalkayeva, A. B., & Ferens, Y. V. (2021). Common Problems In Learning English Grammatical Collocations Among Kazakh Learners Of English. Kazakhstan Science Journal, 4(2 (27)), 13-13.

Zaferanieh, E., & Behrooznia, S. (2011). On the impacts of four collocation instructional methods: Web-based concordancing vs. traditional method, explicit vs. implicit Instruction. Studies in Literature and Language, 3(3), 120-126.