Razi University

Technology Assisted Language Education

ISSN: 2981-1465

Homepage: https://tale.razi.ac.ir

The Effect of Providing Collocational Awareness through Corpus on Iranian EFL Learners' Motivation to Write

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Article Info

Article type:
Research Article

Article history:

Received February 02, 2025

Received in revised form August 20, 2025

Accepted September 23, 2025

Published online September 25, 2025

Keywords:
Collocational Awareness; Corpora; COCA; Writing Motivation; Iranian EFL Learners.

Abstract

Along with rapid technological development, it seems necessary for teachers to update their teaching methods to adapt to the modern technological changes affecting classrooms. The present study aimed to investigate the effect of collocational awareness on the motivation of Iranian EFL learners to write, as informed by a corpus. To this end, 45 female learners were randomly selected and divided into one control and two experimental groups. The control group was taught writing through the traditional method, while the first experimental group received treatment focused on collocational awareness, and the second experimental group received treatment incorporating corpus-based collocation awareness. A quasi-experimental pretest-posttest design was used. All participants in the three groups completed the Writing Motivation Questionnaire (Payne, 2012) before and after instruction. Independent-samples t-tests and ANOVA were used for statistical analysis. The results indicated that collocational awareness effectively motivated students to write. Moreover, it was found that the group receiving collocational awareness through the corpus (COCA) had a higher mean than the group receiving collocational awareness, meaning that using COCA could enhance the motivation of EFL learners to write more effectively. The results might be useful for teachers, material developers, and syllabus designers.

Cite this article: Ahmadi, S. D., Gholami Mehrdad, A., & Korani, A. (2025). The Effect of Providing Collocational Awareness through Corpus on Iranian EFL Learners' Motivation to Write. *Technology Assisted Language Education*, *3*(3), 27-44. doi: 10.22126/tale.2025.11732.1091

Publisher: Razi University.

DOI: http//doi.org/10.22126/tale.2025.11732.1091.

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Introduction

Effective communication in a second language involves mastering multiple skills, including speaking, writing, listening, and reading (Rahimi, 2011). Among these, writing is often perceived as the most challenging, as it demands greater cognitive engagement and the ability to organize ideas coherently (Srinawati & Alwi, 2020; Wu, Silitonga & Murti, 2024). However, motivation plays a crucial role in overcoming the difficulties learners face in writing, making it a central factor in the development of writing proficiency (Alves-Wold et al., 2024; Barratt-Pugh, Ruscoe, & Fellowes, 2021). A significant aspect of writing competence that has received considerable attention is the use of collocations. Collocations—combinations of words that frequently occur together in a language (Bui, 2021; Nguyen & Nguyen, 2023)—are integral to achieving native-like fluency. However, many second language learners, especially in the Iranian context, struggle with collocational deficiencies, often substituting grammatical structures for more idiomatic expressions (Akhter & Nordin, 2022). This deficiency leads to unnatural and less fluent writing, which can negatively affect their motivation to write (Sonbul, El-Dakhs & Masrai, 2023).

Recent developments in language teaching have emphasized the use of corpora in language learning, particularly through Data-Driven Learning (DDL). DDL allows learners to explore real language use and identify collocation patterns in authentic texts, offering a more independent and reflective approach to language acquisition (Emir & Yangin-Eksi, 2023; Xixin, 2024). Research has shown that corpus-based instruction can enhance learners' collocational knowledge and their writing proficiency (Chitez & Dinca, 2023). However, the relationship between corpus use, collocational awareness, and writing motivation remains underexplored, especially in Iranian EFL contexts.

This study aims to fill this gap by investigating the effects of corpus-based instruction on collocational awareness on EFL learners' motivation to write. By comparing the impact of explicit collocation instruction with that of corpus-based collocational awareness, the study seeks to determine whether corpus consultation can provide an additional motivational boost for learners. The findings of this research may have important implications for EFL teachers, material developers, and syllabus designers in integrating collocational awareness into their instructional practices. Therefore, the present study focuses on a corpus-based approach and the use of concordance, aiming to investigate the effect of corpus-based awareness of collocations on motivating students to write. To do so, the following research questions and hypotheses were proposed and investigated. To fulfill the purpose of this study, the following questions were formulated:

- Does providing collocational awareness affect the motivation of Iranian EFL learners to write?
- Does providing collocational awareness through a corpus have any effect on the motivation of Iranian EFL learners to write?

- Does corpus use in providing collocational awareness affect Iranian EFL learners' motivation to write any better than only providing collocational awareness?

The hypotheses associated with the research questions were as follows:

- H01: Providing collocational awareness does not have any significant effect on Iranian EFL learners' motivation to write
- H02: Providing collocational awareness through a corpus does not have any significant effect on Iranian EFL learners' motivation to write
- H03: Corpus use in providing collocational awareness does not significantly affect Iranian EFL learners' motivation to write any better than only providing collocational awareness.

Literature review

The role of collocational awareness in second language (L2) writing has been widely studied, with many researchers highlighting its importance in producing fluent, natural language. Collocations, defined as word combinations that frequently co-occur in a language, are key to achieving native-like fluency (Nesselhauf, 2003; Wray, 2002). In the context of L2 writing, mastering collocations has been found to enhance learners' accuracy and fluency, allowing them to produce more idiomatic and natural sentences (Boers et al., 2014).

Several studies have investigated the effect of explicit instruction on learners' writing skills, particularly in collocations. For instance, Goudarzi and Moinzadeh (2012) found that raising Iranian EFL learners' awareness of collocational patterns significantly improved their writing fluency and accuracy. Similarly, research by Boers et al. (2014) demonstrated that explicit collocation instruction facilitates learners' retention of lexical chunks and improves their ability to use collocations in writing tasks. These studies emphasize the significance of direct instruction in facilitating learners' internalization of collocational knowledge.

Another strand of research has focused on the use of corpus-based instruction to teach collocations. Data-driven learning (DDL), which involves learners working with authentic language data from corpora, has been shown to enhance collocational awareness by exposing learners to real-world language use (Johns, 1991). Several studies have found that corpus consultation can improve learners' understanding of collocational patterns and their ability to use them in writing (Boulton, 2010; Yoon & Hirvela, 2004). For instance, Yoon and Hirvela (2004) found that learners who used corpus tools to explore collocations produced more natural and contextually appropriate language. Similarly, Boulton (2010) reported that learners who engaged with corpus data demonstrated improved writing skills, particularly in their use of formulaic sequences.

In a series of related studies on corpus, writing, and motivation, the following studies are reported below. Gupta and Woldemariam (2011) conducted a study examining the influence of motivation and attitude on the writing strategies used by undergraduate EFL students at Jimma University, Ethiopia. The results indicated that highly motivated students used more writing

strategies than less motivated students. Gditawi, Noah, and Abdul Ghani (2011) conducted a study investigating the relationship between motivation and learning reading and writing among sixth graders in public schools in the Hashemite Kingdom of Jordan. The study indicated a significant, positive correlation between motivation and reading and writing.

Having synthesized findings from 5,795 studies, Alves-wold et.al., (2024), in a work titled "The ABCs of motivation to write: a systematic review of factors emerging from K-5 students' self-reports as influencing their motivation to write.", found nine factors including (A) Appeal, (B) Beliefs, (C) Choice, (D) Difficulty, (E) Environment, (F) Feedback, (G) Goals, (H) Help, and (I) Instructor that influence writing motivation. They suggest the list as a useful tool for both researchers and teachers. Under the title of "Motivation to write: conversations with emergent writers", Barrat-Pough, Ruscoe, and Fellowes (2021) explored children's motivation to write, emphasizing listening to children's voices while teaching writing.

In the Iranian EFL context, the role of collocational knowledge in writing has also been explored. Namvar (2012) and Fatemi (2012) both found that Iranian EFL learners' ability to use collocations was positively correlated with their writing performance. Research has shown that learners in Iran, like their peers in other EFL settings, often struggle with collocations, which negatively affects their writing fluency and accuracy (Koosha & Jafarpour, 2006). As a result, raising learners' collocational awareness has become an important pedagogical focus. Despite the growing body of research on collocation instruction and corpus-based learning, the relationship between corpus consultation and writing motivation remains underexplored. While previous studies have demonstrated that both collocational awareness and corpus-based approaches can improve learners' writing abilities, little research has focused on how these approaches influence learners' motivation to write. This gap in the literature underscores the need for the present study, which aims to investigate the effect of corpus-based instruction on collocational awareness on the motivation of Iranian EFL learners to write.

Method

The methodology followed in the study is explained below.

Design

In this study, a quasi-experimental method with a pretest-posttest design was used, which is shown schematically below:

EG1 -------- T1 -------- X1--------- T2

EG2 -------- T1 -------- X2--------- T2

CG --------- T1--------- O --------- T2

Participants

The participants in the study were 45 female Intermediate students (aged 13-16) from Sadra and Shahed schools in Qorveh. To ensure that all participants were at the same level of

proficiency, the Oxford Placement Test was administered to 60 students prior to the start of the experiment (Appendix A). The test took 60 minutes. Forty-five EFL Students who scored one standard deviation (SD =7.40) above and one standard deviation below the mean ($\overline{X}$ = 25.55) were conveniently selected to be randomly assigned to the three groups of experimental group 1 (providing collocations, n=15), experimental group 2 (providing collocations through corpus, n=15), and the control group (n=15). The results of this placement test are given in Table 1 below.

Table 1

Descriptive Statistics for the Oxford Placement Test

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
	60	6	40	25.55	7.40
Valid	60				

Materials

For the experimental group, the Dictionary of Collocations, published by Oxford University Press, was used. The Corpus of Contemporary American English (COCA) was used for experimental group two. This corpus, which is constantly growing (2009, 385 million words; 2019, 560 million words). As of November 2021, the Corpus of Contemporary American English comprises 485,202 texts. According to the corpus website, the current corpus (as of November 2021) comprises 24-25 million words per year from 1990 to 2019. The corpus is used by approximately tens of thousands of people each month, making it the most widely used "structur" corpus currently available. For each year, the corpus is evenly divided between six genres/registers: TV/Movies subtitles, spoken, fiction, popular magazines, newspapers, and academic journals. The main reasons for choosing COCA were its size, free access, and the available search tools. Since the present study focused on high school students, a corpus reflecting the latest trends in English seemed the most appropriate alternative. In addition, all groups (two experimental groups and one control group) used the book "Four Corners 3" by Richards and Bohlke (2018), published by Cambridge University Press. The desired collocations were selected from this book.

Instruments

The instruments included the Oxford Online Quick Placement Test, as mentioned above, and a Motivation to Write questionnaire, which measured students' motivation to write. All participants in the three groups completed the AWMQ (Academic Writing Motivation Questionnaire) before and after the study. AWMQ was developed by Payne (2012). The Academic Writing Motivation Questionnaire is a 37-item, Likert-type questionnaire. There is a

response scale for each item that participants use to indicate their level of agreement with each statement. The response scale ranges from zero to four, and values for the scale are as follows: 0 = Strongly Disagree; 1 = Disagree; 2 = Uncertain; 3 = Agree; 4 = Strongly Agree. The questionnaire has high internal consistency, as indicated by a Cronbach's reliability coefficient of .95 (as cited in Payne, 2012). The students completed the questionnaire at the first and last sessions of the research.

Procedure

After random participant selection and the pretest, the three groups were introduced to the course materials they would receive. In all the groups, the teacher practiced essay writing with the students and taught them the basic principles of academic essay writing. However, the following were also followed in the experimental groups. For the experimental group one, the teacher introduced the O.U.P. Dictionary of Collocations (mentioned above) and explained how it could be used to find the best verb to accompany a particular noun or to identify an appropriate adjective-noun combination when writing or editing their own work. To be more specific, activities performed in one of the sessions are described below.

On the fifth session: at the beginning of the class, the teacher wrote the following sentences from the examples on the board:

1- If you cannot speak English, you cannot ……. a good job.

2 -You should never ……. business with your friends or family.

Then the teacher asked the students which words would fit in the gaps (get, do) and told them whether they could use other words here - e.g., *make a job, *take a job; *make business, *take business (No, you can't). Then, the students were asked why they could not use any other words here (some of the students were aware of the concept of collocation—words that often go together).

Accordingly, the teacher explained that in English there were many words which often went together in this way, and told some basic verb + noun collocations that students might have already known (e.g., do homework, make a mistake), then tried to elicit some 'collocations' in the students' own mother tongue(s). They were also asked to examine the sentences on the board and identify the parts of speech of the words (verb + noun). At the end of class, the teacher explained that verb + noun collocations, like those presented, were very common in English and informed the students that they would practice some important collocations used in the Language.

For experimental group two, concordance lines from the Corpus of Contemporary American English (COCA) were used. This corpus is easily accessible online. It can be found at *http://corpus.byu.edu/coca*. One of the sessions in this group is also described below.

In Session Three, the students received a brief lecture accompanied by a handout on collocations, which helped them understand how to approach the corpus activity section that required them to identify these language chunks in the data. The handout can be found in

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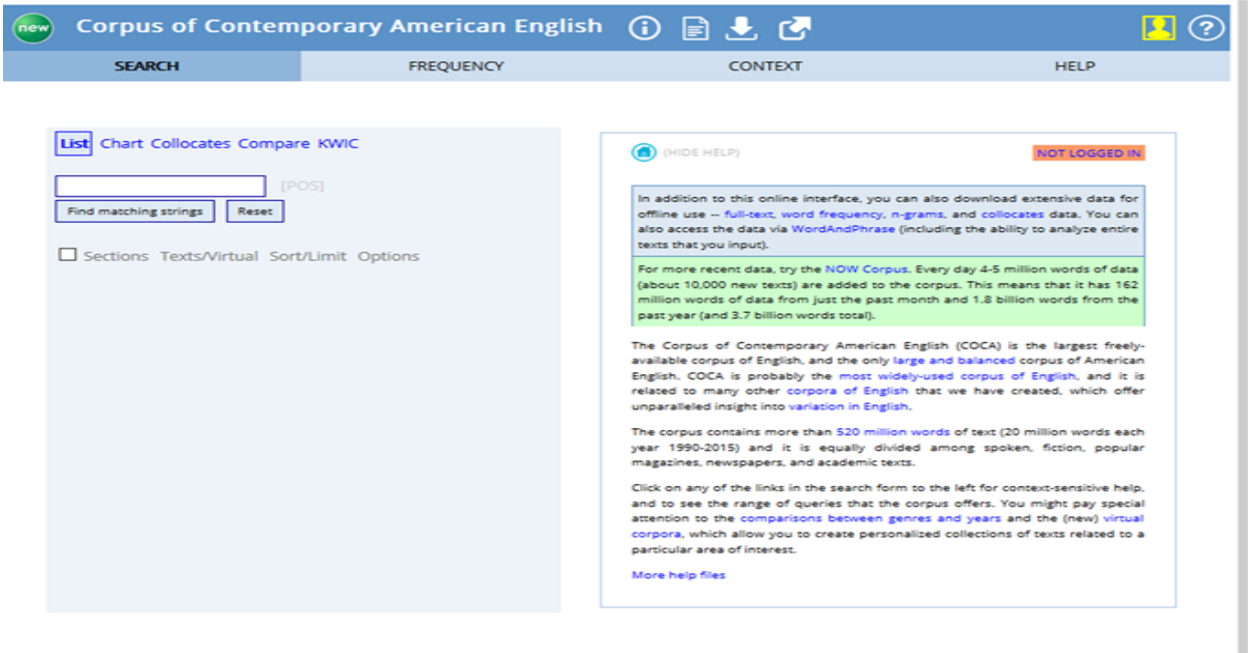
Appendix D. It describes and provides examples of the different levels of collocations and types (i.e., lexical and grammatical) of formulaic language. The researcher used the handout to explain how learners can deduce such information from concordance lines. Through this explanation, the students learned how to work with concordance lines effectively and avoid distractions, thereby better appreciating the information. The researcher taught learners how to use concordance lines and how to search for collocations. The corpus used for this study was the Corpus of Contemporary American English (COCA). As an example, the instructor showed one concordance screen, which was composed of different patterns of the word" fe", and asked



learners to match the information with that in the table. The example is illustrated as follows.

A) The interface

B) Concordance entry

Following these introductions to corpora and collocations, the students engaged in concordance work in the fourth session. Using this tool, students entered a word and explored what words were most likely to occur before or after it. Initially, they specified a keyword to search for and identify which other words typically appear near it. For example, one student entered the word "fast" in the "WORD(S)" box. In the Coca Corpus, then, looked up to see which words usually appear near it. After that, she clicked the word "COLLOCATES" (under "WORD(S)"), set the number boxes to 0 and 4, then clicked the search button. The concordance searched for" fa" and all of the words that appeared within four words to its left, and gave a list that was based on how common the word pair was. The collocations instruction lasted for 5 weeks, consisting of three classes, each with two 60-minute sessions. At the end of instruction for the three groups, the posttest was administered to assess the effect of the treatment.

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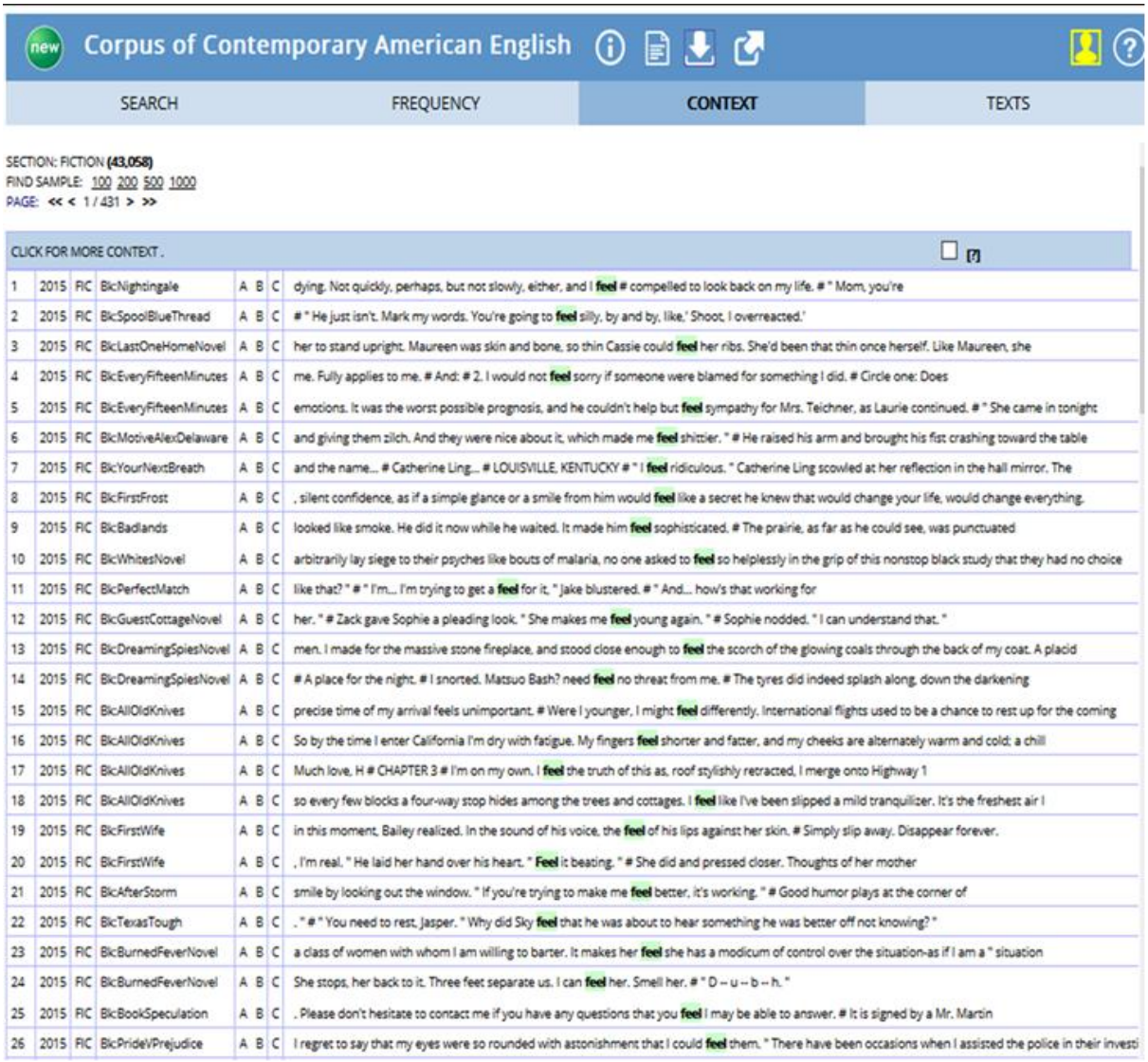

1	2015	FIC	BlcNightingale	A	B	C	dying. Not quickly, perhaps, but not slowly, either, and I **feel** # compelled to look back on my life. # " Mom, you're
2	2015	FIC	BlcSpoolBlueThread	A	B	C	# " He just isn't. Mark my words. You're going to **feel** silly, by and by, like.' Shoot, I overreacted.'
3	2015	FIC	BlcLastOneHomeNovel	A	B	C	her to stand upright. Maureen was skin and bone, so thin Cassie could **feel** her ribs. She'd been that thin once herself. Like Maureen, she
4	2015	FIC	BlcEveryFifteenMinutes	A	B	C	me. Fully applies to me. # And: # 2. I would not **feel** sorry if someone were blamed for something I did. # Circle one: Does
5	2015	FIC	BlcEveryFifteenMinutes	A	B	C	emotions. It was the worst possible prognosis, and he couldn't help but **feel** sympathy for Mrs. Teichner, as Laurie continued. # " She came in tonight
6	2015	FIC	BlcMotiveAlexDelaware	A	B	C	and giving them zilch. And they were nice about it, which made me **feel** shittier. " # He raised his arm and brought his fist crashing toward the table
7	2015	FIC	BlcYourNextBreath	A	B	C	and the name... # Catherine Ling... # LOUISVILLE, KENTUCKY # " I **feel** ridiculous. " Catherine Ling scowled at her reflection in the hall mirror. The
8	2015	FIC	BlcFirstFrost	A	B	C	, silent confidence, as if a simple glance or a smile from him would **feel** like a secret he knew that would change your life, would change everything.
9	2015	FIC	BlcBadlands	A	B	C	looked like smoke. He did it now while he waited. It made him **feel** sophisticated. # The prairie, as far as he could see, was punctuated
10	2015	FIC	BlcWhitesNovel	A	B	C	arbitrarily lay siege to their psyches like bouts of malaria, no one asked to **feel** so helplessly in the grip of this nonstop black study that they had no choice
11	2015	FIC	BlcPerfectMatch	A	B	C	like that? " # " I'm... I'm trying to get a **feel** for it, " Jake blustered. # " And... how's that working for
12	2015	FIC	BlcGuestCottageNovel	A	B	C	her. " # Zack gave Sophie a pleading look. " She makes me **feel** young again. " # Sophie nodded. " I can understand that. "
13	2015	FIC	BlcDreamingSpiesNovel	A	B	C	men. I made for the massive stone fireplace, and stood close enough to **feel** the scorch of the glowing coals through the back of my coat. A placid
14	2015	FIC	BlcDreamingSpiesNovel	A	B	C	# A place for the night. # I snorted. Matsuo Bash? need **feel** no threat from me. # The tyres did indeed splash along, down the darkening
15	2015	FIC	BlcAllOldKnives	A	B	C	precise time of my arrival feels unimportant. # Were I younger, I might **feel** differently. International flights used to be a chance to rest up for the coming
16	2015	FIC	BlcAllOldKnives	A	B	C	So by the time I enter California I'm dry with fatigue. My fingers **feel** shorter and fatter, and my cheeks are alternately warm and cold; a chill
17	2015	FIC	BlcAllOldKnives	A	B	C	Much love, H # CHAPTER 3 # I'm on my own. I **feel** the truth of this as, roof stylishly retracted, I merge onto Highway 1
18	2015	FIC	BlcAllOldKnives	A	B	C	so every few blocks a four-way stop hides among the trees and cottages. I **feel** like I've been slipped a mild tranquilizer. It's the freshest air I
19	2015	FIC	BlcFirstWife	A	B	C	in this moment, Bailey realized. In the sound of his voice, the **feel** of his lips against her skin. # Simply slip away. Disappear forever.
20	2015	FIC	BlcFirstWife	A	B	C	, I'm real. " He laid her hand over his heart. " **Feel** it beating. " # She did and pressed closer. Thoughts of her mother
21	2015	FIC	BlcAfterStorm	A	B	C	smile by looking out the window. " If you're trying to make me **feel** better, it's working. " # Good humor plays at the corner of
22	2015	FIC	BlcTexasTough	A	B	C	. " # " You need to rest, Jasper. " Why did Sky **feel** that he was about to hear something he was better off not knowing? "
23	2015	FIC	BlcBurnedFeverNovel	A	B	C	a class of women with whom I am willing to barter. It makes her **feel** she has a modicum of control over the situation-as if I am a " situation
24	2015	FIC	BlcBurnedFeverNovel	A	B	C	She stops, her back to it. Three feet separate us. I can **feel** her. Smell her. # " D -- u -- b -- h. "
25	2015	FIC	BlcBookSpeculation	A	B	C	. Please don't hesitate to contact me if you have any questions that you **feel** I may be able to answer. # It is signed by a Mr. Martin
26	2015	FIC	BlcPrideVPrejudice	A	B	C	I regret to say that my eyes were so rounded with astonishment that I could **feel** them. " There have been occasions when I assisted the police in their investi

Data Analysis

Because the study included both pre- and posttests, according to statisticians (Tabachnick & Fidell, 2007), an ANCOVA was necessary. However, performing all the required steps, including screening the data, and checking normality assumptions such as 1) the interval data, 2) the normality of the data, 3) the equality of error variances, and 4) the equality of slope of regression lines between groups, showed that the data was not distributed normally. Therefore, gain scores were calculated for all pre- and posttest tests. Because the obtained data were normal, independent-samples t-tests were conducted for the first two hypotheses, and an ANOVA was performed on gain scores for the three hypotheses discussed below.

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Results

Below are the detailed results of the three hypotheses. As mentioned in the data analysis section, gain scores were obtained after checks of normality, so the result of each hypothesis is presented after normality checks for ANCOVA, which usually include: 1) the interval data, 2) the normality of the data, 3) the equality of error variances, and 4) the equality of slope of regression lines between groups. It should be noted that for each hypothesis, the assumptions were thoroughly checked, as statisticians recommend. However, to avoid making the paper overly lengthy, only the assumptions regarding the normality of the data for the third hypothesis are detailed below.

The first hypothesis was "providing collocational awareness does not have a significant effect on the motivation of Iranian EFL learners to write". Since the gain scores were normally distributed, an independent-samples t-test could be run. The descriptive group statistics for the gain scores and the Independent-Sample's T-Test are presented below in Tables 2 and 3.

Table 2

Descriptive Statistics for Gain Scores in Experimental Group 1 and the Control Group

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Gainscores	Control Group	15	7.1333	5.57887	1.44046
	Collocation Group	15	14.2000	9.65993	2.49418

Table 3

Independent Samples T- Test for Gain Scores in Experimental Group 1 and the Control Group

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Gains cores	Equal variances assumed	2.821	.104	-2.453	28	.021	-7.06667	2.88026	-12.96660	-1.16673
	Equal variances not assumed			-2.453	22.404	.022	-7.06667	2.88026	-13.03371	-1.09962

It can be observed that there is a significant difference in the scores obtained by these two groups. In the control group, gain scores are respectively M= 7.1333, SD= 5.57887, and in the experimental group, gain scores are M=14.2000, SD = 9.65993, t (28) = -2.453, P < .05 (P =

.021). The value of the mean in these two groups shows that the mean in the experimental group is more than the mean in the control group, and the value of P is significant (P < .05), implying that collocational awareness has a significant effect on EFL learners' motivation to write.

The second hypothesis was "providing collocational awareness through a corpus does not have a significant effect on the motivation of Iranian EFL learners to write". Since the gain scores were normally distributed, an independent-samples t-test could be conducted. The descriptive group statistics for the gain scores and t-test are presented below in Tables 4 and 5.

Table 4

Descriptive Statistics of Kurtosis and Skewness for Gain Scores in Experimental Group 2 and the Control Group

Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Gainscores	Control Group	15	7.1333	5.57887	1.44046
	Corpus Group	15	18.4667	11.50693	2.97108

Table 5

Independent Samples Test for Gain Scores in Experimental Group 2 and the Control Group

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Gains cores	Equal variances assumed	9.951	.004	-3.432	28	.002	-11.33333	3.30185	-18.09687	-4.56980
	Equal variances not assumed			-3.432	20.237	.003	-11.33333	3.30185	-18.21571	-4.45096

As observed, there is a significant difference in scores obtained in these two groups. In the control group, the figures are M = 7.1333, SD = 5.57887; in the experimental group, M = 18.4667, SD = 11.50693. The t-test results in a significant difference, t(28) = -3.432, P < .05 (P = .003). The mean values in these two groups indicate that the experimental group's mean is higher than the control group's. The value of P is significant (P < .05), indicating that providing collocational awareness through a corpus significantly impacts the motivation of EFL learners.

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The third hypothesis was "the use of corpus in providing collocational awareness does not significantly affect Iranian EFL learners' motivation to write any better than just collocational awareness". As the researchers had to use ANOVA rather than ANCOVA, the first assumption (mentioned above) of normality is checked individually below.

Table 6

Descriptive Statistics of Skewness and Kurtosis for Two Experimental Groups and Control Group

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Pretest	45	57.00	94.00	75.5333	7.91029	.037	.354	.035	.695
Posttest	45	62.00	123.00	87.6222	15.74122	.170	.354	-.932	.695
Valid N (listwise)	45								

According to Tabachnick and Fidell (2007), "if Kurtosis and Skewness are between -2 and +2, it indicates that the obtained data are normal". The values of Skewness and Kurtosis were, respectively, 0.037 and 0.035 for the pretest, and 0.170 and -0.932. As can be observed, the data were normally distributed. As the descriptive statistics indicated normality, the data were subjected to inferential tests of normality using the Kolmogorov-Smirnov and Shapiro-Wilks' tests to provide greater confidence in the data's normality. Table 7 below shows the statistics.

Table 7

Kolmogorov- Smirnov and Shapiro-Wilk's Tests of Normality for Two Experimental Groups and Control Group

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Group	Statistic	Df	Sig.	Statistic	df	Sig.
pretest	Control Group	.204	15	.094	.914	15	.155
	Collocation Group	.151	15	.200*	.946	15	.471
	Corpus Group	.171	15	.200*	.946	15	.460
posttest	Control Group	.194	15	.132	.930	15	.276
	Collocation Group	.111	15	.200*	.946	15	.470
	Corpus Group	.138	15	.200*	.938	15	.363

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The Kolmogorov-Smirnov and Shapiro-Wilk tests of normality indicated that the data were normally distributed. As shown in Table 4.17, the value of P in the control group pretest, was P = .155. In the pretests of the first and second experimental groups, the results were P = 0.471 and P = 0.460, respectively. The value of P in the control group posttest was 0.276. In the first and second experimental groups, the posttest results were P = .470 and P = .363, respectively. Therefore, the data in the experimental and control groups are normally distributed. The third assumption for performing ANCOVA was Levene's test of equality of error variances, presented in Table 8 below.

Table 8

Levene's Test of Equality of Error Variances for two Experimental Groups and Control Group

Levene's Test of Equality of Error Variances[a]

Dependent Variable: posttest

F	df1	df2	Sig.
3.831	2	42	.030

In Table 8, the evidence indicates a P value of 0.030, indicating that the assumption of equal error variances was not met (P < .05). Therefore, as statisticians recommend, ANCOVA could not be performed. Therefore, the difference between the pretest and post–test (gain scores) was computed. Then, it was checked whether the obtained data were normal. Table 9 below shows the statistics.

Table 9

Descriptive Statistics of Kurtosis and Skewness for Gain Scores in Two Experimental Groups and Control Group

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Gainscores	45	.00	39.00	13.2667	10.20116	.748	.354	-.153	.695
Valid N (listwise)	45								

The values of Skewness and Kurtosis for gain scores were, respectively, 0.748 and -0.153. As it can be seen, the data appear to be normally distributed.

Table 10

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Kolmogorov- Smirnov and Shapiro-Wilk's Tests of Normality for Gain Scores in Two Experimental Groups and Control Group

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Group	Statistic	df	Sig.	Statistic	df	Sig.
Gain scores	Control Group	.182	15	.193	.913	15	.153
	Collocation Group	.149	15	.200*	.954	15	.592
	Corpus Group	.195	15	.131	.922	15	.208

The Kolmogorov-Smirnov and Shapiro-Wilks' tests of normality indicated that the data were normally distributed. As shown in Table 10, the value of P for the control group's gain scores was P = .153, while for the first and second experimental groups, the values were P = .592 and P = .208, respectively. Moreover, the normality of data in the three groups was observed. Therefore, a one-way ANOVA was run to compare the differences between these three groups.

Since the data were normally distributed for the gain scores, a one-way ANOVA could be performed. The descriptive group statistics for the gain scores, as well as the Test of Homogeneity of Variances, One-Way ANOVA, and Post Hoc Tests, are presented below in Tables 11, 12, 13, 14, and 15.

Table 11

Descriptive Statistics for Gain Scores in the Two Experimental Groups and Control Group

Descriptives

Gain scores

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Control Group	15	7.1333	5.57887	1.44046	4.0439	10.2228	.00	17.00
Collocation Group	15	14.2000	9.65993	2.49418	8.8505	19.5495	.00	32.00
Corpus Group	15	18.4667	11.50693	2.97108	12.0943	24.8390	4.00	39.00
Total	45	13.2667	10.20116	1.52070	10.2019	16.3314	.00	39.00

Table 12

Homogeneity of Variances for the Gain Scores in Two Experimental Groups and Control Group

Test of Homogeneity of Variances

Gain scores

Levene Statistic	df1	df2	Sig.
3.924	2	42	.027

As indicated in Table 12, the homogeneity of variances was not observed (P = .027). Therefore, as the homogeneity of variances assumption was not observed (violated), the Games-Howell Dunnett's C post hoc test should be run as a post hoc test. The Games Howell test is generally recommended (https://statistics.laerd.com/features-owa.php) by statisticians. According to Pallant (2016), if the assumption of homogeneity of variances is violated, the two tests (Welch and Brown-Forsythe) are preferable.

Table 13

One-Way -ANOVA for the Gain Scores in Two Experimental Groups and Control Group

ANOVA

Gainscores

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	982.933	2	491.467	5.740	.006
Within Groups	3595.867	42	85.616		
Total	4578.800	44			

As shown in Table 13, there is a significant difference between groups (P = .006).

Table 14

The Robust Test of Equality of Means

Robust Tests of Equality of Means

Gainscores

	Statistic[a]	df1	df2	Sig.
Welch	7.226	2	25.326	.003
Brown-Forsythe	5.740	2	33.945	.007

As shown in Table 14, the values of P for Welch and Brown-Forsythe are, respectively, P = .003 and .007, which are less than p < .05.

Table 15

Post Hoc Tests for the Gain Scores in Two Experimental Groups and the Control Group

Multiple Comparisons

Dependent Variable: Gainscores

Games-Howell

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Control Group	Collocation Group	-7.06667	2.88026	.056	-14.2928	.1595
	Corpus Group	-11.33333*	3.30185	.007	-19.6793	-2.9874
Collocation Group	Control Group	7.06667	2.88026	.056	-.1595	14.2928
	Corpus Group	-4.26667	3.87921	.522	-13.8811	5.3478
Corpus Group	Control Group	11.33333*	3.30185	.007	2.9874	19.6793
	Collocation Group	4.26667	3.87921	.522	-5.3478	13.8811

The One-way Analysis of variance indicates a significant difference among these three groups. In the first experimental group (collocational group), the figures are (M = 14.2000, SD = 9.65993), in the second experimental group (corpus group), they are (M = 18.4667, SD = 11.50693), and in the control group, they are (M= 7.1333, SD =5.57887). Other figures are F(2, 42) = 5.740, and P < .001 (P = .006). The Games-Howell test, however, indicated that the difference between the first and second experimental groups was not significant (P = .522). The difference between the control group and the two experimental groups was significant (P = .056) and (P = .007). The second experimental group has a higher mean than the first, although the difference is not significant. Both experimental groups outperformed the control group. To sum up, the use of corpora to foster collocational awareness significantly increased Iranian EFL learners' motivation to write.

Discussion

To prepare students for 21st-century writing tasks, teachers need to help them use available technological tools (Ahmadi & Heidari, 2023) through systematic, purpose-driven instruction that identifies and applies the most suitable tools for specific tasks throughout the writing process (Troia, 2014). Additionally, students who struggle with writing are likely to benefit from the thoughtful use of technology to eliminate or diminish the barriers they encounter for successful text production (MacArthur, 2006). Corpus technology has demonstrated outstanding potential for L2 writing instruction by integrating the vocabulary, grammar, and discourse patterns of specific types of writing into L2 writing instruction (Hyland, 2002). A corpus concordance, in particular, is a type of technology that offers learners the opportunity to engage in activities that produce comprehensible output and where meaning must be negotiated.

The first research question was whether providing awareness of collocation affected EFL learners' motivation to write. The data obtained indicated that collocation awareness affected

the motivation of Iranian intermediate EFL learners to write. The results show that, regardless of corpus use, collocation awareness has a positive effect on students' motivation to write. The second research question was whether using a corpus could increase the motivation of Iranian intermediate EFL learners to write. The results of the statistical analysis indicated a notable difference between the mean of experimental group two and, as observed, the class using the corpus outperformed the class that did not use the corpus, which led the learners in the second (corpus) experimental group to write better than those in the class with only collocation provision. The third research question was whether corpus use in providing collocational awareness would affect Iranian EFL learners' motivation to write any better than only collocational awareness. The findings revealed that the corpus approach heightened the students' language awareness, which, in turn, affected their approaches to writing and the writing process. Regardless of their frequency of corpus use, their exposure to the corpus made them aware of the importance of common usage and collocations in writing. That is, the corpus served as a good reference for language input and helped them become more attentive to their writing.

Regarding the efficacy of corpus-based instruction, this study's findings can be explained by the potential benefits of corpus-based materials. As Leech (1997) stated, corpora can have either a direct or an indirect effect on the language classroom. The most salient advantage of using corpora is that they motivate learners to learn independently, thereby enabling the class to shift to learner-centered learning. The findings are also in line with the study performed by Fang, Ma, and Yan (2021), who found that corpus training improved Chinese word selection. In the present study, using a corpus helped students improve their writing skills. The findings verify Bui's (2021) work, arguing for the importance of collocation knowledge in improving the four skills. The results of the study also align with those of Thurstun and Candlin (1998), who found it beneficial to adopt a corpus-based approach to teaching collocations and their use in writing.

The findings of the current endeavor also confirm those of the study by Hua, Lu, and Guo (2024), which found that collocation use improves with independent use of a corpus tool in academic writing. It also provides evidence for Lin and Zuo's (2023) exploration of English writing-teaching research, in which they recommend more comprehensive corpus training for teachers. In addition, the results of the present work corroborate those obtained by Emir and Yangin-eksi (2023), who similarly found that using a corpus had a significant impact on Turkish students' writing skills. Moreover, the findings partly affirm those of Jafarpour, Hashemian, and Alipour's study (2013) by showing positive effects of data-driven approaches on the comprehension and production of collocations. In addition, the findings seem to align with those reported by Abu Alsharr and Abu Seileek (2013). They reported better writing among L2 learners who were taught collocations using concordances.

The study also aligns with studies that have found the corpus-based approach to be superior to traditional approaches. Koosha and Jafarpour (2006) conducted a study on collocation learning among Iranian L2 learners and found positive relationships between concordancing and collocation learning. The positive effect of the corpus-based approach on the experimental group's comprehension of collocations suggests that L2 learners' collocational knowledge and the way collocations are learned are closely and positively related. Overall, the findings of this

study revealed that both experimental approaches — explicit collocation awareness instruction and corpus-based collocation awareness — significantly enhanced the motivation of Iranian EFL learners to write compared to the control group. This indicates that raising learners' awareness of collocations is, in itself, a powerful pedagogical strategy. However, the authors believe that future studies with larger populations and longer durations may reveal whether corpus use can lead to measurable motivational benefits. Despite the study's limitations, including its small sample size and relatively short duration, the present work contributes to the growing body of research supporting the role of collocational awareness in L2 writing motivation. It suggests that corpus tools can be considered a complementary resource rather than a standalone, superior method.

Conclusion

This study demonstrated that both collocation awareness instruction and corpus-based collocation awareness significantly improved EFL learners' motivation to write compared with the control group. Although the corpus group obtained a slightly higher mean score than the collocation group, the difference was not statistically significant. This indicates that raising learners' collocational awareness – whether through direct instruction or with the aid of a corpus could be an effective way of enhancing writing.

The findings highlight the pedagogical value of integrating collocational awareness into writing instruction and suggest that corpus consultation may serve as an additional tool to engage learners with authentic examples of language use. However, given the absence of a statistically significant difference between the two experimental groups, teachers may choose either approach depending on contextual constraints and learners' preferences. Hence, future research should employ larger sample sizes, longer treatment periods, and more detailed task designs to determine whether corpus-based instruction can yield measurable advantages over traditional collocation-focused methods.

Like all research, this study has its limitations. First, the sample size was relatively small (N = 45), which reduced the analyses' statistical power and limited the generalizability of the findings. Second, all participants were female Iranian EFL learners from a single private language institute, which restricts the applicability of the results to more diverse populations. Third, the treatment lasted only 5 weeks, and a more extended intervention period might have produced more robust differences between the experimental groups. Finally, the study primarily relied on self-report questionnaires to measure writing motivation; future studies could benefit from combining such measures with direct assessments of learners' written performance and qualitative data such as interviews or classroom observations.

Despite its limitations, the present study provides valuable insights for EFL writing instruction. The findings suggest that raising learners' awareness of collocations—whether through explicit instruction or corpus consultation—can effectively enhance their motivation to write. Teachers are therefore encouraged to incorporate collocational activities into their writing classes, as they help learners notice recurrent word combinations and gain a deeper understanding of natural language use.

Corpus tools, while not statistically superior in this study, still offer unique pedagogical value by exposing learners to authentic, context-rich examples of collocations and fostering independent discovery skills. Teachers may choose to integrate corpora into lessons when resources and time allow, or rely on explicit collocation instruction when such tools are not

available. In either case, focusing on collocational awareness appears to be a promising way of increasing learners' motivation and confidence in writing.

References

Abu Alsharr, A., & Abu Seileek, A. F. (2013). Using concordancing and word processing to improve EFL written English. *JALT CALL Journal,9* (1), 59-77.

Ahmadi, S. D. & Heidari, S. (2023). Novice and experienced EFL teachers' perceptions of the obstacles in implementing task-based language teaching in SHAD platform. *Technology Assisted Language Education, 1* (2): 93-112.

Akhter, Sh., & Nordin, N. R. M. (2022). Exploring the role of collocation in creative writing among Pakistani learners at secondary level: A corpus-based study. *World Journal of English Language, 12*(2), 382-391.

Alves-Wold, A, Walgermo B.R., McTigue, E., & Uppstad, P. H. (2024). The ABCs of writing motivation: a systematic review of factors emerging from K–5 students' self-reports as influencing their motivation to write. *Front. Educ.* 9:1396484. doi:10.3389/feduc.2024.1396484.

Barratt-pugh, C., Ruscoe, A., & Fellowes, J. (2021). Motivation to write: Conversations with emergent writers. *Early Childhood Education Journal (2021)* 49:223–234. Doi: 10.1007/s10643-020-01061-5.

Boulton, A. (2008). Looking for empirical evidence for DDL at lower levels. In B.Lewandowska–Tomaszczyk (Ed.),Corpus linguistics,. *Computer tools and applications: state of the art,* 581-598.

Bui, T. L. (2021). The role of collocations in English teaching and learning. *International Journal of TESOL and Education, 1*(2), 99-109.

Chitez, M. & Dinca, A. (2023). On corpora and writing. In O.Kruse, Ch. Rapp, Ch. M. Anson, K. Benetos, E. Cotos, A. Devitt, & A. Shibani (Eds.), Digital Writing Technologies in Higher Education. Pp. 385-405: Springer.

Emir, G., & Yangin-Eksi, G. (2023). Corpus used as a data-driven learning tool in L2 academic writing: Evidence from Turkish contexts. *TEFLIN Journal,34*(*2*): 209-225.

Fang, L., Ma, Q., & Yan, J. (2021). The effectiveness of corpus-based training on collocation use in L2 writing for Chinese senior secondary school students. *J. China Comput. Assist. Lang. Learn, 1*(1): 80–109.

Fatemi, S. A. (2012). *The Effects of Concordance-based Instruction on Iranian EFL learners' Learning of Different Types of Collocations.* Zahedan, Iran.

Hua, Y., Lu, X., & Guo, Q. (2024). Independent corpus consultation for collocation use in academic writing by L2 graduate students. *System, 127*(9):103515.

Hyland, K. (2002). *Teaching and Researching Writing.* Tübingen: Pearson.

Jafarpour, A. A., Hashemian, M., & Alipour, S. (2013). A corpus-based approach toward teaching collocation of synonyms. *Theory and Practice in Language Studies*, *3*(1), 51-60.

Koosha, M., & Jafarpour, A. (2006). Data-driven Learning and Teaching collocation of prepositions: The Case of Iranian EFL Adult Learners. *Asian EFL Journal, 8*(8), 23-32.

Leech, G. (1997). *'Teaching and language corpora: a convergence.* (S. F. A. Wichmann, Ed.) London: Longman.

Lin, J, & Zuo, Y. (2023). A review of 23-year corpus-based research on writing English teaching in China from 2001-2023. *Journal of Education and Educational Research, 6*(3): 51-55.

MacArthur, C. A. (2006). The effects of new technologies on writing and writing processes.

Namvar, F. (2012). Analysis of collocations in the Iranian postgraduate students' writings. *Southeast Asian Journal of English Language Studies, 18*(3), 41-52.

Nguyen, N. L. D., & Nguyen, N. M. (2023). An application of collocations in teaching academic speaking: a case study at Dongnai Technology University. *Global Journal of Arts Humanities and Social Sciences, 3* (6), 725-735.

Pallant, J. (2016). *SPSS Survival Manual: A Step By Step Guide to Data Analysis Using SPSS Program* (6th ed.). London: UK: McGraw-Hill Education.

Payne, A. R. (2012). Development of the Academic Writing Motivation Questionnaire *Master's Theses*, 36. Retrieved from https://getd.libs.uga.edu/pdfs/payne_ashley_r_201212_ma.pdf

Rahimi, M. (2011). The effect of teaching collocations on English language proficiency. *Social and Behavioral Sciences,* 3–42. Retrieved from Retrieved April 29, 2014, from:

Richards, J. C., & Bohlke, D. (2012). *four corners.* cambridge: CUP.

Sonbul, S., El-Dakhs, D., & Masrai, A. (2023). Second language productive knowledge of collocations: Does knowledge of individual words matter? *Studies in Second Language Acquisition, 45* (2): 480-502. Doi: 10.107/S0272263122000341.

Srinawati, W., & Alwi, R. (2020). Critical thinking ability in EFL students' argumentative writing: the difficulties and the strategies. *Journal of Scientific Information and Educational Creativity, 21* (2): 200-210.

Tabachnick, B.G., & Fidell, L.S. (2007). *Using Multivariate Statistics* (Fifth Edition ed.). Boston: Pearson Education, Inc.

Thurstun, J., & Candlin, C. (1998). Concordancing and the teaching of the vocabulary of academic English. *English for Specific Purposes, 17*(3), 267- 280.

Troia, G. (2014). *Evidence-based practices for writing instruction (Document No. IC-5)*. Retrieved from Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center: http://ceedar.education.ufl.edu/too

Wu, T., Silitonga, H. M., & Murti, A. T. (2024). Enhancing English writing and higher-order thinking skills through computational thinking. *Computers and Education, 213,* 105012.

Xixin, Q. (2024). Exploring the effect of corpus-based writing instruction on learner-corpus interaction in L2 revision: a study of Chinese EFL disciplinary writers. *TESOL Quartely, 58* (3), DOI:10.1002/tesq.3308.