



The Effect of Incidental vs. Intentional Instruction of Collocations on Iranian EFL Learners' Writing Scores

Fatemeh Shamshir

Department of English Language Teaching, WT. C., Islamic Azad University, Tehran, Iran.

fafaaash.76@gmail.com

Shokouh Rashvand-Semiyari  (Corresponding Author)

Department of English Language Teaching, ET. C., Islamic Azad University, Tehran, Iran.

Sh_Rashvand@yahoo.com

ARTICLE INFO:

Received date:

2025.06.13

Accepted date:

2025.08.06

Print ISSN: 2251-7995

Online ISSN: 2676-6876

Keywords:

Collocation Instruction; Incidental Instruction; Iranian EFL Learners; Writing Score



Abstract

To be proficient in writing, learners of foreign languages are expected to communicate effectively and effortlessly with native speakers. Collocations, defined as the natural pairings of words, are essential for achieving proficiency in a language and enhancing writing quality. This research explored how incidental and intentional instruction of collocations affected the participants' written task scores. This study included 60 students at the pre-intermediate level who studied English at Safir Language School in Tehran, Iran. These students were grouped according to their proficiency test results to ensure homogeneity. They used the Touchstone series and the English Collocations in Use as their primary textbooks. After each unit, they had to do a written task. The results indicated that both incidental and intentional instruction positively impacted the students' writing scores. Notably, those in the incidental instruction group outperformed their counterparts in the intentional group. The findings showed incidental instruction of collocations was more effective than intentional teaching. The outcomes of the study can assist educators in choosing effective teaching strategies for collocations to boost writing performance, syllabus designers in incorporating these insights into educational materials to enhance vocabulary instruction, teachers in emphasizing the benefits of incidental learning, and learners in focusing on the importance of collocations, as unfamiliarity with these word combinations may hinder their writing skills. Conducting studies with larger sample sizes to validate the findings in broader settings, and exploring incidental/intentional teaching to students with varying skills, expertise, gender, and experiences are also suggested for further studies.

Citation: Shamshir, F. & Rashvand-Semiyari, SH. (2025). The Effect of Incidental vs. Intentional Instruction of Collocations on Iranian EFL Learners' Writing Scores. *Journal of English Language Teaching and Learning*, 17 (36), 305-318. DOI: 10.22034/elt.2025.67831.2796

Introduction

The use of collocations significantly influences the naturalness of language production. Learners use collocations to enhance their writing style, improve readability, and facilitate comprehension, providing more options and creative ways to express their thoughts (Du et al., 2025, 3067).

Tanihardjo (2018) emphasizes their importance, noting that collocations not only enhance fluency but also improve accuracy. Collocations involve lexical relationships that are often arbitrary and influenced by native speakers of a language (Trng & Thao, 2021). They enable learners to pair words that naturally belong together, avoiding unnatural combinations or unintended meanings. Despite this, English as a Foreign Language (EFL) learners face challenges mastering collocations because of their native language. The differences between English collocations and those in learners' first languages present further obstacles (Trng & Thao, 2021). Nation (2001) describes collocations as structured and interconnected word groups, while Lea (2002) provides a broader definition, linking them to how words come together to create fluent speech and writing. The challenge lies in finding effective strategies to expand learners' knowledge of collocations in English language education. Various approaches exist for developing lexical knowledge. Brown et al. (2008) and Richards and Schmidt (2002) define the incidental way of learning as a process where learners acquire knowledge indirectly, without the explicit intention to learn (Ahmad, 2011). Horst (2005) argues that while incidental learning is challenging to define, it is essential in classroom environments since the vast vocabulary needed for fluency cannot be learned solely through direct instruction. Webb and Nation (2017) assert that vocabulary acquisition is often incidental rather than intentional. Limited exposure to second-language (L2) resources can necessitate deliberate learning, which aids retention and yields faster results (Webb, 2008). Schmitt (2008) observes that intentional learning promotes faster achievements and better retention, while Hulstijn and Laufer (2001) suggest that deeper cognitive engagement enhances recall. Incidental learning mirrors the way individuals acquire their first language, as encountering new words in context encourages learners to rely on grammatical and contextual clues. This process of analysis and reinterpretation fosters deeper cognitive processing and improves retention (Ahmad, 2011). Mastery of collocations enables EFL learners to express their thoughts in both written and spoken forms more naturally and concisely, resembling native speakers (Duong & Nguyen, 2021). Nonetheless, proficiency in using collocations is typically seen as an advanced expertise in learning languages and accomplishments (Akhter & Nordin, 2022). In language classrooms, there are some students with good ideas who often lose marks because they do not know some of the most important collocations of a keyword that is central to what they are writing. Moreover, "the intrinsic complexity of collocations, particularly their arbitrary nature, presents substantial learning challenges" (My & Loi, 2025, 4). Therefore, teaching collocations deliberately or incidentally can improve the learners' knowledge of the English language (Webb & Nation, 2017). The study attempted to examine the effectiveness of incidental versus intentional instruction to see when better results in learners' writing scores

could be achieved. Moreover, it focused on beneficial techniques for teaching collocations for the purpose of EFL learners' improvement in English writing.

1. Literature Review

1.1 The Significance of Incidental Learning

Incidental learning is a fundamental yet frequently overlooked aspect of the learning process, often referred to by researchers as the "forgotten dimension" (Rosenberg & Artman-Meeker, 2020). While formal learning takes place within structured settings and designated timeframes, much of learners' perception develops through incidental and informal learning. The concept of "incidental way of learning" was first introduced by Reber in 1967 when he was studying artificial grammar acquisition. Many scholars consider incidental learning a form of informal learning, viewing it as an unconscious process that occurs naturally alongside other activities (Marsick & Watkins, 2001; Stangl, 2004). This connection aligns incidental learning with implicit learning, which is characterized by a lack of conscious awareness (Stangl, 2004). Formal learning is typically organized, institution-based, and occurs in structured environments such as classrooms. On the other hand, informal learning, though intentional, is unstructured and takes place in everyday life situations. According to Godfroid (2016), implicit learning can lead to behavioral changes that individuals may not consciously acknowledge. Although widely accepted as an unconscious process, some researchers challenge this notion, questioning its validity and effectiveness. When learners practice specific language forms using explicit knowledge, implicit learning may also occur, facilitating the development of underlying cognitive processes. Paradis (2004) proposed the "Activation Threshold Model," which suggests that repeated activation of a concept lowers its threshold for retrieval. As a result, focusing on meaning rather than structure—can strengthen the acquisition of core cognitive skills. Adults typically tend to rely on explicit learning and require precise information to enhance their knowledge. However, as they advance in proficiency, they gradually transition from metalinguistic awareness to implicit competence. Incidental learning is also closely linked to self-regulated learning and intrinsic motivation, which play crucial roles in the acquisition process (Finn, 2019).

1.2 The Importance of Intentional Instruction

Pianta (2003) defines intentionality as a "deliberate and organized interaction between educators and children, where teachers purposefully challenge, support, and develop children's skills" (p. 5). Epstein (2007) elaborates that educators facilitate learning by providing information, offering feedback, posing questions, and introducing hypothetical situations to deepen understanding. Drawing on Pianta (2003) and Berliner (1992), Epstein (2007) describes an intentional teacher as someone who consciously and purposefully ensures that young learners acquire the essential skills and knowledge Epstein (2007) defines an intentional teacher as one who operates with clear purpose and awareness to ensure young learners develop the essential skills and knowledge required for both academic achievement and success in life (p. 1). The belonging and becoming framework encourages "educators to recognize the importance of the children's present lives, emphasizing that early childhood needs to be accounted not only for the preparation for the future but also for its current experiences" (Deewr, 2009, 7). Epstein (2007) further explains that intentional teaching is a thoughtful and

deliberate process, requiring careful planning and purposeful action. Intentional educators use their expertise and knowledge to design meaningful learning experiences, identify teachable moments, and make the most of them. Additionally, such teachers focus on defined learning objectives and employ strategies to guide children in achieving these goals.

1.3 Collocations: Definitions and Contributions to Writing

Theories related to formulaic language in English derive from the contributions of grammar structures and other linguistic elements (Wray, 2002, as cited in Gulec, 2015). Language develops through both written and spoken forms, shaping established routines and common phrases. Collocations primarily involve lexical and grammatical components. Scholars define collocations in various ways, but they are generally seen as words that frequently occur together in sentences or paragraphs, forming recognizable patterns. These fixed combinations often appear together in context. Sinclair et al. (2004) describe collocations as words that typically align with two or more others, forming coherent structures in communication. Saeed (2003) views collocations as word pairs that habitually appear together, emphasizing their role in helping learners internalize meaning through repeated exposure. Akbar, Pathan, and Shah (2018) highlight that writing is one of four key language skills required for learning English, identifying it as the most important. Effective writing allows individuals to communicate their ideas clearly (Kumar et al., 2021; Sadiku, 2015). Chandio et al. (2013) describe creative writing as an expression of original thought, relying heavily on the cognitive abilities of the writer. Writing depends on vocabulary, requiring not only the knowledge of individual words but also of words that commonly occur together (Çakmak et al., 2021; Murcia, 2001). Collocations represent habitual word pairings, showcasing a significant trend of go togetherness (Webb et al, 2013). These pairings are vital for vocabulary acquisition. While many strategies exist for teaching collocations, mastering them remains a challenge for learners of foreign languages (Ucar & Yükselir, 2015). To express themselves effectively, learners must use appropriate word pairings, which significantly enhance their language skills.

Given the critical role of collocations in language learning, educators and researchers have increasingly prioritized their instruction, especially for EFL students (Ariffin & Abdi, 2020). EFL learners often struggle with English writing due to it not being their native language, prompting ongoing research to improve creative writing abilities (Ismail, 2011; Kumar, 2020). Lee (2024) stated that “productive knowledge of collocations is scalable, which progresses from the ability to recall the form to the ability to use the form in the context in free production” (P.113). Studies suggest that emphasizing collocations is among the most effective strategies for improving writing proficiency (Ashouri & Mashhadi Heidar, 2015). Bui (2021) observes that EFL learners often devote years to memorizing vocabulary and grammar, yet they still struggle to produce natural-sounding writing and speech. Teachers should adopt approaches that enable students to communicate their ideas effectively in written form. It is important to create activities that engage students in developing their writing abilities (Pan et al., 2022; Sepianita, 2010). Anh (2019) asserts that strong writing skills are essential for communication, allowing individuals to express themselves effectively through written language. While writing is inherently creative, it is also described as a difficult integrative practice (Leggette et al., 2015). Nonetheless, many English learners find writing particularly challenging, facing

difficulties in articulating their thoughts and mastering the language. Researchers have explored these challenges extensively, identifying the barriers students usually face in their writing assignments (Anh, 2019).

1.4 The Current Study

Ghonsooli et al. (2008) note that while Iranian EFL learners may have a substantial vocabulary repertoire, they often lack an understanding of collocations. Despite their strong grasp of grammar and vocabulary, these students find it challenging to use the language cohesively. Their ability to produce and comprehend language heavily depends on their lexical knowledge, particularly their familiarity with collocations. McCarthy (1990) argues that knowledge of collocations is a fundamental aspect of the linguistic competence that native speakers possess, which can be particularly difficult for second-language learners to acquire. Scholars suggest that mastering collocations is vital for language development (Hill, 2000; Lewis, 2000). Research indicates that teaching lexical collocations can significantly improve overall English proficiency (Hsu, 2010). However, the pedagogy surrounding multi-word units remains underexplored (Sánchez, 2015). According to Siyanova-Chanturia and Spina (2019), proficiency in collocations reflects target language fluency. In classroom contexts, students with creative ideas may receive lower grades because they lack awareness of the essential collocations related to key terms in their writing. Consequently, both incidental and deliberate instruction of collocations can enhance students' mastery of English (Webb & Nation, 2017). Focusing on productive skills associated with collocational use may also play a crucial role in improving EFL learners' writing performance (Mousavi & Darani, 2018). This study aimed to explore effective methods for teaching collocations to improve EFL learners' writing outcomes. Specifically, it compared the effects of incidental and deliberate instruction on students' writing scores and sought to identify strategies that could enhance their ability to use collocations effectively in writing. Therefore, the below-mentioned queries were proposed:

RQ1. Does incidental teaching of collocations significantly affect the writing performance of Iranian EFL learners?

RQ2. Does intentional teaching of collocations significantly affect the writing performance of Iranian EFL learners?

RQ3. Which of the methods of instruction (i.e., incidental vs. intentional) is statistically more significant?

2. Methodology

2.1. Participants

The study was carried out with 60 pre-intermediate English learners from Safir Language School in Tehran, Iran. The participants, evenly split between 30 males and 30 females, ranged in age from 17 to 25. To ensure uniformity, two experimental groups were created according to their proficiency test results. The instructional materials for the study included the *Touchstone* series and McCarthy and O'Dell's (2008) *English Collocations in Use*. Each unit concluded with a writing assignment. One group underwent direct instruction to intentionally learn collocations, while the other group was exposed to collocations incidentally, and there was no control group.

2.2. Instruments

2.2.1 Preliminary English Test (PET)

To form homogeneous groups, the Cambridge ESOL Preliminary English Test (PET), developed by Cambridge University Syndicates (UCLES), was employed. This general English proficiency test consisted of three sections: reading and writing (35 reading items and 3 writing tasks), listening (25 items), and speaking (4 parts), assessing participants' English proficiency. The writing section specifically evaluated grammar, structure, spelling accuracy, and clarity in conveying a short communicative message. Participants were tasked with composing a written piece addressed to a specific individual. Using the PET scoring rubric, four subscales—content, communicative achievement, organization, and language—were rated from 0 to 5. The test duration was 75 minutes.

2.2.2 Pretest for Collocations and Writing

Fifty lexical and grammatical collocations were selected from the course materials, including *English Collocations in Use* by McCarthy and O'Dell (2007). These collocations were categorized based on their relevance to the learners' resources and familiarity. To evaluate participants' writing proficiency, the PET writing section was employed as a pretest, examining their skills through the criteria of organization, communicative achievement, content, and language. The assessment also considered their usage of collocations to determine the extent of their learning. Participants' written submissions were scored accordingly. The writing task allocated 30 minutes for completion, as specified in the PET manual.

2.2.3. Posttest for Collocations and Writing

The same writing task from the PET exam was utilized as the posttest to evaluate the impact of the instructional sessions. Participants were given 30 minutes, consistent with the pretest, to complete the posttest.

2.2.4 Textbooks

To teach collocations, *English Collocations in Use* by Michael McCarthy and Felicity O'Dell (2007) was integrated alongside the course book. This textbook was selected to familiarize learners with common collocations derived from the Cambridge International Corpus (2017). Each section spanned two pages: explanations of collocations and the relevant tasks and activities.

2.3. Design and Context of the Study

The research employed a quantitative approach with a quasi-experimental design, consisting of pretest, instructional intervention, and posttest phases. Two experimental groups were included, both undergoing treatment sessions, with no control group. Participants' writing scores were the dependent variables, while the types of instruction—intentional and incidental—served as the independent variables.

2.4. Data Collection Procedure

The PET was administered to EFL learners at Safir Language School to confirm their homogeneity. Participants were grouped based on their availability, and their PET writing

scores were evaluated against a rubric emphasizing collocation usage. Fifty collocations were selected from participants’ textbooks and aligned with those found in *English Collocations in Use* by McCarthy and O’Dell (2008). A collocation pretest was designed, which participants completed before undergoing six instructional sessions. In the first group, target collocations were presented intentionally, with explicit instruction on their structure and meaning. This group occasionally used the Longman Dictionary of Contemporary English for unfamiliar terms, underlined collocations, and compiled lists. In contrast, the second group learned collocations incidentally through L2 reading tasks, without direct focus on collocation teaching. Before reading assignments, students discussed relevant topics, such as holiday experiences, facilitating implicit learning of phrases like “take a holiday” or “take a train/bus.” Students then shared personal stories and completed short written tasks at home, drawing from their experiences. Their submissions were reviewed and corrected in the following sessions. After the instructional phase, participants took a posttest identical to the pretest. Additionally, a different version of the PET was administered to measure progress. SPSS software was used to analyze the pretest, posttest, and writing data.

2.5. Data Analysis Procedure

To evaluate the mean scores of the experimental groups on the pretest and posttest, two paired-sample T-tests and one independent-sample T-test were performed. The statistical analyses were carried out using SPSS and the results were presented for assessment.

3. Results

3.1. Results of the First Research Question Analysis

A paired samples *t*-test was conducted to examine improvements in writing scores of Iranian EFL learners in incidental group over time, from the pretest to the posttest. It should be noted that in all the analyses the normality of data was checked through examining the skewness values and all were between -2 and +2 (see Tabachnick & Fidell, 2013), showing the normality of the dataset (see Table 1).

Table 1. *Descriptive Statistics of the Incidental Class*

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Pretest	30	12.00	20.00	15.43	2.69	0.38	0.43
Posttest	30	16.00	20.00	18.53	1.38	-0.49	0.43

Table 2. *Paired Samples t-test for the Incidental Class*

		Paired Differences					t	df	Sig.
		Mean	Std. Deviation	Std. Error	95% CI				
					Lower	Upper			
Incidental Group	Pretest Posttest	3.10	0.20	0.36	3.84	2.35	8.64	29	.00

The paired-sample *t*-test demonstrated that the students in incidental group had some advances over time (3.10 points increase), from the pretest to the post-test, *t* = 8.64, *p*=.00. More specifically, as shown in Table 1, it can be argued that the students in the post-test (*M*=18.53,

$SD=1.38$) had significantly better performance in comparison with theirs in the pre-test ($M=15.43$, $SD=2.69$), with Cohen's d of 2.00, which signified a large effect (Sawilowsky, 2009).

3.2. Results of the Second Research Question Analysis

Another paired samples t -test was implemented to examine improvements in writing scores of Iranian EFL learners in intentional group over time, from the pretest to the posttest. It should be noted that in all the analyses the normality of data was inspected through examining the skewness values and all were between -2 and +2 (see Tabachnick & Fidell, 2013), signifying the normality of the dataset (see Table 3).

Table 3. Descriptive Statistics of the Intentional Class

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Pretest	30	12.00	20.00	15.16	2.46	0.35	0.42
Posttest	30	13.00	20.00	16.70	2.13	-0.10	0.42

Table 4. Paired Samples t -test for the Intentional Class

		Paired Differences				t	df	Sig.	
		Mean	Std. Deviation	Std. Error	95% CI				
					Lower				Upper
Individual Group	Pretest Posttest	1.53	1.04	0.19	1.09	1.14	8.06	29	.00

As can be seen in Table 4, the paired-sample t -test indicated that the students in the intentional group as well had improvements from the pretest to the post-test (a 1. points increase), $t=8.06$, $p=.00$. Consequently, it can be said that, as Table 3 illustrated, the students in the post-test ($M=16.70$, $SD=2.13$) had significantly better performance compared with theirs in the pretest ($M=15.16$, $SD=2.46$). At the same time, Cohen's d of 1.41 suggested a large effect (Sawilowsky, 2009). Considering this finding, the relevant null hypothesis was rejected.

3.3. Results of the Third Research Question Analysis

One independent-samples t -test was run on gain scores to investigate the differential effects of incidental and intentional teaching of collocations on the participants' writing scores from the pretest administration to the posttest and differences between these tests for all participants in collaborative and individual levels were examined. It is worth noticing that prior to utilizing t -test, the normality of data as well as the skewness values of these tests were also checked and it was displayed as -2 and +2 (See Tables 1, 3, & 5); showing the normality assumption was reasonable.

Table 5. The Descriptive Statistics of Writing Gain Scores of Different Groups from Pretest to Posttest

Group	Mean	Std. Deviation	Std. Error Mean	Skewness Statistic	Std. Error
Gain Intentional	1.53	1.04	0.19	1.27	0.42
Incidental	3.10	2.00	0.36	0.23	0.42

The outcomes revealed that participants' mean scores were statistically different in both administrations and for both groups, showing a large effect (see Tables 5 and 6) and it can be seen that the latter outperformed the former over the two testing times. Ultimately, it can be

concluded incidental teaching of collocation was more effective than its intentional counterpart in boosting Iranian EFL learners' writing scores over time.

Table 6. Independent-samples t-test of Gain scores of Writings

		Levene's Test		t-test						
		F	Sig.	t	df	p value	Mean Difference	Std. Error Difference	95% CI	
									Lower	Upper
Gain	Equal variances assumed	7.49	0.01	3.79	58	0.00	1.57	0.41	2.39	0.74
	Equal variances not assumed			3.79	43.57	0.00	1.57	0.41	2.40	0.73

4. Discussion

The analysis indicated that both intentional and incidental learning strategies led to significant improvements in writing scores; however, incidental learning had a stronger impact. This aligns with Chen's (2021) findings that state incidental learning imposes less cognitive pressure on learners, enhancing their performance. Hulstijn (2013) similarly noted the advantages of incidental vocabulary acquisition, emphasizing its potential for long-term retention. Studies by Lu (2021) and Sok and Han (2020) further corroborate the effectiveness of incidental learning in fostering meaningful engagement with word meanings and structures, thereby improving retention and application in writing. Minda and Ross (2004) supported these findings by demonstrating that incidental learning improves learners' performance and helps them acquire language structures more effectively. Similarly, Webb et al. (2013) observed that learners often pick up word combinations unintentionally while reading, with repetition playing a key role in mastering collocations. Their research highlighted that (a) individuals can acquire word combinations incidentally through story reading. These outcomes align with Boers (2020), who found that unintentional learning strategies contributed to vocabulary acquisition, although methods involving the simultaneous study of information proved more effective. This effectiveness is attributed to the ability of repeated experiences to reinforce memory, albeit within certain limitations. Pellicer-Sánchez (2020) also argued that incidental learning benefits from the intensive study of collocations, as frequently encountering word groups facilitates retention. He emphasized that collocations are less noticeable than individual words in authentic contexts, making focused exposure crucial. Collocations often consist of common words, which further reduces the likelihood of learners consciously recognizing them (Pellicer-Sánchez, 2020).

In contrast, Nakata and Suzuki (2019) argued that deliberate learning methods are more effective in recalling collocations for a longer time. Their study highlighted the advantages of spaced vs. massed practice in vocabulary acquisition, a finding supported by research on the spacing effect (Cepeda et al., 2006) and vocabulary learning (Farvardin, 2019). Similarly, Laufer (2005) cautioned against relying solely on reading for vocabulary acquisition and advocated for explicit instructional strategies to develop vocabulary effectively. Alemi and Tayebi (2011) diverged from these results, suggesting that the mode of information presentation significantly influences vocabulary outcomes, with no clear advantage for either incidental or intentional strategies. Ahmed (2017) concluded that intentional learning promotes better memorization due to the depth of processing involved. Spector and Kim (2014) echoed

this view, asserting that intentional methods are more efficient because they provide clear objectives that engage learners more deeply. Hung (2015) also noted that intentional learning fosters active engagement with resources, leading to improved outcomes. Serrano and Huang (2021) suggested that deliberate repetition is more beneficial for vocabulary learning than incidental methods. Schmitt and Won (2008) similarly reported that intentional learning strategies yielded better results than incidental methods.

Conclusion

The analysis of the data for the first research question revealed that students in the incidental learning group experienced significant progress from the initial test to the final test, indicating a strong effect. In essence, comparable improvements were observed in the intentional learning group. Regarding the third research question, an independent samples t-test identified a significant difference in gain scores between the groups, with the incidental group outperforming the intentional group. These results suggest that incidental instruction of collocations was more influential in enhancing the participants' writing scores.

The study highlights the value of incidental learning in writing enhancement. These findings can assist educators in choosing effective teaching strategies for collocations to boost writing performance. Additionally, syllabus designers and policymakers could incorporate these insights into educational materials to enhance vocabulary instruction. Teacher training programs should emphasize the benefits of incidental learning, encouraging instructors to adopt strategies that focus on this approach for greater effectiveness. Learners should also be educated on the importance of collocations, as unfamiliarity with these word combinations may hinder their writing skills. Teachers must actively engage students with collocations and frequently evaluate their understanding and application in various contexts.

Several limitations must be considered when generalizing these findings. The study's sample size was restricted to participants from a single language institute in Iran. Likewise, including the control group that would receive no treatment on collocations may enhance the reliability of the findings. Future research should consider larger, more diverse samples. Factors such as participants' prior learning experiences and socio-economic backgrounds were not controlled, which may lead to varying results. Additionally, the study's one-semester duration limits conclusions about the long-term effectiveness of this instructional approach. Longitudinal research could examine these methods over longer periods and with more varied participants. Future research could explore the following areas:

- Conducting studies with larger sample sizes to validate the findings in broader settings.
- Exploring incidental/intentional teaching to students with varying skills, expertise, gender, and experiences.
- Investigating these approaches' impact on speaking, listening, etc.

References

- Ahmad, J. (2011). Intentional vs. incidental vocabulary learning. *Interdisciplinary Journal of Contemporary Research in Business*, 3(5), 67-75.
- Ahmed, S. (2017). Mental Health Stigma and Subjective Happiness. *Journal of Psychology & Clinical Psychiatry* 7(1), 00426. <https://doi.org/10.15406/jpcpy.2017.07.00426>
- Akbar, M., Pathan, H., & Shah, A., Syed Waqar. (2018). Problems Affecting L2 Learners' English Writing Skills: A Study of Public Sector Colleges Hyderabad City, Sindh, Pakistan. *Language in India*, 18(5), 7-26. www.languageinindia.com
- Akhter, S. & Nur Nordin, R. (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), 382-382.
- Alemi, M., & Tayebi, A. (2011). The influence of incidental and intentional vocabulary acquisition and vocabulary strategy use on learning L2 vocabularies. *Journal of Language Teaching and Research*, 2(1), 81-98. <https://doi.org/10.4304/jltr.2.1.81-98>
- Anh, D., & Thi, N. (2019). EFL Student's Writing Skills: Challenges and Remedies. *IOSR Journal of Research & Method in Education (IOSR-JRME)*, 9(6), 74-84. <https://api.semanticscholar.org/CorpusID:211201771>
- Ariffin, A., & Abdi, B. M. (2020). The relationship between collocation competence and writing skills of EFL learners. *AJELP: Asian Journal of English Language and Pedagogy*, 8(1), 41-52. <https://api.semanticscholar.org/CorpusID:274171492>
- Ashouri, S., Arjmandi, M., & Rahimi, R. (2014). The Impact of Corpus-Based Collocation Instruction on Iranian EFL Learners' Collocation Learning. *Universal Journal of Educational Research*, 2(6), 470-479. <https://doi.org/10.13189/ ujer.2014.020604>
- Berliner, D. C. (1992). Telling the stories of educational psychology. *Educational Psychologist*, 27(2), 143-161. https://doi.org/10.1207/s15326985ep2702_2
- Boers, F., (2020). Improving English learners' productive collocation knowledge: The effects of involvement load, spacing, and intentionality. *TESL Canada Journal*, 34(3), 140-164. <https://doi.org/10.18806/tesl.v34i3.1277>.
- Brown, R., Waring, R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories. *Reading in a Foreign Language*, 20(2), 136-163. <https://api.semanticscholar.org/CorpusID:14219593>
- Bui, T. L. (2021). The Role of Collocations in the English Teaching and Learning. *International Journal of TESOL & Education*, 1(2), 99-109. <https://doi.org/10.11250/ijte.01.02.006>
- Çakmak, F., Namaziandost, E., & Kumar, T. (2021). CALL-enhanced L2 vocabulary learning: Using spaced exposure through CALL to enhance L2 vocabulary retention. *Education Research International*, 2021(1), 1-8. <https://doi.org/10.1155/2021/5848525>
- Cambridge University Press. (2017). *Cambridge International Corpus*. <https://www.cambridge.org/elt/corpus>
- Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T. & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin*, 132(3), 354-380. <https://doi.org/10.1037/0033-2909.132.3.354>
- Chandio, J. H., Khan, H. M. A., & Samiullah, M. (2013). Condition of creative writing in the north and south Punjab. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 7(2), 321-330. <https://api.semanticscholar.org/CorpusID:168168914>
- Chen, Y. (2021). Comparing incidental vocabulary learning from reading-only and reading-while-listening. *System*, 97, Article 102442. <https://doi.org/10.1016/j.system.2020.102442>
- DEEWR (2009). *Being, Belonging and Becoming: The Early Years Learning Framework for Australia*. Barwon, ACT: Commonwealth of Australia.
- Du, T. T., Triet, A. M., & Thy, N. L. N. (2025). An investigation into the use of collocations in essay writing among English-majored students: A case study at the selected high schools in Binh Duong

- province. *International Journal of Innovative Research and Scientific Studies*, 8(3), 3066–3078. <https://doi.org/10.53894/ijirss.v8i3.7167>
- Duong, T. M., & Nguyen, H. T. T. (2021). EFL students' perspectives on the employment of language learning strategies. *English Language Teaching Educational Journal*, 4(1), 49-60. <https://doi.org/10.12928/eltej.v4i1.3489>
- Epstein, R. M. (2007). Assessment in Medical Education. *The New England Journal of Medicine*, 356(1), 387-396. <http://dx.doi.org/10.1056/NEJMra054784>
- Farvardin, M.T. (2019). Effects of spacing techniques on EFL learners' recognition and production of lexical collocations. *Indonesian Journal of Applied Linguistics*, 9(2), 395-403. <https://doi.org/10.17509/ijal.v9i2.20237>
- Finn, V. (2019). Entre el individuo y el Estado: Burocracia pre- y post-migratoria [The Individual Versus the State: Pre- and Post-Migration Bureaucracy]. *Revista Interdisciplinaria da Mobilidade Humana*, 27(56), 159–178. <https://doi.org/10.1590/1980-85852503880005609>
- Ghonsooli, B., Pishghadam, R., & Mahjoobi, F. (2008). The impact of collocational instruction on the writing skill of Iranian EFL learners: A case of product and process study. *Iranian EFL Journal*, 2(1), 30-59. <http://www.iranian-efl-journal.com>
- Godfroid, A. (2016). The effects of implicit instruction on implicit and explicit knowledge development. *Studies in Second Language Acquisition*, 38(2), 177-215. <https://doi.org/10.1017/S0272263115000388>
- Gulec, N. & Gulec, BA (2015). Lexical Collocations (Verb + Noun) Across Written Academic Genres In English. *Procedia – Social and Behavioral Sciences*, 182(2), 433 – 440. <https://doi.org/10.1016/j.sbspro.2015.04.816>
- Hill, J. (2000). Revising priorities: From grammatical failure to collocational success. In M. Lewis (Ed.). *Teaching collocation: Further developments in the lexical approach* (pp. 47-67). Language Teaching Publications.
- Horst, M. (2005). Learning L2 vocabulary through extensive reading: A measurement study. *The Canadian Modern Language Review*, 61(3), 355-382.
- Hsu, J-Y. (2010). The effect of collocation instruction on reading comprehension and vocabulary learning of Taiwanese college English majors. *Asian EFL Journal*, 12(1), 47-87.
- Hulstijn, J. H. (2013). Incidental learning in second language acquisition. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics* (Vol. 5, pp. 2632-2640). Wiley-Blackwell. <https://doi.org/10.1002/9781405198431.wbeal0530>
- Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. *Language Learning*, 51(3), 539-558.
- Hung, H.-T. (2015). Flipping the Classroom for English Language Learners to Foster Active Learning. *Computer Assisted Language Learning*, 28(1), 81-96. <https://doi.org/10.1080/09588221.2014.967701>
- Ismail, S. A. A. (2011). Exploring students' perceptions of ESL writing. *English Language Teaching*, 4(2), 73-83. <https://doi.org/10.5539/elt.v4n2p73>
- Kumar, T. (2020). Approaches in teaching writing skills with Creative Writing: A TESOL Study for Indian learners. *TESOL International Journal*, 15(5), 78-98.
- Kumar, T., Nukapangu, V., & Hassan, A. (2021). Effectiveness of code-switching in language classroom in India at primary level: A case of 12 teachers' perspectives. *Pegem Journal of Education and Instruction*, 11(4), 379-385. <https://doi.org/10.47750/pegegog.11.04.37>
- Laufer, B. (2005). Focus on Form in Second Language Vocabulary Learning. *EUROSLA Yearbook*5, 223-250. <https://doi.org/10.1075/eurosla.5.11lau>
- Lea, D. (2002). *Oxford collocations dictionary for students of English*. Oxford University Press.

- Lee, S. (2024). The relationship between receptive and productive knowledge of L2 English collocations. *International Journal of Applied Linguistics*, 35(1), 109-133. <https://doi.org/10.1111/ijal.12605>
- Leggette, H., Rutherford, T., & Dunsford, D. (2015). A model to augment critical thinking and create knowledge through writing in the agricultural social sciences. *NACTA Journal*, 59(3), 245-252. <https://search.proquest.com/docview/1731202934?pq-origsite=gscholar>
- Lewis, M. (2000). Learning in a lexical approach. In M. Lewis (Ed.), *Teaching collocation: Further development in the lexical approach*. Oxford University Press.
- Lu, Y. (2021). Implication from Incidental and Intentional Learning in Taking up a Foreign Language. *Advances in Social Science, Education and Humanities Research*, 615. 4th International Conference on Humanities Education and Social Sciences (ICHESS 2021). <https://doi.org/10.2991/assehr.k.211220.091>
- Marsick, V. J., & Watkins, K. E. (2001). Informal and incidental learning. *New Directions for Adult and Continuing Education*, 2001(89), 25-34. <https://doi.org/10.1002/ace.5>
- McCarthy, M. (1990). *Vocabulary*. Oxford University Press.
- McCarthy, M., & O'Dell, F. (2008). *English collocations in use*. Cambridge University Press.
- Minda, J.P., & Ross, B. H. (2004). Learning categories by making predictions: An investigation of indirect category learning. *Memory & Cognition*, 32(8), 1355-1368. <https://doi.org/10.3758/BF03206326>
- Mousavi, S. M., & Heidari Darani, L. (2018). Effect of collocations on Iranian EFL learners' writing: Attitude in focus. *Global Journal of Foreign Language Teaching*, 8(4), 131-145. <https://doi.org/10.18844/gjflt.v8i4.3568>
- Murcia, M. C. (2001). *Teaching English as Second or Foreign Language*. Newbury House.
- Nakata, T. & Suzuki, Y. (2019). Effects of massing and spacing on the learning of semantically related and unrelated words. *Studies in Second Language Acquisition*, 41(2), 287-311. <https://doi.org/10.1017/S0272263118000219>
- My, V. T. D., & Loi, N. V. (2025). In Need of Academic Collocation Instruction: Vietnamese English Majors' Knowledge and Perception. *Educational Process: International Journal*, 15, e2025132. <https://doi.org/10.22521/edupij.2025.15.132>
- Nation, P. (2001). *Learning vocabulary in another language*. Cambridge University Press.
- Pan, H., Xia, F., Kumar, T., Li, X., & Shamsy, A. (2022). Massive open online course versus flipped instruction: Impacts on foreign language speaking anxiety, foreign language learning motivation, and learning attitude. *Frontiers in Psychology*, 13, 833616. <https://doi.org/10.3389/fpsyg.2022.833616>
- Paradis, M. (2004). *A Neurolinguistic Theory of Bilingualism*. John Benjamins.
- Pellicer-Sánchez, A. (2020). Learning single words vs. multiword items. In Stuart Webb (ed.), *The Routledge handbook of vocabulary studies*, 158-173. Routledge. <https://doi.org/10.4324/9780429291586-11>
- Pianta, R. (2003). Standardised classroom observations from pre-K to 3rd grade: A mechanism for improving access to consistently high-quality classroom experiences and practices during the P-3 years. *Foundation for Child Development*.
- Reber, A. S. (1967). Implicit Learning of Artificial Grammars. *Journal of Verbal Learning and Verbal Behavior*, 6(6), 855-863. [http://dx.doi.org/10.1016/S0022-5371\(67\)80149-X](http://dx.doi.org/10.1016/S0022-5371(67)80149-X)
- Richards, J., & Schmidt, R. (2002). *Longman dictionary of language teaching and applied linguistics*. Pearson Education.
- Rosenberg, N. E., & Artman-Meeker, K. (2020). The effects of bug-in-ear coaching on special education teachers' use of effective classroom management practices. *Journal of Special Education Technology*, 35(1), 30-40. <https://doi.org/10.1177/0162643419836415>
- Russeler, J., Hennighausen, E., Munte, T.F., Rosler, & Sadoughvanini, S. (2012). The Relationship between use of collocations and expressiveness: fulfilling the referential function of language. *International Journal of English Language and Literature Studies*, 1(2), 28-37. <https://api.semanticscholar.org/CorpusID:14427469>

- Sadiku, L. M. (2015). The importance of four skills reading, speaking, writing, listening in a lesson hour. *European Journal of Language and Literature*, 1(1), 29-31. <https://doi.org/10.26417/ejls.v1i1.p29-31>
- Saeed, J. (2003). *Semantics* (2nd ed). Blackwell Publishing.
- Sánchez, L. (2015). L2 activation and blending in third language acquisition: Evidence of cross-linguistic influence from the L2 in a longitudinal study on the acquisition of L3 English. *Bilingualism: Language and Cognition*, 18(2), 252-269. <https://doi.org/10.1017/S1366728914000091>
- Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329-363. <https://doi.org/10.1177/1362168808089921>
- Sejianita, S. (2010). Increasing the Students' Writing Skill through Round Table Technique at The Second Year Student of SMPN 1 Sinjai Tengah (Doctoral dissertation, Universitas Islam Negeri Alauddin Makassar).
- Serrano, R., & Huang, H. Yun. (2021). Time distribution and intentional vocabulary learning through repeated reading: a partial replication and extension. *Language Awareness*, 32(1), 1–18. <https://doi.org/10.1080/09658416.2021.1894162>
- Sinclair, J., M., Jones, S., & Daley, R. (2004). *English collocation studies: The OSTI Report*. Continuum.
- Siyanova-Chanturia, A., & Spina, S. (2019). Multi-word Expressions in Second Language Writing: A Large-scale Longitudinal Learner Corpus Study. *Language Learning*, 70(2), 420-463. <https://doi.org/10.1111/lang.12383>
- Sok, S. & Han, Z. (2020). A study of L2 vocabulary acquisition under incidental and intentional conditions. *Vigo International Journal of Applied Linguistics*, 17(2020), 113-140. <https://doi.org/10.35869/vial.v0i17.1467>
- Spector, J. M., & Kim, C. M. (2014). Technologies for intentional learning: Beyond a cognitive perspective. *Australian Journal of Education*, 58(1), 9–22. <https://doi.org/10.1177/0004944113517828aed>.
- Stangl, W. (2004). Hide and seek? Communicating without words. In K. Notzon (ed.), *Understanding and Designing*. Oldenbourg Verlag.
- Tabachnick, B.G. & Fidell, L.S. (2013). *Using Multivariate Statistics sixth edition*. Pearson.
- Tanihardjo, J. (2018). Indonesian EFL Students' Production of English Lexical Collocation in Writing. *Journal of English Language and Culture*, 7(2). <https://doi.org/10.30813/jelc.v7i2.1025>.
- Trng, V.T., & Thao, T. T. (2021). A Study on the UES of English Collocation in Writing by Students at Thai Nguyen University. *International Journal of Social Science and Human Research*, 04(05), 1044-1049. <https://doi.org/10.47191/ijsshr/v4-i5-19>
- Uçar, S. & Yükselir, C. (2015). The Effect of corpus-based activities on verb-noun collocations in EFL Classes. *TOJET: The Turkish Online Journal of Educational Technology*, 14(2), 195–205. <https://api.semanticscholar.org/CorpusID:14393740>
- Webb, S. (2008). Receptive and productive vocabulary size. *Studies in Second Language Acquisition*, 30(1), 79-95.
- Webb, S., & Nation, P. (2017). *How vocabulary is learned*. Oxford University Press.
- Webb, S., Newton, J., & Chang, A. (2013). Incidental learning of collocation. *Language Learning*, 63(1), 91–120. <https://doi.org/10.1111/j.1467-9922.2012.00729.x>.
- Wray, A. (2002). *Formulaic language and the lexicon*. Cambridge University.