

The Effects of Isolated, Integrated and Synonym Generation Techniques on L2 Vocabulary Learning

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ABSTRACT

The purpose of this study was to investigate the effects of isolated, integrated and synonym generation techniques of L2 vocabulary instruction on Iranian EFL learners' short and long term vocabulary comprehension and production. For this purpose, 90 Intermediate level students were selected and randomly assigned to three experimental groups. Each group received instruction through a different technique of vocabulary instruction; namely, isolated, integrated, and synonym generation instruction. At the end of the experimental period, immediate and delayed post-tests were administered. The obtained data were analyzed using one-way ANOVA procedures. Results showed that among the three techniques for teaching vocabulary, integrated vocabulary instruction had the most desirable effect on the learners' short and long term vocabulary comprehension and production.

Key words: Isolated vocabulary instruction, integrated vocabulary instruction, synonym generation, vocabulary comprehension, vocabulary production.

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INTRODUCTION

Vocabulary is the basis of language; so teachers or even materials developers can never undervalue its importance in learning a foreign language (Hoshino, 2010). Not only is the learning of vocabulary important, but also it is a major challenge to many L2 learners. Iranian EFL learners are no exception to this general rule. This highlights the importance of attempts at finding techniques and activities that may facilitate this thorny task. According to Laufer (2005), vocabulary learning has been mistreated by the focus-on-form researchers. This implies that focusing on various kinds of instructional activities may enrich vocabulary teaching (Ellis, 2001). Many studies (File and Adams, 2010; Zarei and Arasteh, 2011; Zarei and Afrash Ab, 2013) have been conducted on various aspects of vocabulary learning and the factors

that may affect vocabulary learning. However, given the complexity of L2 vocabulary learning process, previous studies have come up with mixed, and sometimes contradictory, results. As a result, there appears to be a lack of consensus in our understanding of the exact nature of vocabulary learning in general, and the effect of different techniques of presentation on L2 vocabulary learning, in particular.

In an attempt to partially fill this gap, this study aims to investigate the effects of isolated, integrated and synonym generation techniques of vocabulary instruction on EFL learners' vocabulary comprehension and production. Although several studies have indicated that an integrated instruction during a reading lesson improves vocabulary learning (Blachowicz et al., 2005),

some others have shown that isolated vocabulary instruction also has positive results (File and Adams, 2010). In addition, few of the mentioned studies on vocabulary instruction were based on research in a classroom setting, and therefore, their results are not applicable to classroom contexts (Tinkham, 1993).

Questions of the Study

The present study aims to address the following research questions:

Q1. Are there any significant differences among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' short term vocabulary comprehension?

Q2. Are there any significant differences among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' short term vocabulary production?

Q3. Are there any significant differences among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' long term vocabulary comprehension?

Q4. Are there any significant differences among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' long term vocabulary production?

REVIEW OF THE RELATED LITERATURE

Vocabulary Definition

The term vocabulary refers to "a list or set of words for a particular language or a list or set of words that individual speakers of a language might use" (Hatch and Brown, 1995). Words are the tools we use to think, to express ideas and feelings and to learn about the world. Because words are the very foundation of learning, improving students' vocabulary knowledge has become an educational priority. Johnson and Johnson (2004) argue that "students' word knowledge is strongly linked to academic accomplishment, because a rich vocabulary is essential to successful reading comprehension". Vocabulary is the knowledge of words and word meanings (Diamond and Gutlohn, 2000). Vocabulary knowledge is not something that can ever be completely mastered; it expands and deepens during the course of a lifetime. Instruction in vocabulary involves far more than looking up words in a dictionary and using the words in a sentence.

Vocabulary is acquired incidentally through indirect exposure to words and intentionally through explicit instruction in specific words and word learning strategies. Vocabulary has a crucial role in every language (no matter whether it is first, second or a foreign language).

Chastain (1988) has acknowledged the important role of vocabulary in language acquisition. She believes that vocabulary usually plays a greater role in communication than the other components of language. She also asserts that the lack of needed vocabulary is the most common cause of students' inability to say what they want to say during communication. There are several ways in teaching L2 vocabulary that have appeared in the literature since the 1970s. They vary from inferring from context, to explicit teaching, integrating old words with the new ones, and promoting a deep level of processing (Atkinson, 1975; Nation, 1990). These trends are discussed below.

Inferring from Context

Atkinson (1975) argues that our perspective on teaching vocabulary was greatly influenced by the top-down, naturalistic, and communicative approaches of the 1970s and 1980s. Atkinson further adds that the emphasis was on implicit, incidental learning of vocabulary. Textbooks, in his opinion, emphasized inferring word meaning from context as the main vocabulary skill. Although exposure to a word in a variety of contexts is extremely important to understanding the depth of the word's meaning, providing incidental encounters with words is only one method to facilitate vocabulary acquisition.

Zarei and Arasteh (2011) investigated the effects of code-mixing, thematic clustering, and contextualization on L2 vocabulary recognition and production; they found that the participants of the thematic clustering group performed better than the participants of the code-mixing group on the production test. But there was no significant difference between the code-mixing and contextualization groups. In addition, the participants of the thematic clustering group performed better than the participants of the contextualization group on the production test.

Explicit Teaching

Livingston (1997) believes that explicit teaching helps to build a large 'sight vocabulary', integrate new words with the old, provide a number of encounters with words, promote a deep level of processing, facilitate imaging and concreteness, use a variety of techniques, and encourage independent learner strategies. L2 learners need help to develop a large sight vocabulary so that they may automatically access word meaning (Adams and Huggins, 1985). However, which words should be focused on: high frequency words or difficult ones? Difficult words need attention as well. Because students will avoid words which are difficult in meaning, in pronunciation, or in use, preferring words which can be generalized (Livingston, 1997), lessons must be designed to tackle the tricky, less-frequent words along with the highly frequent.

Integrating New Words with the Old Ones

According to lexico-semantic theory (Lado, 1990), humans acquire words first and then, as the number of words increases, the mind is forced to set up systems which keep the words well-organized for retrieval. The human lexicon is, therefore, believed to be a network of associations, a web-like structure of interconnected links (Atkinson, 1975). Lado (1990) argues that if L2 students are to store vocabulary effectively, instructors need to help them establish those links and build up those associations. When students are asked to draw on their background knowledge, their schema, they connect the new word with already known words, the link is created, and learning takes place. He further adds that there are a variety of class activities which draw on background knowledge, stimulating students to explore the relationships between the new words and words already known. Better learning will take place when a deeper level of semantic processing is required because the words are encoded with elaboration (Coady and Huckin, 1996). This means that by simply repeating items, maintenance rehearsal will not lead to retention. However, according to Cohen and Aphek (1981), providing elaborative rehearsal and richer levels of encoding will result in better learning. "When students are asked to manipulate words, relate them to other words and to their own experiences, and then to justify their choices, these word associations are reinforced" (Cohen and Aphek, 1981).

Integrated, Isolated and Synonym Generation Techniques

Generally speaking, intentional learning of vocabulary is the method of learning vocabulary by using tools to bring learners' attention to the form and meaning of words, such as dictionaries, vocabulary lists and direct vocabulary explanation. Zarei and Afrash Ab (2013) believe that in order to achieve a high level of recall, spelling corrections, synonym generation and relevant feedback are valuable. Barcroft (2009) examined the effects of synonym generation on L2 vocabulary learning during reading in both incidental and intentional vocabulary learning contexts. Spanish-speaking adult learners of L2 English at low- and high-intermediate proficiency levels read an English passage containing ten target words translated in the text. Results revealed that target word recall was higher when explicit instruction was provided and when synonym generation was not required.

Negative effects of synonym generation emerged in both incidental and intentional learning conditions. Many investigations indicating the strengths of isolated word training have examined children who were just entering school (Stuart et al., 2000). In contrast, there are several

studies that have shown children are more successful at reading words in context than at reading words in lists (Briggs et al., 1984; Juel, 1980; Nicholson et al., 1991; Perfetti and Roth, 1981; Wong and Underwood, 1996). The present study is aimed to resolve part of the existing controversies by investigating the effect of different techniques of vocabulary instruction on Short and long term L2 vocabulary comprehension and production.

MATERIALS AND METHODS

Participants and Instruments

A sample of 120 Iranian EFL learners (female) was selected to participate in the study. They were studying English at Sadegh institute (west of Tehran). The participants were roughly at the intermediate level of proficiency, and their age ranged from 14 to 22. After the administration of a 60-item TOEFL test and taking the result into account, 30 participants were excluded from the study because of either a different language proficiency test score, or not writing their names on the papers. There remained 90 learners to take part in the study. They were divided into 3 groups, and each group was randomly assigned to one type of treatment condition as follows: Group A: Integrated vocabulary instruction; Group B: Synonym generation vocabulary instruction and Group C: Isolated vocabulary instruction.

To fulfill the purpose of this study, the following materials and data collection instruments were used: A paper based TOEFL test was administered to homogenize the participants at the beginning of the study. This test contained 60 multiple choice items, and it was used to determine the proficiency level of the participants. It consisted of three sections. Section one: 20 items on vocabulary, Section two: 20 items on structure and Section three: 20 items on reading comprehension. A 100-item teacher-made vocabulary test was administered as the pretest to check the participants' knowledge of vocabulary and to make sure that they did not have knowledge of the target words prior to the treatment. Each item in the test included a statement containing one of the target words, which was underlined. The participants were expected to write the Persian equivalent of the target words. To study the effects of the treatments on the participants' short term vocabulary comprehension, a 30-item multiple choice posttest was administered immediately after the treatment. Another posttest in fill-in the-blanks format was administered to see the effects of treatments on the participants' short term vocabulary production.

The test had 30 items, each item included a statement with a blank to be filled with one of the target words that the participants had learnt during the treatment. There

Table 1. Descriptive and test statistics for the ANOVA on short-term vocabulary comprehension.

	N	Mean	Std. deviation	Std. Error
Synonym generation	30	22.45	2.645	0.591
Integrated	30	24.75	2.510	0.561
Isolated	30	21.50	2.724	0.609
Total	90	22.22	3.117	0.348

F=10.239, Sig. =.000 $\omega^2 = .25$

were also two delayed posttests one month after the treatments: one of them, a 30-item multiple choice test, was administered to compare the effects of the treatments on the participants' long term vocabulary comprehension. Another delayed posttest was a 30-item fill-in-the-blanks test. It was administered to investigate the effects of the treatments on the participants' long term vocabulary production. The teaching materials of this study included 15 reading passages taken from Interchange Book 2. The number of the target words to be taught during the treatment was 250. New Interchange, the English series for adult and young-adult learners of English, teaches students to use English for everyday situations and purposes related to school, work, social life, and leisure. Its integrated multi-skills syllabus uses contemporary, real-world topics to introduce conversational language and place grammar in communicative contexts.

Procedure

Initially, a TOEFL test was administered to the participants to select the sample of the study. Those whose scores fell between one SD above and below the mean on the TOEFL test were selected to participate in the study. Then, the participants were randomly assigned to one of the treatment conditions. Every group contained 30 participants (totally 90 participants). In the first session of the experiment, the pretest was administered. Those words of which the participants had prior knowledge were excluded from the posttests. Then, the treatment began, during which the learners were taught vocabulary three sessions a week. The participants were divided into three groups and each group was randomly assigned to one of the three treatment conditions as follows:

In one of the experimental groups, the researcher (teacher) used synonym generation technique of vocabulary instruction while in another group, vocabulary was presented using integrated vocabulary instruction; in the third group, the isolated vocabulary instruction was used.

First, the participants were given three minutes to discuss the title of the passage in pairs and to make predictions about the passage. Following this warm-up, the reading treatments began. In each group, the teacher read the text aloud while the participants followed along, reading their own books. This procedure was adopted to control

the pace of the reading lesson and to ensure that all the participants had the same processing time for the text. At the end of each paragraph, the researcher stopped and summarized the main ideas of the paragraph or asked students to do so. After the treatment, two immediate and two delayed posttests were administered to the learners in order to test their short and long term vocabulary comprehension and production, respectively.

RESULTS AND DISCUSSION

The First Research Question

The first research question sought to investigate whether or not there were any significant differences among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' short term vocabulary comprehension. To this end, the participants' scores on the immediate vocabulary comprehension test were compared using a one-way ANOVA. Descriptive and test statistics are summarized in Table 1. Table 1 indicates that the highest mean on the vocabulary comprehension test belongs to the integrated vocabulary group ($\bar{x}=24.75$), followed by the synonym generation group ($\bar{x}=22.45$). The lowest mean belongs to the isolated vocabulary instruction group ($\bar{x}=21.50$). In addition, the F-value and the significance level are indicative of significant differences among the three groups ($F_{(2,87)} = 10.23, p < .01$).

Meanwhile, the index of the strength of association indicates that 25% of the total variance among the groups is attributable to the effect of presentation techniques. In order to locate the differences among the groups, a post hoc Scheffe test was used. The results are summarized in Table 2. As it can be observed in Table 2, the mean score of the integrated group is significantly better than the mean scores of the synonym generation and the isolated groups, suggesting that the participants of the integrated group have outperformed their counterparts in the two groups, but the mean scores of the latter two groups do not differ significantly from each other.

The Second Research Question

The second research question was aimed at finding out whether or not there were any significant differences

Table 2. Multiple comparisons for the ANOVA on vocabulary comprehension.

(I) Group	(J) Group	Mean difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Integrated	Synonym generation	3.25000*	0.84830	0.004	0.8246	5.6754
	Isolated	4.55000*	0.84830	0.000	2.1246	6.9754
Synonym generation	Isolated	1.30000	0.84830	0.507	-1.1254	3.7254

*. The mean difference is significant at the 0.05 level.

Table 3. Descriptive and test statistics for the ANOVA on short-term vocabulary production.

	N	Mean	Std. Deviation	Std. Error
Integrated	30	22.9000	3.89196	0.87027
Synonym generation	30	19.3500	4.01674	0.89817
Isolated	30	18.2500	3.29074	0.73583
Total	90	20.7625	4.27013	0.47742
		F = 7.27,	Sig. = .000	$\omega^2 = .19$

Table 4. Multiple comparisons of means for the ANOVA on short-term vocabulary production.

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Integrated	Synonym generation	3.55000*	1.21344	0.043	0.0806	7.0194
	isolated	4.65000*	1.21344	0.004	1.1806	8.1194
Synonym generation	isolated	1.10000	1.21344	0.844	-2.3694	4.5694

*. The mean difference is significant at the 0.05 level.

among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' short term vocabulary production. To this end, the participants' scores on the immediate vocabulary production posttest were compared using another one-way ANOVA. The descriptive and test statistics are presented in Table 3. Table 3 indicates that the highest mean ($\bar{x}=22.90$) belongs to the integrated group, followed by the synonym generation group ($\bar{x}=19.35$). The participants of the isolated group have the lowest mean ($\bar{x}=18.25$). As it can be seen in Table 3, the F-value and the significance level ($F_{(2,87)}=7.27$, $p < 0.01$) are indicative of significant differences among the means. Furthermore, the index of the strength of association indicates that 19% of the total variance among the groups is due to the effect of presentation techniques. Another post hoc Scheffe test was utilized to locate the differences among the groups. The results of the multiple comparisons are summarized in Table 4. Based on Table 4, the mean score of the integrated group is significantly better than the mean scores of the synonym generation and the isolated groups, but the mean scores of the latter two groups do not differ significantly from each other. In other words, the participants of the integrated group have outperformed those of the synonym generation and the isolated groups, suggesting that integrated vocabulary instruction is the

most effective technique of instruction on short term vocabulary production.

The Third Research Question

The third research question sought to investigate whether or not there were significant differences among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' long term vocabulary comprehension. To this end, another ANOVA was used to compare the participants' scores on the delayed vocabulary comprehension test. Descriptive and test statistics are summarized in Table 5. Table 5 indicates that the highest mean on the long-term vocabulary comprehension test belongs to the integrated vocabulary group, followed by the synonym generation group. The lowest mean belongs to the isolated vocabulary instruction group. In addition, the observed F-value and the significance level ($F_{(2,87)} = 11.17$, $p < .01$) indicate that there are statistically significant differences among the three groups. At the same time, the index of the strength of association ($\omega^2 = 0.24$) indicates that 24% of the total variance in the dependent variable is accounted for by the independent variable. This means that the remaining 76% of the variance is left unaccounted for. In order to locate the differences among the groups, a post

Table 5. Descriptive and statistics for the ANOVA on long-term vocabulary comprehension.

	N	Mean	Std. Deviation	Std. Error
Synonym generation	30	22.9980	2.28725	1.371
Integrated	30	23.6420	2.14098	2.25
Isolated	30	22.1100	2.90816	2.215
Total	90	30.3250	3.11783	1.3658
	F = 11.17	Sig. = .000	$\omega^2 = .24$	

Table 6. Multiple comparisons for the ANOVA on long-term vocabulary comprehension.

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
	Synonym generation	3.15000*	0.86430	0.003	0.8996	5.1311
Integrated	Isolated	4.94000*	0.88140	0.001	2.1136	6.0036
Synonym generation	Isolated	1.41000	0.88120	0.511	-1.1254	3.1114

*. The mean difference is significant at the 0.05 level.

Table 7. Descriptive and test statistics for the ANOVA on long-term vocabulary production.

	N	Mean	Std. Deviation	Std. Error
Integrated	30	25.8700	3.89196	0.85134
Synonym generation	30	20.3600	4.98172	0.88716
Isolated	30	19.0100	3.7168	0.78173
Total	90	22.7901	4.08819	0.45197
	F = 8.21	Sig. = .000	$\omega^2 = .19$	

Table 8. Multiple Comparisons of Means for the ANOVA on Long-term Vocabulary Production.

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Integrated	Synonym generation	3.61000*	1.21344	0.032	0.0806	7.0194
	isolated	4.99000*	1.21344	0.002	1.1806	8.1194
Synonym generation	isolated	1.87000	1.21344	0.844	-2.3694	4.5694

*. The mean difference is significant at the 0.05 level.

hoc Scheffe test was used. The results are summarized in Table 6. As it can be observed in Table 6, the mean score of the integrated group is significantly better than the mean scores of the synonym generation and the isolated groups, suggesting that the participants of the integrated group have outperformed their counterparts in the two groups, but the mean scores of the latter two groups do not differ significantly from each other.

The Fourth Research Question

The fourth research question was aimed at finding out whether or not there were any significant differences among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' long term vocabulary production. To this end, the participants'

scores on the immediate vocabulary production posttest were compared. The descriptive and test statistics for the ANOVA are presented in Table 7. Table 7 indicates that the highest mean belongs to the integrated group, followed by the synonym generation group. The participants of the isolated group have the lowest mean. As it can be seen in Table 7, the F-value and the significance level ($F_{(2,87)} = 8.21$, $p < 0.01$) are indicative of significant differences among the means. Moreover, the index of the strength of association ($\omega^2 = 0.19$) shows that 19% of the total variance in long term vocabulary production is accounted for by vocabulary instruction techniques. Another post hoc Scheffe test was utilized to locate the differences among the groups.

The results of the multiple comparisons are summarized in Table 8. Based on Table 8, the Scheffe test indicates

that the mean score of the integrated group is significantly better than the mean scores of the synonym generation and the isolated groups, but the mean scores of the latter two groups do not differ significantly from each other. In other words, the participants of the integrated group have outperformed those of the synonym generation and the isolated groups, suggesting that integrated vocabulary instruction is the most effective technique of instruction on long term vocabulary production.

Discussion

The first and the second research questions of the present study sought to investigate whether or not there were any significant differences among the effects of integrated, isolated and synonym generation techniques on Iranian EFL learners' short term vocabulary comprehension and production. The results of these research questions were in line with several studies that have shown children are more successful at reading words in context than at reading words in lists (Briggs et al., 1984; Juel, 1980; Nicholson et al., 1991; Perfetti and Roth, 1981; Wong and Underwood, 1996). One of the studies consistent with the findings of the present study is the study done by Briggs et al. (1984) with nine- and ten-year old good and poor readers reading a target stimulus, either a word or a pseudohomophone, preceded by incongruous, congruous, or no-sentence context in the case of words, and by congruous or no-sentence context for the pseudohomophones. Both good and poor readers showed contextual inhibition with incongruous context, but only poor readers showed facilitation with congruous context. With the non-word targets this facilitation was particularly effective, such that poor readers' performance matched that of the good readers.

Another study supporting the usefulness of integrated vocabulary instruction technique is that of Juel (1980), who reported that good readers are predominantly text-driven, while poor readers are concept-driven, and average readers fluctuate. In the same vein, Nicholson et al. (1991) argue that there is a popular view among teachers that children read words better in context. This view is certainly supported by Goodman's classic study in 1965, which showed a 60 to 80% gain in word recognition accuracy when children read words in context as against reading an isolated list. Similarly, Martin-Chang and Levy (2005) concluded that words learned in context are read faster and more accurately in a new story context than are words learnt in isolation. Likewise, the findings are in line with those of Martin-Chang et al. (2007), who concluded that in comparison to isolated word training, contextual training has clear advantages for both word acquisition and transfer, and, with no drop in retention promotes the development of the reading skill over and above isolated word training.

The findings of the present study comply with the above-mentioned studies in that the results showed that if vocabulary items are taught in context (integrated vocabulary instruction), they are most likely to be comprehended and recalled both in short and long-term. On the other hand, unlike the above-mentioned studies, several other investigations underscore the strengths of isolated vocabulary instruction (Stuart et al., 2000). Regarding research questions 3 and 4, there are also a number of studies which have resulted in both isolated and integrated vocabulary instruction techniques being equally effective on EFL learners' vocabulary learning and retention. One of these studies was carried out by File and Adams (2010), who reported that both types of instruction were effective, and that their effect on learning and retention rates was more than incidental exposure alone. Also, retention rates were similar for both isolated and integrated instruction, but isolated instruction led to higher rates of learning.

One of the reasons why this study revealed different results from that of File and Adams with regard to isolated instruction may be the age of the participants. Older L2 learners may devote more attention to their learning with more consciousness and intellectual effort. Bearing this in mind, an older learner can benefit from isolated vocabulary instruction as well. Another study the findings of which partially contradict those of the present study is that of Nassaji (2003), who concluded that intermediate-level ESL learners are not very successful at inferring word meanings from context in a reading text, and that it is better in ESL learning classrooms for students not to be pushed to rely too much on context to learn the meanings of the new words. The reason for the different results could be the different L2 learning settings. The study carried out by Nassaji was in an ESL context, whereas ours was carried out in an EFL context. This factor may be an influential factor because learners in different L2 learning contexts may apply different vocabulary learning strategies.

In another study, Bracraft (2009) examined effects of synonym generation on second language vocabulary learning during reading in both incidental and intentional vocabulary learning contexts. He concluded that target word recall was higher when explicit instruction was provided and when synonym generation was not required. Negative effects of synonym generation emerged in both incidental and intentional learning conditions. One reason why the mentioned study yielded different results from the present study may be due to different L1 of the participants, which is considered a determining factor in synonym-generation technique. The other reason could be the way the new vocabulary was presented to the learners. In Bracraft's study, words were presented in the text itself with their translation, whereas in the present study, the teacher did not provide the learners with the text and did not translate them to L1 and

instead, gave them the synonyms as they were reading the text.

Conclusions

Based on the results presented earlier, it can be concluded that from among the three methods of vocabulary instruction, the group that received integrated vocabulary instruction outperformed the other two groups. This means that integrated vocabulary instruction turned out to be the most effective of the three techniques on both short-term and long-term vocabulary comprehension and production. In addition, the results of the immediate and delayed posttests showed that the synonym generation technique of vocabulary instruction comes second. This means that if EFL teachers teach vocabulary by giving synonyms, it will result in better short-term and long-term vocabulary comprehension and production than the third method of instruction that is isolated technique of instruction. Based on the findings of the present study, it can be concluded that teachers who wonder which of the three vocabulary instruction techniques cited in this study is better to follow can choose integrated technique, which turned out to be the best one. It can also be claimed that if teachers follow the integrated vocabulary instruction technique, they are most likely to obtain satisfactory results in their students' long and short term vocabulary comprehension and production. It can further be claimed that applying a synonym-generation approach to vocabulary instruction will result in better vocabulary learning and retention than an isolated approach. Furthermore, it can be suggested that a vocabulary instruction syllabus will yield better results if it is made of the three investigated vocabulary instruction techniques.

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