Effect of Vocabulary Instruction Integrated with Writing Exercises on Word Learning, Retention, and Awareness

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ABSTRACT

This study aimed to determine the effect of vocabulary instruction integrated with writing exercises on vocabulary learning, retention, and awareness. The research was designed according to the sequential explanatory mixed-method design, in which quantitative and qualitative methods were used together. A quasi-experimental model with a pretest-posttest control group was used in the quantitative phase. The study group of the quantitative stage consisted of 76 seventh-grade students in two experimental and one control group. The target words were taught according to the vocabulary instruction integrated with writing exercise in group A, enriched vocabulary instruction in group B, and traditional vocabulary instruction in the control group. In the qualitative phase, the participants were interviewed to determine to what extent they had learned the target words in terms of meaning and use. For this, three students from each group were selected and these students were interviewed about specific target words during the intervention. In addition, at the end of the intervention, the opinions of the students and their teacher in group A were elicited. Quantitative and qualitative findings revealed that vocabulary instruction integrated with writing exercises contributed to students' better learning of target words, the permanence of their learning, and the development of word awareness.

Key words: Vocabulary, Vocabulary Instruction, Writing, Word Awareness

INTRODUCTION

Vocabulary is an essential requirement for language and literacy skills. The results of the research (Baker et al., 1998; Bilge & Kalenderoğlu, 2022; NRP, 2000; Stahl & Fairbanks, 1986) reveal the existence of a strong relationship between vocabulary and reading comprehension. In addition, in some research (Cunningham & Stanovich, 1997; Scarborough, 2002), it has been determined that vocabulary in early periods is an essential predictor of reading success in later periods. Similarly, a situation can be mentioned between students' vocabulary and their success in listening comprehension (Stæhr, 2009). Vocabulary is also an essential factor in writing and speaking performance (Muallimoğlu, 2016; Olinghouse & Wilson, 2013).

Because of the importance of vocabulary, vocabulary instruction is an inseparable and indispensable part of language education. Although its weight varies according to the period and approaches, it is a subject considered in language education research and practice (Beck & McKeown, 1991; Blachowicz, Fisher, Ogle, & Watts-Taffe, 2006). One of the common approaches from past to present is traditional vocabulary instruction. This approach is mainly based on definitional knowledge (Nagy & Scott, 2000); words are given from a list or text, defined, looked up in the dictionary, memorized, and used in a sentence. Research shows that instruction based on definitional knowledge of words is not effective enough in teaching the meaning and usage characteristics of words. On the other hand, it shows that giving definitional and contextual knowledge together provides a higher level of learning (Baumann et al., 2003; Stahl & Fairbanks, 1986).

Research shows that for the best learning, it is necessary to use a method suitable for the target words, convey the words in a rich context, encounter words frequently, and actively participate in the learning process (Baumann et al., 2003; Beck & McKeown, 1991; Graves, 2009; NRP, 2000). Therefore, it can be said that there is a need for a comprehensive approach to vocabulary instruction. Due to this need, recent theoretical and applied research underlines that a comprehensive approach is necessary for effective vocabulary teaching (Baumann et al., 2003; Beck et al., 2013; Graves, 2016; Graves et al., 2021; Nagy, 2005; Stahl & Nagy, 2006).

There are many problems related to L1 vocabulary instruction in Turkey. When we look at the issues related to the method, research shows that modern methods and practices are used less in vocabulary teaching and that methods and practices cannot be sufficiently diversified in the teaching

process (Uğur, 2014; Yağcı et al., 2012). Textbooks and, therefore, vocabulary teaching practices are mainly based on the definition of words (Dilidüzgün, 2014; Ülper & Karagül, 2012). Some research shows that the practices for regular and purposeful repetition of target words in the course are insufficient (Ülper & Karagül, 2012), and the relationship between vocabulary learning and language skills are not emphasized enough (Karadağ, 2021; Pehlivan, 2003). Also, in a study examining the use of new words taught in Turkish lessons in written expressions, it was determined that the frequency of using target words was low (Genç, 2010). These results show that the practices for teaching vocabulary are limited to vocabulary activities, and the practices aimed at bringing the target words to the productive vocabulary are insufficient. Due to these deficiencies, the contribution of vocabulary instruction in the classroom to the students' vocabulary remains limited.

It takes a long process for the word to become a part of the mind with its meaning and usage features (Nagy & Scott, 2000). In this process, students should gain experience with target words by repeatedly encountering them in listening and reading activities and using them frequently in speaking and writing activities. Therefore, superficial learning, a teaching based on the definition of words, cannot ensure that the word is known enough. Penetrating the meaning of the word and mastering the usage characteristics can be achieved by understanding the meaning and usage characteristics of the word in different contexts and using this information in various language activities.

This study is based on Tansel's (1975) view: "We can master the meanings of words by using them, rather than going through our dictionaries and seeking them on our memory." This view and the requirements of vocabulary teaching have been taken into account. In other words, definitional and contextual knowledge will be handled together, and writing exercises will be used as a practice of vocabulary teaching. This comprehensive approach can provide better and permanent learning of words' meanings and usage characteristics in L1 vocabulary instruction. On the other hand, the practice can contribute to the development of students' vocabulary learning skills and habits and increase their interest and curiosity by increasing word awareness. The present study compared the effectiveness of methods each other to test the accuracy and validity of this assertion. In this context, the research questions of the study are as follows:

1. What is the effect of vocabulary instruction integrated with writing exercises on word learning?
2. What is the effect of vocabulary instruction integrated with writing exercises on word retention?
3. What is the effect of vocabulary instruction integrated with writing exercises on word awareness?

METHOD

Study Design

This study was carried out according to the mixed method (Creswell et al., 2003), in which quantitative and qualitative research methods are used together. The quantitative phase of the study aimed to determine the effect of the experimental intervention on students' learning and retention of target words and word awareness. The quasi-experimental study was carried out according to the pretest-posttest control group design. The qualitative phase of the study was designed and conducted as basic qualitative research (Merriam & Tisdell, 2016). In the qualitative phase of the study, firstly, interviews on target words were conducted to reveal the extent to which the students learned certain target words in depth and their ability to use them. After the intervention was completed, the opinions of the students and the teacher who performed the intervention were consulted about the experimental intervention. The documents produced by the students in the vocabulary and writing exercises were examined. Thus, the quantitative data obtained in the study was tried to be explained in more detail, and the effect of the intervention was presented from a more comprehensive perspective.

Participants

In the quantitative phase of the study, the study group consisted of 76 seventh-grade students in the experimental and control groups according to cluster sampling. In group A, 48.1% (n=13) of the students were male, 51.9% (n=14) female; in group B, 52% (n=13) of students were boys, 48% (n=12) were girls; in the control group, 54.2% (n =13) of students were male and 45.8% (n=11) was female. The study group of the qualitative study phase consists of 9 students according to maximum variation sampling. For this group, one upper, middle, and lower-level student was selected from each of the control and experimental groups according to their success in the pre-test application of the vocabulary achievement test. There are 5 boys and 4 girls in this group. In the qualitative phase of the study, apart from the study group created to determine the students' knowledge of certain words, a second study group was used. After the intervention was completed in this study group, interviews were conducted with the experimental group students, who were taught vocabulary integrated with writing activities about the experimental intervention. In addition to this, the teacher who performed the intervention was also consulted.

Data Collection

In the quantitative phase of the study, two different data collection tools were used, namely the vocabulary achievement test and the word awareness scale, which the researcher prepared. In the qualitative phase of the study, the interview was used as a data collection method.

Vocabulary achievement test was prepared to measure students' knowledge of target words during the quantitative phase of the research. The vocabulary achievement test includes 80 multiple-choice questions designed to measure each of the 80 target words. The vocabulary achievement test was applied as a whole before the intervention as a pretest. On the other hand, the vocabulary achievement test was given as a post-test and a 4-week delayed test piece by piece,

and a total of eight post-tests and 4-week delayed tests were applied during the intervention.

Word awareness scale was used in the research to determine the effect of the experimental intervention on students' word awareness. The scale was piloted in four different schools located in the city center of Ankara. As a result of the EFA, the items with a factor load of less than.32, burdening more than one factor and forming a single factor, were removed. A three-factor structure was obtained. The factor load values of the items vary between.399 and.818. Three factors, the first factor is 31.819, the second factor is 9.223, and the third factor is 6.765, explaining 47.807% of the total variance.

CFA was performed to determine whether the three-factor 17-item structure obtained from the EFA was confirmed. As a result of the analysis, it was seen that the t and chi-square values of the latent variables explaining the observed variables were significant. [$\chi 2$ =202.72, SD=116, p<.00]. The ratio of the degree of freedom with chi-square was determined as $\chi 2/SD$=1.75. The values obtained from other fit indices are as follows: RMSEA=.043, GFI=.94, AGFI=.93, RMR=.062, NNFI=.95, CFI=.96.

To test the reliability of the 17-item word awareness scale, Cronbach's Alpha internal consistency coefficient was examined. As a result of the analysis, the internal consistency coefficient of the scale as a whole was determined as.86. In addition, the internal consistency coefficient was examined for each sub-dimension of the scale. Accordingly, the internal consistency coefficients of function, interest, and strategy sub-dimensions were determined as.79.,73, and.74, respectively.

Interviews were conducted in the study immediately after and in harmony with the vocabulary achievement tests. Accordingly, the first interviews were done for all 20 target words at the beginning of the intervention. The second and third interviews were conducted piecemeal as in the posttest and 4-week delayed test. After applying the posttest and 4-week delayed test in each session, the students were interviewed about the selected words. Interviews were conducted within a semi-structured interview form to measure vocabulary.

Considering the difficulties in implementation, interviews were conducted with a limited group of students –9 students– for specific target words –20 words–. Besides the interviews to measure vocabulary in the qualitative research phase, interviews were conducted for the experimental intervention. The interviews were conducted using a semi-structured interview form with the students in the experimental group, in which vocabulary instruction integrated with writing exercises and the teacher who carried out the intervention.

Procedures

The experimental intervention was conducted within the framework of 8 texts in the textbook and related activities in this research. Explanations on the selection of target words and the implementation of the experimental intervention are given below.

Selecting Target Words

In this study, target words were selected based on the Tier approach (Beck et al., 2013). Considering that the number of words that can be taught to students in a lesson is between 8-12 (Beck et al., 2008; Stahl, 1999), it was decided to teach students 10 target words in each intervention session.

Firstly, to select 10 target words in each text, Tier 2 words in the texts were determined. After creating the candidate target word pool, the candidate words were subjected to several evaluation processes to determine the final target words. First, the research results on the vocabulary of the target audience (Karadağ, 2005; Kurudayıoğlu, 2005) were used. Secondly, the words that were the subject of vocabulary teaching activities were determined by scanning the 5th and 6th-grade Turkish textbooks. These words were removed from the candidate target words pool of this study. Thirdly, 5 Turkish teachers were asked to select 15 words that students probably do not know and need to learn from the candidate target word pool. After this evaluation process, the number of candidate target words was reduced to 15.

After identifying the candidate target words of 15 words, these were converted into a knowledge rating form (Blachowicz & Fisher, 2015). Before the intervention, this form was applied to the experimental and control group students. The students rated the 15 candidate target words determined for each of the 8 texts and a total of 120 candidate target words according to the criteria in the form. The data obtained from this form were considered in selecting the final target words. According to these, 10 target words were chosen from each text, which are thought to be more important and useful, and most of the students do not know.

Intervention

Vocabulary activities were conducted in one lesson in each group. In the experimental group, in which vocabulary instruction integrated with writing exercises, an additional lesson in writing with target words was carried out. The intervention was made by the same teacher who conducted the Turkish lessons in the classes in all of the experimental and control groups.

The target words were handled within the framework of the vocabulary activities in the textbook in the control group. The book mainly includes activities that include puzzles and word-meaning matching. Traditional vocabulary teaching practices are included throughout the book. In teaching target words, three basic steps are followed: estimating the word's meaning from the context, checking the guessed meaning from the dictionary, and using it in a sentence.

To ensure ideal learning, instead of using a single method and technique, the methods and techniques used in the teaching process have been diversified according to the target words and the students' characteristics. While creating the content of the vocabulary instruction applied in the experimental groups, many sources were consulted. Still, mostly Beck et al. (2008, 2013), Graves (2009, 2016), Karadağ (2021), and Stahl and Nagy's (2006) principles of effective vocabulary teaching were used. Accordingly, starting from

introducing a word, a series of activities were carried out to gain the word's meanings and usages.

The target words were first presented to the students in the experimental groups with a context that would best reflect the target meaning. The meaning of the target word was not given directly, and the students were directed to use context clues and the word parts to enable them to guess the meaning more accurately. After that, the guesses put forward by the students for the meaning of the word were checked from the dictionary, and the word meaning was revealed more clearly with the explanations of the teacher. While giving the dictionary meaning of the word, the meaning has been handled with its determining and distinguishing features, and it has been tried to be embodied as much as possible. For this purpose, multimedia tools have been used in the teaching process.

After the word meanings were explained thoroughly, three different sentences were given to the students, exemplifying the correct and beautiful use of the target word. After examining the sample sentences, the students were sometimes asked to rewrite/say one of these sentences in their own words and sometimes to summarize the text they read using the target words. After that, students were asked to write/say an original sentence including the target word. To avoid carelessly constructed sentences consisting of subject and verb, it was requested that the sentence to be written/said to be composed of at least five words. In addition, the teacher uses the "Is there no one who increases?", which she applied to encourage students to use the target word in a larger sentence structure. The teacher evaluated the students' sentences, and feedback was given to the students about their word usage. After these activities, the target words were added to the word wall created on the class board, and these remained on the word wall until another word activity.

In addition to the word activities described above, writing activities related to word activities were performed in the experimental group, in which vocabulary instruction integrated with writing activities. Writing activities were carried out immediately after the vocabulary activities. The importance of words and word choice in written expression was explained with examples at the beginning of the intervention to encourage the students to use the newly learned words in their writings. Also, the necessity of using newly learned words in written and oral expression was emphasized. After that, the target words were written on the board from time to time, and the students were asked to use them in their writings by adding them to the writing activities from time to time. The students tried to use the target words in their writings. In this way, eight different writing exercises were carried out during the intervention.

Data Analysis

In the quantitative research phase, the students' correct answers were coded as 1 and the incorrect answers as 0 in the vocabulary achievement test, used as a pre-test, post-test, and 4-week delayed test. Total post-test scores were obtained by combining the scores of 8 different immediate tests applied piecemeal. Similarly, the total 4-week delayed test

score was obtained by combining 8 different 4-week delayed test scores, which were applied piecemeal. Accordingly, if a student answers all questions correctly, the highest score he can get from the vocabulary achievement test is 80. Statistical analysis was performed on the total scores of both tests. T-tests were used for comparisons within groups, and ANOVA and ANCOVA tests were used for comparisons between groups. The effect sizes were calculated according to Green and Salkind (2005) formulas.

Student answers to the target words, which are the subject of the interview, were evaluated using the vocabulary evaluation form. In this framework, first, the knowledge and skills of the students for each of the target words were graded as "unknown, partial meaning knowledge, complete meaning knowledge, partial usage skills, complete usage skills." Secondly, the students' knowledge levels about the words that are the subject of the interview and the results of the vocabulary achievement test were compared. In the qualitative phase, it was not aimed to test whether there was a significant difference between the vocabulary of the groups by analyzing the data statistically. Instead, it aims to evaluate the effectiveness of the experimental intervention by revealing the level of the students' vocabulary.

Word interviews were analyzed by three different researchers within the framework of the evaluation form. During the analysis process, the names and group information of the students were hidden, preventing possible biased coding. The researchers' encoding of students' vocabulary was calculated according to the encoder reliability formula of Miles and Huberman (1994), and the inter-coder reliability was calculated as.92. However, this was not enough, and a consensus was sought in all codings in the study. For this reason, different codings were re-evaluated with the researchers, and a consensus was reached on all codings.

According to the content analysis, some main themes and sub-themes were reached. Accordingly, four main themes, namely contributions, supporting elements, orientations, and negativities, were determined based on the opinions of the teachers and students, and sub-themes and views related to the main theme were discussed under these main themes. Besides student and teacher opinions, the documents were examined and analyzed. The findings obtained from the analysis of the documents were not dealt with separately in the study, and they were used in the conclusion and discussion section.

RESULTS

Quantitative Findings

As a result of the measurements made to determine the effect of the experimental intervention on the students' level of learning target words and word awareness, some findings were reached. The data regarding the results are presented in Table 1 as a whole.

As seen in Table 1, in all experimental and control groups, it was determined that the post-test mean scores were higher than the pre-test mean scores and differed significantly $[t_{(26)}= -24.96, \eta^2=.96; t_{(24)}= -25.81, \eta^2=.97; t_{(23)}= -22.90, \eta^2=.96 \ p<.05]$. On the other hand, when the post-test mean

scores and the 4-week delayed test mean scores were compared within the group, a significant decrease was observed in all experimental and control groups [$t_{(26)}$= 6.601, η^2=.63; $t_{(24)}$= 8.262, η^2=.74; $t_{(23)}$=10.336, η^2=.82; $p<.05$]. According to the ANOVA results, no significant difference was found between the groups in the vocabulary achievement test [$F_{(2-73)}$=.932, $p>.05$] and the word awareness scale [$F_{(2-73)}$=1.150, $p>.05$]. On the other hand, a significant difference was found between the post-test mean scores of the groups in the vocabulary achievement test in favor of the first experimental group A, in which the vocabulary instruction integrated with writing exercises [$F_{(2-73)}$= 22.767, $p<.05$, η^2=.38]. In addition, according to the ANCOVA results, which were conducted by controlling the post-test scores of the groups to test whether vocabulary instruction integrated with writing exercises has a significant effect on word retention, a significant difference was found between the experimental group A and control group [$F_{(2-72)}$=3.505, $p<.05$, η^2=.09]. On the other hand, according to the ANOVA results, no significant difference was found between the groups' post-test mean scores on the word awareness scale [$F_{(2-73)}$=1.628, $p>.05$].

Qualitative Findings

Findings on the Students' Vocabulary

After the experimental intervention, interviews were conducted with the students selected from the experimental and control groups to reveal how much they learned the target words. The findings related to students' meanings obtained from these interviews are presented in Figure 1.

When Figure 1 is examined, an increasing trend is striking in learning target words in terms of the meaning of group A students. It can be said that this increase is evident at the level of complete meaning knowledge, and it is also seen in the total number of words with partial and complete meaning knowledge. It can be said that the increase in the level of learning target words of the group B students is not continuous. It is noteworthy that although the vocabulary knowledge increased in the second interview compared to the first interview, it remained the same or decreased in the third interview. There was an increase in the vocabulary of the control group students in the second interview compared to the first interview. However, in the third interview, there is an increase in the complete meaning knowledge of the high-successful student and a decrease in the total number of words known. In addition, there is an increase in the vocabulary of medium and low-successful students. As a result, it can be said that the students' vocabulary meaning knowledge tends to improve in all groups in general. Still, the students in Group A have a more successful performance than the others.

When Figure 2 is examined, there is an increasing trend in the ability of group A students to use target words, as in learning the meanings of words. This increase, which is more evident in the second interview, is seen both in the complete

Table 1. Means and standard deviations at vocabulary achievement test and word awareness scale

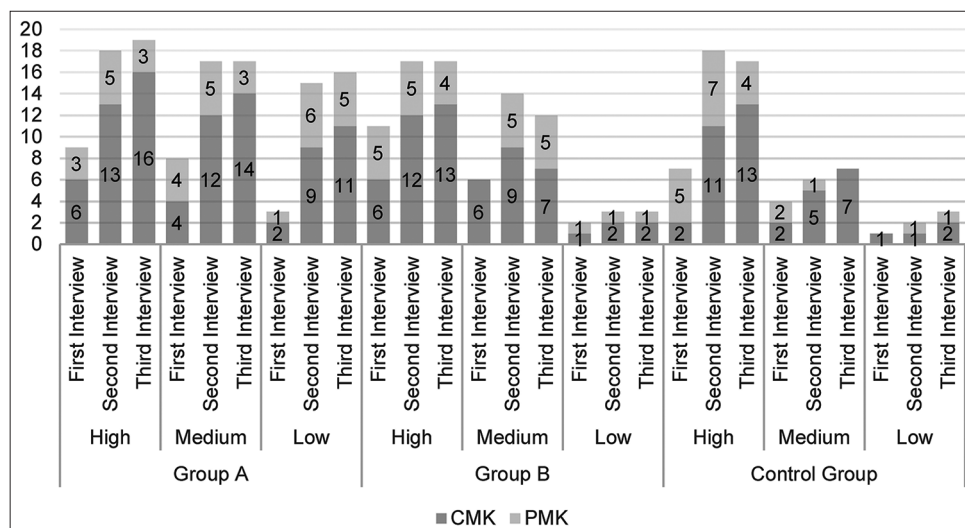| Measurement Tool	Measurement	Group A (*n*=27)		Group B (*n*=25)		Control Group (*n*=24)	
		M	*SD*	*M*	*SD*	*M*	*SD*
Vocabulary Achievement Test	Pre-test	33.86	7.70	30.76	7.86	31.58	9.84
	Post-test	69.78	3.71	63.80	4.98	60.25	6.44
	Delayed Test	63.78	5.48	54.20	8.27	47.79	9.79
Word Awareness Scale	Pre-test	64.37	6.90	65.36	8.00	67.42	6.83
	Post-test	64.07	8.66	65.28	9.24	68.42	8.43

Figure 1. Students' level of word meaning knowing
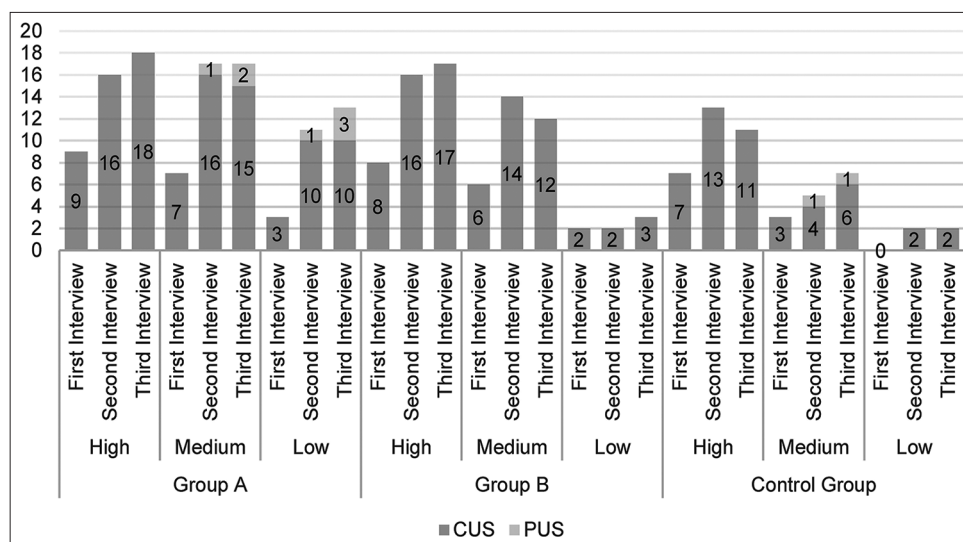*CMK: Complete Meaning Knowledge, PMK: Partial Meaning Knowledge*

Figure 2. Students' level of word usage
CUS: Complete Usage Skill, PUS: Partial Usage Skill

usage skill and the total number of words with partial and complete usage skills. In the third interview, compared to the second interview, the skills of using words of group A students increased, or their gains were preserved. There is a similar situation for group B and control group students. However, unlike the group A students, a decrease is observed in the word skills of the moderately successful student from group B and the highly successful student from the control group. In addition, another remarkable result is that the number of words that low-achieving students in group B and the control group can use is limited, as is the number of words they know. As a result, students' ability to use target words tends to improve in all groups. However, group A students have a significantly more successful performance in this regard.

Opinions on the Experimental Intervention

Contributions

All the students in the experimental group, in which vocabulary instruction integrated with writing exercises, expressed a positive opinion about the benefit of the intervention. This theme includes three different sub-themes: contribution to vocabulary learning, contribution to writing skills, and contribution to word awareness. All students think that the practices contribute to vocabulary learning in the theme of contributing to vocabulary learning. They attribute this contribution to the fact that the intervention provides permanent learning and is fun. Regarding this, a student said:

We learn words more easily. What we learned in the past was not permanent. We were working, and we were making textbooks, we were passing, two or three lessons were permanent. Now it's more… Previously, five out of 10 words were permanent. But now it's seven to nine words, or even more. [St.2, boy]

Another student said, *"We worked in a fun way with pictures, example sentences, and writing activities."* [St.27,

girl] Similarly, the teacher who made the intervention explained her thoughts in this regard as follows:

While vocabulary activities were a matter that we had previously covered in 10 minutes, with this intervention, it took one class hour and even two lesson hours with writing. The intervention attracted a lot of attention from the students. Even the students who never wrote a sentence made up sentences. They experienced the pleasure of using different words. Words made their writing more expressive. They listened to and criticized each other's writings. Critiques have been constructive. The student also realized whether or not he used the word correctly. He realized that word choices are not an easy task, and it takes time and effort.

Supporting Elements

In the students' opinions, the view that both sentence making and writing activities help them learn the target words gains weight. However, in addition to these, some of the students' opinions point out that the methods and techniques, materials, and assessment and evaluation activities used during the intervention contribute to the students' vocabulary learning. One student expressed his opinion as follows:

I think that everything we do has a contribution. The picture made us remember it more. Example sentences set an example for us, and we tried to do like him. Writing activities also contributed. [St.27, girl]

The teacher's opinion also supports the students' views. The teacher expressed her opinion as follows:

Visual materials and worksheets made the lesson lively. The tests at the end of the activities were very effective. Although I warned them many times, many students thought they knew the word and marked the meaning in the tests without reading the sentence. He was surprised when he did not get the score he wanted at the end of the exam. By doing this a few more times, he learned by experience that words gain different meanings in each

sentence. Example sentences were helpful when constructing sentences. They got help from those sentences. They noticed the changing meanings in the sentence.

Devotion

There are two sub-themes within this main theme: the desire to continue the intervention and the willingness to use independent vocabulary learning strategies. In the experimental group, except for two students, all students want the practice to continue and the vocabulary activities to be carried out similarly to the intervention. The students justified their requests with the fact that the intervention was fun and its contribution to learning the words permanently. Some of the student views on this are as follows:

> *Because it is easier to learn that way. It's already enjoyable. Besides, we do not get bored while learning words.* [St.2, boy]
>
> *I will try to use words all the time.* [St.16, girl; St.17, girl]

The teacher also wants to continue practicing and carrying out the vocabulary activities similar to the students' opinions. She expressed her opinion as follows:

> *Beforehand, I used to not insist on getting feedback and not pay much attention to word activities. After the intervention, I enjoyed it as they learned and used the words correctly. I devoted most of my time to writing activities. The beautiful expressions in the writings of the students made me proud. I would like to use this practice even though it is not as detailed as this in my next lessons. If we can continue this practice, I think it will be more effective in the future. This practice should be implemented gradually from the fifth grade to the eighth grade, and the time devoted to grammar should be devoted to these activities.*

Negativities

It was observed that the students in the experimental group had favorable opinions about the intervention in general. Still, they had negative approaches to some stages of the intervention. Some students said that imitating an example sentence helped them learn the words. On the other hand, some students said they had difficulty imitating example sentences, or this was a tedious and unnecessary activity. Students expressed their opinion on this matter as follows:

> *At first, we did not like to imitate sample sentences. But later, we realized that the practice was to get used to using words correctly. So it was good for us.* [St.5, boy]

The views of the teacher also support these views of the students. The teacher stated that the students did not like this practice very much. Except for the imitation of the example sentence, no adverse opinions were expressed about the intervention. However, although he had a favorable opinion about the benefit and contribution of the intervention, one student stated that he was bored with the intervention. The teacher also did not express any adverse opinions about the intervention.

DISCUSSION

According to the post-test result, it was concluded that both vocabulary instruction integrated with writing exercises, enriched vocabulary instruction, and traditional vocabulary instruction practices are effective in teaching target words. Studies in the literature (Marzano, 2004; NRP, 2000) also show that direct vocabulary teaching contributes to vocabulary learning. In this respect, it can be said that the results obtained in this study are compatible with the results of the research in the literature. According to the 4-week delayed test, it can be said that no vocabulary teaching method, regardless of its content, can prevent the learning of target words from being forgotten. It can be noted that the decrease in the 4-week delayed test is related to the forgetting of the learned information over time. The knowledge gained from vocabulary learning can quickly weaken (Nation & Webb, 2011). At the same time, it can be thought that the immediate test results do not reflect the actual situation of the students, and they overestimate the students' vocabulary (Waring & Takaki, 2003).

A significant difference was found between the post-test mean scores of the groups in favor of group A. This situation reveals that vocabulary instruction integrated with writing exercises is more effective than enriched and traditional vocabulary instruction in teaching target words. Related studies in the literature also support this result. More effective results are obtained in teaching target words with practices that include a rich teaching process, encourage students to use target words and actively participate (Baumann et al., 2003; Graves, 2006; Graves & Silverman, 2011; NRP, 2000; Stahl & Fairbanks, 1986). On the other hand, studies in the literature show that although there is no possibility of choosing the best method in vocabulary teaching, any instruction gives better results than no instruction, and practices that include different methods and techniques are more effective than practices that include a single method and technique (Beck & McKeown, 1991; Graves & Silverman, 2011).

Qualitative findings of vocabulary learning in the study also point to a similar result to the quantitative findings of the intervention. The results of the second interview revealed that the vocabulary instruction integrated with the writing exercises contributed more to the teaching of the target words. The interview determined that the number of words learned and used by the students in group A was higher than those in group B and the students in the control group. The teacher's and students' opinions about the intervention's contribution also support the mentioned quantitative and qualitative findings on vocabulary learning.

Many factors can be mentioned that explain the effectiveness of vocabulary instruction integrated with writing exercises in teaching target words. The first and most important of these is that students use target words outside of vocabulary activities – in this study, in writing exercises. Because group A was more successful in the vocabulary achievement test and interviews than group B, which was subject to the same activities, except for writing exercises. Some theoretical and applied studies (Duin & Graves, 1987; Graves & Silverman, 2011; Tansel, 1975; Zou, 2017) also reveal that

writing in a way that supports this idea is an important tool in vocabulary learning. On the other hand, research on memory shows that deeply processed information (Craik & Tulving, 1975) is more permanent.

It can be said that additional sentence examples contributed to the fact that the students in group A and group B were more successful than the control group in the vocabulary achievement test and interviews. Experimental group students saw the meaning and usage characteristics of the target word in sentence examples, in other words, in different contexts. Thus, they could structure the meaning and usage of the word flexibly in their minds. It can be said that this need is primarily related to the contextual knowledge of the target word. Because to understand the meaning and usage characteristics of the words, it is necessary to see the words in a context and know the meaning and usage characteristics that they gain in different contexts. It turns out that teaching is more effective than just teaching definitional knowledge. In addition, words and concepts should be seen in different contexts to not be limited to the context in which they were learned and to generalize to new situations (Baddeley, 1999; Beck et al., 2013).

While explaining the meanings of the words in the experimental groups, the drama, picture, cartoon, etc., are used in the teaching process. It can be said that the elements contribute to teaching target words. The fact that the experimental groups were more successful in the vocabulary achievement test and interviews than the control group, teacher and student views support this idea. The results of studies on the use of tools such as pictures and cartoons in vocabulary teaching (Bayraktar & Yaşar, 2005; Yaman & Gülcan, 2009) reveal that supporting definitions with a visual element, in other words, embodying the meaning of words makes an important contribution to vocabulary learning. In addition, some studies on memory (Clark & Paivio, 1991) show that coding information both visually and verbally in the mind provides better learning.

Based on the quantitative and qualitative findings of the study, it can be said that traditional practices, including using a dictionary to teach the meaning of the word, understanding the synonyms or antonyms of the word, and using the word in a sentence, help teach target words. Despite this, it can be argued that traditional vocabulary teaching is not an effective and efficient method when compared to the vocabulary teaching practices applied in the experimental groups. The fact that the level of remembering the target words of the control group students was lower than the students in the experimental group. Their achievements in the post-test compared to the pre-test were almost half in the 4-week delayed test reveal this situation more clearly. Research (Baumann et al., 2003; Nagy, 1988; Nagy & Scott, 2000; Stahl & Nagy, 2006) in the literature reveal that traditional practices have a place in vocabulary teaching, but they are not sufficient for thoroughly learning the meaning and usage characteristics of words.

There was no significant difference in the mean scores obtained from the pre-and post-test of the word awareness scale, both within the group and between the groups.

Accordingly, it can be said that the vocabulary teaching applied in the experimental and control groups is not effective enough in improving the students' word awareness. Some studies in the literature (Graves & Watts-Taffe, 2008; Scott & Nagy, 2004) point out that using the learned words in writing and paying attention to word preferences allows word awareness development. In this regard, it is unclear why the mean scores of the students in group A, in which the vocabulary instruction integrated with writing exercises, did not show an increase in the post-test of the word awareness scale compared to the pre-test. Because the opinions of teachers and students in qualitative findings indicate that students enjoy vocabulary activities, and their interest and knowledge of vocabulary learning have increased. However, interestingly, word awareness mean scores decreased slightly in the experimental groups, unlike the control group.

Several factors can be mentioned that explain the lack of increase in word awareness in the experimental groups. First, in the pre-test of the word awareness scale, it can be thought that the students' views on their vocabulary development do not reflect the truth, and the students' self-perceptions are high. Secondly, it can be thought that the experimental intervention enables students to evaluate their vocabulary development in a more realistic way, which in turn affects the results. Thirdly, the change in students' attitudes and behaviors may be related to other features of word awareness that are not included in the scale.

According to the qualitative findings, contrary to the quantitative results, it can be said that the intervention affects the development of word awareness. Because the views of the teacher and the students in the experimental group in which vocabulary instruction integrated with writing exercises indicate that the intervention contributed to the development of vocabulary awareness. Student and teacher opinions reveal that thanks to the practices, students began to see vocabulary activities as fun activities, students' interest in learning vocabulary has increased, and they enjoy using the new words they have learned. Students' attitudes and behavior changes about vocabulary learning suggest that the practice affects word awareness.

CONCLUSION

In conclusion, considering the quantitative and qualitative findings of the study, it can be said that traditional practices including using a dictionary to learn the meaning of the word, understanding the synonyms or antonyms of the word, and using the word in a sentence, help teach target words. Despite this, it can be argued that traditional vocabulary instruction is not an effective and efficient method compared to the teaching practices in the experimental groups, leading to superficial learning and causing the learned words to be forgotten quickly. It can be said that the comprehensive approach adopted in vocabulary instruction enables the meaning and usage characteristics of words to be learned better and permanently, and the practice contributes to the development of students' skills and habits towards learning vocabulary, increasing their interest and curiosity by providing a word awareness. However, the deficiencies in the

experimental groups show that vocabulary instruction and development should be considered and applied in a long-term and in-depth manner.

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