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Improving EFL Learners' Vocabulary Mastery: An Action Research Approach

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Abstract

In this action research study, the researcher aimed to find and address a problem that English as a Foreign Language (EFL) learners in her class come across to improve their language learning process. The action research study adopted mixed methods design using both qualitative and quantitative data collection and analysis methods. Firstly, to identify the problem, the researcher observed the students closely, analyzed their midterm scores, and administered a diagnostic survey to the students. The data collected through these procedures indicated that vocabulary is the most problematic area for learners. Then, to diagnose the source of the problem, the researcher used a think-aloud protocol. In this way, rich verbal data about students' reasoning during a vocabulary task were collected. After identifying that the source of the problem was a lack of strategy use, strategy training for contextual clues was implemented as an intervention for five weeks. Finally, the effectiveness of the intervention was evaluated through a paired-samples t-test. The analysis showed that students had significantly higher results in the vocabulary section of the second midterm compared to the first midterm. This study found that strategy training for using contextual clues is effective in improving EFL learners' vocabulary mastery, independent of their language level.

Keywords: Action research, contextual clues, English as a foreign language, think aloud, vocabulary mastery

Introduction

In learning a foreign language, vocabulary has an indispensable role (Wilkins, 1972). Having a strong knowledge of vocabulary will help learners master the language by improving their performance in the four major skills (i.e., listening, speaking, reading, and writing) (Krashen, 1981). Tnanh Huyen and Thi Thu Nga (Rouhani & Behzad, 2013) highlighted the significance of vocabulary by defining it as a language element linking these four language skills when learning a foreign language. Moreover, Richard and Renandya (2002) supported the idea that vocabulary is crucial in foreign language learning, as it determines the speaking, listening, reading and writing performance of language learners in the target language. As Brown (2001, cited in Utami, 2014) stated, vocabulary is a fundamental element of a language, as having a sufficient vocabulary will enable language learners to communicate in that language, at least at a basic level. It seems that people's ability to convey meaning by simply

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stringing words together without utilizing any grammar rules makes vocabulary an essential element of a language, facilitating communication. Owing to this, vocabulary should be considered as an important component of foreign language learning, and sufficient attention, time, and effort should be given to develop vocabulary comprehension and to improve the vocabulary mastery of language learners.

Although developing good vocabulary is a fundamental element in learning a foreign language, it is one of the most difficult ones to learn. That is because knowing a word requires different kinds of knowledge (Nation, 1990). It requires knowing the meaning(s), the written form, the spoken form, and the grammatical behavior of the word. However, many language learners do not acquire the same level of comprehension about the words they have learned, because learning all aspects of words at once is not possible (Schmitt, 2000). Therefore, vocabulary is one of the most problematic areas for language learners, which affects their language learning process negatively (Kweldju, 2004; Priyono, 2004). However, it is possible to deal with this common problem of foreign language learning through strategy training. According to O'Malley and Chamot (1990) and Oxford (1990), by training learners for strategy use and encouraging them to utilize these strategies properly, English as a Foreign Language (EFL) teachers can enhance the language learning processes of their learners.

Believing that strategy training may have positive effects in EFL classes, some scholars identified the essential principles for successful implementation of strategy training (O'Malley & Chamot, 1990; Oxford, 1990). One of these researchers, Oxford (1990), defined these principles in ten steps. These are: (1) focusing on the attitudes, beliefs, and needs of students in strategy training; (2) choosing the strategies that support each other and that are appropriate for the language task, learner goals, and learning styles; (3) involving strategy training in language teaching activities continuously instead of teaching them as short and individual interventions; (4) providing students with sufficient opportunities to practice strategies during language instruction; (5) providing various activities and materials that students can refer to for reference at home; (6) addressing the affective concerns like anxiety, motivation, attitudes and interests that will affect strategy choice; (7) making the strategy training explicit and relevant with sufficient, varied, and authentic practice materials; (8) making strategy training transferable to future language tasks and not only in the given class; (9) individualizing the strategy training for different students' preferences or needs; and (10) facilitating students' self-evaluation of their progress and the effectiveness of the strategy use.

Strategy training is regarded to be more important in vocabulary teaching/learning because research indicates that learners should not be left alone to deal with the vocabulary in the target language in their own way but should explicitly be taught how to

develop their vocabulary mastery through vocabulary learning strategies (Brown & Perry, 1991). In a similar way, Nation (2001) claimed that since there are numerous narrow-range, low-frequency vocabulary items in a language, it is not logical to expect learners to learn all these words, but they can be taught how to handle them. It is also a well-known fact that languages include a huge number of words, so it is neither possible nor realistic to expect learners to know all these words. Thus, several researchers like Sternberg (1998) and Rubin (1987) stated that good language learners are accurate guessers who can guess the meaning of an unknown vocabulary item from the context. Therefore, they need to be taught about the strategy of analyzing the sentences in the text to guess the meaning. According to cognitive psychologists, such strategies require deep comprehension and manipulation of information, so they may bring about stronger retention and better learning (Ma, 2017). It is possible to deduce from the findings of the previous research that the guessing process suggested as a strategy to deal with the unknown vocabulary items in a foreign language can benefit language learners, as they will gain a deeper understanding of the word by knowing the word in a context.

Context is so important in language learning that it includes both the question and the answer at the same time. Thus, foreign language learners need the ability to deduce meaning from the context. Laufer and Bensoussan (1982) are scholars believing that guessing by focusing on contextual clues is a vital skill that should be taught to language learners. Likewise, Porte (1988) and Nation (2001) claimed that using context and contextual clues is one of the most effective ways to guess and learn a word, and it should be included in foreign language instruction. The researcher also suggested that EFL learners, especially advanced learners, should be trained in using the context effectively for guessing. Additionally, Kesler (2010) used the context clues strategy through the cloze procedure. In other words, he removed the selected words from the text and put a space instead. The students receiving the text with the missing parts were required to complete the missing parts using their prior knowledge. At the end of this study, Kesler (2010) suggested that students had to use the contextual clues in the text. Using contextual clues improved students' vocabulary knowledge significantly.

Some other researchers who were interested in strategy training conducted research to investigate the effectiveness of training the language learners in guessing from the context. For example, Ebrahimain and Nabifar (2015) compared the effectiveness of three vocabulary learning strategies (i.e., using word-part, word-card, and contextual-clues). At the end of their study, they found that using contextual-clue strategy resulted in higher test scores than the other two strategies in posttests, which suggests that training language learners in the guessing strategy can enhance their ability to guess unknown words from the context. Similarly, Schmitt (2008) and

Fraser (1999) found that guessing from the context is the most preferred strategy employed by language learners when they encounter unknown words, and proving that the training sessions to teach the strategy to the students had a positive effect on their performance.

Seeing the positive effect that the guessing strategy may bring into language learning, some researchers suggested methods to teach language learners the art of guessing. To illustrate, Thornbury (2002) recommended some steps for guessing vocabulary from context. In the first step, he suggested that students should decide on the part of speech of the unknown word. That is, they should determine whether the word is a noun, a verb, or an adjective, etc. In the second step, students are asked to look into the word's direct collocate or the words that precede or follow it. In the third step, students are advised to look at the wider context, including the surrounding clauses and sentences. They can benefit from the signposting words such as "but," "and," or "however." These words have the potential to give a clue about how the unknown word is connected to its context. In the fourth step, students should guess the meaning of the unknown word, and in the last step, they need to continue reading to see if their guess is correct.

It can be inferred from the literature review that strategy training, especially guessing from the context, in teaching and learning vocabulary, plays a crucial role in the improvement of foreign language learners' vocabulary mastery. However, very few researchers have studied vocabulary guessing strategies in the Turkish context. In this action research study, the researcher aimed to help the learners in her class overcome their struggles with vocabulary by training them for strategy use. She observed that they had difficulty in learning vocabulary, but to make a data-driven decision, she collected data to test her assumption about the problem. By analyzing the exam scores and giving them a diagnostic survey, the researcher was sure that vocabulary was a problem suffered by the students in her class. Then, she decided to conduct an action research study to address the issue. As an intervention, the researcher trained her students for five weeks, till the second midterm exam, in the strategy of using contextual clues that would allow them to infer meaning from the text. At the end of the intervention, she investigated the effectiveness of the training. In brief, in this action research study, the researcher aimed to investigate whether strategy training can be a solution to her students' problems with vocabulary mastery. The following questions guided this research study:

1. Is vocabulary a problem for my learners that needs to be addressed?
2. Why do the learners have this problem?
3. How can this problem be overcome? (Can strategy training for using contextual clues solve the learners' problems with vocabulary mastery?)

Methods

The study adopted an action research design using both quantitative and qualitative data collection methods. The design aligns with the purpose of the research; as Nunan (1992) stated, action research is a method of self-reflective investigation performed by a teacher as a practitioner in order to solve problems, improve practice, or increase learning. In order to solve a problem in her everyday teaching context, the researcher followed the four steps of classroom action research: (1) Identifying a problem and planning the action; (2) Implementing the action; (3) Evaluating the action; and (4) Reflecting on the result of the evaluation (Kemmis & McTaggart, 1988).

Research Site and Participants

The research was conducted in an English Preparatory School at a state university in Turkey. The subjects of the action research study were 22 pre-intermediate level EFL students in the researcher's class. Their age ranged from 17 to 21. In the study group, 10 of the students were male, while the remaining 12 were female. All of the students were native speakers of Turkish.

Data Collection Tools

Various qualitative and quantitative data collection tools were administered in different stages of this action research study.

Midterm Scores

In the first stage of the study, to identify the problem, the researcher collected quantitative data through midterm scores. She collected the students' first midterm results and recorded the scores they received from the vocabulary section of the midterm exam. In the third stage of the action research, to evaluate the implementation's effectiveness, the researcher used midterm scores again. She collected the second midterm results of the students after implementing the intervention for five weeks and recorded their vocabulary scores, to compare them with their first midterm scores. The reliability and validity of the vocabulary sections of the midterms were checked by the researcher. For that purpose, the researcher computed the coefficient alpha values and split-half coefficient values of each exam. To calculate the split-half coefficients, the researcher split the items in the vocabulary sections of the exams into two halves based on odd and even numbers to avoid undesirable factors. The coefficient alpha values were calculated to be .75 and .74, and the split-half coefficient values were found to be .84 and .81. All values indicated that the reliability of the exams was met. For the validity of the exams, all of the vocabulary items in the vocabulary sections of the exams and the distracters were selected from the target vocabulary list given in the program. In this way, the content validity of the vocabulary sections of the exams was assured.

Survey

To validate the data received from midterm scores, in other words, to determine the language element (i.e., reading, listening, writing, speaking, grammar, and vocabulary) that the students had the most difficulty in, the researcher administered a diagnostic survey. In the survey, there were two items. The first item asked students to rate the level of difficulty they had in learning each language element on a 4-point Likert scale (1: No difficulty at all, 2: Little difficulty, 3: Much difficulty, 4: Very much difficulty). The other item in the survey was an open-ended item asking them to explain why they thought they had difficulty in learning the particular language element.

Think-Aloud Protocol

To answer the second research question, that is, to identify the source of the problem, the researcher collected qualitative data through a think-aloud protocol from four students. Based on their vocabulary scores from the first midterm, the two students scoring the highest (5 out of 10) and the two students scoring the lowest (0 out of 10) were invited to the think-aloud protocol, which facilitated collecting rich verbal data about these students' reasoning during a vocabulary task. The researcher informed them about the process and received their consent to record the think-aloud process. The researcher had a brief follow-up interview to learn about if/how they study vocabulary, what they do to practice the vocabulary they have learned in class, and whether or not they maintain a vocabulary journal.

In the third stage of the action research, to evaluate the impact of the action, the researcher used the think-aloud protocol again. The researcher invited the same four students to have another think-aloud protocol. The same students were intentionally invited to the second think-aloud protocol as the researcher aimed to explore if there was a change in their thinking processes and use of the strategy after being given the strategy training. They were given a vocabulary task very similar to the one they had in the second midterm and asked to think-aloud their reasoning while doing the task. This procedure was audiotaped, to study in detail for research purposes. Then, they were briefly interviewed to find out whether or not there were any changes in their vocabulary study habits.

Data Collection

Survey

The researcher conducted the survey in November 2018, in the last hour of her last lesson. The survey was administered in Turkish to collect as much data as possible, especially with the open-ended question. All of the 22 students got the surveys. It

took them 10 minutes to complete the survey. Before they participated in the survey, all participants provided written informed consent.

Think-Aloud Protocol

To collect think-aloud data, the researcher scheduled each student a to different session in the researcher's office to provide them a quiet setting that would facilitate thinking aloud. After signing their consent, students were told to think-aloud as they problem-solved to answer the simulated vocabulary task. They were told that they should continue thinking aloud. The researcher kept the interaction with the students to a minimum, so as not to affect their thoughts. Once data collection was complete, the researcher asked a few questions to shed light on students' thinking and reasoning strategies. Besides, she conducted a brief follow-up interview regarding the students' vocabulary study habits.

Data Analysis

Analysis of Quantitative Data

Midterm Scores

The quantitative data received through midterm scores were analyzed using the IBM Statistical Package for the Social Sciences (IBM SPSS Corp., Armonk, NY, USA) 20 program, and were subjected to mean standard deviations. In order to determine whether significant differences were present between the first and the second midterm scores, a paired-samples *t*-test was run.

Survey Data

The quantitative data collected through the closed item in the diagnostic survey was analyzed by means of descriptive statistics through SPSS (Version 20). The number of counts was displayed in a table.

Analysis of Qualitative Data

The qualitative data collected through the think-aloud protocol and the follow-up interviews were transcribed and subjected to content analysis. The content analysis aimed to provide an overall description of the reasoning processes that the students used during the vocabulary task. The analysis allowed the researcher to illustrate the strategies the students used during problem-solving, and their rationale for the choices and decisions they made.

To present the voices of the participants in the study and to maintain the trustworthiness of the qualitative data, the researcher utilized the "member checking" strategy suggested by Lincoln and Guba (1985). For that purpose, after transcribing the think-aloud procedure, the researcher asked the participants to review the transcripts. The participants checked the transcripts, and none of them suggested any correction or revision.

Implementing the Action

As an action/intervention for not using contextual clues, the researcher trained students in a strategy for using contextual clues by modeling her way of thinking aloud. As Nation (2001) argues, benefitting from the context is one of the most useful strategies to learn and retain vocabulary. It is not likely that foreign language learners could remember all the new words. In that case, they may benefit from using the context to find the correct word. Therefore, the researcher decided to raise students' awareness of using contextual clues, such as punctuation, synonym, antonym, and example within the context. To do that, the researcher modeled how to use contextual clues to guess the meaning of unknown vocabulary.

To model her reasoning and thinking process in doing the vocabulary task, the researcher applied a think-aloud process in her class. She had a vocabulary task very similar to the one in the midterm. It was a one-page text with 10 missing vocabulary items and 14 vocabulary items given in a box. The task was completing the missing parts with an appropriate word from the box. She started reading the whole text with the missing parts first before attempting to complete the blanks. She explained that in this way, she could understand what the text was about. She explained that if they could understand what the text was about, they could activate their former knowledge about the topic, which would help them to come up with the correct answer. Then, she demonstrated how to use the contextual clues in the text. She looked for collocations, the words coming before or after the blank, or any other related word like a preposition in the context. Then, she searched for synonyms and/or antonyms within the text that would help her find the correct answer. She reread the lines around the blank to check if there were any clues like a word with a similar or opposite meaning. Then, the researcher focused on the formation of the words, explaining that knowing what type of a word they needed for the blank would ease their job. She demonstrated how they could understand whether a noun, a verb, an adjective or an adverb would fit in the blank. The researcher repeated the think-aloud procedure and modeled her reasoning, thinking, and problem-solving process once a week for five weeks. In this way, she aimed to teach the students how to use the contextual clues strategy expected from them in vocabulary tasks.

Results

Quantitative Data Findings

First Midterm Scores

To make a data-driven decision about the problem to work on in this action research, the researcher studied the grades that her students got from the vocabulary section of

Table 1.
Classroom Mean of Each Section in the First Midterm

Sections in the Midterm	Section Total	Classroom Mean
Listening	15	9
Reading	35	18
Writing	15	9
Vocabulary	10	3
Language	25	13
Total	100	52

the first midterm. As Table 1 shows, the mean score of the vocabulary section in her class was three out of ten, which was the lowest among the other sections of the exam (i.e., the listening, reading, language, and writing sections). The midterm scores indicated that this language area was a problem for this particular group of students.

Second Midterm Scores

As Table 2 shows, the mean scores of students in the listening, writing, and vocabulary sections of the second midterm were higher than their scores in the first midterm. The listening and writing mean scores increased slightly, while the vocabulary mean scores were doubled. In order to check if the differences were significant, the researcher needed to run further tests. Thus, in the third stage of the action research, to evaluate the effectiveness of the action/the intervention and to check whether or not the differences between the students' mean scores in listening, writing, and vocabulary sections of the first and the second midterms were significant, the researcher ran a paired-samples *t*-test. The results indicated that the differences in their listening and writing scores were not significant (Table 3). However, there was a

Table 2.
Classroom Mean of Each Section in the Second Midterm

Sections in the Midterm	Section Total	Classroom Mean
Listening	15	10
Reading	35	18
Writing	15	11
Vocabulary	10	6
Language	25	12
Total	100	56

Table 3.
Paired-Samples t-Test Analysis Results Comparing Vocabulary Scores From the First and the Second Midterms

	First Midterm			Second Midterm		<i>t</i>
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Vocabulary	22	3	1.25	6	1.05	8.58*
Listening	22	9	1.03	10	1.23	1.56
Writing	22	9	0.98	11	1.40	1.56

**p* < .01.

Table 4.
Frequencies of the Students Having Difficulty in Each Language Element

	Very Much Difficulty	Much Difficulty	Little Difficulty	No Difficulty at All
Reading	10	6	4	2
Writing	11	5	5	1
Speaking	15	6	1	0
Listening	10	6	4	2
Vocabulary	18	2	2	0
Grammar	14	6	2	0

significant difference in the vocabulary scores in the first midterm ($M = 3$, $SD = 1.25$) and the second midterm ($M = 6$, $SD = 1.05$); $t(22) = 8.58$, $p < .01$. This finding of the action research study suggests that the intervention effectively improved the students' vocabulary mastery.

Survey Results

The researcher conducted a diagnostic survey asking students to rate the language areas and skills to indicate their perceived difficulty. All of the 22 students in the classroom took the survey. As Table 4 shows, the survey results revealed that 18 students reported that they had very much difficulty in vocabulary, while two students stated that they had much difficulty in vocabulary, and the remaining two students indicated they had little difficulty in vocabulary.

For the open-ended items asking students why they found the language element(s) difficult, most of the students having very much difficulty in reading explained that they could not answer comprehension questions because they did not know the words in the text or in the questions. Similarly, most students having very much difficulty in writing explained that they had difficulty in using the necessary words to explain what they meant in their writing, because they did not know enough vocabulary to express their ideas. Therefore, it was deduced that students had difficulty in reading and writing, mainly because of their incompetency in vocabulary.

Results of the First Think-Aloud Protocol

The think-aloud protocol enabled the researcher to see what was happening in the thinking process of the students since it "involves more direct reporting of what learners are doing at the time of the task" (Nassaji, 2003). The results of the first think-aloud process suggested that the students receiving the highest vocabulary scores and the ones receiving the lowest scores differed in terms of their strategy. While the former read the text before they started putting the vocabulary items in an appropriate place in the text and applied some strategies like using contextual clues such as the collocations, synonyms and antonyms in the text, the latter group neither read the text nor used the contextual clues such as collocations, synonyms,

and antonyms in the text. Although one of the low achievers tried to consider the part of speech of the words, he could not, since he had difficulty in identifying the part of speech of the words. He said:

Now I need to decide if these words are “verbs”, “nouns” or “adjectives”. I know that “orbit”, “is composed of” and “merge” are verbs but what about “expanding”, is it a verb with “-ing” or is it an “adjective”, may be a “noun”. I am not sure, sorry.

At the end of this process, the researcher deduced that the students did not know how to use contextual clues to complete blank fill-in type of vocabulary tasks. Even if some might have known some strategies, such as considering the words’ part of speech, they could not find the correct answer because of their incompetence in word-formation. In addition, the lowest-scoring students stated that they did not revise vocabulary outside class as they did not know how to study vocabulary, and also as they felt frustrated when they saw the long list of the vocabulary items they were expected to know. One student said, “I really don’t know how to study vocabulary. I try to memorize them but I cannot keep all of them in my mind.” On the other hand, the highest-scoring students reported that they recorded the active vocabulary items that they were supposed to know on a daily basis. One of them stated that “After class every day, I write the new words that we learn in class in my notebook. I sometimes write them on cards to study later.”

Results of the Second Think-Aloud Protocol

The second think-aloud process revealed that the students were more careful with the contextual clues and strategy use. For instance, all four students read the text before starting to complete the blanks. They tended to use contextual clues by looking for the collocations, synonyms, antonyms, and word forms. One said:

To find the correct answer, I know that I should look at the word coming before and after the blank. They give me a clue as certain words are used together..... and the words with opposite meaning or the same meaning may appear around the blank.

Yet, they had difficulty in remembering, especially the collocations. They were all aware that they should look for collocations, but this strategy did not help the students receiving the lowest scores in both exams (i.e., both received 0 in the first midterm and 2 and 5 in the second exam.) much as it did with the students receiving the highest scores (i.e., both received 5 in the first midterm and 7 and 8 in the second midterm). The problem that the former students had was that they did not know the words that collocate with the target word. However, they showed a significant improvement in using the contextual clues. For one blank, two of the lowest-scoring

students could find the right word using their knowledge of word-formation, but they could not remember the meaning of the target vocabulary item. As a result, the second think-aloud protocol suggested that the students were eager to learn and use the contextual clues strategy; however, for this strategy to work more effectively, students need to recycle vocabulary more often.

Discussion, Conclusion and Recommendation

The quantitative data showed that the language area in which the students in the researcher's class had the most difficulty was vocabulary. The qualitative data also supported that poor lexical knowledge negatively affects the reading comprehension and writing skills of the language learners in the researcher's class. After determining the problem area for that specific group of learners, the researcher conducted a think-aloud protocol with some of the students in her class to find out the reason for the issue. As a result of the think-aloud protocol, the main source of the difficulty was found to be that students were not revising the vocabulary outside class and not using the contextual clues in the text. Accordingly, the researcher thought that raising their awareness of the importance of context and contextual clues through modeling her own strategy use for vocabulary tasks would be beneficial to address the problem.

The researcher taught the strategy of using contextual clues by modeling her own cognitive processes through the think-aloud method for five weeks till the second midterm. After implementing the intervention for five weeks, the researcher evaluated the effectiveness of the intervention by analyzing the second midterm scores and comparing them with those of the first midterm. As a result, the researcher found that the intervention proved useful, as there was a statistically significant improvement in students' vocabulary scores. The overall findings resulting from this research suggested that the intervention effectively contributed to the students' improvement in their vocabulary mastery. The mean vocabulary scores of the students in the first midterm were 3, and it increased to 6 in the second midterm. This finding of the study matches with previous research findings (Almunawaroh, 2018; Fraser, 1999; Huckin & Jin, 1987; Kesler, 2010; Nation, 2001; Schmitt, 2008), claiming that using the context and contextual clues is one of the most effective strategies to guess and learn a vocabulary in foreign language instruction.

It is possible to attribute the students' success at the use of contextual clues in inferring meaning at the end of the intervention to the effectiveness of the strategy training given to students. To train her learners for strategy use, the researcher explicitly modeled how to infer the meaning of an unknown word by using contextual clues in the text using a thinking-aloud method. In this way, she could verbalize her cognitive thinking strategy by self-questioning and this seems to result in the students'

receiving high gains in terms of strategy use. In the same vein, the researcher wanted the interviewees to think aloud and verbalize their thinking processes by providing them a similar vocabulary task, to understand their reasoning processes. The think-aloud method proved useful both as a teaching and a data collection tool in this study. Thus, this action research highlighted the value of the think-aloud method not only for teaching but also for evaluating the thinking and reasoning processes of students, which are not observable.

The study also revealed that guessing the meaning of unknown vocabulary items from the context is a suitable strategy for lower-level learners. This finding of the study contradicts the previous research of Alsaawi (2013) and Walters (2006), who claimed that the guessing strategy is useful for upper-intermediate and advanced learners who have enough linguistic competence to make a guess. Similarly, the findings of the study mismatch with the claims of Fudhla et al. (2019), who asserted that the strategy of using contextual clues for vocabulary learning works with learners having advanced language proficiency and it is too challenging for learners with lower levels of vocabulary acquisition. Differing from the research indicating that it is only advanced language learners who can benefit greatly from strategy training, this action research study suggests that lower-level language learners can also benefit from strategy training. This can be because the action research was conducted at an English medium instruction university, and the students participating in the study were required to pass a proficiency exam to start their undergraduate programs. Thus, the students had similar affective characteristics like having high motivation to improve their language proficiency and having positive attitudes toward the English language, which is their choice of language for academic study. Therefore, based on the findings of this action research, it is possible to conclude that affective factors like language learners' motivation and their attitude toward the language can determine their strategy use for contextual clues more than their language levels. This might explain the significant difference between the vocabulary scores of the participants who were studying in a pre-intermediate class at an English medium instruction university after getting strategy training. However, it is also important to mention the further findings of the second think-aloud protocol concerning the thinking processes of the low achievers. The qualitative data showed that the two interviewees receiving the lowest scores were well aware of how to use the contextual clues strategy after receiving strategy training, but they still encountered several difficulties in employing these strategies because, although they had the knowledge to look for collocations, they failed to do so as they lacked the knowledge of collocations of the target words. This means that although low achievers showed a significant improvement in using the contextual clues just like high achievers, they had more challenges in implementing these strategies and needed further support to be able to employ them more effectively. Thus, low achievers may benefit more from strategy training if it is

accompanied by well-designed vocabulary recycling support. As a result, based on the findings of the study, it is argued that it is not necessary to postpone the strategy training for vocabulary learning and guessing until students have gained much proficiency in the language. Rather, it is suggested that the strategy training can prove effective not only in higher-level EFL classes but also in lower-level classes, especially in the ones having students with high motivation and positive attitudes toward language learning.

Another important finding of the study is that among the four steps recommended for guessing vocabulary from context, by Thornbury (2002), most of the participants in this study preferred considering the part of the speech of the unknown words. They did not seem to prefer the other steps suggested by Thornbury (2002), like looking into the word's direct collocation or the words that precede or follow it, or looking at the wider context, including the surrounding clauses and sentences. This can be because the intervention was applied only for five weeks, and among all of the suggested steps for the strategy use, considering the part of speech is relatively an easy one. The results would have been better if the intervention had been applied for longer.

This study found that strategy training to use contextual clues is effective in improving EFL learners' vocabulary mastery. Thus, foreign language learners need to learn to use contextual clues to guess the meaning of unknown vocabulary items, which is a helpful strategy for giving students a hint without being forced to check the dictionary. Based on the findings of the study, it is advisable for EFL teachers to train their learners to be able to use contextual clues in a text. As it is not very likely for EFL learners to retain all the vocabulary items taught in class, they may need some other strategies to deal with the unfamiliar vocabulary in a text. To do that, they may benefit from the steps for guessing vocabulary from context by considering the part of speech of the unknown word, looking into the word's direct collocate or the words that precede or follow it, looking at the wider context, including the surrounding clauses and sentences, and continuing to read on to see if they guessed correctly.

As the participants using the strategies have produced good results in this study, teachers need to train learners for learning strategies through strategy instruction. Teachers should attempt to train their learners for strategy use so that they become more self-sufficient and effective in dealing with the challenges in language learning. It is advisable for teachers to systematically teach and boost learning strategies that support students' effective language use, and thus enhance their performance. A similar suggestion was made by Oxford (1990), who suggested that teachers introduce language learning strategies to their students and involve them in their daily instruction so that they could provide their students with sufficient opportunities

for practicing these strategies. However, in order to train their learners, the teachers should be trained in strategy instruction themselves. That is, they should be educated on the method, to be able to employ strategy training in their classroom instruction. The results and experiences gained through this action research study are expected to enable other teacher-researchers working in different contexts to compare and contrast the vocabulary learning and teaching processes and strategy training in their classes, and be more motivated to learn strategy training and implement it in their classes. The specific situations may differ from those described in this research study, but the general lessons can still be drawn and applied.

Conclusions and Reflections

The major purpose of the present study was to address a problem that EFL learners in the researcher's class face in enhancing their language learning process. The researcher identified that vocabulary is the most problematic area for learners. To deal with the issue, she tried giving strategy training on using contextual clues and evaluated the effectiveness of the intervention. As it was shown, the participants had higher grades on the vocabulary section of the midterm after they were given strategy training sessions on how to use context to guess the meaning of unknown words. Although the study has some limitations, like the limited number of students that participated in the study and the limited period of time that the intervention was implemented, it still has useful results and implications for teachers in the realm of teaching EFL. It revealed that teachers could use different strategies to facilitate the vocabulary learning of their students. Though the present study revealed very useful results, there is a need for more comprehensive research on different strategies that can be used for dealing with unknown vocabulary items. Some other strategies may lead to similar or even better results in foreign language learners' ability to handle unknown vocabulary items. In addition, differing from previous research, the study discovered that the strategy training proved useful even with lower-level students. Thus, apart from proficiency level, some other variables such as motivation, attitude, cultural background, beliefs, and learning style that may have an effect on the language learning strategy use of foreign language learners should be studied by future researchers.

As a practitioner-teacher who aimed to improve my practice and increase my students' learning, I found the action research process very rewarding and fulfilling as I had the chance to reflect on my teaching and my students' learning processes and to look for new ways to improve both. Initially, through the think-aloud protocol, I had the opportunity to understand the thinking processes of my students and I realized that it is a great method, enabling me to see the issues from their points of view because although I am quite good at observing my students, it is not always possible for me to realize what they have difficulty in and especially why they have the particular difficulty. Thus, in this action research study, I realized the value of the think-aloud

protocol and decided to benefit from the method more often in my future studies. Although the process was quite satisfying for me, I should admit that by the end of the strategy training process, I experienced how complex action research might be. To illustrate, I had to think carefully about how to ensure my students' participation while meeting the demands of the curriculum and the needs of my students. The class's involvement was quite strong, but there were a few students who were getting bored, especially with the modeling process, which they were not familiar with. Yet, the process seemed to work quite well, as when they were asked questions requiring them to justify their choice of vocabulary items to complete the blanks in the text, most of the students used the contextual clues to justify their answers. That proved the strategy training was successful. However, throughout the implementation, I had to spend at least two extra class hours on each vocabulary task, which caused me to fall behind the program and get a bit stressed. Therefore, I can say that the process of conducting action research might be challenging and stimulating. Planning, implementing, and evaluating the intervention required an intense effort and time, but I can easily say that I have gained considerable experience and confidence to address the multiple components of an action research study while adjusting my daily routine of planning, grading, and teaching, so I am sure that I will feel more comfortable with my next action research.

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References

- Almunawaroh, N. F. (2018). Teaching vocabulary through context clues strategy. *English Empower*, 3(2), 27–33.
- Alsaawi, A. A. (2013). To what extent guessing the meaning from the context is helpful in teaching vocabulary. *Annual Review of Education: Communication and Language Sciences*, 10, 130–146. [\[CrossRef\]](#)
- Brown, T. S., & Perry, F. L. (1991). A comparison of three learning strategies for ESL vocabulary acquisition. *TESOL Quarterly*, 25(4), 655–670. [\[CrossRef\]](#)
- Ebrahimain, A., & Nabifar, N. (2015). The effect of three vocabulary learning strategies of word-part, word-card and context-clue on Iranian high school students' immediate and delayed English vocabulary learning and retention. *The Journal of Applied Linguistics*, 8(17), 42–63.
- Fraser, C.A. (1999). Lexical processing strategy use and vocabulary learning through reading. *Studies in Second Language Acquisition*, 21(2), 225–241. [\[CrossRef\]](#)

- Fudhla, N., Solusia, C., & Oktoviandry, R. (2019). Context clues as a vocabulary learning strategy: A view of its implementation in EFL classroom. *Advances in Social Science: Education and Humanities Research*, 411, 83–87.
- Huckin, T., & Jin, Z. (1987). Inferring word-meaning from context: A study in second language acquisition. In F. Marshall, A. Miller, & Z. Zhang (Eds.), *Proceedings of the third eastern states conference on linguistics*. Columbus: The Ohio State University.
- Kemmis, S., & McTaggart, R. (Eds.). (1988). *The action research planner* (3rd ed.). Waurin Ponds: Deakin University Press.
- Kesler, T. (2010). Shared reading to build vocabulary and comprehension. *Reading Teacher*, 64(4), 272–277. [\[CrossRef\]](#)
- Krashen, S. D. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon Press Inc.
- Kweldju, S. (2004). Lexically-based language teaching: An innovative step for ELT in Indonesia. In B. Y. Cahyono & U. Widiati (Eds.), *The tapestry of English language teaching and learning in Indonesia* (pp. 37–56). Malang: State University of Malang Press.
- Laufer, B., & Bensoussan M. (1982). Meaning is in the eye of the beholder. *English Teaching Forum*, 20(2), 10–13.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications, Inc.
- Ma, T. T. (2017). *The effectiveness of guessing vocabulary meaning using contextual clues and learning word lists in terms of vocabulary retention*. Hong Kong: The University of Hong Kong.
- Nassaji, H. (2003). L2 vocabulary learning from the context: Strategies, knowledge sources, and their relationship with success in L2 lexical inferencing. *TESOL Quarterly*, 37(4), 645–670. [\[CrossRef\]](#)
- Nation, I. S. P. (1990). *Teaching and learning vocabulary*. New York: Newbury House.
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Nunan, D. (1992). *Research methods in language learning*. Cambridge: Cambridge University Press.
- O'Malley, J. M., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Rowley: Newbury House.
- Porte, G. (1988). Poor language learners and their strategies for dealing with new vocabulary. *ELT Journal*, 42(3), 167–172. [\[CrossRef\]](#)
- Priyono. (2004). Logical problems of teaching English as a foreign language in Indonesia. In B. Y. Cahyono & U. Widiati (Eds.), *The tapestry of English language teaching and learning in Indonesia* (pp. 17–28). Malang: State University of Malang Press.
- Richard, J. C., & Renandya, W. A. (2002). *Methodology in language teaching an anthology of current practice*. Cambridge: Cambridge University Press.
- Rouhani, M., & Behzad, P. (2013). The effect of games on learning vocabulary. *International Research Journal of Applied and Basic Sciences*, 4(11), 3540–3543.
- Rubin, J. (1987). Learner strategies: Theoretical assumptions, research history and typology. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 15–30). London: Prentice-Hall.

- Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge: Cambridge University Press.
- Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329–363. [\[CrossRef\]](#)
- Sternberg, R. J. (1998). Metacognition, abilities and developing expertise: What makes an expert student? *Instructional Science*, 26(1/2), 127–140. [\[CrossRef\]](#)
- Thornbury, S. (2002). *How to teach vocabulary*. Harlow: Pearson Education Limited.
- Utami, Y. S. (2014). *Improving students' vocabulary mastery using crossword puzzles for grade 7* (Unpublished Master's thesis). Indonesia: Yogyakarta State University.
- Walters, J. D. (2006). Methods of teaching inferring meaning from context. *RELC Journal*, 37(2), 176–190. [\[CrossRef\]](#)
- Wilkins, D. A. (1972). *Linguistics in language teaching*. Cambridge: MFT Press.