

The Effect of Teaching Critical Reading Strategies on Advanced Iranian EFL Learners' Vocabulary Retention

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Abstract—The core interest of this study was to investigate whether teaching critical reading strategies had any significant effect on advanced EFL learners' vocabulary retention. In order to make a homogenous sample, 96 language learners in an English institute in Sari were invited to participate in a paper-based TOEFL test. Finally, 48 of them regarded as advanced EFL learners were selected to participate in the study. The instrument employed in the study included five critical reading comprehension texts selected from Critical Reading Workbook for the SAT (2006) by Green and Weiner and one supplementary material from Cambridge IELTS7. After the pretest had been administered, advanced EFL learners had 8 sessions of explicit teaching and practicing the critical reading strategies such as annotating, questioning, summarizing, and inferencing. Then, they had their posttest and finally the mean scores of pre and post-test critical reading were compared through Paired samples t-test which led to the rejection of the null hypothesis. At the end of the instruction, Vocabulary Knowledge Scale (VKS) was administered with the repeated measures designed to measure the retention of inferred meanings after an interval of 2 weeks. By applying one way ANOVA, the researcher could claim that there was a significant difference between VKS pre-test and VKS immediate post-test, and there was no significant difference between VKS immediate and VKS delayed post-test. The participants' knowledge remained largely the same during the two weeks interval. Therefore, teaching critical reading strategies affirmed to have a significant effect on advanced EFL learners' vocabulary retention.

Index Terms—critical reading, critical reading strategies, vocabulary retention

I. INTRODUCTION

No communication can take place without knowing the lexical items that can carry the meanings of the message. Wilkins (1972) argues, "While without grammar very little can be conveyed, without vocabulary nothing can be conveyed"(p.111).

Many learners have been complaining that not long after memorizing a word, it runs away and according to what Allen (1983) says, in most cases that teachers spend much time to vocabulary teaching, the results are not satisfactory. Thus, in order to absorb and retain many unfamiliar words without internalizing them requires vocabulary learning by the means of elaborating and effective approaches.

McCarthy (1990) pointed out that a word is well remembered in the case of being learned in a meaningful context. So, it seems that advanced learners require proper and efficient strategies to keep the new words, and EFL teachers also require to apply efficient approaches and practices to equip learners with those strategies. Learners with high-level reading comprehension strategies are able to acquire more vocabularies and retain them better (Paribakht & Wesche, 1999; Stoler & Grab, 1993).

An efficient attempt has been made to promote critical reading and higher level thinking skills in reading by the means by the means of developing effective strategies, techniques, and model lessons .In order to fully understand a text and critically analyze it, different steps in the form of strategies which include inferencing, questioning, annotating, finding the main idea, and summarizing are adopted (Sousa, 2004, pp. 105-106).

Learning words of a language is one of the essential components of learning that language. To do so, based on Wallace (2003), a critical reader mentally works on the word-form and makes connections between the context and his own personal knowledge to guess the meaning of the word. A critical reader is able to build a connection between the text and its vocabularies by concentrating on decoding meaning from the passage rather than just rote-reading the words.

Critical reading is a skill which helps to discover information and ideas within a text and it is applied for a careful, active, reflective, and analytic reading (Kurland, 2000). It provides learners with the chance of thinking about and analyzing the information critically. In other words, it makes them be able to consider the context with a better view and a critical understanding and provide the opportunity to evaluate the context. It is done through critically and frequently exposing to and using the new vocabularies in a meaningful way (Wallace, 2003). (as cited in Khabiri & Pakzad, 2012).

II. LITERATURE REVIEW

A. Critical Reading

Flynn (1989), critical reading involves “an interactive process using several levels of thought simultaneously” (p.664). “Critical reading” is considered as teaching the students to think while reading. It is described as “learning to evaluate, draw inferences, and arrive at conclusions based on evidence”(Collins, 1989). In fact, students learn to read personally, actively, and deeply (Sweet, 1993). Critical reading regarded as “turning knowledge into wisdom” is one of the central skills in learning. It is the ability to learn from text, to think analytically and critically. Critical reading suggests teaching the students the way to analyze and improve reading and writing assignments from the perspective of formal, logical pattern of consistency (Popkewits & Flender, 1999). Critical reading has some strategies which are pointed out below.

B. Critical Reading Strategies

There are some critical reading strategies three of which were provided to the participants by the means of some pamphlets, and were directly instructed to them by the researcher in this study. These strategies are fully explained here:

The first strategy utilized in this study was *annotating*. Based on Diyanni (2002) this is the strategy the researcher explicitly taught during reading which is actively reading the text while reading and marking, circling, or writing some key words, and the meaning of unknown words (synonym and antonym) and the definitions in the margin. Based on Susa (2004) by applying this strategy, the learners pay attention to the unknown words and they are not ignoring the unknown words in the text. The learners should also have a pencil in hand so that they can “annotate” their text. Key words or symbols in the margin refer to the significant information. Also at the end of sub-sections, the reader can write short summaries in the margins, and follow the steps of the process by writing numbers in the margin. He can write questions in the margin beside the answer in the text, and identify the audience’s challenging ideas, knowledge, sentiment, and beliefs. Furthermore, the reader can note his every personal experience on the topic. Marking, circling, or underlining the words which demonstrate voice, tone, sentiment, and the style of writing, and recognizing the information or evidence which demonstrates the historical, cultural, and biographical context of the text are recommended. The learners are also taught to make any connections to other sources they already have read on the topic.

The second strategy of this study was *inferencing* which takes place after guessing. Loafer (1997) argued that a learner who has been taught guessing strategies would not automatically produce correct guesses while reading. The factors, availability of clues, familiarity with the clue words, and presence of misleading clues will effect guessing. According to Brown (1993) a number of learning texts and contextual factors that influence the success of L2 lexical inferencing have also been identified in many researches on the topic. Inferencing was one of the strategies which the researcher has applied while reading. This strategy is common in critical reading. Reading is a process that is not regarded as separate units. The reader is frequently engaged in guessing meaning through encountering with the text. The meaning which is derived by the reader is influenced by the context, the reader's aim for reading and the situation of reading.

The last strategy used by the researcher was *summarizing* which helps the learners to self-correct by the means of reading the text again and again, checking the topic sentences, identifying the main ideas, and relating passages to each other. In this study, the participants first looked for main information while their reading and then they switched to style, details, and examples in the subsequent readings. If the participants were being asked to summarize a particular piece of writing or the texts, they would want to look for the main points. Summarizing the text which the participants have read was a valuable way to check their understanding of the text. When they summarized, they were able to find and write down the main points of the text. They restated a summary which reflected the author's main point, purpose, intent and supporting details in their own words. They were also able to discard information seemed redundant or trivial from their summary on their reading assignment. Summarization fostered the understanding of the text, as they needed to be able to recreate the meaning of the text in their own words. Summarizing made it possible for the participants to analyze and critique the original text. In order to understand the material they should read it over as many times as necessary and notice the unfamiliar words at the same

C. Vocabulary Retention

Schouten-Van Parreren (1985) discussed the presentation of vocabularies in text. She believed that texts give a lot of clues of reference for the retention of new words. Schouten-Van Parreren’s focus was reading with the purpose of vocabulary acquisition, and the researcher discussed that guessing and analyzing the new word is really efficient. Guessing refers to the inference of the meaning of unknown word-form of the context. This action is thought to greatly cause the retention of new words. The identification of the relationships between unfamiliar words and the known words in L2, the mother-tongue, or other languages, considering etymology and the knowledge of word formation is the result of the analysis of word-form.

According to Paribakht and Wesche (1993, 1996, & 1997) engaging “greater mental effort” is fundamental for more efficient learning and retention of words. Hulstijn (1992) also suggests cognitive psychology by which it is meant that when learners have to infer or induce a solution to a problem they will invest more mental attempt than when the

solution is given and that information that has been attained with more mental attempt can later be better retrieved and recalled than information that has been attained with less mental attempt.

A critical reader mentally works on the word-form and makes connections between the context and his own personal knowledge to guess the word meaning (Wallace, 2003). Therefore, the researcher wanted to investigate if teaching critical reading strategies to advanced Iranian EFL learners can have a significant effect on the retention of new vocabulary.

D. Empirical Studies of Critical Reading and Vocabulary Retention

De Bot et al. (1997) attempted to present a lexical inferencing model based on the results of their introspective study of L2 learners' strategies when encountering an unfamiliar word through the text. Within the framework of Levelt's (1991) model they hypothesized that the richness of the text context in which the unknown words are embedded, enables L2 readers to infer word meanings. Results revealed that the participants utilized a wide range of knowledge sources to infer the 35 meanings of unknown words in two reading tasks (summarizing paragraphs and answering reading comprehension questions). De Bot et al. (1997) stated that in the process of constructing knowledge about the semantic and the syntactic features of their lexicons, the participants were engaged in applying these knowledge sources.

The study of Paribakht and Wesche's (1999) was a pursuing classroom experiment with 10 university ESL students. They tried to recognize the strategies and the types of knowledge and information which learners use while inferring unfamiliar L2 vocabularies they encounter in reading by the means of using introspective and retrospective think aloud data collection technique. They reported that learners tended to ignore a large proportion of the words. Moreover, they found that inferencing was the mostly used strategy (almost 80 %) for those words that learners paid attention to.

Wesche and Paribakht's (2000) argued that text-based vocabulary exercises might promote vocabulary growth. Ten intermediate-level ESL students took part in the research in a Canadian university setting. Learners were trained how to think aloud their thoughts before the study. First, the researchers asked the participants to read the text. Then, they asked them to perform the eight tasks in the same way with expressing their thinking and doing. A comparison of the findings of this study and the previous one (reading only study, Paribakht & Wesche, 1999), helps to explain the differential word-learning outcomes found for the two treatments in the earlier experimental study (Paribakht & Wesche, 1997). The result of Wesche and Paribakht (2000) revealed that majority of the target vocabularies learned by the learners stayed at the recognition level in the *reading only* condition. On the contrary, in the *reading plus* condition achievement of the vocabulary knowledge covered some aspects of word knowledge and word use ability in production. Differences between learners responses under the *reading only* and *reading plus* instructional conditions help to explain the superior effectiveness of the latter condition in the number of words retained (Paribakht & Wesche, 1997).

The use of strategies and knowledge sources in L2 lexical inferencing and their relationships with inferencing success was explored in Nassaji's (2003) study. Data were collected in individual sessions which consisted of introspective and retrospective think-aloud protocols of 21 intermediate ESL learners. The findings of his study showed that different strategies contributed differently to inferencing success and that successful inferencing possibly depends on not just applying particular strategies but on how efficiently the use of strategies is corresponded with the use of sources of information in and outside of the text, as well.

Trautman (2012) reported that strategies which help to develop and improve annotation with young adults pay meticulous attention to aid their reading comprehension and critical thinking skills. Likert scale questionnaire was given to teenager students. Besides, observations and a journal were frequently recorded thoughts and comments on how annotation activities were going. The results showed that annotation helps students be more desirable reader, writers, and critical thinkers. The aim of that study was to find strategies which enhance annotation strategies in the seventh grade English classroom.

III. METHODOLOGY

This study was to examine the effect of teaching critical reading strategies on advanced Iranian's EFL Learners' Vocabulary retention. The present study was going to answer the following research question:

Does teaching critical reading strategies have any significant effect on advanced EFL learners' vocabulary retention?

A. Participants

The subjects of this study were 48 students of different social classes and university degrees, but of a homogenous advanced level of English proficiency in the north of Iran. The sample participants whom were asked to take part in this study had voluntarily agreed to take part. They were male and female EFL learners whose first language was Persian. Their age range was twenty to thirty-one (mainly adults). The sample comprised of 31 male and 17 female, and none had ever lived in an English speaking country.

The first criterion used to choose the adults participants was the learners' proficiency level. Ideally, participants were expected to be advanced learners in terms of general proficiency. The TOEFL test (Paper-Based TOEFL Practice Test, 2003) was administered to subjects. The TOEFL test in three phases was administered since the researcher had large population in the study. Among the 96 subjects who took the TOEFL test, only 48 EFL learners were invited to the study. The researchers selected the participants who passed the TOEFL exam by the score of above 515 in order to

make homogenous sample of around 50 participants for the study. According to the participants' performance on the TOEFL test, they were considered to be advanced language learners.

B. Instrumentation

The instruments employed in this study encompassed reading texts in which there were 20 target words which were unfamiliar for the participants. In order to make sure that the intended words were unfamiliar to them, these words along with other words had been piloted with some advanced students who did not take part in the study. They were asked to choose unknown words which were given on a list, so that they could not use the clues in the sentences, and based on their responses, 20 words were selected as unfamiliar target words for the study. The target words which were also given on a list to the participants consisted of ten Nouns, six Verbs, and four Adjectives: Cognition, Slogan, Aphid, Craft, Espousal, Lubricant, Circumstance, Coincidence, Livestock, Egotist, Defer, Propagate, Obviate, Sift, Belittle, Domesticate, Phony, Rugged, Epigrammatic, Sophisticated. The instrumentation included five Critical Reading comprehension texts selected from Critical Reading Work Book for the SAT (2006), by Weiner Green and Mitchell Weiner, 12th Edition. It also contained texts and critical reading comprehension questions. In addition there was a supplementary material which was a text from Cambridge Book for the Cambridge exams, Cambridge IELTS 7. The researchers used this non-critical text to assess the participants' critical performance on the text. It was based on learners' interests in the title of Ant Intelligence which engrossed for the participants who were mainly males. Vocabulary Knowledge Scale, VKS, (Paribakht and Wesch, 1993, 1996, 1997; Wesch and Paribakht, 1996) was administered with the repeated measures designed to measure the retention of inferred meanings.

C. Procedure

In order to find the answer of the research question in this study, the researchers arranged two critical reading tests and three VKS tests.

D. The Administration of the Pre & Post-test of Critical Reading

The researchers held 8 sessions of teaching and practicing critical reading strategies classes once a week. They administered a pretest of critical reading and vocabulary knowledge scales test in the first session. The participants answered critical reading pretest in order for the researchers to understand the participants' early concepts of Critical Reading. The number of the questions in this test was sixty seven for the participants to answer. In the next two sessions the researchers explicitly taught the critical reading strategies with the help of a pamphlet and made the participants aware of these strategies. Annotating is an important strategy to employ if the readers want to read critically. Successful critical readers read with a pen or pencil in their hands, making notes in the text while reading. As an "active reader", the participants already knew that when they read textbook assignments, they should have had questions in their mind (Carter, 2007). Here are some techniques that the readers could use to annotate text: underlining important terms, circling definitions and meanings, writing key words and definitions (Diyanni, 2002), making a signal where important information or key words could be found by the means of "NB" which implies "important" in the margin, an asterisk, writing "concl" which implies "conclusion" in the margin of points where the writer drew major conclusions (Freshwater & Rolfe, 2004). By the means of these readings, the learners would be ready to handle the strategies in a way that they could later apply while reading a text. In this course the focus of teaching was more on the strategies which participants were less familiar and had more problems with. After the strategies had been taught by the means of guiding the required practices, the focus was switched to the text by going through reading and then discussing different questions and inferences that the participants had made. The participants were taught strategies such as inferencing, annotating, questioning and summarizing, and afterwards could promote inferencing and annotating strategies while reading. From the next session on, six selected texts were read in the class by the participants and the researcher asked them to apply the critical reading strategies which they have already been taught.

The researchers tried to engage the participants in the process of thinking, make the participants familiar with the critical reading strategies through reading as much as possible and also tried to extend the strategies in all levels using their background knowledge experience, connecting different information, making inferences, annotating, and generally being critical.

The participants in this study first searched for basic information while reading and then their focus switched to style, details, and examples in the subsequent readings. The participants read with a pen or pencil, underlining the key statements, parts, or points even those they found confusing. Also, they made notes of words or terms which they did not understand. Teaching critical reading strategies could help to become autonomous readers in the classroom.

The purpose of post-test was to search to what extent the participants were familiar with the critical reading ability after almost 3 months. And at the end of the sessions, the participants answers the same test, the post-test of critical reading, and the results were compared to their answers at the beginning of the first session by the researchers to investigate if teaching critical reading strategies caused any development in participants' understanding of critical reading strategies. In this study the researchers attempted to investigate whether the participants' English vocabulary retention could be developed through explicit instruction of the critical reading strategies.

E. The Administration of the Pilot Test for VKS Test

Before the main study, a pilot study was conducted for selection of target words in VKS. As Dornyei (1960) has pointed out, a research study needs a dress rehearsal to ensure high quality in terms of reliability and validity of the outcomes in the specific context. Piloting is more important in quantitative studies because a quantitative study relies on the psychometric properties of research instrument. An intact class of eleven participants who were not present in the main study in an institute was given the list of the thirty five words in order to check the unfamiliarity of words. The time taken to complete the pilot test ranged from 10 to 15 minutes. Based on their responses twenty target words out of thirty five words were selected and employed in the VKS tests for assessing vocabulary retention. It was to make sure that the intended words were unfamiliar to the participants of the study. After running pretest of critical reading the researchers administered the pretest of VKS.

F. The Administration of the Pre & Post-test (Immediate & Delayed) for VKS Test

After the explicit instruction period, two (immediate and delayed) posttests of VKS were also given. Warning & Takak (2003) argue that new words are fresh in the mind for an immediate posttest, thus, the scores of immediate posttest are higher than the scores of delayed one which is taken some time later. Claims made only on the basis of the immediate posttest results could not be generalized. Repeated measure design was preferred to measure whether the participants could retain the meaning over time. The first immediate posttest was run; participants completed the immediate posttest in a time in 8 to 12 minutes. The second test was administered two weeks after the first posttest to measure the retention of vocabulary. The VKS tests sessions were unannounced, and the same procedure was followed for both of them, the time taken to complete the VKS test ranged from 8 to 10 minutes. Since the participants had read the text, they might infer the meaning of the words in the test. As the researcher tried to measure the vocabulary retention, it was decided to not test the target words in the context in order for the researchers to definitely understand if the word was learned from reading, or inferring by using contextual clues.

IV. RESULTS

Table 1 shows descriptive statistics related to the critical reading pre-test and critical reading post-test:

TABLE I
DESCRIPTIVE STATISTICS OF THE CRITICAL READING PRE-TEST AND POST-TEST

Test	Number	Mean	SD
Pre-Test	48	37.65	3.33
Post-Test	48	55.33	3.86

It can be inferred that the participants did much better in post-test than the pre-test. In order to scrutinize whether the differences are significant or not, as mentioned earlier, Paired Samples t-test was used.

TABLE II
PAIRED SAMPLES T-TEST FOR CRITICAL READING PRE-TEST & CRITICAL READING POST-TEST OF THE STUDY

	Mean	Std.Deviation	T value	Df	Sig.(2.tailed)
Pre vs. Post Critical Reading	-17.68	1.41	-75.96	47	.00

*P<0.05

According to table 2, the results of Paired Samples t-test for comparison of pre and post-test revealed the mean of 17.68, standard deviation of 1.4, and t value of -75.96 with the significant level .00 and df of 47 that is statistically significant at the .05 level. Therefore, the researchers claim that teaching critical reading strategies were positively effective for participants.

The results of the comparison between VKS tests are shown in the tables below. The first table shows the mean, standard deviation, and the number of the participants in each test of VKS pre-test and VKS Immediate Post-test.

TABLE III
DESCRIPTIVE STATISTICS OF VKS PRE-TEST AND VKS IMMEDIATE POST-TEST

VKS Test	Number	Mean	SD
Test 1	48	20.88	.81
Test 2	48	55	1.45

The results of paired samples t-test for VKS pretest and VKS Immediate post-test of the participants as illustrated in table 4 revealed the mean of -34.12, standard deviation of 1.53, and the t value of -153.671 with df of 47 that is statistically significant at .05 level (p<.05). Therefore, the researcher asserts that the participants had better retention of vocabulary in VKS immediate post-test.

TABLE IV
PAIRED SAMPLES T-TEST FOR VKS PRE-TEST AND VKS IMMEDIATE POST-TEST

	Mean	Std.Deviation	T	Df	Sig.(2.tailed)
Pre vs. VKS immediate Post-Test	-34.12	1.53	-153.67	47	.00

*P<0.05

As illustrated in table 4, paired samples t-test for equality of means exhibits that $\text{sig}=0$ which is less than 0.05, and as a result the mean is significant.

The results of the comparison between VKS tests are shown in the tables below. The first table shows the mean, standard deviation, and the number of the participants in VKS Immediate Post-test and VKS Delayed Post-test.

TABLE V
DESCRIPTIVE STATISTICS OF VKS IMMEDIATE POST-TEST AND VKS DELAYED POST-TEST

VKS Test	Number	Mean	SD
Test 2	48	55.46	1.27
Test 3	48	55.40	1.28

The results of paired samples t-test for VKS immediate post-test and VKS delayed post-test of the participants as illustrated in table 6 revealed the mean of 0.06, standard deviation of 0.24, and t value of 1.77 with df of 47 that is not statistically significant at the .05 level. So the researchers claim that VKS immediate post-test and VKS delayed post-test yield the same retention of target words in the study.

TABLE VI
PAIRED SAMPLES TEST FOR VKS IMMEDIATE POST-TEST AND VKS DELAYED POST-TEST

VKS Immediate vs. VKS delayed Post-Test	Mean	Std.Deviation	T	Df	Sig.(2.tailed)
	0.06	0.24	1.77	47	0.08

* $P < 0.05$

The above table clearly displays that there is no significant difference between the means of the VKS Immediate posttest and VKS Delayed posttest. The significance level of VKS immediate posttest and VKS delayed posttest is 0.05. Therefore, the researchers assert that there is no significant difference in retention of target words during two weeks.

The researchers used one way ANOVA for assessing the significance of the differences in the means of VKS pre-test, VKS immediate post-test and VKS delayed post-test. There was a significant difference between VKS pre-test ($M=20.88$, $SD=.82$), and VKS immediate post-test ($M=55.46$, $SD=1.27$), and there was no significant difference between VKS immediate and VKS delayed post-test ($M=55.40$, $SD=1.28$), $F(7, 2.62) = 211.67$ $P < .001$. The participants' knowledge remained largely the same during the two weeks interval. Thus, the researchers claim that VKS immediate post-test and VKS delayed post-test had an equal weight on vocabulary retention.

TABLE VII
ONE-WAY ANOVA FOR VKS PRE-TEST, VKS IMMEDIATE POST-TEST AND VKS DELAYED POST-TEST OF THE STUDY

		Df	F	Sig.
VKS	Between Groups	7	211.67	.00
	Within Groups	40		
	Total	47		
VKS	Between Groups	7	0.45	0.86
	Within Groups	40		
	Total	47		

Therefore, it could be inferred that teaching critical reading strategies had statistically significant effect on advanced EFL learners' vocabulary retention.

V. DISCUSSIONS

Teaching critical reading strategies might have led critical reading activities to be easier and more interesting for the participants and also helped them retain the target vocabularies. Moreover, it is asserted that the more L2 readers apply critical reading strategies on texts, the more they can enhance their vocabulary and reading skills to become more independent and successful readers and as a result retain the vocabularies easier. Differently speaking, critical reading strategies could make the students more independent in vocabulary learning and led in better retention since the learners consider themselves as the responsible for their learning.

The type of the participants' critical reading activities such as text summarizing, annotating, lexical inferencing, and questioning did have a better effect. The researchers concluded that every student in the class could have the chance to involve in the intellectual discussion and made their voices heard through these activities. Based on Oxford and Scarcella (1994) and Joel Walz (2001) language experts strongly believe that vocabulary learning in context is more efficient than learning words in lists. They perceived that decontextualized vocabulary learning can help learners to internalize vocabulary for tests, while learners possibly forget vocabulary memorized from lists. Furthermore, McCarthy (1990) indicated that a word is well remembered if it is learned in a meaningful context. Therefore, the positive impact of critical reading strategies on the reading comprehension might deduce the results of this study and as a result contributed to the vocabulary retention in an indirect way.

The findings of this study also corroborated the effective role of critical reading strategies in contextualizing vocabulary learning. The participants' handling with the vocabularies in context by utilizing critical reading strategies

such as: inferencing, questioning, summarizing when conversing the content of the texts in the class resulted in good vocabulary retention of the participants.

Based on the studies conducted by Coady 1997; Meara 1997; Nation and Newton 1997; Watanabe 1997; Huckin & Coady 1999; and Hulstijn 2001, word knowledge has to be processed in mind and should be developed to successfully attain vocabulary learning, and critical reading strategies set an appropriate context for vocabulary learning.

The result of this study was in line with the result of Khabiri and Pakzad (2012). They investigated the effect of teaching critical reading strategies on intermediate EFL learners' vocabulary retention. In that study, almost the same content was taught to both control and experimental groups throughout 19 sessions treatment with the only difference that the experimental group was taught critical reading strategies while for the control group the common comprehension-based approach was applied and after an interval of two weeks, the pilot vocabulary retention post-test corresponding to the vocabulary pre-test was administered to the participants of both groups. According to the results, teaching critical reading strategies proved to have a significant effect on intermediate EFL learners' vocabulary retention. As the researchers of this study studied almost the same topic with different methodology on participants of different ages and levels of proficiency, they could enjoy the purpose and the results of that study so much.

Patching, Kameenui and Carmine, Gevsten and Colvin (1983) investigated the impact of direct instruction in critical reading. The results showed that significant differences were found on performance of the main posttest between the direct-instruction sample and both the workbook with corrective-feedback and no-intervention samples. The critical reading test indicated that systematic instruction on adults using modeling and explicit training in overt strategies was significantly more effective than exposing to the same material in a workbook format with no intervention. Therefore, the researcher utilized the same way of teaching (explicit training) for teaching the critical reading strategies.

Linda Flynn (1989) reported on the study of the developing critical reading skills through cooperative problem solving. He showed that young readers develop into independent critical readers when they learn how to analyze, synthesize, and evaluate knowledge by thinking how to solve the problems in a cooperative learning environment, and applying critical reading strategies make the students become autonomous. The researcher found almost the same results in developing critical reading skills by adult participants in class which provides a cooperative learning situation.

In the case of supportive intensifiers, Kobayashi (2007) highlighted the effect of critical reading orientation on applying external strategies such as note-taking or underlining while reading an expository text. Trautman (2012) reported that strategies which help to improve annotation with young adults pay special attention to helping their reading comprehension skills and critical thinking skills. Note-taking and underlining are the strategies of annotating which in this study the researchers taught the participants to use in order to focus the participants' attention to the unknown words in the reading texts. They underlined new vocabulary and then inferred the meaning of those words.

Zabihi and Pordel (2011) referred to what extent popular reading text books meet the criteria for the development of critical reading that identifies and investigates the presence of those items within reading text books which help to promote critical reading. The results revealed that the prerequisites to develop the critical reading are autonomy and engagement which can be obtained by the means of task-based teaching the strategies. The researchers in this study also paid much attention to the selected reading texts in order to meet the criteria for the development of critical reading. Moreover, the researchers utilized strategies instruction to reach the goal.

VI. CONCLUSION AND IMPLICATIONS

Many teachers and learners agree on the need for vocabularies as the building blocks of a language without which people cannot communicate their intentions (Allen, 1983). The basic role vocabulary learning plays in acquiring a new language was well demonstrated in the study conducted by knight (1994) and Paribakht & Wesche (1996). So, absorbing and retaining too many new words in a short time without the chance of internalizing them needs vocabulary learning carried out by the means of detailed and efficient approaches.

It has been the frequent complaint of many learners that too short after they have memorized a word, it runs away and referring to Allen (1983), even in the case of teachers' dedicating much time to vocabulary teaching, often the results are not satisfactory. Thus, it is indicated that EFL learners require effective and suitable strategies to keep the new words in mind, on the other hand, EFL teachers require to find elaborate and effective approaches and practices to provide learners with required strategies. According to the findings proposed here in this study, teaching the critical reading strategies to EFL learners is an effective approach, because reading text provides an extensive exposing to unfamiliar vocabulary in L2. From the other point of view, high-level reading comprehension strategies enable the learners to acquire more vocabularies and retain them better (Paribakht & Wesche, 1999; Stoler & Grab, 1993). "Vocabulary learning dominantly occurs through reading with the learner's guessing the meaning of unknown words"(P. 182).

The findings of this study enhance the language teachers' understanding of the nature of the teaching critical reading strategies and the necessity of this process in L2 vocabulary retention through reading. The experimental study reported in this research supports the important role of teaching critical reading strategies in vocabulary development and suggests that in order to develop vocabulary retention through reading, formal training of critical reading strategies can be effective in strengthening the learners' ability to infer and retain the meaning of unknown words while reading. A further pedagogical implication of the findings of this research recommends L2 language teachers to assign their

students as more reading exercises as possible. The more they read the greater chances they can find to learn. This study also has some other usages which are applicable in other institutes and educational centers. Recently, the importance of vocabulary learning has been more emphasized. It seems necessary to adopt some ways which can lead to better vocabulary learning. Critical reading strategies can be included in educational curriculum in order to create a way of teaching. It can be a challenging course and program for future language learning as it helps the learners to develop their knowledge of vocabulary.

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