The Effect of Vocabulary Strategy Training among Autonomous and Non-Autonomous Learners in Iranian EFL Context

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Abstract

Vocabulary has been regarded as a fundamental element of learning English as a Foreign Language (FL). However, the present situation suggests that students in this context are not learning vocabulary at a feasible pace that will help them develop sufficient competency for handling academic studies at tertiary level of education. The present study aims at looking at the effect of Iranian EFL learners' vocabulary strategy training on the retention of vocabulary and to study this effect among autonomous and non-autonomous learners. Eighty students from four intact classes in Gogan were selected for the purpose of this study. Each intact class was randomly selected as an experimental group and a control group. After the pretest was given to the participants, they were taught by three types of vocabulary instruction including word parts, elaboration technique, context clues or guessing meaning from context. The findings revealed that experimental group made progress over time, that is, the students from this group attained an increase in scores from pretest to posttest. Further, there was a significant difference between autonomous and non-autonomous learners in posttest in experimental group. The results of this study raise more questions and point out the need for the implementation of autonomy in relation to vocabulary achievement.

Keywords: Vocabulary, vocabulary strategy training, autonomy, EFL

1. Introduction

In recent decades, non-native speakers all over the world have been impelled to learn English to gain advantages, both in their own societies and global settings, due to the fact that English has become the dominant medium for world communication. The language plays a vital role in academic, economic, and political spheres. For example, more than 50% of the academic papers published each year are written in English, and over 90% of web pages are written in English (Brown, 2002).

In contrast to the growing demand for English as a communicative tool, English education in Iran appears to fail to meet the demand. Instead, it has emphasized grammatical structure, teacher-oriented classrooms and standardized exams (Hart, 2002; Torikai, 2000). The public has expressed dissatisfaction with English education, complaining mainly of inefficiency in education for improving authentic English skills.

Other Asian countries also have serious problems in English education. Policy makers and teachers across Asian Pacific countries frankly admit that the quality of education in the public sector is so low that no one learns English in school (Nunan, 1988). Since English proficiency can playa crucial role to be successful in both a global and domestic society, failure to provide adequate

education may reproduce inequalities in society, limiting access to tremendous amounts of information in English as well as certain job positions which demand a good command of English.

According to Gee (2004), traditional school systems have been criticized for emphasizing information and skills disconnected from students' real lives, which can discourage some from learning at school. These claims also apply to current English education in Iran: The content of English education have often been criticized for being irrelevant to authentic English in the real world and as some teachers believe, a considerable number of junior high and high school students confessed that they dislike studying English.

Under these circumstances, the concept of "autonomy" has attracted attention as an alternative approach to language learning (Benson,2001; Gremmo & Riley, 1995). Benson (1997) defines autonomy as the capacity to take control of one's learning (p.25). According to Benson and Voller (1997), the significance of the concept of autonomy in language learning has emerged under the circumstances that far more language education is taking place, in more varied situations, and for a wider variety of purposes than ever before, while the traditional teaching style has had difficulty catching up with these new complexities. Although there are different perspectives in the field of autonomy, many agree that autonomy plays the most important role in acquiring authentic language (Benson, 2001).

Fostering students' autonomy can help students to identify goals, employ effective strategies to achieve these goals, and raise awareness of social contexts. Therefore, it can be regarded as a strong potential as an alternative approach to language learning. In fact, autonomy has been effectively fostered through cooperative learning in the classroom (Hart, 2002), creating self-access facilities (Gardner & Miller, 1999), as well as giving instruction of language learning strategies. All of these studies show positive results that learners successfully improved language proficiency, self-confidence, and motivation.

On the other hand, many researchers and linguists make great effort to find out the most effective vocabulary instruction and learning strategies that can help students improve word power. In language learning, vocabulary acquisition definitely plays an important role as Wilkins (1972) pointed out that 'without grammar very little can be conveyed, without vocabulary nothing can be conveyed' (p.111). Learners need to have a bank of lexical items in order to express themselves as part of and throughout the learning process. They also have to know how to master the essential lexical items. Nevertheless, vocabulary learning is often seen as the greatest source of problems experienced by second language learners. Learners feel that an inadequate vocabulary is the reason for a lot of their problems in both receptive and productive language use (Nation, 1990). Given such a critical role that vocabulary learning plays in second language acquisition, further investigation into learners' approaches and perception towards learning vocabulary is worthwhile.

1.2 Background of the study

Vocabulary is regarded as a fundamental element of learning English as a Foreign Language (FL) in Hong Kong secondary schools (Curriculum Development Council, 2000). However, the present situation suggests that students in Hong Kong are not learning vocabulary at a feasible pace that will help them develop sufficient competency for handling academic studies at tertiary level of education. The present curriculum shows its own shortcomings with regard to vocabulary teaching and learning. This coincides with Zimmerman's (1997) complaint that teaching and learning vocabulary have been undervalued in the field of second or foreign language acquisition (as cited in Coady, 1997, p.273). It is probably only recently that vocabulary learning has drawn the attention of the Education of Manpower Bureau, which has put forth a project in collaboration with the Chinese

University of Hong Kong to develop a vocabulary syllabus in the New Senior Secondary curriculum.

As an English teacher serving for a local secondary school, I have observed that one of the major weaknesses among students that other teachers have often spotted is their low capacity to express themselves using the right words. Measures of promoting reading to learn language skills among students have been implemented. Students' interest in reading has been cultivated yet their vocabulary competence remains unsatisfactory as reflected by their performance in school examinations. The theory of learning vocabulary through reading does not seem to be working. Moreover, the problems of having limited ways of assessing students' word knowledge and little emphasis on the use of vocabulary learning strategies in the curriculum suggest a need to look at teachers' instruction of learning strategies and whether the strategies bring benefits to students as far as vocabulary learning is concerned. There is also a need to change the passive role of learning that students generally take when learning new words through the introduction of vocabulary learning strategies. The motivation for promoting the use of learning strategies through training is that learners can become more effective and autonomous learners. Regarding all the afore-mentioned issues, the role of English language teachers is helping students acquire better skills for vocabulary learning has to be re-addressed.

1.3. Statement of problem

Attempts have been made in the past to look at the influence of reading on one's vocabulary acquisition. Learners are assumed to acquire new words either by guessing word meanings in context or frequent exposures. Nation (1990) suggested that learners learnt 80% of vocabulary indirectly through the exposure of words in contexts. Schouten-van Parreren, (1989, as cited in Fraser, 1999, p.226) also suggested that 'the rich psychological and linguistic context that text provides can act as a cognitive hook for the memory of new words'. The incidental vocabulary acquisition assumption suggests a great importance of reading to learners. Nevertheless, how successfully can learners guess word meanings from context and thus lead to retention of vocabulary and whether they can have repeated exposures to the same groups of lexis especially in narrative genre of texts like fiction that they read most often are issues that draw our concerns before assuming the importance of learning vocabulary through reading.

Another problem that presents itself as hindrance to vocabulary learning is the limited ways in which students' vocabulary learning is assessed in the classroom. The common practice for teachers to assess how well students have learnt the words taught in a particular unit is dictation either in the form of reading aloud a short paragraph or individual words. In such case, students tend to remember the form and pronunciation of the words merely. They do not pay much attention to their meanings and usage. Very often their memory of the words is a short term one. Another way in which vocabulary is assessed is through fill-in-the-blank questions. Students are asked to fill in a word that best suits the meaning of a given sentence. This is a more feasible way as it involves students' memory of word meanings. Nevertheless, it only tests students on their receptive knowledge of the words. Students need not have deep understanding of the words such as how it is used in different contexts. Students who have greater capacity of memory and receptive skills can usually do well in the assessments. It gives the man incomplete picture of what word knowledge is about.

Furthermore, due to time constraints, limited hours are assigned to English lessons. Teachers often have to ensure they cover materials that are designed and scheduled in the syllabus. The four skills remain the main focus of learners' development. Vocabulary, as it cannot be treated as an isolated subject, is often less focused. Vocabulary instruction is often restricted to teaching a word

itself but not the ways of learning to learn new words that would lead students to better mastery or deeper learning. Vocabulary learning strategy is something to which students do not have much exposure. The most common methods that are taught to students by teachers are the use of dictionary and keeping a notebook. Studies also showed that Asian students favour using dictionaries the most as found in Schmitt's (1997) study. Other means for further processing or consolidation of new words are seldom brought to the classroom and thus leading to students' low awareness of a range of strategies they can use and their potential benefits. Holding a similar point of view, Shen (2003) expressed the need for introducing a greater range of learning strategies for learners in her research paper.

On the other hand, according to Benson (2002), the concept of autonomy has a complex construction, making it intricate to separate one element of autonomy from another. However, earlier studies in autonomous language learning overlooked the holistic view of autonomy, approaching autonomy from one particular angle. The segmented versions of autonomy may lead us away from the whole map, which crosses technical, cognitive, and social domains. For example, an approach to autonomy as skills, or as psychological capacities, tend to fail to provide valid implications for language learning, disregarding social constraints of autonomy (Benson, 1997, p.67). Street (1994, as cited in Benson, 1997) insisted that research needs to seek the dynamic aspects of language learning process embedded in social contexts. Consequently, this thesis examines English learners' contexts, and the ways in which learners exercise autonomy, perceive of language learning, and seek to understand how these elements interact to build the complex construction of autonomy.

Second, the majority of previous studies on autonomy in language learning have based their conclusions within the framework of existing educational systems. These studies likely overlooked the autonomy which learners gained in social contexts in out-of-school settings. These studies demonstrated that fostering autonomy in the classrooms through collaborative learning and teaching specific language learning strategies such as vocabulary strategies have been trends.

1.4 Purpose and significance of the study

The present study aims at looking at students' use of vocabulary learning strategies and their perception of their usefulness . Under the assumption that they have little exposure to vocabulary learning strategies, which can be taught, a few strategies are chosen to be presented to students. It aims at getting learners to be more aware of learning strategies that are available and might be helpful to them. In fact, the teaching of vocabulary learning strategies is considered to be essential by a number of scholars such as Oxford and Scarcella (1994, cited in Coady, 1997). It has also been suggested that the development of extensive vocabulary knowledge for advanced literacy purposes requires some direct instruction and strategy training (Coady, ibid). In the present study, training is provided for students to try out the strategies presented to see if there are any impacts on their perception of vocabulary learning strategies, use of strategies and learning outcomes. Most importantly, autonomy as a psychological factor, which may affect the learners' use of strategies and difficulties they encounter while learning new words will also be addressed.

The present study examines teaching some vocabulary learning strategies among young learners at three English institutes in an Iranian EFL context. Findings and implications will provide relatively new insights for teachers working in these settings. Most of the past studies described learners' use of strategies and did not relate to the effects of strategy training. The present study aims to find out the effects of strategy training on autonomous and non-autonomous students' vocabulary learning. If it follows that strategy training does have positive effects on learners, which affirms that vocabulary learning strategies can be taught and learnt, the implication will be that it is

worthwhile to put more emphasis on learning to learn vocabulary in the language classroom. To teachers, vocabulary was too vast a quantity for direct instruction. If learners can deploy strategies for independent vocabulary learning both inside and outside classroom, their vocabulary banks can increase. Teachers' role in facilitating learners' autonomous learning through introducing strategies will be ascertained. It will thus provide us with clearer directions of vocabulary instruction in classroom context. It is believed that more skillful learning of vocabulary through the use of learning strategies fuels the process of second language learning and learning outcomes.

1.5 Research Questions

The present study attempts to answer the following questions:

1. Does vocabulary strategy training have any impact on the retention of vocabulary in an Iranian EFL context?

2. Is there any significant difference between the effect of vocabulary strategy training among Iranian autonomous and non-autonomous learners?

1.6 Statement of the Hypotheses

In order to investigate the above-mentioned research question empirically the following null-hypotheses are stated:

H01: Vocabulary strategy training has no impact on the retention of vocabulary in an Iranian EFL context?

H02: There is no significant difference between the effect of vocabulary strategy training among Iranian autonomous and non-autonomous learners?

2. Previous studies on vocabulary acquisition

Researchers seem to have shown great interest in looking at vocabulary learning strategies among good and poor learners. In Gu's (1994) study on vocabulary learning strategies of good and poor Chinese EFL learners, it is suggested that 'the ways a learner learns vocabulary determine the retrievability and flexibility of his lexicon and, to a considerable extent, his overall language achievement' (p.2). The differences in the process of vocabulary learning may account for good and poor learners. Any research related to vocabulary learning strategies is essential to bring more understanding on how lexical items are acquired. Ahmed (1989) in a study of some 300 Sudanese learners found that good learners not only used more vocabulary learning strategies but they also relied more heavily on different strategies than poor learners did (as cited in Coady &Huckin, 1997, p.277). Gu (2003) carried out a more qualitative study on two successful Chinese EFL learners from a university in China. He highlighted the frequent use of metacognitive strategies such as self-initiation and selected attention of the learners and a wide range of strategies they deployed.

Without too much of a strong intention to look at correlation between learners' proficiency and strategy choice, Fan (2003), in her study that aimed to identify the vocabulary size of tertiary students and any strategies conducive to learning vocabulary among Hong Kong learners, found that Hong Kong learners did not favour association strategies for imagery or grouping in learning L2 vocabulary and the most proficient students used more strategies more often than the less proficient students.

Studies on vocabulary learning were also conducted in EFL contexts. One example is Taga's (2000) study that investigated the strategies of Chinese university students studying Japanese. She identified task-specific learning strategies in her experiment. It was found that cognitive strategies were the most common among the learners. The least used strategies were mnemonic and incorporating new words in sentence making.

In the studies above, definitions assigned to vocabulary learning are not clear. There seems no clear distinction between the strategies used when encountering a new word from the ones used for consolidation or retention. Lawson and Hogben (1996) more specifically looked at the retention ability of the subjects in their study. They got learners to think aloud while they learned 12 words in another language. It was found that learners who recalled more words used a greater range of repetition, elaborative and rehearsal recall strategies and more often than learners who recalled fewer words (as cited in Nation, 2001, p.227).

Regarding the role of autonomy in language learning, Nematipor (2012) investigated learners' autonomy level and its relationship with learning style in a sample of 200 undergraduate students studying at the Department of Foreign Languages, of Azad University, in Shiraz Branch by means of two questionnaires. The data of the study were analyzed by a two-way ANOVA and Pearson Product Moment Correlation with SPSS Version 16.0. The results revealed that visual and auditory learning styles were significantly and positively related to their learner autonomy. However there were no significant differences among males and females regarding language learning style and autonomy level.

3. Methodology
3.1. Participants
Eighty students from four intact classes were selected for the purpose of this study. The participants consist of male and female learners at intermediate level from Talk Institute, Giti Institute, Arian Institute in Gorgan. Subjects had a mean age of 20. Each intact class was randomly selected as an experimental group and a control group. Their level of English proficiency was determined on the basis of their scores on the TOEFL proficiency test. Those whose scores were between one standard deviation score above the mean and one score below the mean were selected for the main study. Because some of the students were absent during the implementation of one of the tests, they were excluded from the main participants resulted in 35 students in the respective experimental group and 32 in the control group. Therefore, the final total number of the sample was 67 subjects as it is clear from Table 1.

3.1. Number of Iranian EFL Learners

Name	EFL
Experimental group	35
Control group	32
Total	67

3.2. Instrumentation
3.2.1. Vocabulary Quizzes
The pre- and post-test as well as the instructional vocabulary quizzes to be used were designed by Amy Olsen and published in Active Vocabulary: General and Academic Vocabulary, 3rd edition by Pearson Longman. The chapters used were chapters 10, 12, 16, and 18. Each chapter has two sets of traditional vocabulary quizzes that follow a cloze-statement format. One of the quizzes from each chapter was used for the pretest and post-test and the other quiz was used as the instructional vocabulary quiz immediately after instruction. All of the quizzes included cloze-type statements on all of the words and required the participants to select from one of four words for completion. The pretest and post-test mimic the individual quizzes; however, the pretest and post-test included 30 cloze-type statements and the individual quizzes contain 10 cloze-type statements each.

A pilot study was conducted on the words to ensure that a larger percentage of each group of 10 words is not known by the student population prior to their use in the proposed study. This

ensured an equal degree of difficulty of the three groups of ten words. Additionally, a pilot of the instructor scripts for the types of vocabulary instruction was completed to ensure their viability with community college developmental reading students. The pilot was conducted with a random group of students who had similar characteristics.

3.2.2. A Learner Autonomy Questionnaire:

This questionnaire was first developed by Zhang and Li (2004, p. 23). It consists of 21 items. Among them, the participants should answer eleven questions, based on five-scale items including never, rarely, sometimes, often, and always. Other questions should be answered based on five multiple-choice items. It was administered to see how autonomous the participants were in learning English as a foreign language. The questionnaires had been proved to have high content validity and high reliability

3.3. Procedure

After receiving formal consent from each student and the instructor, in order to answer the research questions, a quantitative study was used. In the first stage of the study, a 30 word vocabulary pretest was used to identify the level of vocabulary knowledge for participants. In the next stage of the study, three different vocabulary instructions were used to teach 30 words. The 30 words were grouped by 10 for each of the three types of vocabulary instruction including word parts (prefixes and suffixes), elaboration technique, context clues or guessing meaning from context. After the students were taught the vocabulary instruction, an instructional vocabulary quiz on the 10 words was administered after training. In the third stage of the study, the pretest was re-administered as a post-test to measure growth and retention. The procedure for doing the three above-mentioned types of vocabulary were as follows:

At the start of the semester, students took a pretest with 30 cloze-type statements on 30 words prior to instruction. The 30-word vocabulary pretest was designed by Amy Olsen and published in Active Vocabulary: General and Academic Vocabulary, 3rd edition by Pearson Longman. The pretest required the participants to select from one of four words for completion. The book has a mix of both general and academic vocabulary. The general vocabulary words were selected from popular magazines such as Newsweek, as well as from SAT and GRE word lists. For the academic vocabulary, the author culled words from textbooks in the field of introductory reading as well as lists such as the Academic Word List in selecting words; most of the words were new to most students.

Regarding the three methods of vocabulary instruction, the 30 words were split into three groups of 10 words and were taught three types of vocabulary instruction including word parts (prefixes and suffixes), elaboration technique, context clues or guessing meaning from context. The instructor used the instructions provided by the researcher for the 30 vocabulary words. Each passage introduced the 10 new words in context.

As far as the first method of instruction is concerned, the instructor taught the new vocabulary using word parts/word families. "Most students understand the importance of context—they know that words have meaning in relation to other words in a sentence. But not so many understand that words also derive meaning from their component parts" (Dale, O'Rourke, & Bamman, 1971, p. 92). In this method, the instructor introduced the students to the words and the students used morphemic analysis to identify familiar or easily analyzable parts (Alvermann et al.,2007).

For the purpose of this study, the teacher first provided the students with a list of the 10 words and then directed the student to use morphemic analysis to identify any free morphemes (words that can stand alone) and provide the meaning. Next, students looked for familiar or easily identified word parts that indicated a specific meaning. Once the students exhausted the possibilities for

specific meaning in a word, the teacher gave the students a word parts/word families handout to assist them in determining meanings of words that they were not able to identify earlier. The handout was broken down into three parts: word parts, meanings, and word derivations. The word derivatives provided a list of words using the same base, root, prefix, or suffix, which affords students with an opportunity to transfer meaning to an unknown word to identify its meaning. Dale et al. (1971) believe word parts should be taught from the known and applied to the unknown. This method allowed students to make their own generalizations about words based on their inferences. Students worked together as a class to determine and write down the meaning of the new words. Once students agreed on a meaning, students worked collaboratively in small groups to learn the meaning(s) and ways to use the word in different contexts. At the end of class, the teacher administered the instructional vocabulary quiz .

The use of context clue was the second method of instruction. Dale et al., (1971) identify this as the reader determining the meaning of an unfamiliar word by how it was used in context and without looking it up in a dictionary. The instructor presented the students with a passage titled Renaissance Periods introducing 10 new words. The teacher read the passage to the students and asked the students to use one of different methods of using context clues to determine the meaning of the word. The students wrote down all 10 words and their meaning as used in the passage. Once students agreed on the meaning of all 10 words, they worked collaboratively in small groups discussing the meaning(s) and ways to use the word in different contexts. At the end of class, the teacher administered the instructional vocabulary quiz.

The final method of instruction was the elaboration technique in which students were provided opportunities to elaborate on new terms (Ellis, 2002). Ellis provides several elaboration techniques, but for the focus of this study only two of his methods were used. Key to the first part of this approach was the presentation of new terms in meaningful subject-matter contexts during which the teacher facilitated a discussion of the new word. This part of the instruction also encouraged students to use the word in their own sentence. The instructor introduced 10new words using a passage titled Business. The teacher read the passage to the students and engaged them in a discussion about the new words. Ellis further suggests that a second component include the connection of the new term to background knowledge or something with which students are already familiar. Similarly,Nagy (1988) refers to this as deep word-knowledge. The instructor encouraged students to make connections from the new word to familiar situations or prior knowledge they have that can be linked to the new word. Helping students to make links with their existing schemata or to integrate meaning or new words to prior learning provided repeated exposures to the words. This aided students' retention of new meanings and engaged students in meaningful discussions that required applying the word in a variety of contexts. Active engagement with vocabulary and deep processing is the best way to learn vocabulary (Stahl &Kapinus, 1991). Once students agreed on the meaning of all10words, they worked collaboratively in small groups discussing the meaning(s) and ways to use the word in different contexts. At the end of class, the teacher administered the instructional vocabulary quiz.

4. Result and Discussion

The present study attempts to answer the following questions:

Q1: *Does vocabulary strategy training have any impact on the retention of vocabulary in an Iranian EFL context?*

H01:*Vocabulary strategy training has no impact on the retention of vocabulary in an Iranian EFL context.*

Before data analysis, we should know that, for all statistical analyses in this study, .05 was used as the alpha level at which findings were considered to be significant. Several statistical tests were employed to address the different research questions. The data were analyzed using the Statistical Package for the Social Sciences (SPSS 14) software package to identify statistically significant relationships on targeted vocabulary quizzes and between vocabulary pretest and posttest within the groups who received the three types of vocabulary instruction.

However, before doing any analysis, we should know whether we are able to use a parametric test or not. Therefore, we should check whether the data have been normally distributed or not. If the level of significance is more than 0.05, it indicates the normality of data distribution. Therefore, we can use parametric test for further data analysis. Table 1 indicates the result of Kolmogorov-Smirnov Test.

Table 1. One-Sample Kolmogorov-Smirnov test for vocabulary pretest in experimental and control group.

		Accuracy
N		67
Normal Parameters	Mean	12.64
	Std. Deviation	3.60
Most Extreme	Absolute	.161
Differences	Positive	.161
	Negative	-.057
Kolmogorov-Smirnov Z		.498
Asymp. Sig. (2-tailed)		.965

As it is evident from Table 1, the result of normality test shows that p values of two groups (.965) is more than significance level (0.05).Therefore, we can accept the assumption of normality and we can use a parametric test like ANOVA for comparing the results of pretest and posttest in experimental and control group. In order to answer the first question, first the gain scores from pretest to posttest in experimental and control group were computed and then ANOVA was used to see whether there was any significant difference between the two groups in pretest and posttest stage. The following tables show the results:

Table 2. **Mean gain scores of samples in experimental and control group.**

Group	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Experimental	35	5.89	2.298	.388	1	12
Control	32	.13	1.996	.353	-4	4
Total	67	3.13	3.605	.440	-4	12

The results of data analysis (ANOVA) in table 3 below indicates that there is a statistically significant difference between the students' performance in experimental and control group in the results of pretest and posttest because obtained F value of 118.989, was found to be significant at .001 level (P=.000). Also, by looking at table 1 above, subjects scored higher in experimental group (M=5.89, SD= .13), after they were taught the three vocabulary strategies considered for the purpose of this study including context clues, elaboration techniques, and word parts and word families , than the control group (M=.13, SD= 3.13). With respect to this point, the first null hypothesis is rejected. In other words, teaching vocabulary strategies play a significant role in developing the level of the learners' vocabulary knowledge.

Table 3. Results of ANOVA for mean gain scores of samples in experimental and control group.

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	554.748	1	554.748	118.989	.000
Within Groups	303.043	65	4.662		
Total	857.791	66			

Q2: *Is there any significant difference between the effect of vocabulary strategy training among Iranian autonomous and non-autonomous learners?*

H02: *There is no significant difference between the effect of vocabulary strategy training among Iranian autonomous and non-autonomous learners.*

In order to answer the second question, one-way ANOVA was used. The results of this test are indicated in Table 4 and 5.

Table 4. Mean scores of vocabulary knowledge posttest among autonomous and non-autonomous group.

Group	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Autonomous	15	6.80	2.541	.656	1	12
Non-autonomous	20	5.20	1.881	.421	2	9
Total	35	5.89	2.298	.388	1	12

The results of data analysis (ANOVA) in table 5 below indicates that there is a statistically significant difference between the autonomous and non-autonomous students' performance in experimental group because obtained F value of 4.595, was found to be significant at .05 level (P=.04). Also, by looking at table 4 above, autonomous subjects scored higher (M=6.80, SD= 2.54), after they were taught the three vocabulary strategies considered for the purpose of this study

including context clues, elaboration techniques, and word parts and word families , than the students in non-autonomous group (M=5.20, SD= 1.88). With respect to this point, the second null hypothesis is rejected. In other words, autonomous learners had better performance in learning vocabulary after they were taught vocabulary strategies, in comparison to non-autonomous learners.

Table 5. **Results of ANOVA for mean scores of vocabulary knowledge posttest among autonomous and non-autonomous groups**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.943	1	21.943	4.595	.040
Within Groups	157.600	33	4.776		
Total	179.543	34			

It is widely believed that students have a better chance of success in language learning if their vocabulary knowledge is increased (Beck & Mckneown, 1983; Dupis & Synder, 1983). This is of paramount importance for the students whose English is a second or foreign language. In almost all the universities in which English is taught as a field of study, students are required to study English in order to reach a certain level of language proficiency.

Furthermore, a well-developed vocabulary base and the ability to understand how to use vocabulary are essential to compete for jobs and function effectively. It is with an understanding of the findings on vocabulary competence that we now focus on discussion and recommendations that inform research in the field of reading and /or appropriate vocabulary instructional methods. This study analyzed the effects of three instructional modes for developing vocabulary - word parts, elaboration, and context clues - and the role of autonomy as an independent variable- on vocabulary competence after receiving treatment on post-tests. In order to enhance vocabulary knowledge , vocabulary instructional methods employed must be evaluated. In identifying best teaching practices, vocabulary instruction should be continuously reevaluated based on current research in an EFL context to identify what is or is not successful in achieving learning outcomes necessary for student success.

5. Conclusion

Problem-solving and higher-order thinking skills are integral traits needed by citizens in the modern world (Hargreaves, 2003). Educators constantly review teaching methods to determine the most successful types of delivery so that problem solving and higher-order thinking can develop in their students (Buffum & Hinman, 2006). Some investigators argued that active learning in which social interaction between students is encouraged will foster higher-order thinking and problem solving and, thereby, enhance academic achievement (Bilgin, 2006; Stevens, 2003).

Many researchers reported that learner autonomy promoted higher-order thinking and problem-solving abilities in students (Brown, 2002; Palincsar & Herrenkol, 2002). This study was designed to investigate the effects of three instructional methods for developing vocabulary - word parts, elaboration, and context clues on autonomous and non-autonomous students' performance studying English in English language institutes at intermediate level .

The findings revealed that experimental group made progress over time, that is, the students from this group attained an increase in scores from pretest to posttest. Further, there was a significant difference between autonomous and non-autonomous learners in posttest in experimental group. The results of this study raise more questions and point out the need for the implementation of autonomy in relation to vocabulary achievement.

Many researchers found that the use of cooperative learning produced gains in enhancing autonomy. Some researchers reported findings similar to the present study, in which the use of cooperative learning as a way for enhancing autonomy increased student achievement measurably more than traditional strategies (Riley & Anderson, 2006; Stevens 2003).

To conclude, it is not the teachers responsibility to teach all vocabulary to the learners. Learners should depend on themselves by adopting strategies that suit their abilities in learning vocabulary. Vocabulary learning is not always easy. But with practice and time, learners should find that they are making progress. Learners should study items that appear in many contexts. Learning in rich contexts is valuable for vocabulary learning. Vocabulary words should be those that the learner will find useful in many contexts. When vocabulary items are derived from content learning materials, the learner will be better equipped to deal with specific reading matter in content areas. Learners will feel that vocabulary learning is effective when it entails active engagement in learning tasks. Computer technology can be used effectively in learning vocabulary autonomously. Autonomous learners in learning vocabulary should have a continuous desire of learning vocabulary and they should develop their strategic ways of learning. Learners should choose a private way that stimulates their enthusiasm and motivation. As mentioned earlier in this context the learner who learns vocabulary autonomously should choose the objectives of his/her learning then he/she should choose the materials that will be used to reach the objectives chosen. He/she has to decide upon the methods and techniques he/she wants to use. All the previous decisions are usually taken concurrently with decisions about materials since means and ways are closely interdependent. The outcome is assessed and more decisions are made as to the degree of appropriateness of the chosen objectives, materials, methods and techniques.

As a conclusion, it can be said that investigating learning autonomy level and learning styles from the aspects of curriculum, teaching process and teachers will contribute significantly to the Iranian Education.

6. Theoretical and Pedagogical Implications

While a small sample was used for the purpose of this study, the findings may have suggestions for vocabulary instructional methods for a larger sample of community group. For example, elaboration technique instruction, where teachers elaborate different words can be regarded as an effective instructional method based on this study. However, some researchers indicate that the use of the dictionary is not the only way to explicitly understand word meaning. This study raises questions about where other methods of vocabulary instruction might be appropriate, and under what different conditions.

In addition, the success of EFL learners using word parts and word family instruction suggests that instructors should incorporate this instructional method into their repertoire of teaching strategies as well as other instructional strategies. These students made significant gains immediately after treatment and specifically with word parts. Knowledge of prefixes, suffixes, and roots can be extremely helpful in one's native language, but it may be of significant value for Iranian EFL learners. Nagy and Anderson (1984) estimated that around 60% of the new words

encountered by students are able to be broken down into parts that aid in determining the meaning of the word.

As far as some recommendations for action are concerned, educational systems constantly look for teaching methods that meet the diverse learning styles and needs of today's students. Administrators and teachers alike go through various trainings each year to investigate and implement different strategies and styles to ensure that students reach optimal academic achievement. Many systems adopt programs and require teachers to follow these specific programs in their daily instruction. The results of this study revealed that the use of vocabulary strategy training had a positive effect on vocabulary achievement. Further, while all students showed gains in test scores from pretest to posttest, the autonomous learner group achieved significantly better tests scores than did the non-autonomous group without any kind of instruction. This study was able to report findings similar to those of other studies in which the use of vocabulary learning strategies promoted academic achievement (Adams 2000; Siegel, 2005; Stevens, 2003).

Understanding and identifying how learners process and understand new words is essential if we are interested in finding about the effect of instruction for long-term gain. A checklist identifying strategies which are used to learn new vocabulary is a vital part of vocabulary development for both the instructor and the students. A need to focus on how learning is taking place is as important as what is being learned. What strategies are being used for EFL learners' success is important to identify by considering the increasing number of students entering college or university in Iran. However, the development of learning strategies requires time, guided instruction, and ample opportunity to practice the new strategy in a variety of contexts. The checklist can provide additional information related to the need to review and re-teach strategies.

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