Comparing the effects of direct and indirect learning strategies on Iranian EFL learners' vocabulary learning

Ali Taghinezhad
Comparing the Effects of Direct and Indirect Learning Strategies on Iranian EFL Learners’ Vocabulary Learning

Ali Taghinezhad *
Department of Foreign Languages, Fasa University of Medical Sciences, Fasa, Iran

Maral Azizi
General Department of Fars Province Education, TEFL, Islamic Azad University, Shiraz, Iran

Sedigheh Shahmohammadi
General Department of Fars Province Education, Fars, Iran

Fateme Saneie Kashanifar
Department of English Language and Literature, University of Tehran, Tehran, Iran

Mahboobeh Azadikhah
General Department of Fars Province Education, Fars, Iran

Abstract
Vocabulary is vital to English language teaching since without a sufficient knowledge of vocabulary students are not able to understand others or to express their ideas. Therefore, several indirect and direct strategies have been proposed to improve vocabulary learning. Whether indirect or direct strategies can contribute more to vocabulary learning has been a significant issue. Therefore, this study aimed at investigating the influence of indirect and direct learning strategies on the vocabulary learning of Iranian EFL learners. To this end, ninety upper-intermediate students were selected from two English language institutes in Shiraz, Iran. Students were divided into two experimental groups. One experimental group (A) received vocabulary instruction using direct learning strategies and the other group (B) received vocabulary instruction using indirect learning strategies. After the instruction the students were required to take a vocabulary examination. The results indicated that students who received vocabulary instruction using indirect strategies outperformed their counterparts in the other group. Implications of the findings are also discussed at the end of the study.

Keywords: direct/indirect learning strategies, vocabulary instruction, vocabulary knowledge, vocabulary acquisition

INTRODUCTION
Vocabulary learning is considered as one of the most significant problems that learners face while learning a second or foreign language. Undoubtedly, insufficient knowledge of vocabulary leads to difficulty in speaking a second language. Therefore, learners need to
be made familiar with vocabulary learning strategies in order to cope with this problem. Learning a second language requires motivation, suitable learning environment, language awareness, and language learning strategies. Among these factors, the importance of language learning strategies cannot be ignored. Studies on language learning strategies began in the 1960s (Oxford, 1990). During the past twenty years there have been a lot of advances in the field of language learning strategies (O’Malley & Chamot, 1990). Vocabulary learning is considered as a fundamental tool in learning a second language. It is regarded as the most difficult field in learning a second or foreign language (Celik & Toptas, 2010).

Some scholars believe that vocabulary knowledge is crucial to communicative competence (Richards & Renandya, 2002), and this knowledge can improve learners’ reading comprehension (Tozcu & Coady, 2004) because it is a prerequisite for reading comprehension (Anderson & Freebody, 1981). Thompson (1999) maintains that learners need to enhance their vocabulary knowledge in order to have a good command of reading comprehension. Learning a second language requires a considerable sum of vocabulary items in that language. Scholars believe that vocabulary learning is the basis of acquiring another language (e.g. Sun et al., 2011). Wilkins (1972) maintained that without grammar little can be conveyed, but without vocabulary nothing can be conveyed. Rubin et al. (2007) conducted a study and found that teaching learners language learning strategies not only helps them acquire more vocabulary items but also encourages them to have a better performance. The use of language learning strategies helps learners to improve their proficiency. A study done by Abedini, Rahimi, and Zare-ee (2011) showed that strategies can help learners achieve their learning goals, gain autonomy, and develop their success in learning a language. Moreover, language learning strategies can help instructors to understand their students’ prospects better (Suwanarak, 2012).

**REVIEW OF LITERATURE**

**Vocabulary learning strategies**

Oxford (1990) classified language learning strategies in the most comprehensive way. She proposed direct and indirect strategies which include six subcategories, nineteen strategies and sixty two sub-strategies. Direct strategies are utilized to attract the learners’ attention into direct communication with form and meaning of vocabulary items such as using a dictionary and word list. On the other hand indirect strategies help learners learn a language without directly getting involved in the target language. O’Malley and Chamot (1990) conducted a study and indicated that language learning strategies are mostly used for learning vocabulary.

Vocabulary learning strategies are subdivisions of language learning strategies (Cohen & Macaro, 2007). These strategies have attracted a lot of researchers’ attention (e.g. Celik & Toptaş, 2010; Fan, 2003; Wanpen et al., 2013). This is because vocabulary knowledge is of paramount importance in learning a second language and learners must use these strategies in order to compensate for their restricted vocabulary knowledge especially in countries where English is not spoken so much like Iran. Therefore, the significance of
vocabulary learning strategies is strongly felt. This issue was the subject of a study by Ahmed (1989). He used a structured interview and observation during think-aloud tasks. In his study, the students were divided into some groups namely, “good students”, “underachievers”, and “high-achievers”. The results of the study showed that high-achieving learners used those strategies more than other groups of students. On the contrary, those students in other groups who did not make any improvement showed little use of those strategies.

Vocabulary learning strategies are the strategies used by learners in order to learn new words in the second language (Gu, 1994) and are considered as a component of language learning strategies (Nation, 2001). Whereas, language learning strategies are the subcategories of general learning strategies. Several classifications have been proposed by different scholars regarding vocabulary learning strategies. For instance, Gu (2003) classified second language vocabulary learning strategies as metacognitive, cognitive, activation, and memory strategies. Also, Schmitt (1997) classified vocabulary learning strategies as determination strategies, social strategies, memorization, cognitive, and metacognitive strategies. Another classification was proposed by Fan (2003) who modified Gu's (2003) classification. His classification included primary category and remembering category. The former comprises dictionary strategies and the latter included repetition, grouping, analysis, association, and known words strategies. In fact, vocabulary learning strategies are the steps which are taken by learners in order to learn new words.

**Language learning strategies**

Language learning strategies have been defined as the steps or operations which are used by a learner to facilitate acquisition, storage, retrieval, or the use of information (O’Malley, Chamot, Stewner-Manzanares, Kupper, & Russo, 1985). LLSs have the potential to be a powerful learning instrument which can lead to the betterment of proficiency and self-confidence (Oxford, 1990). Although several scholars have been working on language learning strategies, it is not easy to define and classify them clearly. Scholars are not unanimous regarding the meaning of learning strategies. Griffiths (2004) identified two types of learning strategies: those contributing directly to learning, and those contributing indirectly to learning. She divided direct strategies into six types: memorization, monitoring, deductive reasoning, guessing/inductive inferencing, practice, clarification/verification, and the indirect strategies into two types: production tricks, creating opportunities for practice.

Oxford (1990) expanded that definition and classified learning strategies into six groups: cognitive strategies which are related to the way students think about their learning, metacognitive strategies which are related to how students monitor their learning, compensation strategies which enable students to compensate for their inadequate knowledge, affective strategies which are concerned with students’ feelings, memory strategies which are related to the way students remember language, and social strategies which are concerned with students’ learning through interaction with others.
Oxford’s classification is almost the most widely accepted classification. However, it is still impossible to consider it as the most complete classification (Dörnyei, 2005).

Based on the studies done so far, it can be concluded that one of the effective ways of improving students’ vocabulary knowledge is through making them familiar with learning strategies and how to apply them efficiently (Oxford, 1996). Eslami-Rasekh and Ranjbari (2003) conducted a study concluding that teaching students language learning strategies can help them improve their learning output because those strategies can increase learners’ consciousness of how to learn efficiently. Another study was done by Taghinezhad, Tabaeifard, and Bazyar (2015) which investigated the impact of teaching listening comprehension strategies on the improvement of listening comprehension ability of Iranian EFL learners and found that teaching listening comprehension strategies can play a major role in the improvement of listening comprehension ability. Also, Taghinezhad, Dehbozorgi and Esmaili (2015) conducted a study investigating the influence of teaching meta-cognitive reading strategies on the reading self-efficacy beliefs of Iranian EFL learners. The study showed that those who received instruction using meta-cognitive reading strategies had higher self-efficacy beliefs comparing with those who did not receive such instruction. However, there was no statistically significant difference between males and females regarding their self-efficacy beliefs. In another study Cohen and Macaro (2007) classified vocabulary learning strategies as 1) repetition strategies, 2) inferencing strategies, 3) memorization strategies, 4) association strategies, 5) dictionary use, 6) semantic grid strategies, 7) key word method, 8) word lists. Farhady (2006) states that using these strategies affects the level of learners’ second language ability.

According to Oxford (1990), direct vocabulary learning strategies focus on the use of tools like dictionaries and word lists and they are concerned with explicit instruction of meanings and forms of the vocabulary items. Whereas, indirect strategies improve learning in an indirect way. In other words, indirect vocabulary learning does not put emphasis on the word itself.

A study was done by Naeimi and Chow Voon Foo (2015) comparing the effect of direct and indirect vocabulary learning strategies on the vocabulary acquisition of pre-intermediate learners, concluding that students who used direct vocabulary learning strategies outperformed those who used indirect vocabulary learning strategies. However, to the best of the researchers’ knowledge, no study has been done on upper-intermediate Iranian EFL leaners comparing the effect of direct and indirect vocabulary learning strategies on the learners’ vocabulary acquisition. Therefore, this study seeks to investigate this issue.

**THIS STUDY**

This study can help instructors to enhance their students’ awareness of direct and indirect strategies in order to improve their vocabulary knowledge. Additionally, it can guide students improve their vocabulary learning strategies and gain autonomy. Teachers can provide learners with suitable materials to develop their vocabulary knowledge.
Students can benefit from direct vocabulary learning strategies (i.e. structured reviewing and mechanical techniques) and indirect vocabulary learning strategies (i.e. organizing and discussing your feelings with someone else) to enhance their vocabulary acquisition.

This study seeks to answer the following questions:

- How much do direct vocabulary learning strategies enhance the vocabulary learning of Iranian EFL learners?
- How much do indirect vocabulary learning strategies enhance the vocabulary learning of Iranian EFL learners?

**METHOD**

**Participants**

Ninety students from two English language institutes in Shiraz participated in this study. They were upper-intermediate learners of English whose age was between 18 to 30. They were all Persian native speakers who were learning English as a foreign language at an upper-intermediate level.

**Instruments**

In order to collect the data the following instruments were utilized:

**Proficiency test**

In order to make sure about the homogeneity of the participants the Key English Test (KET) was used. This test is a valid and reliable instrument for selecting participants. The reliability of this test was calculated to be 0.81 using Cronbach's alpha.

**Reading comprehension passages**

The material used in this study was the upper-intermediate volume of *Select Readings* series by Bernard and Lee (2004). The students were taught 7 units of this book and the vocabulary items in this book were taught using both direct and indirect strategies.

**Multiple-choice vocabulary exam**

The next instrument used in this study was a teacher-made vocabulary test which was used as a pre-test and a post-test. This test was comprised of 45 multiple-choice vocabulary questions which were designed based on the material that was taught to the students. The reliability of this test was found to be 0.79 using Cronbach's alpha.

**Procedure**

This study aimed to investigate the effect of direct and indirect vocabulary learning strategies on the vocabulary learning of students. First, ninety upper-intermediate English learners were selected from two English language institutes in Shiraz, Iran. Then they were required to take the Key English Test (KET) in order to make sure about the
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homogeneity. They were then divided into two experimental groups namely, experimental group (A) and experimental group (B). Therefore, 45 students were in experimental group (A) and 45 students were in experimental group (B). The students were taught the upper-intermediate volume of the Select Readings series for 7 sessions. The students in the experimental group (A) were taught the vocabulary items through direct learning strategies and the students in the experimental group (B) were taught the vocabulary items using indirect strategies. The details of each of those strategies will be discussed in the following sections. At the end of the last session the students in the two experimental groups were required to take vocabulary test based on what they were taught.

Direct learning strategies

Structured reviewing

One of the direct learning strategies as put forward by Oxford (1990) is structured reviewing. Structured reviewing is a technique that is used to remember and use new vocabulary items in the target language. Structured reviewing makes a structured schedule for reviewing new vocabulary items. It helps learners to go back over second language vocabulary at different time intervals. Learners review new words at first close together and then far apart. For instance, the learner practices new words then after 10 minutes practices them again and after one hour or two hours or even after some days again practice those words until overlearning takes place and the material become automatic. The time needed for the automaticity of the words depends on the difficulty of the vocabulary items, the context in which those words have been used, and many other factors. Structured interviewing is based on memory principles which focus on recency, spacing, primacy, pacing, and duration (Stevick, 1976). Although structured is very useful, second language textbooks do not usually suggest that learners use them. However, structured reviewing is a significant vocabulary learning technique which has not been used to its potential.

Using mechanical technique

As another direct vocabulary learning strategy, using mechanical technique was proposed by Oxford (1990). This strategy can be used to remember what has been learned. In this strategy, the learner writes a new vocabulary item on one side of the flashcard and the definition of that word on the other side. In order to contextualize a new word, the learners write a sentence on a flashcard using that new word. Then, the learners practiced those words in their free time.

Indirect learning strategies

Organizing

As an indirect learning strategy as put forward by Oxford (1990), organizing needs different tools like planning, preparing a suitable learning environment, and using a notebook for language learning. Students need a good learning environment for acquiring
any language skill. Therefore, minimizing noise, providing a comfortable atmosphere, and creating a good classroom setting is considered crucial when using this strategy. Moreover, learners have weekly planning with so much time set aside for practicing the language skills outside the classroom. Keeping a notebook while learning a language is considered as a useful aid for learning. This notebook can be used for several activities like writing down new idioms and expressions, taking notes while learning, remembering your goals, and organizing your plans (Oxford, 1990).

**Discussing your feelings with someone else**

This strategy refers to sharing learners’ feelings with friends, teachers, or parents. Teachers can use this strategy in the classroom in order to understand how their students feel and to recognize their needs. Moreover, introverted students can make use of this strategy. Ellis and Sinclair (1989:152) define this strategy as “discussing and reaching agreement with other learners and teachers”. According to Oxford (1990), learning another language is difficult, and learners need to discuss this process with others. Therefore, they would like to negotiate their daily learning activities with other people. They can do it either in the classroom or outside of the classroom.

**Data analysis**

In order to analyze the data in this study, SPSS version 22 was used. Based on the two research questions that were mentioned above, two independent-samples t-test were run in order to compare the means of the two groups after treatment.

**RESULTS AND DISCUSSION**

Having analyzed the data, the researchers compared the results of the analyses through independent-samples t-test. Table 1 provides the calculations related to group (A) which received instruction through direct strategies and Table 2 indicates the results of the analysis regarding group (B) which received instruction through indirect strategies.

According to Tables 1 and 2, the mean scores of students in group (A) and group (B) were not so much different (Group A pretest mean = 46, Group B pretest mean = 47) before the strategy instruction. To find out whether direct and indirect learning strategy instruction made any significant change in the learners’ vocabulary learning progress a posttest was administered to both groups.

<table>
<thead>
<tr>
<th>Table 1.</th>
<th>Descriptive statistics for group A using direct strategies pre-test, post-test results</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Group</td>
</tr>
<tr>
<td></td>
<td>Group A pretest</td>
</tr>
<tr>
<td></td>
<td>Group A posttest</td>
</tr>
</tbody>
</table>

T-observed= 0.068, T-critical=1.841, T-observed is smaller than t-critical.
Table 2. Descriptive statistics for group B using direct strategies pre-test, post-test results

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group B pretest</td>
<td>45</td>
<td>47</td>
<td>0.61</td>
<td>4.216</td>
</tr>
<tr>
<td>Group B posttest</td>
<td>45</td>
<td>58</td>
<td>0.72</td>
<td>P = 0.03</td>
</tr>
</tbody>
</table>

T-observed = 4.216, T-critical = 1.841, T-observed is bigger than t-critical.

Therefore, another independent-samples t-test was run in order to compare the means of the two groups after instruction. The results are provided in Tables 1 and 2. According to Table 1, the mean score of Group (A) that received direct strategy instruction was 46 in the pretest but in the posttest, the mean score was 49. The result of the independent-samples t-test for Group (A) showed that the students’ progress was statistically significant (p > 0.05). Therefore, it can be concluded that teaching direct vocabulary learning strategies could not prove effective in the vocabulary learning of learners in Group (A).

With regard to the results of the data analysis gained from the pretest and posttest for Group (B), we can observe that the mean score of students in this group was 47 in the pretest. After treatment the mean score of the students increased to 58 which shows a considerable progress in their performance. This shows that indirect learning strategies could improve students’ vocabulary learning in this group. Moreover, the results of the independent-samples t-test of the data obtained from the pretest and posttest of Group (B) showed a statistically significant difference (p < 0.05). This verifies that indirect learning strategies could enhance students’ vocabulary performance. These findings are in contrast with previous studies (e.g. Beck & McKeown, 2007; Laufer & Shmueli, 1997) which concluded that using direct vocabulary learning strategies could enhance learners’ vocabulary knowledge. These studies investigated the effect of direct and indirect strategies on students at pre-intermediate level whereas the present study focused on students at upper-intermediate level.

One reason for such a discrepancy might be that students at upper-intermediate level tend to use indirect learning strategies more than direct strategies because unlike elementary learners who need to know basic vocabulary items before starting to learn new words from the context, students at upper-intermediate level have sufficient vocabulary knowledge to guess the meaning of unknown from the context so they rely less on direct strategies in order to understand new words (Waring, 1995). Guessing technique as an indirect strategy is more likely to be used by students at an upper-intermediate level rather than elementary level. At elementary level, teachers teach new vocabulary to their students by providing them with definitions of words in a direct way and structured reviewing as a direct strategy is easy to use by students at an elementary level whereas students at an upper-intermediate level prefer to use indirect learning strategies.

Another reason for such a contrast might be that unlike elementary-level learners, students at an upper-intermediate level have the ability to organize and discuss their feelings with somebody else, therefore, they are more likely to use indirect learning strategies than students at elementary level. According to Oxford (1990), discussing your
feelings with someone else as an indirect learning strategy requires a lot of efforts on the part of the learners since learners are supposed to negotiate and share their experiences with others which students at elementary level are usually unable to do.

CONCLUSION

This study aimed at comparing the effect of indirect and direct vocabulary learning strategies on the vocabulary learning of upper-intermediate Iranian EFL learners. The results of the study showed that students at upper-intermediate level tend to use more indirect learning strategies than direct learning strategies. Therefore, we can conclude that teaching students about indirect learning strategies can prove helpful for students at upper-intermediate level. Thus, teachers are supposed to help students organize their ideas, negotiate their daily events and experience, and discuss their feelings with each other while learning in the classroom. Moreover, material developers are recommended to design textbooks and teaching materials based on strategy-instruction depending on the educational level of the students. In other words, the materials and textbooks should be consistent with the educational level and the learners’ choice of language learning strategies.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

This study like any other studies suffers from some limitations. In this study the factor of gender was not taken into account. In other words, the researchers did not investigate whether gender makes any contribution to the use of language learning strategies especially in terms of indirect and direct vocabulary learning strategies. Therefore, future studies can focus on the role of gender in this regard. Another limitation was that the researchers investigated only two indirect and two direct vocabulary learning strategies and other strategies were not investigated. So, further studies can be conducted investigating the effect of other strategies on the vocabulary learning of students.

REFERENCES


