

Scaffolding and EFL Learners' Use of Language Learning Strategies in the Iraqi Language Teaching Context

Abbas Ali Rezaee¹

Associate Professor, University of Tehran

Ali Akbar Khomeijani Farahani

Associate Professor, University of Tehran

Lihadh Abdulameer Mubarak

PhD Candidate, University of Tehran, Aras International Campus

Abstract

Scaffolding is an instructional strategy which significantly contributes to learning processes. Learning strategies, as well, have often been noticed as being important in helping EFL learners acquiring a new language. The study is an attempt to find out the effect of using scaffolding strategies on EFL learners' use of different language learning strategies. To achieve the aim of the current study, a fifteen-week experiment was conducted. A sample of 100 Iraqi EFL university students participated in the study. The participants were divided into two groups: an experimental group, receiving conversation instruction through different scaffolding strategies, and a control group, being taught according to routine lecture method based on a teacher-centered approach, dominating in Iraqi university contexts. In both groups, the students' use of learning strategies was pre- and posttested. A paired samples t-test, an independent t-test and a multivariate ANOVA were used for statistical analysis of the data obtained. It was found that there is a statistically significant difference between the two groups in favor of the experimental group. This indicates that using scaffolding strategies throughout the teaching process is more effective than the routine lecture method within the teacher-centered approach framework.

Keywords: Scaffolding, Learning Strategies, Teacher-centered, Lecture Method

Received on May 6, 2017

Accepted on October 25, 2018

1. Introduction

Scaffolding is one of the different teaching/learning strategies that have been suggested throughout literature. It is defined by Richards and Schmidt (2002)

¹Corresponding author: aarezaee@ut.ac.ir

as a teaching/learning strategy in which both teachers and learners engage in collaborative problem-solving activities. In this process, the learners become increasingly independent through teachers' support and guidance. It involves any support temporarily provided by experts permitting learners to participate in complex tasks which lead them towards further success in performing the tasks independently (Ediger, 2001). Walqui (2006) puts it in other words saying that scaffolding is a process of setting up situations to make novice's entry into the task easy and successful, then gradually pulling back, and handling the role of those situations, as the learners become competent enough to manage doing the task. As such, the effect of scaffolding on learning a new language has been an attractive topic for a good number of scholars.

Similarly, Language Learning Strategies (LLS) have emerged as integral components of various theoretical models of language proficiency (Bachman & Palmer, 1996 and Ellis, 2008). LLS help learners become more autonomous. They also enhance self-efficacy and individuals' perception which, in turn, help them to successfully complete a task or series of tasks (Carter & Nunan, 2001). LLS are essential in learning a language in a way that language learner needs to have these mental steps, operations, choices, and activities to manage acquiring the target language. Good application of LLS makes learners able to understand and use new expressions in the language they are developing their competence in. Thus, the study of the different LLS is an important area of inquiry.

Despite the abundance of research on scaffolding (e.g. Clark & Graves, 2005; Dabbagh, 2003; Macdonald, & Martinez, 2005; Walqui, 2006), little empirical application of scaffolding strategies has been undertaken especially in Iraqi university contexts (Abdul-Majeed & Muhammad, 2015). Moreover, in the literature on foreign and second language learning, the emphases has been on identifying the LLS used by EFL learners and the factors that affect

this use (e.g. Nambiar, 2009; Griffiths, 2004; Najafi, Gorgani, Haghshenas, & Khosrojerdi, 2014). Some studies have concentrated on finding out relationships among learning strategies, on the one hand, and some of the characteristics of EFL learners, such as their beliefs, style, age, gender proficiency, etc., on the other (e.g., Li, 2004; Nosratinia, Mojri, & Sarabchian, 2014; Lai, 2009). Other studies have focused on training learners to use the learning strategies (e.g., Hasan, Macaro, Nye, Smith & Vanderplank, 2005; Komonova, 2008; Liang, 2009). More importantly, the effect of using scaffolding strategies on the use of different LLS has not yet been widely investigated.

In this study, an empirical application of two types of scaffolding strategies, namely symmetrical and asymmetrical scaffolding, has been investigated. That is, both supports provided by the teacher and/or more privileged peer learners were observed for measuring their effects. This was also done to help learners succeed in different academic activities in identifying or providing correct responses to the questions usually raised in the classroom. Thus, the purposes of this study are (a) to scrutinize the effect of using scaffolding strategies on the EFL learners' use of LLS; and (b) to explore the type of LLS that is most affected by the application of scaffolding strategies in the teaching process.

2. Review of the Literature

2.1 Scaffolding

Generally speaking, the interpretation of scaffolding has been a matter of opinions. For instance, Wood, Bruner and Ross (1976) define scaffolding as "a process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his/her unassisted efforts" (p. 90). Also, Sawyer (2006) states that scaffolding refers to the process of teaching designed to promote a deeper level of learning. It is the support provided to

promote learning when concepts and skills are being first introduced to students. The support is provided during the teaching process to exactly fit the needs of students with the intention of helping them to achieve their learning goals.

The cognitive psychologist Jerome Bruner was the first who introduced the scaffolding theory in late 1950s (Daniels, 1994). He used the term scaffolding to describe young children with informal instructions and the fact that it results in facilitating their learning. It is important to highlight here that scaffolding is strongly inspired by Lev Vygotsky's concept of an expert helping a novice and is strongly related to Vygotsky's socio-cultural theory and Zone of Proximal Development (ZPD). Sociocultural theory regards social activities as the source of complex mental processes. Scaffolding, according to Vygotsky's theory of social constructionism, is the assistance provided by an expert to a novice in order to enhance the learners' independency.

A considerable number of scaffolding types are proposed in the literature due to various classifications suggested by different scholars. Following Vygotsky (1978) and Piaget (1965), the majority of studies, as stated by Clard and Graves (2005), treat scaffolding as of two types: asymmetrical and symmetrical. According to Vygotsky (1978), learning precedes development; this belief leads him to advocate asymmetrical scaffolding. For Vygotsky, the assistance (scaffolding) provided to the learner should be from an expert or a more knowledgeable peer, and only in such a way scaffolding can be useful and only in such a case learners may benefit from it. On the opposite direction, Piaget (1965) believes that development precedes learning. This means that a child/learner should reach a certain degree of maturation in order to be able to benefit from any kind of assistance and/or guidance and

that any kind of instruction, assistance or guidance would be of no help if the child is not mature enough to be able to invest the given assistance.

In their definition of scaffolding, Macdonald, and Martinez (2005) refer to five tools, namely, *simplified language*, *teacher modeling*, *visuals and graphics*, *cooperative learning*, and *hands-on learning*. Below is a brief explanation for each:

1. *Simplifying the language* means that the teacher simplifies the language by, for example, speaking in the present tense, avoiding the use of idioms, etc.
2. *Teacher modeling* is when the teacher may ask for completion instead of generation. The teacher can ask the students to choose answers from a list of choices or a complete paragraph for example.
3. *Visual graphics* refers to the teacher's presenting information and asking students to respond using tables, charts outlines and graphs.
4. *Cooperative learning* refers to teamwork, students can do an assignment by working together in teams, but it is essential that each student is held accountable for the completion of the assignment.
5. *Hands-on learning* means that the teacher tries to make his/her students involve in making a connection between the materials taught and their immediate environment. In such a way the learners will be more likely invested in the lesson.

2.2 Learning Strategies

Learning strategies have been examined and defined by psychologists, linguists, and language teachers. Rubin (1987), for example, defines LLS as attempts that affect learning directly and also aids in developing the language system the learners try to develop. O'Malley and Chamot (1990) as well as Richards and Platt (1992) construe LLS as special behavior and thoughts intentionally used by individuals while learning in order to help them comprehend, retain, understand, learn and remember new pieces of information.

Oxford (1990) first defines LLS as "actions, behaviors, steps, or techniques students use, often unconsciously, to improve their progress in apprehending, internalizing, using the L2" (p. 1). Then she elaborates this definition describing LLS as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations" (p.8). Later, Oxford (2001) further explains that LLS are consciously employed. She believes that when autonomy is reached after extensive practice, that is, when the learners use a learning strategy unconsciously, it should no longer be considered as a strategy but is transferred into what she called an unconscious habit.

By reviewing the definitions of LLS, one can interpret that LLS are thoughts and actions related to the learners' attempts to master new linguistic and sociolinguistic information about the target language. Therefore, LLS are any attempts to develop linguistic as well as sociolinguistic knowledge in the target language. Examples of such strategies are memorization, exposure to the new language, initiations of conversation with native speakers, and so on.

Many experts in the field of language learning/teaching have provided various classifications of LLS. A number of taxonomies have been put forward by different scholars such as Rubin (1975), O'Malley and Chamot (1990), Stern (1992), and Oxford (1990). The classification followed in the current study is the one proposed by Oxford (1990) who divides LLS into *direct* and *indirect* ones. Then she further divides each of these types into subcategories. Direct strategies subdivided into three categories, namely, *memory strategies*, *cognitive strategies* and *compensation strategies*. Indirect strategies are not directly involved in learning and are also subdivided into three categories, *metacognitive*, *affective*, and *social* strategies.

2.3 Studies on Scaffolding

Scaffolding strategies have been investigated from various perspectives (e.g., Birjandi & Jazebi, 2014; Ebadi, 2015; Liang, 2007). These have shown positive effect on acquiring the foreign language. Some studies have focused on scaffolding techniques. Ebadi (2015), for example, concentrated on the impact of three different scaffolding techniques, namely using visuals, simplifying the language, and asking for completion) on speaking and writing performance of 70 Iraqi EFL students. He conducted an experimental study dividing the sample into two equal groups, one experimental group received grammar instruction using scaffolding techniques and the other group (i.e., the control group, was taught following the conventional techniques). At the end of the study the results in writing and speaking tests revealed that the experimental group performed significantly better than the control group. Similarly, Birjandi and Jazebi (2014) studied different scaffolding techniques used by EFL teachers. They found that the teachers used 55 strategies accomplishing different functions which they classified into linguistic, cognitive, social, cultural metacognitive and affective functions. In the same vein, Liang (2007) proposed a five-step pedagogy for scaffolding instruction including contextual-awareness building, controlled and guided practice, model analysis, independent writing and collaborative and construction of text. She concludes that using these five scaffolding techniques help students make better use of their knowledge in grammar and exploit grammar to construct meanings rather than merely maintaining accuracy.

Further studies, on the other hand, have endeavored to explore the effect of using scaffolding strategies on the four language skills: reading, (e.g., Ghaffarsamar & Dehghan, 2013; Rahimi & Ghanbari, 2011) speaking, (e.g., Abdul-Majeed & Muhammad, 2015; Ezza, 2013), writing (e.g., Veerappan,

Suan & Sulaiman 2011; Zarandi & Rahbar, 2014) and listening (e.g., Al-Yami, 2008; Safa & Rozati, 2016).

2.4 Studies on Learning Strategies

A considerable number of studies have addressed LLS. Some of these studies have explored the type of LLS used by EFL learners (e.g., Gerami & Baighlou, 2011; Othman, 2017; Wong, 2011), other studies have focused on the characters of good language learners (e.g., Griffiths, 2004; Nosratinia, Mjori, & Sarabchian, 2014). Still some other studies have investigated different approaches to the teaching and training of learning strategies (e.g., Kozmonova, 2008; Liang, 2009; Miceli & Visocnic-Murray, 2005).

Othman (2017) made a comparison between LLS used by monolingual and bilingual Iraqi Kurdish EFL learners. She reached to the conclusion that both monolingual and bilingual learners make the same use of LLS and that the cognitive strategies are the ones that are most frequently used while the compensation strategies are the least ones used. Wong (2011) investigating the Malaysian preservice teachers' use of LLS, found that the social strategies are most frequently used, followed by metacognitive, then the compensation and cognitive followed affective, the less used strategies are the affective.

Gerami and Baighlou (2011) examined the application of LLS by successful vs. unsuccessful Iranian EFL learners. They found that successful (good) learners do use a wider range of LLS than the unsuccessful learners. Moreover, they found that successful learners, unlike the unsuccessful ones, used metacognitive strategies more frequently.

Miceli and Visocnic-Murray (2005), on the other hand, conducted a project on LLS training for Italian first-year university students. They used strategy instruction to expose EFL learners to the different LLS that can be of good help in enhancing their language study ability. In addition to that they illustrated examples of some activities related to LLS and discussed how

these activities influenced the range and frequency of strategy use and how these activities generated greater learning awareness. They concluded that students, after being exposed to strategy training, had increased their range and frequency of learning strategies use.

3. The Study

Using scaffolding strategies as a way to increase the use of LLS has not been widely examined and no enough empirical studies have been conducted in this regard especially in Iraqi contexts. For that, this study is conducted to inspect the role of scaffolding on the use of the different language learning strategies. Therefore, the current study intends to seek answers to the following research questions:

- 1-What are the most frequently used learning strategies by Iraqi EFL university students?
- 2-What is the effect of the application of scaffolding strategies on Iraqi EFL university students' use of learning strategies?
- 3-What type of learning strategies are most affected by Scaffolding?

3.1 Participants

The participants were 100 Iraqi university students who had studied English during their primary and secondary schools for about nine years. They were first year university students at the Department of English, College of Education for Human Studies during the academic year 2015-2016. They were divided into two equal groups: an experimental group and a control one. The participants' age ranged between 18 and 24 years. All had finished their secondary school and had studied English as one of the materials required throughout their primary, intermediate and secondary school. They were both male (n = 27) and female (n=73). Table 1 shows the demographic features of all participants.

Table 1
Demographic Features of the Participants

Groups	Gender	Frequency	Percent
The Experimental Group	Male	13	26.0
	Female	37	74.0
	Total	50	100.0
The Control Group	Male	14	28.0
	Female	36	72.0
	Total	50	100.0

3.2 Instruments

In order to collect the necessary data, the Strategy Inventory for Language Learning (SILL) was utilized. The SILL devised by Oxford (1990) consists of 50 items covering the six categories of LLS. Participants were asked to respond on a 5-point Likert scale which ranged from 1 (*Never or almost never true of me*) to 5 (*always or almost always true of me*).

The internal reliability of the test was measured twice: for pre and post interventions, (i.e., at time 1 (T1) and time 2 (T2) by calculating their reliability coefficients) which turned out to be 0.857 for the preintervention and 0.860 for the postintervention. It was measured for both the SILL as a whole and each section of the inventory. The results are shown in Table 2.

Table 1
Cronbach's Alphas for SILL for the Whole Sample at T1 and T2

Strategy	At T1	At T2
Cognitive	0.785	0.738
Memory	0.840	0.807
Compensation	0.752	0.770
Metacognitive	0.782	0.802
Effective	0.756	0.773
Social	0.777	0.749
Total SILL	0.857	0.860

3.3 Procedures

The participants in the two groups had taken a conversation class. They were divided into two equal groups, experimental (n = 50) and control (n=50). Initially, the two groups were given the SILL. The students were briefed

about this inventory and some of the items were explained to them. They were told that, regarding this inventory there is no right or wrong answer and that they should mark the choices which actually show their status, (i.e., what they actually use when learning the language not what they see or believe as being a good idea to be used). Then, the participants of both groups were taught the same materials, which were the same dialogues selected from their textbook. The same number of hours was spent teaching conversation in each class.

In the experimental group, the students were exposed to certain scaffolding activities which were designed by the researchers in an attempt to make the participants integrated with the dialogues. Divers scaffolding activities were designed for each lesson. The researchers had a number of objectives after the experimental group's lessons, such as:

- Enabling students to connect to their background knowledge. They were expected to do so through predicting about the dialogue, (i.e., make connections between their personal experience and the dialogues they study possible),
- Enabling equal participation for all the members of the class,
- Enabling students to collaborate in groups,
- Encouraging autonomy.

During the lessons offered to this group, the students' seats were put sometimes in U-shape or in circle(s). Some other times, the students' seats were put on the two sides of the class facing each other. Through this way of classroom arrangements, a comfortable atmosphere was created in the classroom, and facilitated the students' movement when needed. Furthermore, the teacher was able to be closer to most students. Throughout the whole sessions, which lasted for 15 weeks (2 hours per week), different scaffolding strategies and activities were used. The teacher-researcher encouraged

discussions among the students with equal level of language proficiency to help them have symmetrical scaffolding and among students with different proficiency levels to encourage asymmetrical scaffolding. In each week, the first hour of teaching (on Sundays) was assigned to teaching the dialogues selected from the textbook, and the second hour (on Wednesdays) was assigned to free-discussion lessons to encourage students to participate using the target language.

In the first hour of each week when the textbook dialogues were taught, the students were asked to understand and memorize the dialogues while they were asked to do certain activities and to accomplish certain tasks. They were asked to work in pairs or groups for performing the activities. At times the teacher intervened in grouping the students in order to have students who are more proficient in English in each group, this would provide more scaffolding. The students were sometimes given specific situations and were asked to create dialogues suitable for those situations. The given situations were either similar to those given in the dialogues in their textbook or were novel ones. When the situations given were similar to one of those given in the textbook, the chosen topics were not studied in the class. However, after the student finished creating their own dialogues they were told to revert to the pages in their textbook when dialogues were given for similar situations. In this way, they could then compare between the two dialogues, (i.e., the one they had created and the one given in the textbook). This inspired and helped them to improve their language as used in the created dialogues.

In order to provide visual assistance for the students, the following different ideas were applied:

1. The students were given few seconds to look at the pictures at the beginning of each of the dialogues in the textbook and asked to build an image of the situation given in the dialogue.

2. In addition to that, the same topics were searched through the net and similar ones were found and presented as YouTube videos further enhanced the visual support.
3. Finally, the keywords of each dialogue and the new vocabulary were written on the board to provide a visual connection with the words included in the dialogue, especially new words.

In the second hour of each week, when the lessons were devoted to free discussion, the students were asked to do certain types of activities in each lesson, such as choosing a topic and discussing different aspects related to that topic. At first the researcher-teacher suggested some topics, and then the students started to suggest their own preferred topics. In order to encourage the students to participate in the conversations, the researcher tried to choose topics which were interesting for the students and at the same time caused disagreements among them. Examples of the topics discussed included 'working women/mothers', 'belief in horoscopes', 'exposure to western society', 'having a uniform inside the university compass', and so on.

Regarding the control group, the students participated in normal conversation classes, with routine teaching strategies. The routine lecture method based on teacher-centered approach was followed throughout the teaching period. Here the students' seats are put in the normal way with all the students facing the teacher, similar to the same scene in other regular lectures. They were asked to read, understand and memorize the dialogues given in the textbook.

At the end to the teaching period, the participants in the two groups were given the SILL in order to find if there was any change or increase in their use of the different language learning strategies and to find out which of the strategies were affected more by the experiment.

4. Results

The data collected in this study were analyzed by the use of appropriate statistical measures. Table 3 below summarizes the descriptive statistics of the instrument used in the study. It is provided for both groups at T1 (pre-intervention) and T2 (post-intervention).

Table 2
Descriptive Statistics of the (SILL) at T1 and T2 for both Groups

Groups		N	Minimum	Maximum	Mean	SD
Experimental	T1	50	102	197	148.36	22.326
	T2	50	136	215	179.40	15.713
Control	T1	50	97	205	147.38	25.318
	T2	50	107	198	156.60	23.898

As shown in Table 3, the mean scores for the experimental group and that for the control group at Time 1 are close to each other (mean=102 for the experimental group and =97 for the control group), this supports homogeneity of the two groups regarding the pre-intervention use of the language learning strategies. But after the experiment the difference is significant. That is, the mean score for the experimental group increased reaching 136. In the case of the control group, the increase is very small (mean=107).

In order to ensure normality of distribution for the two groups, normality assessment was run. The results showed that there is normal distribution for both groups regarding the scores in the SILL at T1 and T2, as shown in figures 1, 2, 3, and 4.

Rezaee, Khomeijani Farahani, & Abdulameer Mubarak

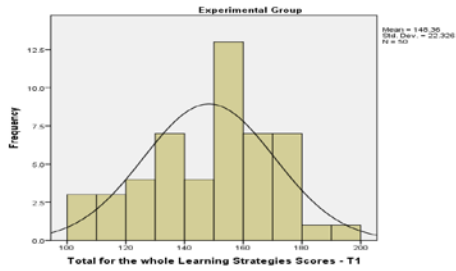


Figure 1. Histogram for the Experimental Group at T1

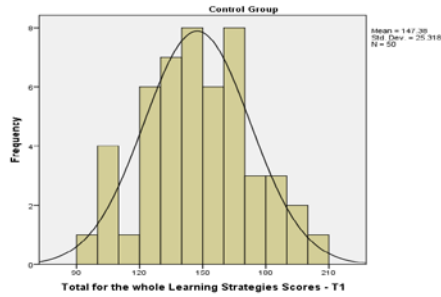


Figure 2. Histogram for the Control Group at T1

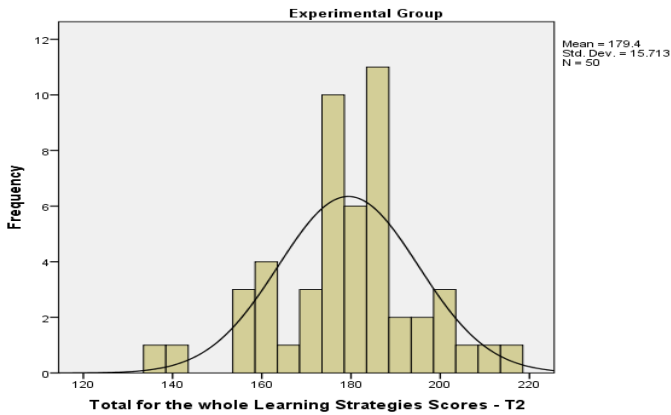


Figure 3. Histogram for the Experimental Group at T2

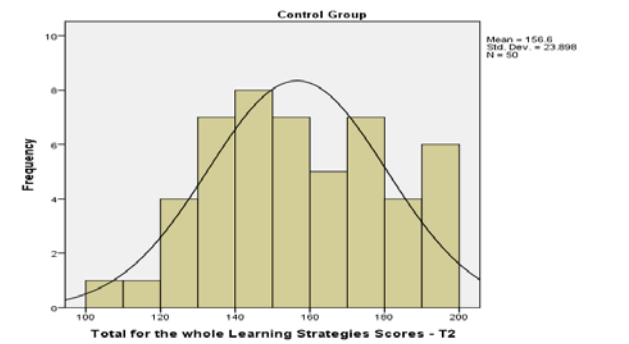


Figure 4. Histogram for the Control Group at T2

After collecting the required data and testing its normality, the researchers conducted the analyses. In order to answer the first research question, that is to identify the learning strategy most frequently used by the Iraqi EFL university students; a descriptive statistics of the six LLS (cognitive, memory, compensation, meta-cognitive, effective and social strategies) was calculated. The results are shown in Table 4 below. The mean of the responses to the items related to each of the six sets of strategies was taken as the criterion for the participants' use of the strategies. A general look at this table shows that all six types of strategies were used by the participants but to a different extent, i.e. the frequencies of using these strategies were different. The most frequently used strategies were found to be the memory strategies, followed by meta-cognitive ones, then cognitive strategies followed by social ones then compensation strategies and the less frequently used strategies were found to be the effective ones. To put it in a clearer way, it can be said that the participants used LLS in the following order: memory (mean = 41.43), meta-cognitive (mean = 29.90), cognitive (mean = 25.62), social (mean = 18.34), compensation (mean = 16.98), and effective (mean = 15.60).

Table 3
Descriptive Statistics of the Six LLS

	N	Minimum	Maximum	Mean	Std. Deviation
T of Memory T1	100	17	63	41.43	11.145
T of Meta-cognitiveT1	100	9	45	29.90	8.309
T of Cognitive T1	100	13	38	25.62	6.630
T of Social T1	100	6	30	18.34	5.751
T of Compensation T1	100	7	29	16.98	5.125
T of Effective T1	100	8	25	15.60	4.461

To answer the second research question which deals with the possible effects of the application of scaffolding strategies on the Iraqi EFL university students' use of LLS, a paired-samples t-test was run. The results showed that there was an increase in the use of learning strategies form time1 to time 2 for both the experimental and the control groups, but the increase in the experimental group, with the means of 148.36 at T1 and 179.40 at T2 respectively, was more than that in the control group (mean= 147.38 at T1 and mean=156.60 at T2). The results had also shown that the difference between T1 and T2 scores in the experimental group is statistically significant (Sig. 2-tailed = .000<.05) while for the control group the difference is not significant (Sig. 2-tailed = .069>.05) (see Table 5).

Table 4
Paired Samples T-Test for the Experimental and Control Groups at T1 and T2

Group	Std. Deviation	t	df	Sig. (2-tailed)
Experimental	22.621	-9..703	49	.000
Control	35.126	-1.856	49	.069

Furthermore, an independent-sample t-test was conducted to compare the participants' scores in SILL for the experimental and control groups at time 2, i.e. after the intervention. The difference between the mean scores for the experimental group and for the control group was also found to be significant as the Sig.2 tailed =0.000 <0.05. Table 6 shows the details.

Table 5
Independent Samples Test for the Two Groups at T2

	F	Sig	t	df	Sig. (2-tailed)
Equal Variances assumed			5.637	98	.000
Equal variances not assumed	14.713	.000	5.637	84.696	.000

To have a clearer idea about the difference between the scores obtained by the participants in the experimental and the control groups, the effect size was calculated using eta squared. It was found to be 0.244 which means that there is a large effect (i.e., 24% of the difference between the scores of the two groups at T2 is explained by the effect of using scaffolding strategies).

In order to answer the third research question, namely, to find out the type of LLS most affected by scaffolding, a one-way between groups multivariate analysis (MANOVA) was performed. The scores for each of the six learning strategies resembled the dependent variables and the independent variable was the use of scaffolding strategies resembled by the scores obtained from the participants at T2. First, preliminary tests for the assumptions required for MANOVA were conducted to check linearity, normality, homogeneity of variance-covariance matrices, univariate and multivariate outliers and

multicollinearity. There was no serious violation for any of these assumptions except for multicollinearity, for that the Pillai's Trace value was considered instead of Wilk's Lambda value. A statistically significant difference was found between the experimental group and the control group on the combined dependent variable (i.e., the use of LLS as a whole): $F = 5.876$, $p = .000$, Pillai's Trace = 0.275; partial eta squared = 0.275 (see Table 7).

Table 6

Multivariate Tests for the Difference between the Experimental and the Control Groups

Effect	Value	F	Sig.	Partial Eta Squared
Group Pillai's Trace	.275	5.876 ^b	.000	.275
Wilks' Lambda	.725	5.876 ^b	.000	.275
Hotelling's Trace	.379	5.876 ^b	.000	.275
Roy's Largest Root	.379	5.876 ^b	.000	.275

Considering the results for the scores in each of the six strategies, a Bonferroni adjusted alpha level of 0.143 was used. This value is obtained from dividing the alpha value 0.860 by 6 which is the number of the dependent variables. The result showed that four sets of the strategies, namely, *cognitive* ($F = 6.769$, $p = 0.011$, partial eta squared = 0.065), *memory* ($F = 24.089$, $p = 0.000$, partial eta squared = 0.197), *compensation* ($F = 3.667$, $p = 0.058$, partial eta squared = 0.036) and *meta-cognitive* ($F = 20.539$, $p = 0.000$, partial eta squared = 0.173), reached statistical significant differences. While two strategies, namely *effective* ($F = 1.598$, $p = 0.209$, partial eta squared = 0.016) and *social strategies* ($F = 1.166$, $p = 0.283$, eta squared = 0.012) did not reach significant values (see Table 8).

Table 7

Test of Between-Subjects Effects for the Six Learning Strategies at T2 for the Experimental and the Control Groups

Dependent Variable	Type III Sum of	df	Sig.	Partial Eta
Cognitive Strategies -T2	265.690	1	6.769	.011.065
Memory Strategies -T2	2079.360	1	24.089	.000.197
Compensation Strategies -T2	86.490	1	3.667	.058.036
Meta-Cognitive Strategies -T2	979.690	1	20.539	.000.173
Effective Strategies -T2	32.490	1	1.598	.209.016
Social Strategies -T2	33.640	1	1.166	.283.012

An inspection of the mean scores showed that the experimental group reported higher levels of all the six learning strategies. The scores resembling the use of all the six learning strategies at T2 were noticeably more than those at T1, as shown in the Table 9:

Table 8

Descriptive Statistics for the Six Learning Strategies at T1 and T2 for the Experimental Group

	Sections	Mean	SD
Cognitive Strategies	T1	26.06	6.582
	T2	30.70	5.912
Memory Strategies	T1	41.12	10.862
	T2	54.38	7.972
Compensation Strategies	T1	16.30	5.183
	T2	19.66	4.914
Meta-Cognitive Strategies	T1	30.22	8.819
	T2	36.69	6.543
Effective Strategies	T1	15.58	4.673
	T2	17.44	4.577
Social Strategies	T1	19.08	5.996
	T2	20.26	5.209

Examining Table 9 above, it can be noticed that the scores for all the six learning strategies were increased at T2 administration of SILL. It is also noticed that memory strategies were most affected by using scaffolding strategies followed by meta-cognitive and cognitive, then compensation and

effective; the least affected strategies were the social strategies. Figure 6 below represent the six strategies:

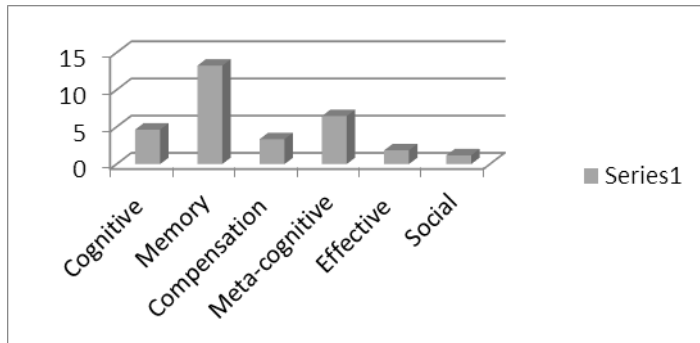


Figure 1. Bar Graph for Increase of the Use of the Six LLS

5. Conclusion

The study was carried out to specify the LLS most frequently used by the Iraqi EFL university students and to find out whether using scaffolding strategies in the teaching process helps in enhancing the use of these strategies. The results of the study indicated that among the six language learning strategies, the most frequently used one was the memory strategies (mean=41.43), and the least frequently used one was effective strategies (mean=15.60). Also a noticeable effect was found for using scaffolding strategies on the use of the LLS in general as the difference between scores obtained at T1 and T2 was statistically significant for the experimental group and not for the control group. In addition to that, the difference between the mean scores at T2 for the experimental group and for the control group was found significant

Regarding the effect of using scaffolding strategies on each of the six learning strategies, there was also an increase in the use of all these six strategies. Although the increase was noticed for each of the six strategies, that is, a noticeable increase was found in the mean scores for each of these

strategies between T1 and T2, it was statistically significant for only four of these strategies namely, cognitive, memory, compensation and meta-cognitive strategies. Regarding the effective and social strategies the differences between scores obtained at T1 and T2 were not statistically significant.

In conclusion, because of the positive role of using scaffolding strategies in EFL contexts, it is important to apply this strategy while teaching English for EFL learners. The obtained positive effect of scaffolding strategies on the EFL learners' use of the LLS can encourage EFL teachers to apply such strategies in their classrooms in order to better help their students to achieve success in acquiring the new language. Thus it is recommended that EFL teachers use different scaffolding strategies throughout teaching to help and encourage learners to invest the different LLS which facilitate acquiring the new language. So, this study recommends EFL teachers to use scaffolding strategies which are proved to have positive role in increasing the EFL learners' use of the different LLS. It also recommends an increase in EFL learners' awareness of LLS because both scaffolding and LLS will contribute to successful language learning.

6. Discussion

The results of the study showed that the LLS are used significantly by EFL university students. These results are in line with a considerable number of studies conducted in various contexts and by different researchers such as Othman (2017) and Gerami and Baighlou (2011). Studying Iraqi bilingual and monolingual Kurdish EFL learners, Othman (2017) found that both monolingual and bilingual learners make use of the different LLS. Also Gerami and Baighlou (2011) found that successful as well as unsuccessful learners make use of the different learning strategies but the former use a wider range of LLS than the later. Regarding the type of LLS that is most

frequently used by EFL learners, the results of the current study revealed that the most frequently used strategies are the memory ones. The high use of memory strategies may reveal the ways of learning and methods of teaching in Iraq which encourage students to use memory strategies in order to be able to increase their vocabulary knowledge and grammar rules. The results of the current study contradict the findings of some of the studies. Gerami and Baughlou (2011), for example, found that meta-cognitive strategies are most frequently used by Iranian EFL learners. Wong (2011), on the other hand, reported that the Malaysian EFL learners use social strategies most frequently than any other type of strategies. Concerning the strategies that are least used; the current study revealed that the affective strategies are the least used ones. This result agrees with the findings of Abed (2011) who reported that affective strategies were the least used ones by the Iraqi EFL learners. These findings go in line with the findings of a number of studies that explored different EFL learners' use of LLS such as: Wong (2011) and Gerami and Baughlou (2011) who reported that EFL learners make less use of the affective strategies. Other studies, however, did not report the same results. Othaman (2017), for instance, found that EFL learners made least use of the compensation strategies. While Aljuaid (2010) and Shabani (2015) found that the memory strategies are the least used ones.

Reviewing a number of studies about the use of the different LLS by EFL learner at different contexts, it was noticed that there is a kind of disagreement. Comparing the results of the current study with the results of other studies reveals differences in strategy preference. This could be due to difference in the cultural group and other associated variables, such as differences in educational setting, learning styles, attitude, gender, motivation, and learning situations. All these factors are often reported by a

number of studies (e.g., Li, 2004; Nosratinia, Majori & Sarabchian, 2014; Sharp, 2008) as being effective in this regard.

It was also found that using scaffolding strategies in the teaching process significantly affected the use of the different LLS. Although no study was found that directly deals with the effect of scaffolding on the use of LLS, the findings of a wide range of studies in the field of teaching English as a foreign language can be interpreted as an indication of the positive role of scaffolding in helping students to achieve better learning. A considerable number of studies have proved that scaffolding helps in increasing EFL learning and acquisition (e.g. Liang, 2007; Birjandi & Jazebi, 2014; Ezza, 2013; Rahimi & Ghanbari, 2011; and Al-Yami, 2008). Moreover, a wider range of studies have proved the positive relationship between the use of LLS and success achieved in learning a foreign language (e.g. Gerami & Baighlou, 2011; Miceli & Visocnic-Murray, 2005; Chamot, 2004 and Lai, 2009).

References

- Abdul-Majeed, M. A. & Muhammad, N. M. (2015). The effect of using scaffolding strategies on EFL students' reading comprehension achievement. *Arts Journal*, 3(1), 91-118.
- Abed, A. Q. (2011). Teachers' awareness of second language learning strategies adopted and used by their students: A questionnaire. *Theory and Practice in Language Studies*. 1(3), 205-218.
- Aljuaid, H. (2010). Language learning strategies: Perceptions of female Saudi EFL learners. *Papers from the Lancaster University Postgraduate Conference in Linguistics & Language Teaching*. Retrieved from <https://pdfs.semanticscholar.org/6e78/8f54ab426b21748fbcf21219bb9f543e2b7c.pdf>
- Al-Yami, S. A. (2008). Effectiveness of scaffolding interactive activities in developing the english listening comprehension skills of the sixth grade elementary schoolgirls in Jeddah. (Unpublished MA thesis). Retrieved from: <https://files.eric.ed.gov/fulltext/ED520563.pdf>
- Bachman, L. F. & Palmer, A. S. (1996). *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.

- Birjandi, P. & Jazebi, S. (2014). A comparative analysis of teachers' scaffolding practices. *International Journal of Language and Linguistics*, 2(3), 154 - 164. <http://www.sciencepublishinggroup.com/j/ijll>
- Carter, R., & Nunan, D. (Eds.). (2001). *The Cambridge guide to teaching English to speakers of other languages*. Cambridge: Cambridge University Press.
- Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic journal of foreign language teaching*, 1, 14-26.
- Clark, K., & Graves, M. (2005). Scaffolding students' comprehension of text. *The Reading Teacher*, 58(6), 570-580.
- Dabbagh, N. (2003). Scaffolding: An important teacher competency in online learning. *TechTrends*, 47(2), 39-44.
- Daniels, H. (1994). *Voice and choice in the student-centered classroom*. Portland, ME: Stenhouse.
- Ebadi, S. & Beigzadeh, M. (2015). The effect of teacher scaffolding vs. peer scaffolding on EFL learners' reading comprehension development. *International Journal of English and Education*, 4(2), 105-116.
- Ediger, A. (2001). Teaching children literacy skills in a second language. In M. Celce-Murcia (Ed.) *Teaching English as a second or foreign language* (pp. 153-169). Boston: Heinle and Heinle.
- Ellis, R. (2008). *The study of second language acquisition*. Oxford: Oxford University Press.
- Ezza, E. Y. (2013). Scaffolding pronunciation in Saudi EFL classroom at Majma'ah University. *International Journal of Applied Linguistics & English Literature*, 2(3), 62-68.
- Gerami, M. H. & Baighlou, S. M. (2011). Language learning strategies used by successful and unsuccessful Iranian EFL students. *Procedia - Social and Behavioural Sciences*, 29 (2011), 1567 – 1576.
- Ghaffarsamar, R. & Dehghan, M. (2013). Sociocultural theory and reading comprehension: The scaffolding of readers in an EFL context. *International Journal of Research Studies in Language Learning*, 2(3), 67 – 80.
- Gorgani, T., Haghshenas, S., & Khosrojerdi, H. (2014). A Critical look at the application of language learning strategies (LLS) by Chinese learners of English. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*, 5(4), 190-207.
- Griffiths, C. (2004). Language learning strategies: Theory and practice. Retrieved December 25, 2017, from the World Wide Web: http://www.crie.org.nz/research-papers/c_griffiths_op1.pdf
- Hassan, X., Macaro, E., Mason, D., Nye, G., Smith, P. & Vanderplank R. (2005). *Strategy training in language learning - a systematic review of*

- Retrieved from
http://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/mfl_rv1.pdf?ver=2006-03-02-124956-547
- Kozmonova, M. (2008). *Language learning strategies and their training in a primary class*. (Unpublished Diploma Thesis). Retrieved from https://is.muni.cz/th/105412/pedf_m/Diploma_Thesis.pdf
- Lai, Y. (2009). Language learning strategy use and English proficiency of university freshmen in Taiwan. *TESOL Quarterly*, 43(2), 255-280.
- Li, X. (2004). *An Analysis of Chinese EFL learners' beliefs about the role of rote learning in vocabulary learning strategies*. (Doctoral dissertation). Retrieved from: www.asian-efl-journal.com/xiuping_11-05_thesis.pdf
- Liang, J. (2007). Language scaffolding in second language writing. *The CATESOL Journal* 19(1), 71-88.
- Liang, T. (2009). Language learning strategies: The theoretical framework and some suggestions for learner training practice. *English Language Teaching*, 2(4), 199-206.
- Macdonald, D. & Martinez, M. (2005). Scaffolding and teacher-talk variation: A study of two grade three art classes. *Revista Virtual de Estudos da Linguagem*. Retrieved October 12, 2016, from the World Wide Web: http://www.revel.inf.br/files/artigos/revel_5_scaffolding_and_teacher_talk_variation.pdf
- Miceli, T. & Visocnic-Murray, S. (2005). Strategy training: Developing learning awareness in a beginning FL classroom. Retrieved September 5, 2017, from the World Wide Web: <https://research-epository.griffith.edu.au/bitstream/handle/10072/2453/29975.pdf?sequence=1>
- Najafi, S., Gorgani, T., Haghshenas, S. & Khosrojerdi, H. (2014). A Critical look at the application of language learning strategies (LLS) by Chinese learners of English. *International Journal of Language Learning and Applied Linguistics World*. Vol. 5(4), 190-207.
- Nambiar, R. (2009). Learning strategy research – Where are we now? *The Reading Matrix*, 9(2), 132-149.
- Nosratinia, M., Mojri, Z. & Sarabchian, E. (2014). Exploring the relationship between EFL learners' language learning styles and strategies. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)* 5(2), 253-264.
- O'Malley, M. & Chamot, A. (1990). *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Othman, H. G. (2017). Examining language learning strategies used by Kurdish monolingual (Kurdish) and bilingual (Kurdish-Arabic) speakers

Rezaee, Khomeijani Farahani, & Abdulameer Mubarak

- as EFL learners. *Humanities Journal of University of Zakho (HJUOZ)*, 5(3), 873-881.
- Oxford, R. (1990). *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.
- Oxford, R. (2001). Language learning strategies. In R. Carter, & D. Nunan, (Eds). *The Cambridge guide to speakers of other languages* (pp. 66-72). Cambridge: Cambridge University Press.
- Rahimi, A. & Ghanbari, N. (2011). The impact of teachers' scaffolding on Iranian high school students' reading comprehension. *Procedia - Social and Behavioral Sciences* 28(2011) 1072-1075.
- Richards, J. C., & Schmidt, R. (2002). *Longman Dictionary of Language Teaching and Applied Linguistics* (3rd ed.). Essex: Longman.
- Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, 9(1), 41-51. Retrieved July 25, 2017, from the World Wide Web: https://jstor.org/stable/3586011?seq=1#page_scan_tab_contents
- Rubin, J. (1987). Learner strategies: Theoretical assumptions, research history and typology. In A. Wenden, & J. Rubin, (Eds.). *Learner strategies in language learning*. Prentice Hall: New Jersey.
- Safa, M. A. & Rozati, F. (2016). The impact of scaffolding and non-scaffolding strategies on the EFL learners' listening comprehension development. *The Journal of Educational Research*, 0(0), 1-10.
- Sawyer, R. K. (2006). *The Cambridge handbook of the learning sciences*. New York: Cambridge University Press.
- Shabani, M. B. (2015). On the relationship between foreign language anxiety and language learning strategies among Iranian EFL learners. *International Journal of Educational Investigations*, 2(2), 9-23.
- Sharp, A. (2008). Personality and second language learning. *Asian Social Science*. Vol. 4, No. 11 (17- 25) retrieved on 8th of Feb. 2017. From <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.474.9614&rep=rep1&type=pdf>
- Stern, H. H. (1992). *Issues and options in language teaching*. Oxford: Oxford University Press.
- Veerappan, V. A. L., Suan, W. H. & Sulaiman, T. (2011). The effect of scaffolding technique in journal writing among the second language learners. *Journal of Language Teaching and Research*, 2(4), 934-940.
- Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *The International Journal of Bilingual Education and Bilingualism*, 9(2), 159-180.
- Wong, M. S. (2011). Language learning strategy use: a study of pre-service teachers in Malaysia. Retrieved October 25, 2017, from the World Wide Web: <http://eric.ed.gov/PDFS/ED521415.pdf> on 13.06.2013

Wood, D., Bruner, J. & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, 17(2), 89-100.

Zarandi, S. Z. A. & Rahbar, B. (2014). The impact of interactive scaffolding on Iranian EFL learners' speaking ability. *International Journal of Language Learning and Applied Linguistics World (IJLLALW)*, 6(2), 344-353.