

## **The Effect of Peer and Teacher Scaffolding on the Reading Comprehension of EFL Learners in Asymmetrical and Symmetrical Groups**

**L. Karimi**  
Assistant Professor, TEFL  
Hamadan Science and Research Branch,  
Islamic Azad University  
email: karimi.lotfollah@gmail.com

**M. Jalilvand \***  
M.A., TEFL  
Hamadan Science and Research Branch,  
Islamic Azad University  
email: m.jalilvand.tb@gmail.com

### **Abstract**

In the present study, attempt has been made to examine the effectiveness of peer and teacher scaffolding in reading comprehension of intermediate EFL students in symmetrical and asymmetrical groups. To do so, sixty intermediate students were purposively selected out of 150 intermediate students in the Hamadan Islamic Azad University and the Kish Language Institute in Hamadan. They were divided into three groups, two experimental groups receiving respectively peer and teacher scaffolding, and just peer scaffolding, and one control group. After a two-month treatment, running ANCOVA, the researchers found a significant difference between asymmetrical subgroups and symmetrical subgroups in reading comprehension development. Besides, significant development in the reading comprehension of EFL students in experimental group 1 receiving peer and teacher scaffolding was observed by performing correlated t-test. The results of the study showed that teacher scaffolding being accompanied by peer scaffolding, rather than just having peer scaffolding, can have positive effects on the reading comprehension of EFL learners.

**Keywords:** reading comprehension, scaffolding, teacher and peer scaffolding, asymmetrical subgroups, symmetrical subgroups

### **1. Introduction**

Nowadays, English is the language of international communication. That is why learning main language skills, that is, listening, speaking, reading and

writing have become important for students all over the world. Although a lot of information and knowledge is exchanged and transferred among teacher and students by using all four skills in the classrooms, among these skills, reading has gained a lot of attention among teachers and students – maybe because of some reasons like withstanding in schools or at universities, expanding knowledge, communicating different ideas, and enhancing the social skills ...Teachers give special attention to reading in teaching situations and have labored long and hard to increase the reading skills. As Grabe and Stoller (2002, as cited in Farhady & Hessamy, 2005) state:

Reading in second language (L2) settings continues to take on increasing importance... L2 reading ability, particularly with English as the L2, is already in great demand as English continues to spread, not only as a global language but also as the language of science, technology and advanced research. Many people in multilingual settings need to read in an L2 at reasonably high levels of proficiency to achieve personal, occupational and professional goals (p.30).

Also, according to Levine, Ferenz, and Reves (2000), "the ability to read academic texts is considered one of the most important skills that university students of English as a second language (ESL) and English as a foreign language (EFL) need to acquire" (p.1). However, as Karasakaloglu (2010) states, "reading action cannot be called reading without comprehending" (p.222).

There are a lot of problems in comprehending an English text. It may have various reasons such as lack of vocabulary, grammatical knowledge, or some psychological problems like fearing failure, lack of motivation... (Magno, 2010). To decrease these problems, recently most of the teachers use various strategies. For example, they try to change the setting of the classrooms from traditional teacher-centered to learner-centered settings (Anton, 1999), or they attempt to use cooperative learning methods in the classroom. To do so, traditional role of a teacher may be replaced by the active role of students via pair or small group work where students are responsible for their own learning. In these small groups, students can learn more by interacting with and teaching to other students (Van Lier, 1996). Also, as Ohta (2005) states, "the learner is, with assistance, able to out-perform what she or he could do without assistance" (p.507).

## **1.2 Statement of the problem**

Reading comprehension is the cornerstone of reading skill (Karasakaloglu, 2010). Many EFL students have a lot of trouble and difficulties in understanding the information presented in the written form of English texts, and sometimes it may be very time consuming for them to read a text in English and understand it.

In reading an English text in the shape of group activity, scaffolding that comes from the students' peers and also sometimes from the classroom's teacher is considered as an utmost important fact. However, the problem that arises here is whether there is a significant difference between these two kinds of group working, asymmetrical and symmetrical.

In spite of increasing students' amount of comprehensible input by applying different scaffolding procedures from the peers in groups, some of the students in those groups fail to interact and negotiate effectively with their peers so their reading comprehension cannot develop efficiently. This is the place that EFL teacher can act as facilitator and provide more language support for students in the groups, and she or he can remove, to some extent, the affective factors and encourage motivation and self-confidence of students. So, the effects of various scaffoldings – that of peer and teacher, in symmetrical and asymmetrical groups – such as skimming, scanning, warm-up activities, L1 translation... (Poorahmadi, 2009) and their effects on the reading comprehension development of EFL students in those groups need investigating.

## **1.3 Significance of the study**

Considering the fact that comprehension is undoubtedly the main goal and an indispensable part of reading, it is quite important to scrutinize the ways of increasing reading comprehension development. For this reason, teachers labor long and hard and use various strategies in the classrooms to help novice readers to become more proficient. Many of them are aware of the strength of collaborative learning, as a beneficial strategy, in which students are working in groups of two or more to mutually search solutions, understand meanings, or create a product (Goodsell, Maher, Tinto, Smith, & MacGregor, 1992). So, based on Vygotsky's sociocultural theory (1978) – all learning occurs as a result of social interaction – teachers try to engage students in active learning in small groups. According to Vygotsky (1934, as cited in Shabani, 2012), "what the child is able to do with some collaboration or assistance today he will be able to do independently tomorrow" (p. 322). However, it is not clear whether there is a significant difference between asymmetrical and symmetrical groups as far as reading comprehension is concerned. Thus, it is worth investigating the theme.

#### 1. 4 Purpose of the study

The purpose of this study is to investigate the effects of various scaffoldings in the reading comprehension development of EFL students in asymmetrical and symmetrical groups.

#### 2. Review of the Related Literature

Sociocultural theory, based on the pioneering work of Vygotsky (1978), places the social context at the heart of the learning and communication process. In the Vygotskian social interactionist constructivism, students can profit from social interactions under guidance or in collaboration with more capable peers. This guidance or collaboration is called "scaffolding" (Yu, 2004). Through utilizing cooperative learning activities such as pair or group work in language learning in a learner-centered setting, learners can gain support/scaffolding from their peers or teacher.

Scaffolding, as an essential concept in sociocultural theory and basis for the study of peer collaboration in English classrooms, has been defined by many researchers. For example, Wood, Bruner, and Ross (1976) demonstrated 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 unassisted efforts" (p. 90). De Guerrero and Villamil (2000) define scaffolding as "those supportive behaviors by which one partner in a semiotically mediated interactive situation can help another achieve higher levels of competence and regulation" (p. 56). By providing enough assistance – scaffolding – to EFL learners, their reading comprehension ability can be accelerated and gradually they can act alone in similar situations (Pooramadi, 2009).

As Tharp and Gallimore (1988) indicate, teaching is assisted through the Zone of Proximal Development (ZPD). Vygotsky (1986) defines ZPD as "the discrepancy between a child's actual mental age and the level he reaches in solving problems with assistance" (p.187). Teacher uses some ways to achieve the functions of scaffolding within ZPD and attains effective intervention in learner-centered classroom. For example, Maloch (2002) considers scaffolding performance of teacher and remarks on some teacher's intervention techniques such as "direct and indirect elicitations, modeling, highlighting of strategies and ..." (p.108). Also, An (2010) illustrates that scaffolding can take some other different forms such as question prompts, expert modeling, expert advice, learner guides, resources, and tools.

Aljaafreh and Lantolf (1994) illustrate that when teachers want to apply effective intervention within the ZPD of students, they should consider three mechanisms: 1) intervention should be "**graduated**" (teacher should take into consideration appropriate level of help given to students while

considering their ZPD); 2) "**contingent**" (offered only when needed and stop when students show self-regulation); and 3) "**dialogic**" (collaborative interaction or negotiation achieved through the medium of dialogue).

There are researchers who consider the effects of scaffolding strategies in reading comprehension development. For example, Poorahmadi (2009) proposed that scaffolding strategies such as skimming, scanning, warm-up activities, L1 translation, modeling a desired behavior, lexical/verbal scaffolding, and paraphrasing a complicated section or asking key questions ... could accelerate students reading comprehension abilities. Poorahmadi

(2009) showed this fact by applying scaffolding strategies to 130 female EFL university students divided into control and experimental groups. He gave scaffolding strategies just to the second group and came to the conclusion that scaffolding can improve the reading ability of students.

Similarly, Rahimi and Ghanbari (2011) observed the scaffolding strategies used by two Iranian first-grade high school teachers in their classroom. First, they tried to know those teachers' opinions about the selected 12 scaffolding strategies by applying an interview. Then, a structured observation was done to see the extent of using chosen scaffolding strategies by those teachers in the class. Teachers used 12 scaffolding strategies in three phases of before, while, and after passage reading. Scaffolding such as teaching unknown vocabularies or activating background knowledge before reading, generating questions, or engaging students in reading or discussion while reading, and completing assignments after reading or summarizing information, were used. They concluded that implementing scaffolding strategies effectively upgrades students' reading comprehension.

Moreover, Magno (2010) chose 60 first-grade pupils and measured their reading speed and anxiety before and after the scaffolding. He states, scaffolding in the form of adult supervision, feedback on decoding, fluency, and modeling... can cause other positive effects like increasing the beginning readers' rate of reading and decreasing reading anxiety.

Vygotsky (1978) and Piaget (1960) with different opinions about cognitive development in children, believe in asymmetrical and symmetrical group scaffolding, respectively. According to Vygotsky in asymmetrical scaffolding, learning occurs faster when individuals interact with more knowledgeable peers; while, Piaget believes that in symmetrical scaffolding individuals interact with peers who have the same level of knowledge and learning occurs faster. On this line, Pishghadam and Ghadiri (2011) came to the conclusion that asymmetrical scaffolding is more successful than symmetrical one in reading comprehension development.

In contrast to this claim Baleghizadeh, TimchehMemar, and TimchehMemar (2010) by doing an experiment dare to say that because of some affective factors like the fear of failure, and anxiety, symmetrical group students who are homogeneous concerning knowledge are more successful than asymmetrical group students in reading comprehension. So, anxiety can have a debilitating effect on the reading comprehension of EFL students (Woodrow, 2006), and these authors suggest that dividing students into symmetrical groups in the class can decrease this affective factor. However, as Mattos (2000, as cited in Yu, 2004) explains sometimes peer scaffolding in group work may have a negative effect on the learners. Some negative affective factors (filters) may interfere with the learners' learning process and subsequently, they cannot cooperate well and this can debilitate students' adaptation and achievement to their educational goals and ultimately, those affective factors negatively affect their language learning process.

Moreover, cooperative learning, as a fundamental way of decreasing affective factors such as situation specific anxiety (Woodrow, 2006), is one of the most powerful methods applied in most of the classroom settings. However, in what ways should cooperative methods be applied to have high impact? It can be the role of teacher to train students to have effective collaboration and to minimize the negative affective factors. Teacher should apply special in-class small group activities that lead to positive psychological and social merits such as decreasing learning anxiety, gaining positive feelings about class and classmates, and learning efficient cooperation.

### 3. Methodology

Based on the objectives of this study, the following three hypotheses were formulated:

- Hypothesis 1: There is a significant difference between symmetrical and asymmetrical groups in reading comprehension of EFL learners.
- Hypothesis 2: Peer scaffolding has significant effects on the reading comprehension development of the symmetrical and asymmetrical groups of EFL learners.
- Hypothesis 3: Teacher and peer scaffolding has significant effects on the reading comprehension development of the symmetrical and asymmetrical groups of EFL learners.

### 3.1 Participants

The participants of this study were 60 people selected purposively out of 150 intermediate students whose age ranged from 18 to 26 years old. 23 of them were male and the rest were female. 28 of them were from the Islamic Azad University of Hamadan and 32 of them were from the Kish Language Institute in Hamadan, Iran. The Kish students were divided in two groups and Azad students were kept as one. The groups were randomly assigned to experimental and control group ones. For the research purpose the participants in each group met in the Islamic Azad university of Hamadan.

Availability of students and the level of their proficiency were two important criteria in drawing up the samples. To more homogenize the participants, analysis of Variance (ANOVA) was run concerning the scores obtained from pretest.

Table 1: Description of the pre-test (proficiency) scores of the three groups

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Experimental-Teacher-Student	28	10.86	5.082	.960	8.89	12.83	4	25
Experimental-Student	16	10.25	6.061	1.515	7.02	13.48	2	25
Control	16	10.69	5.735	1.434	7.63	13.74	3	23
Total	60	10.65	5.439	.702	9.24	12.06	2	25

As Table (1) shows the means and almost the standard deviation of the three groups are close together.

Table 2: Analysis of Variance to examine the homogeneity of the subjects

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.784	2	1.892	.062	.940
Within Groups	1741.866	57	30.559		
Total	1745.650	59			

Analysis of Variance (ANOVA), to compare the primary differences among groups, showed that the three groups did not have significant difference before intervention [ $F(2, 57) = 0.062, p = 0.940, p > 0.05$ ].

### 3.2 Materials

Students worked on some reading passages from *Active skills for reading: Book 3* (Anderson, 2008). Passages were followed by some multiple-choice comprehension questions. All of the students covered the same book.

### 3.3 Instruments

Instruments used were:

- 1) A pretest, an FCE test (*First certificate in English: Handbook for teachers, for examination from December 2008*. University of Cambridge, ESOL Examinations), was used. It is a standardized measurement with four essential qualities – validity, reliability, impact, and practicality – and internationally used to describe language ability of learners.
- 2) A post-test (another version of FCE test) paralleled to pretest was used.

### 3.4 Procedures

The process of data collection of this study started in October 2011, lasted for two months, and ended in November, 2012. The classes were held for 12 sessions, each taking 70 minutes. The researchers explained the stream of study to the participants in the three groups. Then, they administered an FCE test to them as pretest. Based on the size of score each participant gained from the pretest, asymmetrical and symmetrical subgroups were determined. The scores were arranged according to their size. Those above and below the median were considered as high and low respectively. For the purpose of pair working, a participant with high score and the one with low score were put in an asymmetrical subgroup. For putting students in the symmetrical subgroups, two low score students or two high score students were put in the same subgroup. In contrast to two experimental groups who worked collaboratively in pair-subgroups, students in the control group worked individually in a completely traditional teacher-centered setting.

After assigning participants to symmetrical and asymmetrical pairs in two experimental groups, the three groups received the treatment, but in different ways. Although all classes worked on the same reading passages from the same book, in the experimental group 1, there were both peer and teacher scaffolding simultaneously. But, in experimental group 2, there was just peer scaffolding; and in contrast to two experimental groups, in the control group, students worked individually and sometimes just a very little scaffolding came from the teacher. The treatment toward the groups will be explained in detail as follows.

#### 3.4.1 Experimental group 1

Concerning the experimental group 1, receiving both teacher and peer scaffolding and containing seven asymmetrical subgroups and seven



symmetrical subgroups, the teacher tried to apply as much as possible all the six scaffolding functions of Wood, Bruner, and Ross (1976): 1) Recruitment, 2) Reduction in degrees of freedom, 3) Direction maintenance, 4) Marking critical features, 5) Frustration control, and 6) Demonstration.

In each session, the teacher explained some of the reading techniques such as skimming, scanning, getting the main idea, note-taking, reading chunk by chunk not word by word, visualization, guessing unknown vocabularies... to the students. Also, she tried to activate the students' prior knowledge and form new knowledge by applying some pre-reading activities like asking questions about the title of the text and making some comments about it. Moreover, the teacher explained the positive effects of scaffolding that they could gain from their partners and their teacher. So, she taught them how to scaffold their partners effectively. For example, explaining a vague point to each other, asking the partner questions, asking for guides from the teacher instead of his/her shy partner... . After these activities, the teacher gave all the students a short time to read the text and find the main idea of each paragraph or give a summary of paragraphs by applying some of the techniques of reading. Students were let to discuss it with their partner in symmetrical and asymmetrical subgroups and also with their teacher (here both peer and teacher scaffolding occurred). Subsequently, the teacher asked the students to answer the comprehension questions with their partner. While they were working collaboratively and scaffolding each other to complete the task, the teacher scaffolded each group one by one until peers could comprehend the text. Scaffolding such as giving some suggestions, demonstrating some of the questions following the reading text, assisting them, questioning, using gestures, praising, pausing, repeating techniques of reading, summarizing or clarifying the text, and letting them ask any related questions that could help them to answer the comprehension questions ... . Moreover, she tried to discriminate the affective factors in subgroups to decrease their anxiety. When the teacher tried to help the students in subgroups, she considered the students' levels of knowledge. She varied levels of support from participants to participants when she thought help was needed. Gradually after some sessions, the scaffolding applied by the teacher was decreased and at the last sessions, when help was necessary, the teacher intervened and guided the participants.

#### **3.4.2 Experimental group 2**

Students in the experimental group 2 just received peer scaffolding. It contained five asymmetrical and three symmetrical subgroups [being the limitation of the study]. The teacher did not scaffold students in subgroups, she sat silently in her place while students worked collaboratively, and whenever students themselves asked the teacher a question, she answered

them. In this group, teacher did not try to decrease affective factors caused by collaborative working in asymmetrical and symmetrical subgroups.

### 3.4.3 Control group

In the control group, the setting was completely traditional and all of the students worked individually. The setting was fully teacher-led. When teacher came to the class, she just read the text, focused just on some new vocabularies and grammatical points while students just listened to her silently. There was no active interaction between the teacher and students. The teacher did not use subgroup activities in classroom. After the text was read by the teacher, students were given a short time to work on the texts individually and answer the comprehension questions followed by the text.

After the treatment phase, the post test was administered to all groups and the data were analyzed as follows.

## 4. Data Analysis and Results

First, data screening was done to examine probable problems with the data. Just a case of outlier was evident, but as the tests of the Kolmogorov - Smirnov and Shapiro - Wilk (Table 3) indicated the assumption of the normality of the data distribution in the pretest and post-test, there was no need to remove it.

Table 3. Tests of normal distribution of the scores of experimental and control groups in the pretest and post-test

SymAsym	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
PreTest	ASY	.166	24	.086	.927	24	.083
	- SY	.146	20	.200*	.942	20	.259
	Control	.173	16	.200*	.944	16	.400
PostTest	ASY	.172	24	.063	.930	24	.097
	- SY	.185	20	.072	.902	20	.045
	Control	.159	16	.200*	.964	16	.731

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

As it is evident in Table (3), the data related to the performance of all groups in both tests have been normally distributed ( $p > 0.05$ ).

Table 4. Levene's test to check the equality of variances dependent variable: post test

F	df1	df2	Sig.
1.566	2	57	.218

Table (4) shows the equality of variances [ $F(2,57) = 1.566, p > 0.05$ ].

Table 5. Tests of between-subjects effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1035.181 <sup>a</sup>	5	207.036	22.919	.000	.680
Intercept	116.702	1	116.702	12.919	.001	.193
PreTest	485.643	1	485.643	53.761	.000	.499
SymAsym	48.023	2	24.012	2.658	.079	.090
SymAsym * PreTest	2.689	2	1.344	.149	.862	.005
Error	487.802	54	9.033			
Total	9481.000	60				
Corrected Total	1522.983	59				

a. R Squared = .680 (Adjusted R Squared = .650)

As Table (5) shows, the homogeneity assumption of the slope of the regression lines for groups is also held (not violated). This is also supported by figure (1).

Figure 1. The linearity of the relationship between dependent variables and covariate

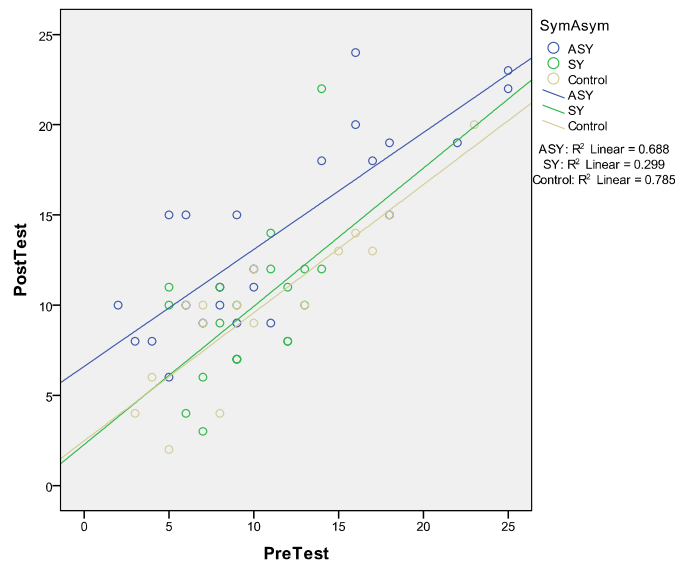


Table 6. Tests of between-subjects wffects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1032.493 <sup>a</sup>	3	344.164	39.294	.000	.678
Intercept	201.251	1	201.251	22.977	.000	.291
PreTest	784.647	1	784.647	89.584	.000	.615
SymAsym	153.308	2	76.654	8.752	.000	.238
Error	490.491	56	8.759			
Total	9481.000	60				
Corrected Total	1522.983	59				

a. R Squared = .678 (Adjusted R Squared = .661)

Table (6) shows that the amount of learning in these groups is significantly different [ $F(1,2) = 8.752, p < 0.05, \eta^2 = 0.238$ ]. So, post hoc test was used for the paired comparisons (Table7).

Table 7. Paired comparison of experimental and control groups after removing the effect of covariate variable (pretest)

(I) SymAsym	(J) SymAsym	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>		
					Lower Bound	Upper Bound	
dimension1	ASY dimension2	SY	3.138*	.904	.001	1.327	4.950
		Control	3.444*	.957	.001	1.528	5.360
	SY dimension2	ASY	-3.138*	.904	.001	-4.950	-1.327
		Control	.306	.995	.760	-1.688	2.299
Control dimension2	ASY	-3.444*	.957	.001	-5.360	-1.528	
	SY	-.306	.995	.760	-2.299	1.688	

Based on estimated marginal means\*. The mean difference is significant at the .05 level. a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

The result of Post Hoc Test for paired comparisons (Table 7) shows that learners in asymmetrical groups have learned more than learners in the symmetrical and the control groups, but symmetrical learners have showed no significant difference compared to control group. According to this finding, the first research hypothesis – there is a significant difference between symmetrical and asymmetrical groups in reading comprehension of EFL learners – is confirmed ( $F = 8.75, df = 1, p < .001$ ).

As the second and third hypotheses do not compare groups, rather they examine the effect of teacher and peer scaffolding for one time and the effect of peer scaffolding for another time in the pre-test and post-test, it was needed to use t-test for paired groups (Table 8). The results of this test show that peer scaffolding has not had a significant effect on the amount of learning ( $t = 1.124$ ,  $df = 15$ ,  $p = 0.27$ ), but teacher scaffolding influenced the amount of learning ( $t = 2.15$ ,  $df = 27$ ,  $p = 0.04$ ,  $p < .05$ ). Thus, the second hypothesis is rejected and the third hypothesis is confirmed.

Table 8. Paired samples test comparing the experimental groups' pretest and post-test scores

TeacherPeer			Paired Differences				t	Df	Sig. (2-tailed)	
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower				Upper
Experimantal-Teacher-Student	Pair 1	PreTest - PostTest	-1.679	4.128	.780	-3.279	-.078	-2.152	27	.041
Experimantal-Student	Pair 1	PreTest - PostTest	-.938	3.336	.834	-2.715	.840	-1.124	15	.279

### 5. Discussion

The current study was based on Vygotsky's sociocultural theory (1978) and investigated the benefits of applying various scaffolding in reading comprehension development of EFL learners through interactive language acquisition in symmetrical and asymmetrical groups.

Regarding the first research hypothesis, the results showed that there was a significant difference between the learning development of students in asymmetrical subgroups and students in symmetrical subgroups and control group. The results revealed that asymmetrical group learners learned more than symmetrical and the control groups ( $F = 8.75$ ,  $df = 1$ ,  $p < .001$ ). The justifiable reason may be that scaffolding by a more knowledgeable one allows constructing new knowledge, challenging or correcting unfinished or incorrect concepts, or recalling the forgotten knowledge (Holton & Clark 2006). Also, this result is more consistent with an empirical study conducted by Pishghadam and Ghadiri (2011). But, the difference between their study and the current study is that, they did not consider the teacher scaffolding.

The results of this study somehow disagree with those of Baleghizadeh, TimchehMemar, and TimchehMemar (2010). They mentioned that affective factors had caused symmetrical groups to be more successful than asymmetrical ones in reading comprehension. Contrary to this research, in the current study, asymmetrical groups were more successful. If a teacher applies scaffolding among asymmetrical groups for the purpose of removing those affective factors that decrease the reading development of learners, asymmetrical groups can outperform the symmetrical groups.

With regard to the second research hypothesis – peer scaffolding has significant effects on the reading comprehension development of the symmetrical and asymmetrical groups of EFL learners – and third research hypothesis – teacher and peer scaffolding has significant effects on the reading comprehension development of the symmetrical and asymmetrical groups of EFL learners – it was found that teacher's scaffolding simultaneous with peer scaffolding is of utmost importance to increase reading comprehension of EFL learners ( $t = 2.15$ ,  $df = 27$ ,  $p = .04$ ) and peer scaffolding has not had a significant effect on the amount of learning ( $t = 1.124$ ,  $df = 15$ ,  $p = .27$ ). It was more helpful in the reading comprehension development of EFL learners if teachers would give scaffolding to the students who were working in group activities rather than peers just receiving some scaffolding from their partner in those group activities, since usually there might be some affective factors that would decrease the efficient development in group activities. Teacher could remove them by his/her appropriate scaffolding. As an explanation, as Zacharias (2007) states most of the times teachers are more competent in terms of language and knowledge and more experienced in language skills and giving feedback. They can give appropriate scaffolding in the correct time to students. Also, scaffolding coming from a more knowledgeable teacher can reduce affective factors like anxiety and unpleasant emotional reaction in reading comprehension (Magno, 2010).

## 6. Conclusions

The present study drew on one of the most important concepts of sociocultural theory, i.e., scaffolding, in communicative teacher-student classroom settings through considering the reading behavior of EFL students in interactive small group symmetrical and asymmetrical activities. In those small groups, students got scaffolding via interaction with their partners and teacher. To sum up, the results of this study indicate that teacher and peer scaffolding simultaneously in symmetrical and asymmetrical group activities, rather than just having peer scaffolding, can influence the amount

of students' learning significantly and reading comprehension of learners in those groups can be developed positively.

### **7. Limitations of the Study**

There are some limitations in conducting this study, like other studies. For example, one of the primary limitations of the current study can be the point that researchers suffered from the limitation of the number of participants to teach them with the required method at the Islamic Azad University of Hamadan. The selection of participants from the two separate places, half from the Islamic Azad University of Hamadan and half from the Kish Language Institute in Hamadan city, was a little problematic for the researchers as far as the homogeneity of the participants was concerned.

Also, due to the limited number of the participants as well as their purposive sampling, the results of the study cannot be generalizable to a larger population.

### **8. Pedagogical Implications**

The findings of the current study offer some pedagogical implications for the learners' reading comprehension development. For example, it is recommended to shift from traditional setting of teacher-centered to more active setting of teacher-learner setting with more collaborative activities in the class, since these activities in this kind of setting can increase and accelerate the process of learning.

Also, the present study somehow provides researchers and teachers with numerical and statistic proof for the advantages of using small group activities in their classroom while applying scaffolding procedures. Teachers and researchers should take into consideration the effectiveness of scaffolding. We also suggest using asymmetrical pair group rather than symmetrical ones to upgrade the reading comprehension of EFL learners. It can be more desirable to include a more knowledgeable learner with a weaker learner in a group activity.

### **9. Recommendations for further Research**

Future research can be done on other important concepts related to ZPD of sociocultural theory in educational settings such as the effects of private speech in learning. They can concentrate on finding the most helpful interactive intervention scaffolding strategies that can be used by teachers in EFL reading classes; for example, which one of the scaffolding strategies are more helpful in enhancing one of the four skills of learners. Another future research possibly could be done within the current study's realm but with participants of different levels like primary or advanced level. Also,

further research would be done in the same line of the current study with considering just one gender, male or female, not both of them. Moreover, other researchers can use the same procedures of this study for other language skills or in ESP classes. Furthermore, confirmatory research is needed to lend support to this study or to reject it.

### References

- Aljaafreh, A., & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the Zone of Proximal Development. *The Modern Language Journal*, 78 (4), 465-483.
- An, Y. J. (2010). Scaffolding Wiki-Based, III-Structured problem solving in an online environment. *MERLOT Journal of Online Learning and Teaching*, 6 (4), 723-734.
- Anton, M. (1999). The discourse of a learner-centered classroom: Sociocultural perspectives on teacher–learner interaction in the second language classroom. *The Modern Language Journal*, 83 (3), 303-318.
- Baleghizadeh, S., TimchehMemar, H., & TimchehMemar, A. (2010). The effect of symmetrical versus asymmetrical scaffolding on English reading comprehension of EFL learners. *Studies in Literature and Language Journal*, 1 (7), 104-111.
- De Guerrero, M., & Villamil, O. S. (2000). Activating the ZPD mutual scaffolding in L2 peer revision. *The Modern Language Journal*, 84 (1), 51-68.
- Farhady, H., & Hessamy, G. R. (2005). Construct validity of L2 reading comprehension skills. *Iranian Journal of Applied Linguistics*, 8 (2), 29-53.
- Goodsell, A. S., Maher, M. R., Tinto, V., Smith, B. L., & MacGregor, J. (1992). *Collaborative learning: A sourcebook for higher education*. Washington: NCTLA.
- Karasakaloglu, N. (2010). Prospective teachers' usage of reading strategies. *European Journal of Social Sciences*, 2 (16), 221-230.
- Levine, A., Ferenz, O., & Reves, T. (2000). EFL academic reading and modern technology: How can we turn our students into independent critical readers? *TESL EJ*, 4 (4), 75-91.
- Magno, C. (2010). The effect of scaffolding on children's reading speed, Reading anxiety, And reading proficiency. *TESOL Journal*, (3), 92-98.
- Maloch, B. (2002). Scaffolding student talk: one teacher's role in literature discussion groups. *Reading Research Quarterly*, 37 (1), 94-112.
- Ohta, A. S. (2005). Interlanguage pragmatics in the zone of proximal development. *System*, 33 (3), 503-517.



- Piaget, J. (1960). *The psychology of intelligence*. Littlefields: Adams & Co.
- Pishghadam, R., & Ghadiri, S. (2011). Symmetrical or asymmetrical scaffolding: Piagetian vs. Vygotskan views to reading comprehension. *Journal of Language and Literacy Education*, 7 (1), 49-64.
- Poorahmadi, M. (2009). The effect of employing scaffolding strategies and classroom tasks in teaching reading comprehension. *Journal of Teaching English as a Foreign Language and Literature*, 1 (3), 87-106.
- Rahimi, A., & Ghanbari, N. (2011). The impact of teachers' scaffolding on Iranian high school students' reading comprehension. *Procedia - Social and Behavioral Sciences*, 28, 1072 – 1075.
- Shabani, K. (2012). Dynamic assessment of L2 learners' reading comprehension processes: A Vygotskian perspective. *Procedia - Social and Behavioral Sciences*, 32 (1), 321 – 328.
- Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life: Teaching, Learning, And schooling in social context*. Cambridge: Cambridge University Press.
- Van Lier, L. (1996). *Interaction in the language curriculum: Awareness, autonomy and authenticity*. London: Longman.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychology process*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1986). *Thought and language*. Cambridge, MA: MIT press.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology & Psychiatry*, 17 (2), 89-100.
- Woodrow, L. (2006). Anxiety and speaking English as a second language. *Regional Language Centre Journal*, 37 (3), 308-328.
- Yu, G. (2004). Perception, Practice and progress - Significance of scaffolding and zone of proximal development for second or foreign language teachers. *ELT. Journal*, 64 (1), 10-20.
- Zacharias, N. T. (2007). Teacher and student attitudes toward teacher feedback. *RELC Journal*, 38 (38), 38-52.