The Effects of STAD and CIRC on L2 Reading Comprehension and Vocabulary Learning

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Abstract

This study investigated the effects of the 'Student Teams-Achievement Divisions' (STAD) and 'Cooperative Integrated Reading and Composition' (CIRC) cooperative learning models on reading achievement and vocabulary learning of Iranian learners of English. 132 female Language learners of EFL participated in the study at National Iran English Language (NIEL) institute in Takestan. The four experimental groups were taught in cooperative learning for one semester with methods of the 'Student Teams-Achievement Divisions' (STAD) and 'Cooperative Integrated Reading and Composition' (CIRC), the control groups were taught in a non-cooperative method. Data collected through reading comprehension and vocabulary post-tests were analyzed using four one- way ANOVA procedures. The results indicated that the cooperative learning model CIRC had statistically significant effects on reading comprehension and vocabulary learning, particularly for elementary EFL learners.

Keywords: Cooperative learning, reading comprehension, vocabulary learning, Student Teams-Achievement-Divisions (STAD), Cooperative Integrated-Reading-and-Composition (CIRC)

Introduction

It was not until the mid 1960s that modern cooperative learning methods were introduced. The application of cooperative learning to classroom teaching finds its root in the 1970s when the United States began to design and study cooperative learning models for classroom context (Kessler, 1992 cited in Liang, 2002). Today, due to its rich history of theory, research and actual use in the classroom, cooperative learning is applied in almost all school content areas and, increasingly, in college and university contexts all over the world, and is claimed to be an effective teaching method in foreign/ second language education by scholars.

It is commonly believed that when students are working in small groups, the teacher is using cooperative learning group. In this study, it is argued that merely putting students in a small group is not cooperative learning group. Cooperative learning refers to a set of highly structured, psychologically and sociologically based techniques that lead to learning and obtaining a learning goal (Oxford, 1997).

The application of cooperative learning to reading comprehension skill is not new. In fact, a review of literature in the area of cooperative learning supports its effectiveness in enhancing reading comprehension of learners. Yet, it seems that the application of cooperative learning to a particular component has not a long history.

Vocabulary as a component of the reading skill plays an important role in expanding the size and depth of comprehension. Lee (2003) investigated vocabulary learning in group work at a university in Vietnam and found that students learned new words in cooperative groups better than in traditional methods and that the group discussion helped them recall and remember English words better than control groups. In addition, Heydari and Gorjian (2009) investigated the effects of learners' awareness of

vocabulary learning strategies on the reading comprehension of 120 intermediate EFL students and found that raising learners' awareness of vocabulary strategies has positive impact on reading comprehension. However, research on the prevalence of cooperative learning in EFL classrooms shows that this strategy is underused. In other words, cooperative learning does not have the place it deserves in EFL education. Perhaps, it is time to reduce the discrepancy between what research shows to be effective and what is practiced in our classrooms. In an attempt to do so, this study investigates the effects of two models of cooperative learning on the reading comprehension and vocabulary learning of Iranian elementary and advanced level EFL learners. It aims at finding answers to the following research questions:

1. Are there any significant differences among the effects of Cooperative Integrated Reading and Composition (CIRC), Student Teams-Achievement Divisions (STAD), and non-cooperative learning methods on the reading comprehension of elementary level EFL learners?
2. Are there any significant differences among the effects of CIRC, STAD, and non-cooperative learning methods on the reading comprehension of advanced level EFL learners?
3. Are there any significant differences among the effects of CIRC, STAD, and non- cooperative learning methods on the vocabulary learning of elementary level EFL learners?
4. Are there any significant differences among the effects of CIRC, STAD, and non-cooperative learning methods on the vocabulary learning of advanced level EFL learners?

Review of the related literature
Elements and methods of cooperative Learning
An effective cooperative learning must meet a number of essential elements. For Sachs, Candlin, and Rose (2003), there are four elements including positive interdependence, individual accountability, equal participation, and simultaneous interaction. Johnson and Johnson (1994) posit five elements including positive interdependence, face to face promotive interaction, individual accountability, interpersonal and small group skills, and group processing.

Based on the studies of Maddinabeita (2006)), ten cooperative learning methods can be summarized as follows:1) TGT: Teams-Games-Tournaments (TGT), 2) Group Investigation, 3) Jigsaw, 4) Team-Assisted individualization, 5) Cooperative Integrated Reading and Composition, 6) Cooperative Learning and Teaching Scripts, 7) Cooperative Learning Structures, 8) Student Teams-Achievement Divisions, 9) Learning Together, and 10) Complex Instruction. Of these, Cooperative Integrated Reading and Composition (CIRC) and Student Teams-Achievement Divisions (STAD) are of particular concern here. Cooperative Integrated Reading and Composition was developed by Stevens, Madden, Slavin and Farnish in 1987. In this method, heterogeneous groups work with different reading levels, reading to each other, predicting, practicing spelling and vocabulary. CIRC is a school-based program that targets reading, writing, and language arts. The three principle program elements are direct instruction in reading comprehension, story-related activities, and integrated language arts/writing instruction. Each student works with another student. These learning teams work cooperatively on program-related activities (Madden, 2004). STAD was developed by researchers at Johns Hopkins University in 1994. In this method, students learn new materials in teams but take individual tests weekly to ensure individual accountability. After the teacher teaches a lesson, students work in teams to

make sure that everyone has mastered the new material. All students take quizzes, and the scores are compared to their previous test scores.

Benefits and Pitfalls
In Cooperative learning, students who are divided into small groups experience working together, and learn to cooperate rather than compete with each other. In classes conducted through cooperative learning, the teacher can find time to walk around and check the students' work. In this way, it is much easier for the teacher to work with one group while others are getting on with their own work. Cooperative learning can also establish positive interdependence among students in such a way that through structuring the goals, materials, and rules, gains for one person are associated with gains for others (Oxford, 1997). In a cooperative learning class, students with different strengths and weaknesses can work with each other. This can help teachers to solve the problem of heterogeneity in EFL classes.
Yet, cooperative learning has also attracted some criticism. Keyser (2000) asserts that cooperative learning strategies take much of the class time and need more advance planning. In cooperative learning classes, teachers may only do one or two exercises in a class period, and they do not find it easy to start with cooperative learning strategies. In addition, the noise level may be high and teachers may lose their power in the classroom. So, implementing cooperative learning needs to be started step by step and it is strongly recommended to use cooperative learning strategies with more flexible activities and exercises.

Reading Comprehension and Vocabulary Learning
Reading
Reading can be defined as the ability to get understanding from written text. L2 reading can best be understood as a combination of skills and abilities that individuals bring to bear as they begin to read (Grabe, 1991). According to Chang (2002), an important development in theories about reading comprehension occurred in the 1970s when reading comprehension was seen as an active process that engaged the reader. Reading comprehension was also seen as the construction of the meaning of a written text through an interaction between the reader and the text.
Just like teaching methodology, reading theories have had their twists and turns. Starting from the traditional view which focused on the printed form of a text and moving to the cognitive view that enhanced the role of background knowledge and ending in the meta-cognitive view which is now in vogue.
Harmer (2007) states that effective reading comprehension needs six types of knowledge including semantic knowledge, morphological knowledge, general world knowledge, socio-cultural knowledge, topic knowledge, and genre knowledge.
Cooperative learning strategy is one of the useful strategies that learners can implement to increase their reading comprehension gain. There are seven instructional strategies that affect students' achievements. They are identifying similarities and differences, summarizing and note taking, nonlinguistic representations, cooperative learning, setting objectives and providing feedback, and questions, cues, and advance organizers. In this study, Cooperative Strategic Reading (CSR) was used as a cooperative learning strategy that is in line with Cooperative Integrated Reading and Composition (CIRC).
In a review of 203 studies dealing with text comprehension, the National Reading Panel (2000) identified six strategies that were more effective in improving the comprehension of readers: comprehension monitoring, cooperative learning, graphic organizer, question-answer, story structure, and summarization. Cooperative Integrated

Reading and Composition (CIRC) uses most of these strategies to improve the reading comprehension skill.

Vocabulary Learning
How vocabulary is acquired and what the most efficient means are to promote effective acquisition have been worthwhile lines of investigation in the field of second language acquisition (SLA).
There are mainly two approaches in vocabulary learning: implicit and explicit. A common view in vocabulary studies is that the majority of words that we know are more likely to be implicit (incidental). Incidental vocabulary is the by-product of implicit activity geared to vocabulary learning. Intentional learning needs focal attention to linguistic form, whereas incidental learning requires focal attention to meaning and peripheral attention to form. In explicit vocabulary learning, students engage in activities that focus attention on vocabulary. As Allen (1983) states, in the explicit approach, vocabulary and vocabulary learning strategies should be taught.
Research in learning vocabulary in a second/foreign language is well documented. However, only a few studies have investigated learning vocabulary in group work. Group work seems to encourage learners to negotiate the meanings of new words among themselves. It is the process by which students share their knowledge of word meanings and forms by helping to explain new words to each other. In the process of clarifying, elaboration, and explaining words, the students enrich their understanding of concepts.

Empirical Studies
 Several studies have investigated the effects of cooperative learning on EFL learning. In a comprehensive study conducted by the National Institute of Education in Washington DC (1985), researchers found that cooperative learning improves the relationship between academically handicapped students and other students. They compared the effects of cooperative learning models (Jigsaw, STAD, and Group Investigation Model) on multicultural awareness, cross-ethnic friendships, interpersonal relationships and pro-social behavior, and concluded that cooperative learning models produce greater interpersonal relationship and enhance self-esteem.
A synthesis of research on cooperative learning indicates that cooperative learning strategies improve the achievement of students and their interpersonal relationships. In 67 studies of the achievement effects of cooperative learning, 61% found significantly greater achievement in cooperative than in traditionally taught groups. Positive effects were found in all major subjects and all grade levels (Dutson, 2001). George (1994) compared the selected cooperative learning methods with traditional learning methods for 18 weeks with 61 students in undergraduate educational psychology classes and found that cooperative learning groups show significantly stronger performance than non-cooperative learning method groups. He also reported that cooperative learning creates more favorable attitudes toward classroom instruction. In a similar study, Ghokhale (1995) found that cooperative learning can be a best choice for teachers to increase the critical thinking skills in learners, help them to understand better and easily solve problems.
Chen (1998) examined and compared English achievement of junior college students through cooperative learning techniques and the traditional whole class method. The results showed that students in small cooperative groups achieved significantly better results on the overall test. Chen states that the achievement gains under cooperative

learning are attributed to the methods' reward structures and carefully structured interaction.

Johnson, Johnson, and Stanne (2000) point out that cooperative learning strategies are widely used because they are based on theory, validated by research, and consistent with personal philosophies. In a meta-analysis of 158 studies, Johnson, Johnson and Stanne report that current research findings present evidence that cooperative learning methods are likely to produce positive achievement results.

In a comprehensive study by Dutson (2001) on the effect of the Kagan's method on learner's achievement, the results were found to be consistent with those of earlier studies comparing other cooperative learning methods against lecture/independent styles of instruction. He concludes that Kagan's cooperative learning model has significant impact on overall achievement.

In a wide variety of studies the potential of cooperative learning to increase student achievement has been consistently shown (Ghaith, 2003). Liang (2002) conducted a study on the effect of cooperative learning on EFL junior high school learners' language learning, motivation toward learning English and high and low achievers' academic achievements with five structures and models of cooperative learning. Liang found that the experimental group outperformed control groups who were taught in Grammar Translation Method and Audio-Lingual Method.

Ghaith (2003) investigated the effects of cooperative learning on reading achievement, academic self-esteem, and feelings of school alienation. The participants were 56 high school Lebanese EFL learners studying at a private school in Beirut. The result revealed that there were no significant differences between control and experimental groups regarding the dependent variables of academic self-esteem and feelings of school alienation. However, the results revealed that the reading achievement of EFL learners improved significantly as a result of implementing cooperative learning. Similarly, Jacobs and Hannah (2004), in integrating cooperative learning techniques with reading aloud, found that not only can they promote language learning, but they also promote active citizenship.

Almaguer (2005) studied the effects of cooperative learning on reading fluency and comprehension of 80 third grade English language learners in south Texas. Analysis of data through covariance revealed that peer assisted reading strategy improves reading achievement.

Apple (2006) holds that cooperative techniques make EFL learners to be more active in the language classroom. Cooperative learning allows them to use language in different ways. Cooperative learning creates more effective classroom climate in which collaboration towards a common goal plays an important role in emotional and linguistic development. In much the same vein, Faryadi (2007) compared the effect of cooperative learning with individual learning and concluded that cooperative learning enhances learners' emotional and social performance and improves their academic accomplishment dramatically. In addition, Adeyemi (2008) found that students exposed to cooperative learning strategies performed better than their counterparts in the other groups.

Mohammadi and Salimzadeh (2009) investigated the effects of cooperative learning strategy training on reading comprehension and motivation of 72 Iranian intermediate EFL learners and found statistically significant differences between control and experimental groups.

However, Abu and Flower (1997) found no significant difference between cooperative learning and competitive learning in home economic subject. In a similar study, Sachs et al, (1997) compared the cooperative learning method (STAD) with competitive

learning to determine the effect of cooperative learning on academic achievement of content knowledge, retention and attitudes toward the teaching method and found no significant difference in students' attitude towards the teaching methods.

These studies have focused on a wide range of dependent variables, including achievement and productivity, motivation to achieve, intellectual conflict, social support, self-esteem, and psychological health. According to these studies, cooperative learning is a cost-effective instructional method and consistently contributes to higher achievement and retention, deeper-level understanding, higher-level reasoning, greater motivation to learn, and positive interpersonal relationships among students. From these studies, it is clearly understood that the more students work in cooperative learning groups, the better they will learn, the easier the retention of the material will be, and the better they will feel about themselves, the class, and their classmates. The aim of the present study is to see which of the two cooperative learning models identified in the above-mentioned studies is more effective for elementary and advanced level Iranian learners' reading comprehension and vocabulary learning.

Method
Participants
The participants of the present study were 132 female English language learners at the National Institute of English Language (NIEL) in Takestan, Iran. The sample included 72 participants at elementary level (in three groups of 24 members each) and three groups of participants (with 20 members each) at advanced level. The age of the participants ranged from 15-25.

Instruments
In order to investigate the effects of two models of cooperative learning, namely STAD and CIRC, on reading comprehension and vocabulary learning at elementary and advanced levels, several instruments were used, including: (a) a Michigan English proficiency test, (b) instructional materials used during treatment, and (c) a posttest.

The first testing instrument was Examination for the Certificate of Competency in English (ECCE), 2009 Sample Test, University of Michigan. It contained 34 items of vocabulary and 3 reading comprehension passages containing a total of 30 items, all in multiple-choice format. This test aimed at controlling the proficiency level of the participants.

The course book taught in the institute was the fifth edition of NIEL series by Horri (2000). For elementary level 'Book Four' and for advanced level 'Book Ten' were used. The posttest was made up of a 34-item vocabulary section and three reading comprehension passages containing a total of 30 items, all in multiple-choice format.

Procedures
A week prior to the treatment, the ECCE test was administered as a measure of homogeneity. After scoring the pre-test, students were ranked based on their performance and then cooperative groups were formed. In each class at advanced level, the five students who scored highest on the pre-test were identified as high achievers and the five students who scored lowest were considered as low-achievers; at the elementary level, six students were identified as high-achievers and six as low-achievers. The remaining students were identified as average-achievers. The students were assigned to groups using the following formula: one high-achiever was grouped with one low-achiever and two average-achievers. The rationale for this type of grouping was that it would provide opportunities for learners to peer tutor and help each

other to accomplish the learning goals. After grouping the students, in STAD and CIRC groups, the procedure was explained and three passages were read and modeled.

In STAD, students were assigned to four-member learning teams. The teacher presented a lesson, and then students worked within their teams to make sure that all team members had mastered the lesson. Finally, students took individual quizzes on the material, at which time they could not help one another. Students' quiz scores were compared to their own past averages, and points based on the degree to which students met or exceeded their own earlier performance were awarded. These points were then summed to form team scores, and teams that met the assigned criteria were rewarded. Then, they sat for weekly quizzes and their quiz performance was added to their final performance.

In the CIRC group, the participants were asked to follow the four phases of Cooperative Strategic Reading (CSR). And they were asked to write a summary for each passage and fill in the pre-reading and post-reading sheets. Each session included five steps for any strategy as Duffy (2009) used. They were (1) lesson introduction (2) modeling the thinking (3) scaffolded assistance, extensive teacher help, less teacher help, no teacher help (4) application in reading (5) application in writing.

Every session, learners were supposed to read and discuss a reading assignment. In the CIRC class, they were supposed to make sentences with new words and write a summary for each text. In both STAD and CIRC groups, the participants were supposed to interact with groupmates, share ideas with each other, and help each other to accomplish the common goal. They read each paragraph and did the four phases of Cooperative Strategic Reading (CSR). For new words in each text, they were asked to scan the paragraph for the new words, and to detect or guess the meaning from context. If students needed help, they were asked to look up the word in their monolingual dictionaries at advanced level and bilingualized dictionaries at the elementary level.

During the treatment sessions, while students worked in their groups, the teacher walked around to ensure that everyone did well. He provided assistance when it was needed in working together. At the end of the experimental period, the posttest was administered to all groups. To answer each of the research questions, a one-way ANOVA procedure was used.

Results and Discussions
Investigation of the First Question
The first research question sought to investigate the effects of 'CIRC', STAD and non-cooperative learning methods on the reading comprehension of elementary level Iranian learners. To do so, a one-way ANOVA procedure was used. Descriptive statistics are summarized in Table 1.

Table 1: Descriptive Statistics for ANOVA on elementary learners' reading comprehension

Models	N	Mean	SD	Std. Error	Min	Max
CIRC	24	21.50	2.87	.58	16	27
STAD	24	20.91	3.34	.68	16	28
NON.CL	24	18.79	3.05	.62	14	25
Total	72	20.40	3.27	.38	14	28

A glance at Table 1 shows that the CIRC group has the highest mean, followed closely by STAD. The mean score of the non-cooperative learning method is noticeably lower than the other groups. To see whether or not the differences are statistically significant, the one-way ANOVA procedure was utilized, yielding the following results:

Table 2: ANOVA on elementary learners' reading comprehension

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	97.52	2	48.76	5.08	.009
Within Groups	661.79	69	9.59		
Total	759.31	71			

Table 2 indicates that the differences among the three groups are statistically significant. In order to locate the statistically significant differences between the means, a post-hoc comparisons of pairs of means (the scheffe test) was used. Results of the post hoc comparisons are summarized in Table 3:

Table 3: Multiple comparisons of means for elementary learners' reading comprehension

(I) model	(J) model	Mean Difference (I-J)	Std. Error	Sig.
CIRC	STAD	.58	.89	.80
STAD	NON.CL	2.12	.89	.06
NON.CL	CIRC	-2.70[*]	.89	.01
* The mean difference is significant at the 0.05 level.				

As it can be seen from Table 3, there is only a significant difference between the CIRC and the non-cooperative groups, with the CIRC group being significantly better than the non-cooperative group.

Investigation of the Second Question
The aim of the second question was to investigate the effects of CIRC, STAD, and the non-cooperative methods on the reading comprehension of advanced level Iranian learners. To this end, another one-way ANOVA was used. Table 4 contains the descriptive statistics:

Table 4: Descriptive Statistics for the ANOVA on the advanced Learners' reading comprehension

Model	N	Mean	Std. Deviation	Std. Error	Min	Max
CIRC	20	20.65	1.98	.44	17	24
STAD	20	20.45	2.76	.61	16	26
NON.CL	20	19.80	2.39	.53	16	25
Total	60	20.30	2.38	.30	16	26

It can be seen from Table 4 that there are no substantial differences among the means of the three methods. Still, the ANOVA was utilized to see the extent to which the observed differences among the groups are statistically significant. The results are presented in Table 5.

Table 5: ANOVA Results on the advanced Learners' reading comprehension

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.90	2	3.95	.685	.50
Within Groups	328.70	57	5.76		
Total	336.60	59			

As it can be seen Table 5, the observed F value and the significance level are indicative of no significant differences among the groups.

Investigation of the Third Question
The third research question investigated the effects of the afore-mentioned three methods on the vocabulary learning of elementary level Iranian learners. To find the answer, another one-way ANOVA was used. Table 6 contains the descriptive statistics:

Table 6:   Descriptive Statistics for ANOVA on elementary learners' vocabulary learning

Model	N	Mean	Sd	Std. Error	Min	Max
CIRC	24	21.04	2.59	.52	17	27
STAD	24	20.79	3.17	.64	15	20
NON.CL	24	18.79	2.78	.56	15	24
Total	72	20.20	2.99	.35	15	27

A glance at Table 6 shows that the CIRC group has the highest mean, followed closely by the STAD group. The mean score of the non-cooperative learning method is noticeably lower than the other groups. To see whether or not the observed differences are statistically significant, the one-way ANOVA procedure was utilized, yielding the following results:

Table 7: Results of ANOVA on elementary Learners' vocabulary learning

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	73	2	36	4.5	.015
Within Groups	564	69	8		
Total	637	71			

Table 7 is indicative of significant differences among the means. The post-hoc comparisons of means helped locate the differences as shown in the following table:

Table 8: Multiple Comparisons of Means for the elementary Learners' vocabulary learning

(I) model	(J) model	Mean Difference (I-J)	Std. Error	Sig.
CIRC	STAD	.25	.82	.955
STAD	NON-CL	2.00	.82	.060
NON-CL	CIRC	-2.25*	.82	.029
* The mean difference is significant at the 0.05 level.				

As it can be seen from Table 8, the only significant difference is between the CIRC and the non-cooperative groups.

Investigation of the Fourth Question
The aim of the fourth question was to investigate the effects of CIRC, STAD, and non-cooperative methods on the vocabulary learning of advanced level Iranian learners. To this end, another one-way ANOVA was used. Table 9 contains the descriptive statistics:

Table 9: Descriptive Statistics for ANOVA on advanced Learners' vocabulary learning

	N	Mean	Std. Deviation	Std. Error	Min	Max
CIRC	20	20.45	2.99	.67	15	26
STAD	20	19.75	2.98	.66	14	25
NON.CL	20	18.45	2.76	.61	15	24
Total	60	19.55	2.98	.38	14	26

To see whether or not the observed differences among the means are statistically significant, the one-way ANOVA procedure was utilized, yielding the following results:

Table 10: Results of the ANOVA on the advanced Learners' vocabulary learning

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	41.2	2	20.60	2.41	.09
Within Groups	485	57	8.52		
Total	526	59			

Table 10 indicates that there are no significant differences among the effects of the three methods on the vocabulary learning of advanced level Iranian learners.
These results lend partial support to previous claims for the efficacy of cooperative learning methods. As Dutson (2001), Goerge (1994), Ghokhale (1995), and Liang (2002) report, cooperative learning has positive impacts on the learners' achievement gains and is much better than traditional teaching methods. It seems that integrating reading and writing in CIRC model makes reading comprehension deeper and the classroom climate more friendly and enjoyable. Providing positive interdependence situation among elementary groups is the key point in making cooperative learning successful.
As to the second research question, results indicate that there are no significant differences among the effects of CIRC, STAD and non- cooperative learning methods on the reading comprehension of advanced level Iranian learners. This may be because students in advanced level often modify the participant pattern or social organization of

the tasks set up by the teacher and this reduces the probability of success of cooperative learning implementation.

With regard to the third research question, it turned out that the elementary students receiving CIRC performed significantly better than the comparison group, non-cooperative learning, on their vocabulary post-test. These results lend support to previous claims for the efficacy of cooperative learning methods (Jacob et al, 1996 and Pica et al, 1996). The result of this study is consistent with the main findings of Lee (2003) that in cooperative learning classes, students learn more vocabulary than traditional one. This could be partially accounted for by the fact that CIRC requires the learners to write a summary or story about each reading, and this improves their reading comprehension and vocabulary.

While cooperative learning was not found to be more effective than non-cooperative learning with respect to advanced students' reading comprehension and vocabulary learning in this study, the literature suggests there may be additional reasons to use cooperative learning. Certainly, the ability to work with others within a group and to develop interpersonal skills may be justifications for using cooperative learning strategies.

Based on the data analysis, it can be concluded that cooperative learning models have positive effects on the learners' reading comprehension and vocabulary learning at elementary levels. The main reason possibly lies in meaning -focused output features of this model. However, it needs to be noted that cooperative learning in its many methods and forms is not the solution to all second language learning problems.

Although cooperative learning did not seem to reach its full potential in advanced level classes, this does not mean that cooperative learning cannot provide a rich environment for second language acquisition. Cooperative learning is not a silver bullet; nor does it deserve to be one that is tossed out when it doesn't work. It is a potentially powerful instruction strategy that requires careful attention. In implementing cooperative learning contextual factors and cultural resistance should be taken into account. Some of the contextual factors which may influence the applicability of cooperative methods include the availability of teachers familiar with the basic features of cooperative learning, the number and characteristics of participants in each group (it may be difficult to form a working cooperative team among learners of different age or gender), the time available for each class, and course requirements (e.g., examination system). The last factor is closely related to educational culture. The educational culture of Iran, which is a function of the wider social culture, is largely individualistic and competitive. Exams often require learners to perform individually on paper and pencil tests. In such a competitive culture, it may be very difficult to convince learners to learn in cooperative groups, particularly when they know they will be tested individually.

In conclusion, cooperative learning is not fully explored and much more research needs to be done. Clearly, however, it can be a very useful instructional strategy when used effectively and in conjunction with other teaching methods.

The findings of the present study can have implications not only for teachers and learners, but also for syllabus designers. The selection and implementation of the appropriate kinds of pair and group work exercises can make cooperation easier. The knowledge of the nature of the effect of such materials enables syllabus designers to prepare textbooks and to present materials in a way which can facilitate and improve the learners' receptive as well as productive knowledge.

References

Abu, B. R., & Flower, J. (1997). The effects of cooperative learning methods on achievement, retention, and attitudes of home economics students in North Carolina. *Journal of Vocational and Technical Education, 13* (2). Retrieved December 16, 2009, from scholar.lib.vt.edu/ejournals/JVTE/v13n2/Abu.html.

Adeyemi, A. B. (2008). Effects of cooperative learning and problem solving strategies on junio secondary school students' achievement in social studies. *Electronic Journal of Research in Educational Psychology, 6*(3), 691-708.

Allen, F.V. (1983). Techniques in teaching vocabulary. Oxford: OUP.

Almaguer, I. (2005). Effects of dyad reading instruction on the reading achievement of Hispanic third grade English language learners. *Bilingual Research, 29* (3), 509-526.

Apple, T. M. (2006). Language learning theories and cooperative learning techniques in the EFL classroom. *Doshisha Studies in Language and Culture, 9* (2), 277 – 301.

Chang, C. (2002). *The reader effect and text effect on first and second language reading comprehension and recall- what does research teach us*? (Report No. CS511 187). (ERIC Documented Reproduction Service No. ED465180).

Chen, C. H. (1998). A comparison between cooperative learning and traditional, whole class learning- teaching English in a junior college. *Academic Journal of Kang-Ning, 3*, 69- 82.

Datson, M. J. (2001). Cooperative learning structures can increase student achievement. Retrieved November 17, 2009, from www.kaganonline.com/ free_articles/.../increase_ achievement.php.

Faryadi, Q. (2007). Enlightening Advantages of Cooperative Learning. Retrieved November 21, 2009, from www.eric.ed.gov/ERICWebPortal/recordDetail?accno

Ghaith, M. G. (2003). The relationship between cooperative learning, perception of social support, and academic achievement. *System, 30*, 263-273.

Gokhale, A. A. (1995). Collaborative learning enhances critical thinking. *Journal of Technology Education, 7* (1), 22-30.

George, G. P. (1994). The effectiveness of cooperative learning strategies in multicultural university classrooms. *Excellence in College Teaching, 5*(1), 21-30.

Grabe, W. (1991). Current developments in second language reading research. *TESOL, 25* (3), 375-406.

Harmer, J. (2007). How to teach English. England: Pearson Education Ltd.

Heydari, L. F., & Gorjian, B. (2009). The impact of Iranian learners' awareness of Vocabulary learning strategies on reading comprehension among pre-intermediate EFL learners. Paper presented at 7th international TELLSI, Yazd, Iran.

Jacob, E., Pottenberg, L., Patrick, S., & Wheeler, E. (1996). Cooperative learning: Context and opportunities for acquiring academic knowledge. *TESOL, 30* (2), 253-264.

Jacobs, G., & Hannah, D. (2004). Combining cooperative learning with reading aloud by teachers. *International Journal of English Studies, 4 (1)*, 97-117.

Johnson, D.W., & Johnson, R. (1994). An overview of cooperative learning. Retrieved October 23, 2009, from www.clearspecs.com/.../ClearSpecs69V01_ Overview%20of%20Cooperative%20Learning.pdf

Keyser, W. M. (2000). Active learning and cooperative learning: understanding the difference and using both styles effectively. *Research Strategies, 7*, 35-44

Lee. H. S. (2003). ESL learners' vocabulary use in writing and the effects of explicit vocabulary instruction. *System, 31*, 537-561.

Liang, T. (2002). *Implementing cooperative learning in EFL teaching: Process and effects*. Unpublished PHD dissertation. National Taiwan Normal University. Retrieved September 19, 2009 from http:// www. Uefap.com/index.htm.

Maddinabeita, C. S. (2006). Cooperative learning. *GRETA, 14*, 80-84.

Madden, N. (2004). Cooperative integrated reading and composition. Success for all Foundation 200 W. Towsontown Blvd. Baltimore, MD 21204, (410) 616-2330. Retrieved September 19, 2009, from www.successforall.net.

Mohammmadi, M., & Salimzadeh, R. (2009). The effect of cooperative learning strategy training on reading comprehension and motivation of EFL learners. Paper presented at 7th international conference TELLSI, Yazd, Iran.

National Reading Panel. (2000). Report of the National Reading Panel – Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. Rockville, MD: National Institute of Child Health and Human Development.

Oxford, R. (1997). Cooperative learning, collaborative learning and interaction: Three communicative strands in the language classroom. *Modern Language, 81*(4), 443-456.

Pica, T., Porter, L. E., Paninos, D, & Linneil, J. (1996). Language learners' interaction: How does it address the input, output, and feedback needs of L2 learners? *TESOL, 30* (1), 59-80.

Sachs, T. G., Candlin, N. C., & Rose, R. K. (2003). Learner Behaviour and Language Acquisition Project: Developing Cooperative Learning in the EFL/ESL Secondary Classroom. *RELC, 34* (3), 338-369.