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تاثیر فنون یادگیری مشارکتی بر درک مطلب زبان آموزان دانشگاهی

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چکیده

اين تحقيق تأثير احتمالي فنون مشاركتي (گروه هاي دانش آموزي-تقسيم كار و بررسي-گروهي) را بر درك مطلب دانش آموزان بررسي كرد. بعد از اجراي آزمون نلسون، ۹۰ زبان آموز پيش-متوسط انتخاب و بصورت تصادفي به ۲ كلاس ۳۰ نفره آزمايشي و ۱ كلاس ۳۰ نفره شاهد تقسيم شدند. در كلاسهاي آزمايشي، ۱۰ تيم ۳ نفره مختلط از نظر توانايي تشكيل گرديد. كلاس شاهد يادگيري را در محيطي معلم-محور و آزمايشي/مشاركتي يادگيري را از طريق فنون مشاركتی (۸ هفته) تجربه كردند. بعد از آزمون نهايي، مشخص گرديد يادگيري مشاركتي تأثير مثبتي بر درك دانش آموزان دارد و يادگيري مشاركتي به شيوه بررسي-گروهي تأثير چنداني بر پيشرفت آنان ندارد. همچنين، مشاهده شد كه درك زبان آموزاني كه در محيط يادگيري مشاركتي به شيوه گروه هاي دانش آموزي-تقسيم كار قرار داشتند پيشرفت محسوسي نداشته است.

واژگان کلیدی: فنون مشاركتي، گروه هاي دانش آموزي-تقسيم كار و بررسي-گروهي

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The Effect of Cooperative Learning Techniques on College Students' Reading Comprehension Achievement

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Abstract

This study investigated the impact of Cooperative Learning techniques—Student Team-Achievement Divisions (STAD) and Group Investigation (GI)—on L2 learners' reading. Applying the Nelson Test, 90 preintermediate female college students were randomly selected and assigned to 3 groups. The experimental groups (A & B) received instruction according to the STAD and GI techniques. The control group (C) was instructed via the Conventional Instruction (CI) technique. Then, the participants took quizzes on the same materials. Results showed the STAD technique is more effective in improving reading, while the GI and CI techniques didn't enhance it significantly. The claim is that *team rewards* may have a strong impact on L2 learners' performance toward reading comprehension.

Keywords: Conventional Instruction; Group Investigation; Student Team-Achievement Divisions

1. Introduction

One of the main problems confronting EFL learners is how to improve their reading comprehension. Reading in a foreign/second language (L2) is necessary when learners further their study. They need good reading skills to acquire knowledge and new information. Many researchers (e.g., Ghaith, 2001, 2003, 2004; Hollingsworth, Sherman, & Zaugra, 2007) have been interested in investigating strategies that help learners have better understanding when they read. Many reading techniques like *Cooperative*

Learning (CL) and *Conventional Instruction* (CI) have been used in classrooms alternately, and the results have shown that some are successful with a particular group of learners while some are not (Adams, 1995; Bejarano, 1987).

A few decades ago, a new approach called *Cooperative Learning* (CL) seemed to attract a lot of attention, whose reputation was made by the attention given to the affective variables by its designers and the desirable activities and procedures. Slavin (1982) defines CL as instructional methods in which learners of all levels of performance in small groups work together toward a common goal that encompasses instructional methods like Student Team-Achievement Divisions (STAD), Team-Game-Tournaments (TGT), Team-Assisted Individualization (TAI), Cooperative Integrated Reading and Composition (CIRC), Jigsaw, Learning Together, and Group Investigation (GI). As such, Johnson et al. (1998) maintain that CL accommodates the tenets of the theories of cognitive-developmental, behavioral, and social interdependence. Johnson and Johnson (1994) assert that CL includes a variety of strategies that utilize learners' collaboration to maximize interaction among them according to the principles of positive interdependence, individual accountability, group processing, and equal opportunity for class participation. Positive interdependence exists when learners come to perceive that their group mates succeed, and/or that they must coordinate their efforts with the efforts of others in the group to complete a task. Learners in CL usually take individual quizzes to demonstrate individual accountability and personal achievement in order to control for any potential free ride effect on the efforts of others. They also in CL may get equal opportunity to participate in class activities and feel responsible for their own learning and get equal opportunities to demonstrate their learning.

Hollingsworth, Sherman, and Zaugra (2007) point out that CL as a method of teaching turns out to be a valuable tool to help learners learn comprehension strategies while encouraging positive interactions among peers. Learners achieve academic success by increasing their reading levels and knowledge of comprehension skills, and there is an increase in enthusiasm and motivation towards reading. What matters in these activities is that learners should have the desire to communicate and to replicate real communication.

Of particular interest in this study is the STAD instructional method. According to Slavin (1987), it has been used in such diverse subject areas as

math, *language arts*, *social studies*, and *science*. Slavin (1987) asserts that STAD is a technique of CL that includes small heterogeneous teams of 4-6 members who tutor each other on the material in the course and prepare each other for weekly quizzes. Slavin (1987) adds that STAD operates on the principle that learners work together to learn and are responsible for their teammates' learning as well as their own and emphasizes having team goals dependent on the learning of all group members.

Ghaith (2004) highlights 4 important stages for implementing STAD in the classroom, such as *teaching*, *team study*, *individual quizzes*, and *team recognition*. As such, learners first listen to the teacher explanation of the material, following which they work in mixed groups based on their ability to complete activities or worksheets, take individual quizzes, and finally recognize their team achievements.

Group Investigation (GI) is the next issue of interest in this research, which is investigated experimentally instead of relying simply on speculations or anecdotal evidence. Kagan (1985) states that learning in GI is student-directed, and this kind of learning is intrinsically rewarding which is different from instrumental learning, which often happens for external rewards. According to Huhtala (1994), GI as a powerful structure enables learners to work actively and collaboratively in small groups and allows them to take an active role in determining their own learning goals and processes. GI limits lecturing, gives power to learners with choices about what and how to learn and capitalizes on the best of CL practices. Sharan and Sharan (1999) suggest that learners form small interest groups, plan and implement their investigation, synthesize information to produce a final product, and participate in the class presentation in the GI technique.

Adams (1995, p. 1) investigated the effectiveness of STAD on achievement and self-esteem levels of mildly handicapped and normal progressing learners in an inclusive classroom. One hundred and eight six-grade learners in 5 reading classes in an inner-city public school participated in the study. The findings showed that normal progressing learners and mildly handicapped in the group instructed through STAD had significantly higher levels of academic achievement in reading comprehension. Contrary to the former studies, this study confirmed the effectiveness of STAD that cast doubt over the nature of earlier studies.

Of the language skills in which principles of *cooperative learning* can be applied, *reading* is probably one of the fundamental skills in L2 learning contexts; moreover, it is probably the most important skill that learners need

for success in their studies. As Farhady (1998) argues, with the rapid explosion of science and technology in the world, reading in English has received priority among other objectives of English language teaching.

Finding an efficient way that facilitates learning and helps learners comprehend better seems to be quite necessary to successful instruction. There is still doubt whether or not CL techniques like STAD and GI can promote reading. Some researchers have provided firm and positive answers; still others radically refute such techniques. Moreover, to the present researchers' knowledge, no study to date has investigated the significance of STAD and GI techniques in reading comprehension at college level. Despite the growing interest in learning English as an L2 in Iran, learners at college level are rarely proficient enough to read and comprehend English texts. And, some teachers and learners ignore CL that may result in optimal learning in different skills, especially in reading.

Therefore, in light of the learners' inadequate English reading skills proficiency and teachers' and students' ignorance of effective techniques like CL ones, this study investigated the effects of 2 techniques of *Cooperative Learning*: STAD and GI, in improving college students' reading comprehension. The results of this study can be considered a point of departure for those teachers outside Iran who wish to see how *Cooperative Learning* techniques can be usefully implemented in the classroom. The following research questions provide the specific focus of the present study:

1- To what extent do CI or CL techniques improve EFL learners' reading comprehension?
2- To what extent do EFL students using the STAD technique have higher reading performance than those using the GI technique?

2. Methodology

2.1. Participants

A sample of 90 female college level students who had registered for a course in General English was chosen based on a systematic random sampling from 140 students in a city in southwest of Iran. Through the Nelson Test (Fowler & Coe, 1976), they were divided into 3 homogeneous groups–each with 30 students–two experimental groups (A & B), and one control group (C). All the participants at this level were preparing to take

part in the University Entrance Examination in Iran. They were at pre-intermediate level in compliance with the Nelson Test.

2.2. Materials

A number of testing instruments were utilized in the process of the development of the present research. Nelson Battery–Section 300A–(Fowler & Coe, 1976) was applied to determine the homogeneity of the groups regarding their levels of proficiency. Though Fowler and Coe (1976) claim that all their test items have been pretested and so their tests seem to be reliable for the purpose of testing the language proficiency of college level students, still the reliability of this test was computed through the application of Kudar and Richardson (KR-21) method (r = .75) because no solid score of reliability measure is offered in the book.

The posttest was a standardized reading comprehension test (30 multiple-choice items for 2 passages and 2 cloze tests) based on the 2 units of the college English textbook. The test was administered at the end of the study to the participants. To standardize the test, the researchers administered the test to a pilot group of 10 learners. Once the test papers were corrected, the item discrimination for each test item was calculated, and some items were kept while some were rejected. The revised version was used for the next stage of the study.

The revised final form of the posttest was administered to another pilot group. Here, again, the item difficulty and item discrimination of the whole test items were estimated. According to Kudar and Richardson (KR-21) formula, the reliability of the posttest was estimated as (r= .73). In addition to these tests, the researchers used 2 quizzes during the study for the experimental groups to ensure individual accountability and opportunity to demonstrate the students' learning.

2.3. *Procedur*e

The student groups in the experiment were instructed by the same teacher (one of the researchers of the present study), who has 15 years of experience of full-time service and who also received training in using the STAD and GI techniques to teach the topics included in the 2 instructional units under investigation; however, each group was seen separately and received a different study. All the sessions took place in the participants' classrooms within about 45-minitue reading periods. The study lasted for 2 months and

covered 2 instructional units from the college English book. The topics of the reading passages in the 2 units were about 'the importance of exercise' and 'the way to give a good speech.' Each passage was divided into paragraphs with different headings, such as *exercise makes your heart happy*, *exercise makes muscles stronger*, *stance and body movement*, and *a sense of humor*. Focusing on the paragraph headings as a reading skill seems to help learners to get the necessary information with little effort. Therefore, these topics were chosen to reinforce the students' reading skills.

Each group was randomly divided into 10 mixed-ability learning groups (i.e., heterogeneous teams) with 3 students. The teacher, then, started the instructional units to the experimental group (A) in line with the dynamics of the STAD technique, and to the experimental group B in consonance with the principles of the GI technique. Meanwhile, the control group (C) was taught the same content by the same teacher, but according to the CI technique whereby the teacher presented the teaching points under study and required the learners to complete exercises in their regular textbook.

The instruction for Group A following the STAD method proceeded according to such components as *teaching*, *team study*, *individual quizzes*, and *team recognition*. Each lesson began with a teacher presentation to introduce and discuss the material under study for about 15 to 20 minutes. Then, the students worked in their teams to complete activities or worksheets that the teacher earlier had prepared. Following this cooperative practice, the learners took individual quizzes on the same material and were not allowed to help each other. Each *individual student's test* score (ITS) was compared to one's base score, obtained in the Nelson Test, and the difference was ones' *individual improvement score* (IIS). The IIS was, then, transferred to *individual improvement points* (IIPs). The IIPs were awarded according to the criteria suggested by Slavin (1995, as cited in Ghaith, 2001, p. 303) as shown in Table 1:

Table 1

Conversion Table for IIS and IIP

IIS	IIP
IIS< -10	5
-10 ≤ IIS ≤ -1	10
0 ≤ IIS ≤ 10	20
10 < IIS	30

Note: When IIS = 100% (perfect score), IIP=30

Then, the team accomplishments were recognized via the team average of IIP. The teams were finally recognized as *super*, *great*, and *good teams* in line with ranking the teams' average from the highest to the lowest as presented in Table 2:

Table 2

Criteria of Team Awards

Team Average of IIP	Team Award
25-30	Super
20-25	Great
15-20	Good

In Group B, the treatment proceeded according to such components of the GI technique as *investigation*, *interaction*, *interpretation*, and *intrinsic motivation*. The learners were assigned to 3-member groups in accordance with the common interest in a specific subtopic of the units. The groups managed to divide their subtopics into individual tasks and synthesize the information to provide group reports. Then, the teacher asked the students to plan their group investigations and to exchange their ideas through *interaction*. In *group investigation*, each student read the reading comprehension individually within a set time, and then the students exchanged their ideas about the meaning as well as the structure, or they raised questions about the areas they could not successfully follow. The clarification of meaning achieved through *student interaction* and *text interpretation* could be internally satisfying, for the learners did not expect their teacher any external motivation, for example, in class scores. This was followed by their cooperation in planning and integrating their findings with the teacher.

3. Results

First, the learners' scores on the Nelson Test were collected from their records. The average mean and standard deviation of each of the three groups are presented in Table 3. The results showed that the three groups had approximately similar performances on the test:

Table 3

Group Means and Standard Deviations for the Homogeneity Test

Groups	*N*	Maxi	Mini	Mean	Std. Deviation
Experimental Group (A)	30	18	6	10.92	10.98
Experimental Group (B)	30	17	6	10.83	9.13
Control Group (C)	30	16	5	10.66	5.26

Next, the average mean and standard deviation of each of the three groups for reading test were calculated. The groups' performances varied on reading comprehension: The results indicated better performance of the learners who received instruction through the STAD technique; those instructed through the GI technique stood somewhere in the middle; and the CI technique led to the lowest performance among the control group participants. Table 4 displays the groups' results:

Table 4

Descriptive Statistics for the Groups' Performances on the Posttest

Groups	*N*	Maxi	Mini	Mean	Std. Deviation
Experimental Group (A)	30	18	5	12.30	3.30
Experimental Group (B)	30	18	6	11	3.14
Control Group (C)	30	16	5	10.23	2.76

Then, one-way ANOVA was run on the mean scores of the three groups in the reading comprehension posttest, and it yielded statistically significant differences between the experimental groups (A & B) and the control group (C) on reading comprehension, as shown in Table 5:

Table 5

Results of One-Way ANOVA for the Groups' Performances on the Posttest

Source of Variances	Sum of Squares	*df*	Mean Square	*F*	*Sig*.
Between Group	65.48	2	32.74	3.46	0.036*
Within Groups	82	87	9.4		
Total	88	89	9.16		

*$p < 0.05$

A post-hoc Scheffe test manipulated to determine where precisely the significance lay revealed a significant mean difference (*MD*) between the experimental group (A), receiving instruction through STAD, and the control group (C), instructed according to CI ($MD = 2.06$, $p < 0.05$). However, the difference between the achievement means of the experimental group (B),

receiving instruction through GI, and the control group (C), instructed through CI (*MD* = 0.76, $p > 0.05$), was not statistically meaningful, implying that *group investigation* led to marginal outperformance of the students compared to the students instructed through *conventional practice*. In addition, the results of comparing the achievement means of the STAD and GI groups (A & B) suggested no significant difference, as presented in Table 6:

Table 6

Post-Hoc Scheffe Test for the Groups' Performances on the Posttest

Group	Groups	Mean Difference	Std. Error	*Sig.*
STAD	GI	1.300	.79	.236
	CI	2.070	.79	.029*
GI	STAD	-1.300	.79	.236
	CI	.7600	.79	0.6
CI	STAD	-2.070	.79	.029*
	CI	-.7600	.79	0.6

*$p < 0.05$

To summarize, on the reading comprehension, the size of the change that occurred between the STAD and CI techniques (*MD* = 2.06) exceeded the one that occurred between the STAD and GI (*MD* = 1.3) and the GI and CI techniques (*MD* = 0.76). The findings illustrated a greater effectiveness of the STAD technique compared to the GI and CI techniques in promoting reading comprehension. This finding suggests the value of stressing learning through *cooperation*, and that not all CL techniques can be effective with all L2 learner groups.

4. Discussion

The results suggest that STAD is more effective than GI and CI techniques in improving EFL reading achievement of college students at pre-intermediate level of English, which confirms the findings by Ghaith (2003), Myers (2006), and Tracy and Barbara (2003) who reported similar results regarding the positive effects of CL in improving reading comprehension. However, what makes the present study significant is the superiority of STAD as one strategy in CL among college level L2 learners, and that other techniques in CL (e.g., GI) might not work well with students from this level.

One possible explanation is that *positive interdependence* among all group-mates encourages L2 learners to help each other and to exert more effort to achieve group success, while in non-cooperative classrooms *negative interdependence* is discouraging since the success of some students, especially high achievers, may result in decreasing the opportunities for their low achieving counterparts.

Students in cooperative groups receive peer encouragement and personalized support from their more competent partners. Their partners are available to help them when they need a customized answer to a question or solution to a problem. When someone generates an incorrect response, the more able students in the group can explain why that answer or movement is not acceptable, and this explanation can increase interaction among group members. However, where the course is obligatory, external factors can be stronger and more persuasive elements than intrinsic motivation to keep L2 learners more involved; hence, the better performance of L2 learners instructed through STAD.

Additionally, the theoretical relevance of CL in enhancing students' reading ability is based on the assumption that learners in CL may feel important because they perform roles essential to the completion of group tasks. Furthermore, they possess information and resources that are indispensable for their teams. Likewise, *interaction* among team members can lead to increased achievement through elaboration and organization of the material prepared by teachers. This is consistent with the finding of cognitive elaboration perspective that cooperative learners must engage in some sort of cognitive restructuring or elaboration to keep information in memory and incorporate it into the existing cognitive structures (Johnson, et al., 1998).

Team rewards, in terms of the average individual improvement points (see Table 2) and as one of the central concepts of STAD, as opposed to GI, may have a strong impact on learners' performance toward reading comprehension. So, the superiority of STAD can be explained from a behavioral learning theory maintaining that learners will work hard on tasks that provide a reward, and that they will fail to work on tasks that provide no reward or punishment. It is likely that the certificates awarded to each group based on *super*, *great*, and *good* criteria reinforce for the expansion of group process skills.

Also, *comprehensible input* may have a strong impact on increasing learners' achievement. Learners cannot learn the materials unless they are

able to comprehend the material to be learned. What is comprehensible for one person may be partially or totally incomprehensible to another person (Chastain, 1988, p. 38). As such, CL, where mixed ability students work with their peers, makes it possible for them to adjust their input to make it more understandable to others. In CI, however, teacher-student relationship is more formal, and with the greater distance perceived by students and teachers, more effort is needed to remove psychological barriers so that a more effective cognitive relationship is created.

On the other hand, cooperative group members help each other to decode and organize words accurately in a passage. Therefore, group members will use little of their speech processing memory for decoding and organizing the words in a passage. They will use more of their speech processing memory to comprehend the tasks by relating new knowledge to their pre-existing knowledge. Consequently, it could be that learners in the STAD Group with sufficient knowledge of a task can elaborate on the tasks to their peers.

This finding is also in agreement with the claim made in *information processing* that the brain's input capacity is limited and "people cannot take up and process all of the input they constantly receive, but rather can select only certain input for attention, uptake, and processing" (Celce-Murcia, 2001, p. 271). Thus, *peer learning* can compensate for the lack of information caused by the limitation of attention and working memory.

Another explanation for the finding based on *social-affective learning strategies* appears worth exploring. Chamot and O'Malley (1987) maintain that small cooperative student groups working on a task can practice L2 skills directly pertinent to that task. Therefore, *cooperation strategy*, as one of the social-affective learning strategies, may have a positive effect on learning L2 skills.

Individuals in CI lack interpersonal feedback in the practice since they complete the activities in their textbooks on their own. Moreover, the environment and structuring learning situations may cooperatively enable learners to process information more deeply than those studying the information by themselves, perhaps because greater social and psychological proximity between learners leads to greater cognitive involvement than individual learning.

The results of the present study also show that despite the basic differences between the CI and GI techniques, GI emphasizes learners' self-direction through group-centered decision making, while CI, according to Tan, Sharan, and Lee (2006), focuses on the verbal presentation of academic

subject matter proposed by the teacher to the students whose primary role is listening and responding to the teacher's questions. This approach stifles learners' creativity and makes them too dependent on teacher lecturing; learning in this approach is a one-way process of the teacher asking questions and the students answering them, falling into the delusion that they are practicing the L2 in real context! GI may not promote a positive effect on reading comprehension, and lack of significant effects on reading comprehension is not surprising, as previous studies on the effects of CL hardly found significant differences on reading comprehension (Rapp, 1991; Tan, Sharan, & Lee, 2007).

The specific tasks constructed on the principles of the GI technique employed here did not promote the learning and practice of such reading comprehension strategies as *summaries*, *headings*, and *identifying main ideas*. Moreover, the participants in the GI Group neither were given tasks designed to develop reading strategies nor were they encouraged to do so in any way.

It seems that *multilateral conversations* within the small groups are other reasons for the outcome of STAD. Although the teacher decided not to allow *multilateral conversations* within the groups, to ensure concentration on peer tutoring of previously taught materials, such group conversations DID develop, and the teacher permitted the participants to continue these conversations. Thus, *multilateral conversations* may guide learners toward a variety of topics with different goals in the class and may also arouse conflict constructively within groups.

As previously mentioned, *peer learning* can compensate for the lack of information caused by the limitation of attention and working memory. On the other hand, Tan et al. (2006) emphasize that using a wide variety of authentic resources and materials are essential for presenting a product in GI classes. Therefore, learners need to have opportunities for more advanced input, for example, from the teacher and/or from the sources offering appropriate L2 activities on which they work in their groups. Unfortunately, observations carried out during cooperative sessions indicate that learners receive much peer input and little input from teachers because of the existing interaction and communication between learners. The way teachers talk to learners is a crucial teacher skill: Teachers empathize with learners when they interact with them by establishing an appropriate rapport with them; they know how to tune their language to what their students understand, say what they mean to; and they consider the manner of presentation of language

(Harmer, 2007). Consequently, it could be that too much peer input and little teacher input can cause learners to acquire incorrect L2 skills, and this can lead to fossilization whereby learners continue to use incorrect forms of an L2.

L2 learners' resistance to GI may also affect the outcome of this study. Mirhassani and Hosseini (2002) point to "the tendency of Iranian high school students for non-cooperation rather than cooperation" (p. 47). Additionally, *competitive learning* is the primary approach in many educational systems including the Iranian educational system. Thus, learners may show resistance to the implementation of GI. Their grudge for CL techniques might emanate from their concerns about accumulating more knowledge through transmission of information from the teacher, so that they are more prepared for the high-stakes University Entrance Examination. In situations like this, teachers are expected to be competent enough to convey abundant materials so that their learners would be in a privileged position. They may feel that the *lecture method* is easier because they are passive during the class while apparently receiving necessary information. In contrast, interactive classes are intense and responsibility for learning is shifted to learners. They may also believe that teachers are not doing their job because their performance is seen as central in typical classrooms.

Additionally, Tan et al. (2006) argue that the lack of EFL teacher's familiarity with alternate evaluation techniques in GI classes may also have a strong impact on learners' performances in reading comprehension. In GI, evaluation may be an individual enterprise, with the student's evaluation, a group activity or both, or individual tests that include both higher and lower items. Thus, the evaluation of the overall group product can be done by teachers and students through using a cumulative view of the individual's work during the entire class of investigation project That is, each score will be partially affected by the student's effective performance in group activities. This makes the whole process of scoring cumbersome, and so teachers find it difficult to follow.

Unfortunately, one shortcoming of techniques like GI is that individual accountability will be lost, or that one learner will dominate the group or do all the work for the group. That is why the teacher in this study frequently evaluated the participants via tests and assumed that there was only one appropriate process for assessing the students' reading comprehension performance .

The *topics* included in the lessons may also have an impact on the results of this study. If issues presented by the teacher were not specific enough, local enough, meaningful enough, or engaging enough, several problems might lead to more concrete investigation and, therefore, more meaningless group products (Huhtala, 1994). Thus, choosing meaningful and narrow topics are important for learners to arrive at group products. Unfortunately, during the period of coaching, the researcher observed that the participants were not eager to structure of the inquiry because of the existing ambiguous and very broad topics. Selecting broad topics confused the participants, and they spent much time determining the resources they needed to work on such topics.

The results also revealed that the STAD and GI participants achieved higher overall scores than those in the CI group. This finding is consistent with the research findings that learners who received the CI technique displayed the lowest performance (Scott & Jess, 1998; Shachar & Sharan, 1994).

However, the STAD technique was not significantly different from the GI one, although the STAD mean scores were slightly higher than those of the GI (see Tables 4 & 6). This finding appears to support the idea that STAD technique is not much superior to GI technique with regard to learners' achievement toward reading (Bejarano, 1987). Research shows that a teacher should give learners direct and sufficient instruction for reading comprehension strategies (Steven, Slavin, & Farnish, 1991). Therefore, learners should receive explicit instruction on specific reading strategies, such as *summaries, headings, identifying main ideas,* and *self-regulation skills*, found to be useful to improve learners' reading ability. Of course, during the period of coaching, the participants in the experimental groups (i.e., A & B) did not receive sufficient explicit instruction in reading comprehension strategies like *identifying main ideas* and *drawing conclusions*, as this was not a methodological concern here.

The lack of a well-researched cooperative curriculum is another factor that might have a strong impact on the results of this study. GI as a specific technique with more complexity than other CL techniques requires more investigation to implement it effectively in the classroom. Thus, teachers responsible for implementing GI technique should be instructed for the specific skills and strategies required to utilize such techniques as *strategies-investigation*, *interaction*, *interpretation*, and *intrinsic motivation*, essential for implementing the GI technique.

Additionally, teachers should be aware of what studies have shown to work. Not only is giving a book/a lesson plan for implementing this technique not enough but also a practical knowledge with examples is necessary. When CL techniques like STAD and GI become entrenched into the school culture as a whole, CL will become more natural for learners. It is not easy to implement CL techniques in one small corner of the overall curriculum, while the other areas of the curriculum remain highly competitive and teacher-centered. Therefore, the educational culture as a whole should be changed so that CL becomes the norm for all learners in all subjects.

5. Conclusion

As this study has demonstrated, simply putting learners in groups does not guarantee positive results. Teachers cannot simply place their students together and expect them to work well with each other. Central components of effective CL must be in place so that learners can come to feel that they are positive contributors, not only to their teams, but to the class as a whole. Most teachers are faced with large heterogeneous classes, making it difficult to serve the needs of all learners. CL techniques (e.g., STAD & GI) take advantages of this heterogeneity by encouraging learners to learn from one another and from more and less knowledgeable peers.

The incentive structure includes rewards intrinsically or extrinsically as a benefit of CL in this process, leading to increased understanding and acceptance of all members of the society. Moreover, the findings here can be helpful to EFL teachers either involved in CL practice or aiming to implement CL to maximize its benefits in their classroom.

Group work, *pair work*, and *peer-work* in CL are common terms that are heard frequently in L2 circles. Actually, it has occupied a considerable amount of CLT course books. In teacher training programs, novice teachers are suggested to inject the cooperation in their teaching to the extent that they can and as artistically as possible, but every technique becomes effective if the realities of the classroom and the cultural background of the target country be considered .

The undertaking of the present study was an effort to localize the suggested practice of CL techniques on the Iranian EFL learners to scientifically seek the superiority of 2 CL techniques (i.e., STAD & GI) in their performance on reading. The results can be considered as illuminating

guidelines, first and foremost, for teachers–the great decision makers in the classroom.

Although this study failed to support an absolute superiority of CL techniques over the CI technique of teaching reading, the trend towards a relative effectiveness of such an approach will hopefully help syllabus designers to benefit from its advantages, and teaching materials could be prepared in such a way to increase learners' involvement in the learning process. Slavin (1987) maintains that CL techniques can be used exclusively with different texts in social studies and other content area textbooks to encourage students to think creatively and to learn group organizational skills. However, it can also be used with different types of texts. The findings here suggest that CL techniques are compatible with well-formed and interesting topics chosen in consonance with L2 learners' interests.

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