Cooperative learning: Homogeneous and heterogeneous grouping of Iranian EFL learners in a writing context

Mona Zamani

Abstract: One of the important aspects of learning and teaching through cooperation is the group composition or grouping “who with whom”. An unresolved issue is that of the superiority of heterogeneity or homogeneity in the structure of the groups. The present study was an attempt to investigate the impact that homogeneous and heterogeneous groupings of Iranian EFL learners regarding their prior levels had on their writing ability when working cooperatively. Having administered a standardized preliminary English test (PET) and a writing test taken from PET sample tests as a pre-test, 66 high and low proficient learners were assigned into three groups: heterogeneous, homogeneous high, and homogeneous low groups. Following the end of the treatment that took 10 sessions each for 30 min, all groups received a writing test as a post-test. The results demonstrated that learners improved their performance through cooperation, whether working with stronger or weaker peers. However, heterogeneous grouping showed superiority over homogeneous grouping at the low level. Low students in the heterogeneous class made more relative gains than high students in the same class. It must be noted that low students did not improve at the expense of high students. The results revealed that cooperative learning could be especially beneficial for low students. It is hoped that the findings of the present study will give teachers deep insights into group compositions in cooperative learning courses, and will help them make better group experiences for students.

Subjects: Language & Linguistics; Language & Literature; Language Teaching & Learning

Keywords: cooperative learning; grouping strategy; homogeneous grouping; heterogeneous grouping; cooperative writing

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PUBLIC INTEREST STATEMENT

Working together in groups has always been emphasized as an interesting feature of classroom practice. One important question is the best way these groups can be formed. In other words, researchers are interested in finding out the best group composition. Present study examines the impact of two different methods of grouping students in writing classrooms. More specifically, the study reports on the difference between homogeneous (students of the same level) and heterogeneous (students of different levels) grouping of students in writing classrooms.
1. Introduction

A review of literature demonstrates that many theoretical perspectives believe that learning improves when it is carried out as a constructive and social activity. According to Barros and Verdejo (1998), cooperative learning (CL) originally based on the social constructivist view of learning and as a major teaching/learning strategy is an attempt to make instruction more relevant and students more responsible. Marr (1997) defined CL as the instructional technique or grouping structure in which students are divided into heterogeneous/homogeneous groups to complete instructional activities. There is a considerable body of research validating the effectiveness of CL. Gillies, Ashman, and Terwel (2008) report that concepts such as cooperative, competitive, and individualistic learning have been investigated in social psychology and about 750 studies have been conducted on the benefits of CL since 1800.

The purpose of CL is elaborated upon by Johnson and Johnson (1989). CL, in their view, is to make each group member a stronger individual in his/her own right. It is not having students merely sitting together, helping the others do their work. Having students who finish their work first to assist others is not a form of CL, either. Neither is assigning a group of students to work together without assuring that all contribute to the product. Baer (2003) holds that the concept of grouping is an important issue in any CL practice. In his words, a very important feature of CL is an appropriate assignment to groups since grouping “who with whom” in the courses which employ CL as the major instructional model is very important. With respect to the fact that with a change in group composition a whole educational course can be either more efficient or unsuccessful, it seems reasonable to investigate this issue empirically instead of getting confused about many contradictory findings.

Baer (2003) goes on to suggest two major ways to group students in CL which are called homogeneous and heterogeneous groupings. In homogeneous groups, students are grouped according to their abilities, genders, and/or races so that everyone in the group is the same regarding ability level, gender, or ethnicity, etc. Its major counter-strategy, i.e. heterogeneous grouping, groups students with a variety of different ability levels, talents, and interests together to complete a single activity. The frequent practice of CL and also the necessity for an informed decision on the part of instructors require scientific research in investigating whatever happens in a cooperatively organized classroom. Therefore, the present study aims at evaluating the effect of homogeneous and heterogeneous groupings of low and high learners working cooperatively on the writing ability of Iranian EFL intermediate learners. It will be highly beneficial for the instructors to know more about the structure of groups in assigning learners to different groups. Actually, the importance of the present study is to provide an opportunity for an informed and scientific decision for the practitioners in the field of EFL. It can also improve our understanding of how such grouping strategies—either homogeneous or heterogeneous—will influence language learning in a course that employs CL as a significant instructional technique.

1.1. Research questions

The present study aims at evaluating the impact that homogeneous and heterogeneous grouping of learners working cooperatively has on the writing ability of Iranian EFL intermediate learners. The rationale for the selection of writing is writing as a process which matches well to the cooperation (Storch, 2005). Through cooperative writing, different members take on a role and through different stages of pre-writing, rough drafting, rereading, revising and editing, they come to a final draft. Furthermore, the present study aims at investigating rigorously what happens to different ability levels, i.e. high and low students in either grouping format. More specifically, in this study attempts were made to answer the following two research questions:

1. Is there any statistically significant difference in the writing performance of homogeneous and heterogeneous groups of Iranian intermediate EFL learners in cooperative learning?
2. Is there any statistically significant difference in the writing performance of homogeneous and heterogeneous groups with regard to their proficiency levels?
2. Literature review

Nowadays the focus of language learning is on communicative competence, rather than linguistic competence; many scholars intensify the key role of communicative competence in language learning which is obtained in groups rather than in an isolated way; in the study of Roseth, Johnson, and Johnson (2008), it was revealed that cooperative goal structures (in comparison with competitive or individualistic goal structures) led to more positive peer relationships and higher achievement. Similarly the result of the research of Gillies and Boyle (2010) indicate the superiority of working cooperative learning in the classroom (in the case of mediated-learning interactions, disciplinary comments and the students’ verbal behavior) over practicing group work only.

Among different language skills, writing as a productive skill, which develops in a process-like manner, seems to adapt itself well to the cooperation process. In second language writing, researchers (e.g. Hyland, 2000; Liang, 2010) used to focus on peer response as the only form of collaborative writing in an EFL context. In addition, it seems that the use of small group/pair work in writing classes is quite limited. It tends to be limited to the beginning stages of joint writing (brainstorming), or to the final stages of writing in which students review each other written text and make suggestions on how it can be improved (Storch, 2005). Regarding the learners view on cooperative writing, results of the studies on students’ attitudes to group/pair work in general are mixed. Some studies reported that learners had positive attitudes to pair and group work (Mishra & Oliver, 1998; Roskams, 1999), while others reported that learners had reservations about pair and group (Hyde, 1993; Kinsella, 1996).

However, according to Storch (2005), most of these studies rely on surveys rather than on interviews conducted with students immediately after experiencing a collaborative activity. In a study done by Storch (2005), all students were positive about group and pair work. However, although most were positive about collaborative writing; two students felt that pair/group work is changed to oral activities, such as group discussion, rather than writing activities. Those who found the experience positive said that it provided them with an opportunity to compare ideas and learn from each other different ways of expressing their ideas.

3. Methods

3.1. Participants

104 Iranian female adults, aged between 18 and 35 volunteered to participate in the study. They all had enrolled in English courses in Kish language school in Tehran. The students were informed that participation in this study is voluntary and they were fully informed about the research before they agreed to take part. In addition, in accordance with the accepted ethical practice, the researcher assured the participants that their identities would not be disclosed in any resulting publication.

Regarding age and educational background, the participants were heterogeneous, and most of them were students of different fields at University level. These learners were administered a preliminary English test (PET) from which the writing paper was excluded in order for researcher to determine their proficiency levels. Out of 104 students, 9 students failed their exam according to the standards of the school, and 8 students did not register for the following term. Therefore, 87 students were left. Afterwards, the writing test was administrated to group students according to their writing proficiency level. In order to expand the writing ability differences of the subjects, the score of those students who fell within .4 standard deviation (SD) below and above mean were not used in the study. The researcher had no alternatives but to eliminate the scores within the range of .4 SD below and above the mean to have a real heterogeneous group, because the number of students was small. Therefore, the scores of 21 students were not used in the study, and the rest (66 students) were allowed to participate in the study, and were assigned into three groups. Participants, who were at low-intermediate level according to the results of PET, were assigned to one of three groups based on their writing ability level. Table 1 illustrates the three groups in detail.
3.2. Design

The design of the study can be deemed quasi-experimental since there was a pre-test at the beginning of the study followed by 10 sessions of treatment, and there was a post-test at the end of the treatment. The researcher herself taught the participants. Moreover, two raters (researcher and another EFL teacher who was made well aware of the scoring procedure) scored the papers and the results were analyzed to estimate the inter-rater reliability.

Learners’ writing performance was the dependent variable of the present study. There were two independent variables as well. The first one was type of grouping which was divided into homogeneous and heterogeneous groupings. The second one was the ability level of the students divided into high and low proficient students. Therefore, there were three groups participating in the present study: the heterogeneous group consisted of high and low students, high-level homogeneous group, and low-level homogeneous group.

3.3. Instruments

Two major instruments were used in the present study: preliminary English test (PET) and writing tests. Firstly, the researcher administered Cambridge preliminary English test (version A) as a language proficiency test so as to homogenize the participants and make sure that they are at the same level of proficiency. Having administered the PET test from which the writing section was excluded, the researcher gave the participants a writing test (pre-test). The purpose of the administration of the pre-test was to identify the low proficient and high proficient students with respect to their writing ability and assign them to different groups. The topic given to the students was “The Rainy Day”. The minimum length of the composition was 150 words. They were also precisely guided as to what was expected of them. The same topic as the pre-test, which was “The Rainy Day”, was assigned and the performance of the learners on the writing test was scored for the post-test. There was an optimal distance (a period of one month) between administrating the pre-test and the post-test; therefore, the test effect foster was naturally eliminated (Best & Kahn, 1989).

3.3.1. Writing test scoring criterion

In this study, Jacobs, Zinkgraf, Wormuth, Hartfiel, and Hughey’s (1981) composition profile is used to score the students performance on writing components. Each paper is rated on five components; Content 30 points, Organization 20 points, Vocabulary 20 points, Language Use 25 points, and finally Mechanics 5 points. This scale is also broken down into numerical ranges that correspond to four mastery levels, excellent to very good, good to average, average to poor, and very poor. These levels are characterized by key words showing specific criteria for excellence in composition (Hadley, 2003). Briefly, the analytic rating was included in the study because it was thought that analytic rating could simplify and objectify the rating of essays, and that it therefore might lead to more reliable writing scores (Hadley, 2003).

3.4. Treatment sessions

Having mentioned the aims of the course as well as the benefits of cooperative learning, the instructor made the students aware of the format of the groups and explained “who with whom” is supposed to work till the end of the course. Afterwards, she taught students some interaction strategies such as modified-interaction strategies and social-interaction strategies deemed essential for them to acquire so as to negotiate for meaning and participate in meaningful interaction.

<table>
<thead>
<tr>
<th>Groups of students</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterogeneous group</td>
<td>22</td>
</tr>
<tr>
<td>Homogeneous high group</td>
<td>22</td>
</tr>
<tr>
<td>Homogeneous low group</td>
<td>22</td>
</tr>
<tr>
<td>Total number of students</td>
<td>66</td>
</tr>
</tbody>
</table>

Table 1. Group demographics
(2006) suggested that students are thought to benefit from learning such strategies. Research in this area suggested that learners can be taught to negotiate for meaning and to participate in meaningful interaction, especially if training is accompanied by linguistic scaffolding, peer help, and cooperation (Naughton, 2006).

Every session, learners in the form of cooperative pairs, were supposed to write a group composition. The researcher chose the topics from sample PET writings. Each treatment session began with a teacher presentation to introduce the method utilized. Then the participants worked with their partners to write a story on a topic taken from a sample PET writing. The students were supposed to write stories in 150 words in class for 30 min. Some of the CL techniques that were utilized in the class are: think-pair-share, constructive controversy or structured controversy, roundtable, jigsaw, group investigation, and cooperative integrated reading and composition on which the researcher elaborated thoroughly in chapter two.

During the treatment sessions what was of utmost importance was keeping the cooperative atmosphere of the class. In fact, a group of students sitting at the table doing their own work, but free to talk with each other as they work is not structured to be a cooperative group as there is no positive interdependence (Jacobs, 1987). There should be an accepted common goal on which the group will be rewarded for their efforts and all these show the important role that teachers have to keep the spirit of cooperation (Johnson, Johnson, & Holubec, 1994). According to Jacobs (1987), “when students write group composition, making each group member responsible for one part of the task can help avoid loafing by less active or less able students” (p. 331). Resource interdependence also leads into positive interdependence. Resource interdependence “exists when each member has only a portion of the information, resources, or materials necessary for the task to be completed and members’ resources have to be combined in order for the group to achieve its goal” (Johnson & Johnson, 1989, p. 24).

During the treatment sessions the researcher walked in the class and among the pairs to observe the cooperative activities of the learners. The researcher insisted on the cooperation of all the participants who were accountable for a part of the task. Students who worked in pairs were assigned different roles. Assigning a role to each student in the group helped to reduce behavior problems. These roles changed so that students did not become bored. The assigned roles included: leader (who led the group in the implementation of the assignment), time keeper (who set the time and let the group know when it is time to start), or encourager (who encouraged group members to participate in discussions and share their idea) (Johnson et al., 1994). In order to encourage group solidarity further, the teacher resorted to positive reward interdependence, too. The teacher tried to make a connection between the rewards that one group member received and that which another one received. In so doing, students earned points for their partner based on how well they did relative to their previous quizzes (Johnson et al., 1994).

4. Results
To deal with the first hypothesis of the research, which claims there is not any statistically significant difference in the writing performance of homogeneous and heterogeneous groups of Iranian intermediate EFL learners in cooperative learning, the researcher has tabulated descriptive statistics in Table 2.

| Table 2. Descriptive statistics of grouping strategy and ability level |
|---------------------------------|---------|---------|---------|---------|
| Group                           | Mean    | N       | Std. deviation | Std. error mean |
| Heterogeneous pre, high post    | 19.20, 21.40 | 11, 11 | 1.21, 1.25 | .36, .37   |
| Heterogeneous pre, low post     | 8.09, 13.20 | 11, 11 | .70, 1.30   | .21, .39   |
| Homogeneous pre, high post      | 16.61, 19.37 | 22, 22 | .95, .93    | .20, .19   |
| Homogeneous pre, low post       | 10.73, 12.62 | 22, 22 | .70, 1.30   | .14, .27   |
As it is shown in Table, low and high students in both heterogeneous and homogeneous groups at the post-test improved in their writing ability (e.g. the mean score of heterogeneous high students on pre- and post-test were 19.20 and 21.40, respectively; the mean score of heterogeneous low students on pre- and post-test were 8.09 and 13.20, respectively). Paired t-tests were run, so as to figure out whether the differences between the means of students at the pre-test and post-test were significant or not. A t-test and the results of \( t(10) = 4.37, p < .001 \) suggested that there is a significant difference between the mean scores of the heterogeneous high students on the pre-test and post-test of writing ability. Heterogeneous low students also improved on the post-test (their mean scores were 8.09 and 13.20 on pre- and post-test, respectively), and their mean difference was significant at .00 level of significance, \( t(10) = 15.95, p < .00 \). The same results were obtained for both homogeneous high and low students. The homogeneous high students’ mean scores on the pre-test and post-test were 16.61 and 19.37, respectively, and the difference was significant, as a t-test and the results of \( t(21) = 13.46, p < .00 \) suggested.

Homogeneous low students’ mean scores were 10.73 and 12.62 on the pre-test and post-test, respectively, and the difference was significant as suggested by a t-test and the results, \( t(21) = 9.46, p < .00 \). Therefore, the first hypothesis which said that there is not any statistically significant difference in the writing performance of homogeneous and heterogeneous groups of Iranian intermediate EFL learners in cooperative learning was rejected. As it was shown, all groups improved at the post-test. A summary of paired t-tests for learners at different groups is also displayed in Table 3.

To better understand the obtained results, they are displayed in two figures. Figure 1 displays mean scores of low homogeneous and low heterogeneous students at both pre- and post-tests. The figure shows that low proficient students in both heterogeneous and homogeneous groups at the post-test improved in their writing ability. The achievement gain for homogeneous low students was 1.88 and it was 5.11 for heterogeneous low students. Therefore, it has been concluded that homogeneous and heterogeneous grouping has an effect on the writing ability of the students.

The second hypothesis claimed that there is not any statistically significant difference in the writing performance of homogeneous and heterogeneous groups among low proficient Iranian intermediate EFL learners. As it was shown in Figure 1, heterogeneous low students obtained a higher mean gain, i.e. 5.11 than the homogeneous ones. This reveals that the heterogeneous grouping has been more effective for the writing ability of low-level students. In other words, heterogeneous low students have improved more as the result of the treatment. A between-groups t-test was run to compare the means of heterogeneous low and homogeneous low students and showed \( t(31) = 8.9, p < .00 \), which maintained that the difference was significant.

Therefore, the second hypothesis states that there is not any statistically significant difference in the writing performance of homogeneous and heterogeneous groups among low proficient Iranian

<table>
<thead>
<tr>
<th>Group</th>
<th>Paired differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Std. deviation</td>
<td>Std. error</td>
<td></td>
</tr>
<tr>
<td>Heterogeneous low</td>
<td>5.11</td>
<td>1.06</td>
<td>.32</td>
<td>15.95</td>
</tr>
<tr>
<td>Heterogeneous high</td>
<td>2.20</td>
<td>1.67</td>
<td>.50</td>
<td>4.37</td>
</tr>
<tr>
<td>Homogeneous high</td>
<td>2.76</td>
<td>.96</td>
<td>.20</td>
<td>13.46</td>
</tr>
<tr>
<td>Homogeneous low</td>
<td>1.88</td>
<td>.93</td>
<td>.19</td>
<td>9.46</td>
</tr>
</tbody>
</table>
intermediate EFL learners was rejected. The third hypothesis states that there is not any statistically significant difference in the writing performance of homogeneous and heterogeneous groups among high proficient Iranian intermediate EFL learners. Figure 2 displays mean scores of high homogeneous and high heterogeneous students at both pre- and post-tests.

Figure 2 illustrates totally reverse results for the high-level students. Again both homogeneous and heterogeneous students obtained more achievement gains and mean scores at the post-test in comparison with the pre-test. This time; however, homogeneous high students outperformed heterogeneous high students. This reveals that the homogeneous grouping has been more effective for the writing ability of high-level students. The result of a between-groups t-test was also calculated, \( t(13) = 1.02, p < .32 \). Consequently, the difference was not significant, and the third hypothesis which stated there is not any statistically significant difference in the writing performance of homogeneous and heterogeneous groups among high proficient Iranian intermediate EFL learners was not rejected.

Since the researcher needed to figure out the interaction between grouping strategy and ability level, she ran t-tests to compare the achievement gains of low and high students in both heterogeneous and homogeneous groups. The independent between-group t-test results that compared the gains of low students and high students in the heterogeneous group support that the low students in the heterogeneous group gained relatively more than their high counterparts in the same group \( t(16) = 4.86, p < .32 \).

Finally, the researcher investigated the results of the independent between-group t-test that compared the achievement gains of high students in the heterogeneous and homogeneous groups. The mean gain and standard deviation for the high students in the heterogeneous group was 2.20 and 1.6, respectively. The mean gain and standard deviation for the high students in the homogeneous group were 2.76 and .96, respectively. A t-test and the results showed that high students in the heterogeneous group gained at least as their high counterparts in the homogeneous group, \( t(13) = 1.02, p < .32 \). Therefore, it can be suggested that the relative gains made by the low students in the heterogeneous group were not made at the expense of their high peers.
In general, the results obtained show that both homogeneous and heterogeneous grouping have a facilitating effect on the writing ability of low and high students. However, heterogeneous grouping seems to be preferable to homogeneous one, since when low students worked with knowledgeable peers, they developed their language skill and got a good experience. Besides, the relative gains made by the low students in the heterogeneous group were not made at the expense of their high classmates. It suggests that high students benefited from teaching less proficient students as well.

5. Discussion and conclusion

The findings suggest that learners boosted their writing performance through cooperation with either low or high proficient learners in both homogeneous and heterogeneous groups. Machado and Mattos (2000) cited Donato (1994) who demonstrated in his article that scaffolding can be obtained through collaborative work among peers of the same level of competence in L2 acquisition settings, and not only through the unidirectional help of a more capable peer or expert, as the majority of research on scaffolding has shown. Indeed, a number of studies in L2 classrooms (e.g. Ohta, 2001; Swain & Lapkin, 1998) have shown that scaffolding can also occur in peer instruction.

However, it was proved that CL was more successful for low proficient students in the heterogeneous group. This can be explained from a sociocultural perspective, too. Vygotsky (1978, p. 128) argued that, from the very beginning of life, for development to occur, a child needs to interact with a more able member of society to receive assistance, which has been referred to as “Scaffolding”. The important point about the metaphor of scaffolding is that it not only helps the weaker accomplish the task at hand, but also enables the child to perform the task independently (Greenfield, 1984). Consequently, it can be that low students have improved more through interaction with their more capable peers. Ellis (2013) also reiterated that to benefit from interactions and exchanges, the L2 learners need to communicate with someone who has sufficient proficiency in the target language to ensure that the input is not just at the learner’s level, but at times, slightly beyond it. Therefore, the researcher came into this perception that the students with a low command of English need to get more help and feedback from their partners.

On the other hand, the high proficient students in the heterogeneous group achieved as much as high proficient students in the homogeneous group despite the fact that they spent considerable time working with weaker students. This finding can be explained from a sociocultural perspective as well. Van Lier (2014) believes that although Vygotsky’s work focused on the cognitive development of children, the theory is applicable to all learning and to both asymmetrical (i.e. expert-novice) and symmetrical (i.e. equal-ability) groupings. This way, students can learn from the act of teaching others. The act of teaching or explaining to others may help L2 learners develop their language knowledge and internalize what they learnt before (Allwright, 2014).

As to the effectiveness of CL practices, novice teachers are recommended to make the students cooperate with their classmates. However, Iranian students usually do not tend to work or learn cooperatively, and they do not feel comfortable with this kind of learning. It does not imply that teachers have to give up using this approach in their classes. It means that teachers need to aware their students of the benefits and advantages of cooperative learning, and put emphasis on the importance of their participation in the classroom work, and let them get habituated to it through practice. In the present study, the researcher observed that the discomfort which the students felt at the beginning of the semester changed dramatically. They became involved with each other very well.

The present study aimed at seeking scientifically for the superiority of two major cooperative grouping strategies (homogeneous and heterogeneous grouping) for Iranian high and low students and their performance on writing. The obtained results can be considered useful and fruitful for language teachers, the great decision-makers in the classroom.
Although language institutes typically group learners homogeneously in classes by means of placement tests, oral interviews, ... there are some students in the same classes who are at lower proficiency level or are weaker at one skill in comparison with the rest of the class; in other words, one of their skills is lagging behind the other skills in comparison with the other students. Therefore, teachers who have sometimes large-size classes are puzzled by the numerous types of students. In these classrooms more proficient students are mixed with less proficient students, and even are thrown together with less proficient ones. Therefore, teachers should ask whether peer interaction can be useful, productive, for both groups in these situations. Making better group experiences for students is essential.

According to a Vygotskian approach, in heterogeneous groups, more competent learners scaffold weaker ones and help their progression (Mynard & Almarzouqi, 2006). The pedagogical implication of the ZPD for SLA/FLA is that learners were helped in doing something will be able to do that something without help (Mynard & Almarzouqi, 2006).

In a cooperative setting, the teacher is also required to monitor students’ interaction (Klingner & Vaughn, 1999). Therefore, teachers need to do some courses to get familiar with appropriate teaching strategies to manage the class (Calderon, 1990). So, teachers should not be left alone in this process. Support from peers, students, from policy-makers, from training courses as well as findings from empirical research on the use of cooperative learning and group composition are deemed important in this process.

The researcher hopes that the results obtained from the present study will be beneficial for those involved in language teaching to help language learners improve their language proficiency. Besides, the researcher hopes that the findings of this study will lead to more studies of cooperative learning group composition.

6. Suggestions for further research
The study at hand investigated the effect of two CL grouping strategies on EFL low and high students’ written performance. Because of the multiple facets of cooperative learning and group composition, the researcher tried to limit the scope of her research. Therefore, the following are suggested for future research:

(1) As a next step, a study can be done to investigate the same grouping strategies on the other skills of the language like speaking and reading.

(2) The participants taking part in the present study were of the same gender. A study can be done to compare separate-gender classes with the mixed-gender ones.

(3) The subjects who participated in the present study were adults aged between 18 and 35. A similar study on subjects of different age range may yield interesting results.

(4) In the present study, students were assigned to either homogeneous or heterogeneous group based on their proficiency level. Students can be grouped homogeneously or heterogeneously based on other factors such as ethnicity, field of study, age of students, etc. ..., and their effects on learners’ writing ability or other language skills can be investigated.

(5) In the present study, the teacher decided who works with whom and assigned students to either group. A study can be conducted to see whether students’ preference to choose their partners has any positive effect on the writing ability or other language skills.

(6) In the study at hand, students were taught interaction strategies at the beginning of the treatment session. However, the effect of this training on the patterns of interaction that arose as small groups of students were working cooperatively to complete tasks was not scrutinized meticulously.
(7) In the present study, the researcher observed learners’ interactions and mechanisms to which they resorted when engaged in cooperative tasks. Another study can be designed to audio-tape and meticulously analyze the nature of collaborative dialogs.

(8) This study showed that heterogeneous grouping is extremely beneficial, especially for low proficient students. The study took a sociocultural perspective and suggested that high learners or experts helped low students or novices in doing tasks. However, the researcher did not explore the scaffolded help that the expert provided the novice. Therefore, a study can be conducted to analyze the tutorial interaction and scaffolding tools within a cooperative work.

(9) In the present study, the use of L1 was not banned to the extent that students tried to meet the goal of the task. Moreover, the researcher observed that students made use of their first language as a scaffolding tool. As a next step, a study can be done to scrutinize the use of L1 as a scaffolded help for accomplishing a task and learning the second language.

In short, it is hoped that both positive and negative experiences and reactions reported here will help teachers decide upon the adequacy of homogeneous and heterogeneous grouping of high and low achievers in cooperative groups for their writing classes, and if one of them is judged to be more appropriate, help make it more useful.

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