Cooperative Tasks and Lexical Development of EFL Learners

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Abstract
This study has been an attempt to investigate the impact of cooperative tasks on the lexical development of Iranian intermediate EFL learners. Sixty male and female students, who had scored homogeneously in a teacher-made proficiency test, participated in this study. Both the control and the experimental groups participated in a multiple-choice pre-test of vocabulary. After undergoing a course of eight sessions, through which the experimental group was taught through the use of cooperative tasks and the control group through the use of traditional techniques, both groups took part in a vocabulary post-test. The data analysis revealed a significant difference between the performances of the two groups, with the experimental group outperforming the other.

Keywords: cooperative tasks, lexical development, social participatory structure

Introduction
Words are the building blocks of any language, without which no message can be sent or received (Rivers, 1981). Lexical items carry the basic information load of the meanings one wishes to comprehend and express. This gives vocabulary study a salience for learners that may be lacking in the acquisition of other features of the language system (Read, 2004). There seems to be a direct link between knowledge of vocabulary and successful communication.

Vocabulary specialists are in agreement on the fact that lexical competence is a very important part of communicative competence; the ability to communicate successfully and appropriately (Coady & Huckin, 1997). Wallace (1982) claims: “Not being able to find the word you need to express yourself is the most frustrating experience in speaking another language” (p. 9). Due to the significant role of vocabulary in language
learning, great care should be taken in choosing the best methods and techniques for teaching it.

Traditional techniques of presenting new words in class or requiring students to memorize lists of vocabulary items seem old-fashioned in the context of current communication-based language programs. During the last decade a great deal of attention has been paid to incidental vocabulary learning. Various researchers such as Decarrico (2001, p. 289) believed that learners should be given explicit instruction and practice in the first two to three thousand high-frequency words (i.e., word families), while beyond this level, most low-frequency words will be learned incidentally.

One of the approaches to incidental vocabulary learning is task-based vocabulary teaching. While performing the tasks, vocabulary learning occurs when the mind focuses elsewhere, such as understanding a text or using language for communicative purposes. Although research on vocabulary learning in a second/foreign language is well documented, only a few studies have investigated teaching vocabulary through tasks (Allen, 1983 Knight, 1996; Nation, 2001; Newton, 2001; La Fuente, 2006).

In his investigation of the effect of using task-based teaching on learning vocabulary La Fuente (2006) concluded that task-based lessons for teaching vocabulary are more effective than the presentation, practice, and production (PPP) ones. She listed a number of benefits of task-based vocabulary lessons: including a wider range of language forms, lexical phrases and patterns, presenting targeted items in context, leading from fluency to accuracy, and integrating all four skills. In a task-based approach, learners will often meet new vocabulary in passing, as they pursue communicative goals. From a vocabulary perspective, teachers need to ensure that through tasks, learners are given opportunities to meet and explore new vocabulary without direct teacher assistance, and to use this vocabulary to meet meaningful task goals (Newton, 2001). Using tasks for the purpose of teaching vocabulary seems to be especially effective with intermediate and advanced learners who already have at least a basic grasp of language skills (Allen, 1983, p. 57).

In order to reconcile the potential advantages of tasks with cooperative learning, teachers may consider a number of cooperative options for exposing learners to new words during task-based interaction (Newton, 2001). Collaborative work on tasks enables learners to perform beyond the capacities of any individual learner. Jacob (1998) listed ten potential advantages of group activities in language instruction, including an increase in the quantity of learner speech, a reduction of anxiety, and an increase in learning (cited in Ellis, 2003, p. 267). Ellis (2003), while referring to the advantages of group work activities, considered them as the rationale for working on tasks in pairs and groups.

Having noticed the importance of using tasks for the purpose of language teaching, and paying attention to the significant role of cooperation in language learning, we decided to investigate whether cooperative tasks have any impact on lexical development of Iranian Intermediate learners who learn English as a Foreign Language (EFL) at English language institutes and whether using cooperative tasks has any advantage over traditional methods of teaching vocabulary.
**Participatory Structure**

The participatory structure of a lesson refers to the procedures that govern the way the teachers’ and students’ participations to the performance of the task are organized. As Ellis (2003) stated, a basic distinction can be made according to the type of participation: individual (each student works by himself or herself) and social (interaction occurs between the participants). In the case of social organization, various options are possible: the teacher can conduct an activity in lockstep with the whole class, a student can take on the role of teacher and perform the task with the rest of the class or the students interacting with one another in small groups or pairs. The choice of participatory structure will influence both its nature and the extent of interaction in the classroom. In this study, we use ‘cooperative’ as a modifying term for ‘tasks’. The term ‘cooperative tasks’ denotes tasks with social participatory structure of small group or pair work.

**Working on tasks in pairs and groups**

Ellis (2003) emphasized the role of collaboration and pair work in performing the tasks in the classroom. He believed that teachers could exploit the potential advantages of group work for task-based pedagogy. According to him, it is not enough to simply put students into groups to complete a task. What counts is the quality of interaction, and whether this enables students to engage effectively in the task and to support each other’s language learning (p. 269).

In fact, the process of negotiating meaning provides language learners with comprehensible input, comprehensible output, and feedback, which are the three decisive factors in successful language learning (Oliver 2002, p. 97). Gass, Mackey, and Pica (1998) referred to the role of negotiation on language production by stating: “Interactional modifications, which are brought about through negotiation for meaning, can have a positive effect on the quality of learners’ immediate production” (p. 302). A key to using group/pair work in task-based language pedagogy, then, lies in ensuring that the students are able to work together effectively.

Ellis (2003) provided a number of practical tips that teachers can attend to in order to foster student cooperation in group/pair work. Students need to be convinced that the task is worthwhile and not simply an opportunity for some fun. Each student needs to be made accountable for his/her own contribution to the completion of the task, which can be achieved by giving each member a specific role to perform or by asking students to make an explicit comment on their personal contribution in the post-task report. Heterogeneous groups of four were recommended, which can be subsequently divided into pairs. In one-way information-gap tasks involving students of differing proficiency levels, collaborative learning is enhanced if students of lower proficiency are put in charge of the information to be exchanged. Students should consider how their group is functioning and find ways of working together effectively. If groups are constantly changing, students they will not have the opportunity to develop the positive interdependence considered essential for group cohesion. Considering the teacher’s role, Ellis (2003) mentions a number of possible roles provided by Jacobs (1998): modeling collaboration, observing and monitoring the students’ performance, and...
intervening when a group is experiencing obvious difficulty. A teacher can also function as a task participant, cooperating with students.

**Method**

**Participants**

The participants of the study were 100 male and female Iranian intermediate EFL learners with the age range of 16 to 25 at an English institute in Karaj, the fourth largest city in Iran. All the participants had studied the pre-intermediate Interchange Series and were going to study the last six units of Interchange three. Sixty homogeneous learners participated in the study: their scores on the standardized language proficiency test were one standard deviation below and above the mean, and they were assigned to two groups of experimental and control.

**Instruments**

Three instruments were utilized in this study:

1. A language proficiency test of 80 multiple-choice items consisting of three parts: vocabulary (30 items), structure (30 items) and reading (20 items). All of the items were selected from the previous interchange series, which had been covered by the learners during the last terms. The test was used to assure the homogeneity of the participants and the test was standardized by the researcher (its standardization process will be elaborated later).

2. A translation test of 210 English words. Students were required to write down the Persian equivalent of these words. This test was administered to identify the words that were not mostly known by the students in order to be further used in the study. The words were selected from previous Interchange series and some other sources of intermediate level vocabulary.

3. A 50 item multiple-choice test of vocabulary, which was developed by the researcher and used as the assessment tool in the pre-test and the post-test phases. The vocabulary items in the test were mainly selected from the new lexical items taught and exposed to during the course. The criterion for selecting the words was their frequency.

**Procedure**

To accomplish the purpose of this study, the researcher carried out the following procedures. First, a teacher-made proficiency test of 80 multiple choice items was administered to the 100 learners. After removing the invalid items and calculating the reliability of the final version through the Cronbach’s alpha formula (r=0.88), students’ answers to the remaining 53 items were rescored and 60 students, whose scores were one standard deviation below and above the mean, were selected and divided into two groups. In order to control the teacher variable, both groups were taught by the same teacher. Then a translation test of 210 isolated English words was given to the learners and they were asked to write down the Persian equivalent of those words. The criterion for selecting the words was their frequency of use and availability. Eighty-five (85) words that were not known by most of the learners were selected for the purpose of the study.
After that, a pre-test of 50 multiple-choice vocabulary items, was administered to both the experimental and control groups. After I removed the malfunctioning items and calculating the reliability of the final version through KR-21 formula \((r = 0.76)\), the students’ answers to the remaining 38 items were rescored and recorded as their pre-test score.

Then an eight-session course of instruction began. This course lasted for a month during which some conventional techniques (memorization, using dictionaries, and using synonyms and antonyms) were used for the control group, while cooperative tasks were used to teach vocabulary to the experimental group. In the conventional approach to vocabulary teaching, the teacher carefully controlled the way the new words were introduced and explained. It is worth mentioning that this class was a teacher-centered class where the learners did not actively participate in the classroom activities. On the other hand, the experimental group benefited from interaction, negotiation of meaning, and active participation of the learners in learning the new words.

In this study, the researcher used eight tasks; each task was carried out within a 20-minute classroom period. They were chosen as tasks typical of those used to promote interaction and negotiation of meaning between and among learners. For example, one of them was an opinion-gap task, in which the learners were given a box of words written on cards, including individual characteristics and their definitions. They were asked to work in pairs and express and clarify their thoughts and opinions about characteristics that they thought were especially applicable to their partners. They engaged in discussion and exchange of ideas, expressed their individual thinking, and negotiated meaning with their pairs to solve any misunderstandings, and they did not need to reach an agreement. Similarly, for performing the other tasks the learners were asked to request clarification and engage in negotiation of meaning if they did not understand the meaning of any particular lexical item during the task performance. Two tasks were carried out by the students working in dyads, four by the students working in small groups, and two by the students working in jigsaw groups. At the end of the course, students in the control and experimental groups were given the standardized test used as the pretest. To examine whether there was a statistically significant difference between the two groups, a t-test was run.

**Results and data analysis**

In order to verify the homogeneity of the participants in terms of their language proficiency, a teacher-made proficiency test, whose reliability and validity have already established, was administered at the onset of the study. Those participants who scored within the range of one standard deviation above and below the mean were selected for the main study. The results are presented in Tables 1 and 2.
Table 1. Descriptive Statistics of the Proficiency test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Valid N</th>
<th>Mean</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Variance</th>
<th>Std. Dev.</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>100</td>
<td>29.68</td>
<td>28.00</td>
<td>6.00</td>
<td>49.00</td>
<td>93.55</td>
<td>9.67</td>
<td>0.97</td>
</tr>
<tr>
<td>Vocab</td>
<td>100</td>
<td>10.52</td>
<td>12.00</td>
<td>0.00</td>
<td>18.00</td>
<td>26.45</td>
<td>5.14</td>
<td>0.51</td>
</tr>
<tr>
<td>Structure</td>
<td>100</td>
<td>12.22</td>
<td>12.00</td>
<td>3.00</td>
<td>21.00</td>
<td>20.90</td>
<td>4.57</td>
<td>0.46</td>
</tr>
<tr>
<td>Reading</td>
<td>100</td>
<td>6.94</td>
<td>7.00</td>
<td>0.00</td>
<td>13.00</td>
<td>19.27</td>
<td>4.39</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Table 2. Participants in the main study

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Acceptable Range</th>
</tr>
</thead>
</table>

After selecting the 60 homogeneous students and then randomly assigning the subjects to two groups, a pretest of 50 multiple choice vocabulary items was administered to both the experimental and control groups. In order to standardize the pretest, the researcher again went through the item analysis process and deleted the items with unacceptable item facility, item discrimination, and choice distribution and as a result 12 items were deleted. After deleting the unacceptable items students’ answers to the remaining 38 items were rescored and recorded as their pre-test score. The reliability of the test as a whole unit was also calculated by the researcher from KR20 formula to be 0.76. Table 3 summarizes the results of the pre-test.

Table 3. Summarized data for the pre-test

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test Score Means</th>
<th>N</th>
<th>Std.Dev.</th>
<th>Variance</th>
<th>Std.Err</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Q25</th>
<th>Median</th>
<th>Q75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>14.93 4.59 21.10 0.84 8.00 25.00 10.00 15.50 18.00</td>
<td>30</td>
<td>4.59</td>
<td>21.10</td>
<td>0.84</td>
<td>8.00</td>
<td>25.00</td>
<td>10.00</td>
<td>15.50</td>
<td>18.00</td>
</tr>
<tr>
<td>Experimental</td>
<td>16.07 4.14 17.17 0.76 7.00 24.00 14.00 17.00 19.00</td>
<td>30</td>
<td>4.14</td>
<td>17.17</td>
<td>0.76</td>
<td>7.00</td>
<td>24.00</td>
<td>14.00</td>
<td>17.00</td>
<td>19.00</td>
</tr>
<tr>
<td>All Grps</td>
<td>15.50 4.37 19.14 0.56 7.00 25.00 11.50 16.50 19.00</td>
<td>60</td>
<td>4.37</td>
<td>19.14</td>
<td>0.56</td>
<td>7.00</td>
<td>25.00</td>
<td>11.50</td>
<td>16.50</td>
<td>19.00</td>
</tr>
</tbody>
</table>

After the treatment the standardized 38-item pre-test was used again as the post-test. Table 4 summarizes the results of the post-test.
In the next step, the researcher compared the differences between the pretest and posttest scores in two groups. Table 5 summarizes the results of the means comparison.

**Table 5. Descriptive statistics of the Dif-scores (Differences between the pre-test scores and post-test scores)**

<table>
<thead>
<tr>
<th>Group</th>
<th>Dif-Score Means</th>
<th>Dif-Score Std.Dev</th>
<th>Dif-Score Variance</th>
<th>Dif-Score Std.Err.</th>
<th>Dif-Score Minimum</th>
<th>Dif-Score Maximum</th>
<th>Q25</th>
<th>Median</th>
<th>Q75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>3.63</td>
<td>3.88</td>
<td>15.67</td>
<td>0.71</td>
<td>-6.00</td>
<td>13.00</td>
<td>3.00</td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>9.63</td>
<td>6.39</td>
<td>40.79</td>
<td>1.17</td>
<td>-6.00</td>
<td>24.00</td>
<td>9.00</td>
<td>13.00</td>
<td></td>
</tr>
<tr>
<td>All Grps</td>
<td>6.63</td>
<td>6.05</td>
<td>36.61</td>
<td>0.78</td>
<td>-6.00</td>
<td>24.00</td>
<td>2.50</td>
<td>6.00</td>
<td>9.50</td>
</tr>
</tbody>
</table>

As can be seen, the dif-score mean for the control group was 3.63, whereas for the experimental, 9.63. The difference between these two dif-score means with the experimental six higher than the control group shows that there has been some difference between the performances of the two groups in learning vocabulary. Whether this difference is statistically significant or not will be explained through the use of the t-test.

In order to test the hypothesis through the t-test, first the homogeneity of the variances had to be checked. Using SPSS software, the researcher calculated the F levene for determining the homogeneity of the variances (F levene = 7.52). Since with 58 degree of freedom p levene was 0.01, it was statistically significant (p < 0.05). Therefore, variances were not homogenous and in this case one must use the t separate formula. By using this formula, tsep was calculated to be 4.40. Since with 48 degrees of freedom, p 2-sided = 0.00, (p < 0.05), the null hypothesis will be rejected with 95% confidence. (See detailed results in Table 6.)

**Table 6. Descriptive Statistics of the t-Test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Control</th>
<th>Mean Experimental</th>
<th>t-value</th>
<th>df</th>
<th>p 2-sided</th>
<th>df</th>
<th>p</th>
<th>t separate var est.</th>
<th>df</th>
<th>p</th>
<th>t separate var est.</th>
<th>df</th>
<th>p</th>
<th>t separate var est.</th>
<th>df</th>
<th>p</th>
<th>t separate var est.</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dif-Score</td>
<td>3.63</td>
<td>9.63</td>
<td>-4.40</td>
<td>58</td>
<td>0.00</td>
<td>-4.40</td>
<td>0.00</td>
<td>30</td>
<td>30</td>
<td>3.88</td>
<td>6.39</td>
<td>7.52</td>
<td>58.00</td>
<td>0.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Discussion

The central question guiding the study was whether the use of cooperative tasks in the classroom has a significant impact on lexical development of Iranian EFL learners. After performing the data analysis, the null hypothesis was rejected; therefore, the study supported the fact that the use of cooperative tasks in the classroom is of great importance in developing the vocabulary knowledge of EFL learners.

Based on the findings of this study, other studies done by researchers (Allen, 1983; Knight, 1996; Nation, 2001; Newton, 2001; La Fuente, 2006) were further confirmed. In other words, this study provided evidence that exchanging information between learners is a fruitful tool in expanding EFL learners’ vocabulary. It is worth mentioning that the study is not aimed to reject the role of other techniques of expanding learners’ knowledge of vocabulary proposed and employed by others, but to emphasize the finding that the use of cooperative tasks in the classroom seems to have greater impact on vocabulary learning.

During the performance of cooperative tasks students practiced activities such as giving explanations, asking questions, having comprehension checks, making requests, asking for repetitions, making guesses, and giving synonyms. Furthermore, during cooperative activities students were not under pressure to produce correct speech and as a result, their mental barriers and internal resistance were minimized. Here the only thing they need to do is to communicate with others. This further gives them the opportunity and the ability to put into practice what they already know.

On the other hand, because task-oriented techniques contain many different types of activities, such as problem solving and role play, they enjoy a great amount of diversity. Therefore, students instructed through such techniques rarely get bored. In fact, they are often engaged in these activities so much that they actually forget they are learning a new language. This makes them concentrate on how to communicate the intended meaning, rather than on the language forms. The learners in the experimental group were gradually seen to become less dependent upon the teacher’s assistance.

Conclusion

Having done the necessary data analysis, I can state that the results of the study provided support for the value of cooperative tasks as effective tools for teaching vocabulary. Language teachers should try to create a stress-free environment in which students do not feel pressure and in this way benefit from these techniques in order to educate more active students who are at the same time more effective communicators. In this way, EFL teachers can make their students self-dependent in the process of vocabulary learning, too. During the process of performing cooperative tasks students should act as active participants to carry out the tasks. The students are given opportunities to express their own ideas and opinions, and in so doing they have a choice not only about what to say, but also how to say it. Cooperative tasks give students opportunities to develop strategies for interpreting and comprehending language as it is actually used by native speakers. They also help learners figure out the speakers’ intention and predict what their interlocutors are likely to say.
Cooperative tasks give students the chance to work on negotiating meaning. On the other hand, when learners work in small groups, the amount of the communicative practice they receive will be maximized. In this way, students also learn to pay attention not only to communicating the intended meaning, but also to the social context of the communicative event. The findings of this research also help syllabus designers and textbook writers to put selection, sequencing and grading of teaching materials on a more effective and practical basis.

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References


