The impact of brainstorming strategies Iranian EFL learners' writing skill regarding their social class status

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Abstract: The present study aimed at investigating the effect of brainstorming strategy on EFL learners' writing performance. To this end, eighty four Iranian EFL intermediate learners were invited in this study. Their performance on the pretest and posttest in both experimental and control groups has been taken into account. As data analysis indicated, the experimental group's performance on the post test was considerably higher than that of their performance on the pre-test. The results of the Analysis of Covariance revealed that the instruction of brainstorm strategy had a positive effect on EFL learners' writing achievements. It also made them more active, which might make them responsible for their own learning and likely to learn better.

Keywords: Brainstorming, Language Proficiency and Learning Strategy

1. Introduction

Writing has always regarded as an important skill in the teaching and learning English as a foreign Language (EFL). On the one hand, it stimulates thinking, compels students to concentrate and organized their ideas, and cultivates their ability to summarize, analyze, and criticize. On the other hand it reinforces learning in, thinking in, and reflecting on the English language. Nevertheless, students find composing in English difficult because the writing process demands that they utilize many cognitive and linguistic strategies of which they are uncertain. Many students complain that they lack ideas and cannot think of anything interesting or significant enough to write. While most EFL teachers are often perplexed by these problems in their writing classes, they cannot find an efficient way to awaken students’ imagination and set their minds working. At best, some teachers only adopt a product-based approach, focusing on exemplifying contrast and comparison, description, classification, and so on. Many teachers are not aware of the role of brainstorming strategy or the value of strategy training in promoting students’ learning skills (Bejarano et al. 1997).

The use of brainstorming as a controversial issue in the history of FLT and it has long been viewed with suspicion by language teachers, and thus it has unfortunately been ignored as a valid activity for language practice and improvement. However, considering with the nature of brainstorming and creative thinking, we can say that there are important elements in teaching process which makes it suitable for being employed in language teaching procedures.

In 1941, Alex F. Osborn as an advertising executive firstly offered a helpful technique to cover all the problems. The technique encouraged the learners to cooperate with learning the ways where a group of 3 to 5 participants work collaboratively to generate a wide number of solutions to a problem. The following study wants to introduce the Osborn’s technique called ‘brainstorming’ which can highly promote the persons creativity to find solutions to everyday problems and challenges. Although the brainstorming strategy is used in every scientific and social field, we used the strategy to study the effect of that strategy in learning English language skills especially writing for EFL courses.

Brainstorming is a technique used to encourage individuals to generate ideas and come up with a list of possible solutions to a certain problem. In 1953 the technique was popularized by Osborn in a book called.
1.1. “Applied Imagination”

Osborn proposed that groups could double their creative output with brainstorming. During the brainstorming session, a number of rules should be taken into account including:

- No criticism of ideas.
- Building on what others have suggested.
- Strange and wild ideas are accepted.
- Welcoming the large quantities of ideas.
- The roles behind brainstorming are as follows:
  - Keep in mind that the more ideas, the better
  - improve or combine ideas already suggested,
  - And do not be critical.

Osborn (1959) claimed that:

If these roles are followed “the average person can think as many ideas when working with a group as when working alone.” Brainstorming helps the learners to transfer the thought from the brain to tongue or to the members that relate to skills especially to writing.

By introducing brainstorming techniques we want to suggest that explicit instruction of the strategy has a measurable influence on writing performance. It is also suggested that EFL teachers in universities or collages should move from a product-based approach to a process-focused approach in their teaching of writing as the latter may contribute towards activating students’ thinking and creating ideas for a writing task.

Beyond the instructional and learning strategies influences on the learners’ performance, their language performance are affected by social/economic factors when group working. A great deal of research has tested Osborn’s claims about the effectiveness of group brainstorming. Many studies have verified that groups generate more ideas when they use Osborn’s brainstorming rules than when they do not.

However, when the performance of interactive brainstorming groups is compared to the pooled performance of the same number of individuals brainstorming alone (nominal groups), nominal groups outperform interactive groups in both the quantity and quality of ideas generated. Several social and procedural factors have been identified as potential causes for this productivity gap, including:

- evaluation apprehension,
- social loafing,
- free-riding, production blocking, and
- downward performance matching.

Most brainstorming research has focused on social factors in the productivity gap between interactive and nominal groups. However, researchers have recently begun to investigate cognitive factors as well, in particular the extent to which idea exchange influences idea generation. Past researches have provided evidence for both social and cognitive factors in brainstorming, and we have incorporated both of these elements into an integrative model.

The social aspect of our model suggests that there may be a mutual influence process during group brainstorming in which the productivity of one brainstormer affects that of another. In novel task situations, participants may be uncertain about appropriate performance standards. This may lead them to imitate or socially compare themselves with co-performers. There is a tendency for group members to converge to a similar low level of performance, although exposure to productive brainstormers or high group goals can raise performance to a high level.

1.2. Review of the Literature

In recent years, researchers and teachers within the language learning field have been paying considerable attention to the development of learning strategies. Much research has been conducted to investigate the effects of strategy training on improving reading skills (for example, Dreyer and Nel 2003; Rao 2003), listening comprehension (for example, Rost and Ross 1991; Thompson and Robin 1996), vocabulary acquisition (for example Brown and Perry 1991; Froster 1990 and the learning process (Chamot 1993). However, relatively little research has been done on productive skills, such as speaking and writing. Of the few studies that have dealt with strategy instruction in writing, only Richards (1990) has elaborated on how to apply the brainstorming strategy to develop students writing.

Writing is a complicated process which involves a number of cognitive and metacognitive activities, for instance:

- brainstorming,
- planning,
- outlining,
- organizing,
- drafting, and
- revising

Cognitive aspects of writing have received a particular attention, as investigators have attempted to understand the thought processes underlying the compositions of students (Flower & Hayes, 1981). According to Omaggio Hadley (1993), writing requires composing, which implies the ability either to tell or retell pieces of information in the form of narratives or description, or to transform information into new texts, as in expository or argumentative writing. Therefore, it is best viewed as a continuum of activities that range from the more mechanical or formal aspects of writing down on the one end to the more complex act of composing on the other end.

A substantial body of research suggests that training students to use language learning strategies can help them become better language learners. Early research on “good language learners” (Naiman, Fröhlich, Stern, & Todesco, 1996) suggested a number of learning strategies that successful students employ when they learn a second or a foreign language.

A study of O’Malley and Chamot (1990) suggested that effective L2/FL learners are aware of the learning strategies they use and why they use them. Meaningful learning
according to Ausubel’s (2000) theory occurs when students intentionally attempt to integrate new knowledge with existing knowledge. A learner who attempts to integrate knowledge has a more extensive network of knowledge and therefore more retrieval paths. Richards, Platt, and Platt (1992) presented a specific definition of strategy training and outlined three different approaches: “[It is] training in the use of learning strategies in order to improve a learner’s effectiveness. A number of approaches to strategy training are used including:

• Explicit or direct training: learners are given information about the value and purpose of particular strategies, taught how to use them and how to monitor their own use of the strategies.

• Embedded strategy training: the strategies to be taught are not taught explicitly but are embedded in the regular content of an academic subject area, such as reading, math or science.

• Combination strategy training: explicit strategy training is followed by embedded training” (p. 355).

Learning to write is difficult especially for those writing in a second or a foreign language in academic contexts since they do not know enough about how to generate ideas for writing. As effective writing is considered to be a problem for EFL learners, a need is felt to find out some ways of teaching that can help learners improve their writing performance. The main purpose of this study is to investigate the effectiveness of explicit instruction of strategies, namely brainstorming, on EFL learners’ writing improvement.

This study built on an emerging interest in a cognitive prospective in ESL/EFL acquisition research. In cognitive theory, learning is seen as an active, constructivist process in which learners select and organized information input, relate it to prior knowledge, retain what is considered important, use the information appropriately, and reflect on the outcomes of their learning efforts (Gagné et al. 1993). In this dynamic view of learning, ESL/EFL learning would be more successful when learners are actively involved in directing their own learning in both classroom and non-classroom settings. Students would select from target language input, analyze language functions and forms perceived as important, think about their learning efforts, anticipate the kinds of language demands they may encounter, and activate prior knowledge and skills to apply to new language tasks. It is because of this intricate set of mental processes that ESL/EFL learning has been constructed as a complex cognitive skill (McLaughlin 1987).

As for writing in EFL, French and Roder (1992) stated that writing could be viewed as the main area in the curriculum that we associate with creativity, noting that writing is one of the most tasks that we can be asked to perform. Thus improving students’ essay writing is believed to be one of the most important skills which EFL learners need to develop through their schooling. During their schooling, EFL learners need to develop some writing skills such as; the ability to write complete and meaningful sentences, coherent, and well-organized idea, use communicative language, choose suitable words and idioms and use writing mechanics appropriate. The present researchers are intending to find out whether Brainstorming has any effect on EFL learners’ writing skill and to compare the findings with the ones have done so far. Therefore the following hypotheses are formulated in the present study:

1. Training brainstorming strategy has different effects on learner’s writing skills.
2. There is a significant relationship between the students’ social class and their general English proficiency level.

2. Methodology

2.1. Subjects

The sample of the study consisted of 84 university students of intermediate level classified into four classes, two served as an experimental group and the other ones as control. The students were assigned randomly from Tabriz University students. Half of them are studying chemistry and the others are Nursing and Midwifery students. A number of 46 of the participants were randomly classified in control group and 38 others in experimental group. The age and sex variables were not controlled. They all interested to participate in the survey because of their eagerness to learn more and promote their essay writing skills.

In order to conduct this study, the following instruments were used:

2.1.1. Materials

a) General English Proficiency Test, (Nelson, series 300B)

In order to make sure of the homogeneity of control and experimental groups in terms of English language knowledge, a test of NELSON, series 300B, after being piloted on a similar group of ten students, was administered. It consisted of four parts: cloze tests, structure, vocabulary, and pronunciation. All parts were in the form of Multiple-Choice questions. There were, in all, 50 items and the time allotted was 45minutes.

b) Individual Background Questionnaire (IBQ)

To identify the participant’s social class level and know about their routine social behavior when taking part in the brainstorming classes, a background questionnaire administered to the students. It was necessary to recognize the participants ‘characteristics such as parent’ occupation, their literacy and educational situation, family’s monthly income, and number of family members that may indirectly effect the students’ participation in class. All these factors can interrupt the participants’ concentration as shyness and or may enhance their motivation.

c) Pre-post essay writing test and its scoring scale

Preparing a fruitful, weighty, yet an easy and suitable subject for the level of the participants, a pre-post test was
administered to both groups before and after the implementation of the proposed technique on the experimental group. Then the students in the groups were asked to write an expository essays on given topics such as education, future employment, air pollution, and psychology before the instruction (pretest) and after the instruction (posttest). The topics for the pretest and posttest were the same. Compositions were then scored out of 100. The students' papers were scored by two raters who taught writing courses in the university for many years. Inter-rater reliability for the pretest and posttest were .760 and .760 respectively.

d) Checklist to identify the essay writing skills needed for Mid-intermediate EFL learners

The checklist was derived from an essay in the Internet cited at “ojs.academypublisher.com, Vol 1, No. 3, March 2011”; it is also made assigned and adopted by jury members: i.e., two professors of Tabriz University in TEFL, Tabriz, Iran. The jury members stated that the skills included in the checklist was generally adequate and appropriate to its purpose. Still some skills were deleted since they had been above the mid-intermediate level.

2.2. Design

This study has a Qusi-experimental design in which four classes were chosen randomly from Tabriz university students. Two classes served as an experimental group and the other ones as control. The independent variable in this study is brainstorming strategy and the dependent variable is the performance of the experimental group on the essay writing posttest. For the purpose of this study, all subjects completed the same writing task before the study and three month later at the end of the study. Impression marking by two independent raters, on 168 texts (76 texts of experimental group & 92 texts of control group) of the pre- and post-study writing task completed by the experimental classes and the control class was performed. The control class in this experiment followed the traditional product-based approach in which the English writing mainly focuses on providing practice for producing writing products. The students first learn how to write simple and complex sentences, and then start constructing paragraphs from models, frames, and other guides. Finally, they write a text by expanding an outline or summary provided. However, the procedure for experimental classes was rather different. This procedure was intended to stimulate students’ thinking, to create and organize ideas, and to compose the raw materials into a text. It ran as follows:

1. **Thinking individually**
2. **Verbalizing ideas in pairs or groups**
3. **Brainstorm ideas in oral and note forms**
4. **Classifying ideas into proper categories**
5. **Completing the writing task in fifty minutes**

Students participated constructively and enthusiastically in the classroom interventions and were very positive about the brainstorming techniques they studied.

2.3. Procedure

2.3.1. Pre-Testing

Before the students in the experimental group received any instruction, all the students in the two groups were asked to write an essay about the given topic. The allotted time for the topic was forty five minutes. The papers were collected and each student's score was measured based on the average score for the two raters.

2.3.2. Strategy Instruction

The strategy instruction phase started a week after the students participated in the pretest. They participated in twelve sixty-minute study sessions. The students in the experimental group received the instruction for brainstorming strategy.

2.3.3. Post-Testing

A week after the instruction period of the strategy of brainstorming all the students in different groups again wrote essays about the given topic. The papers were collected and each student's score was measured based on the average score for the two raters.

2.3.4. Scoring

To measure the students’ ability in writing, they were asked to write essays. Essays were then scored based on a checklist cited at “ojs.academypublisher.com, Vol 1, No. 3, March 2011”. The checklist is also made assigned and adopted by two professors of Tabriz University in ELT, Tabriz, Iran.

Rating was assigned for four criteria: Content and Organization, Mechanics of Writing, Language Use and Creative Abilities. The marking scheme was first explained to the raters. The final score for each essay was then calculated by recording the mean of the two raters’ scores. Students’ essays were scored out of 75 points as follows: Content and Organization 30, Mechanics of Writing 15, Language Use 10, Creative Abilities 20. Each skill has a five-level scoring scale ranging from excellent to poor containing; essay coherency, vocabulary use, spelling and handwriting were taken into consideration by the raters as follows:

- Excellent gets 25 scores, very good gets 20 scores, good gets 15 scores, not bad gets 10 scores, and finally poor gets 5 scores.

Compositions were scored by two university teachers who taught writing courses for many years. For each paper, examiners were required to read the paper attentively and to combine the scores into a single score. Essays were then scored out of 100. Inter-rater reliability for the pretest and posttest compositions were .760 and .760 respectively. The final score for each student was the average score for the two raters.
3. Results and Discussion

As the study proved the application of brainstorming strategy by the learners, through the explicit instruction of the strategy, can help them improve their writing performance. Through brainstorming, students can easily understand and organize their thoughts in pictorial (diagrams) representations. In other words, graphical representation of ideas increases the students’ conceptual understanding which in turn helps them organize their ideas.

The existence of the pretest and posttest as the two dependent variables of English writing skill lead to use the GLMRM (General Linear Model for Repeated Measures) as a suitable statistical method.

The statistical parameters of mean, standard deviation as well as trainee’s numbers for both pretest and posttest variables for training brainstorming strategy are depicted in the Table 1 below.

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistics</th>
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</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
</tr>
<tr>
<td>Pre-test score</td>
</tr>
<tr>
<td>Control</td>
</tr>
<tr>
<td>Experimental</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Post-test Score</td>
</tr>
<tr>
<td>Control</td>
</tr>
<tr>
<td>Experimental</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

As indicated in the table, the values of mean and standard deviation for posttest scores of student’s general English proficiency level are 27.59 and 4.53, respectively. In another example, the mean and Std. values of posttest scores in control group for trainee’s writing skill are 28.63 and 4.25, respectively. Those results indicate that there is not any significant difference between the pretest and posttest scores for the student’s general English proficiency level. However, there is a significant difference between the pretest scores of experimental trainee’s English writing skill (i.e. 31.17) and their posttest scores (i.e. 69.89). On the other hand, another significant difference is observed between the posttest scores of student’s writing skills in control group (28.63) and experimental group (68.89). So, it is concluded that the training variable of brainstorming strategy has an obvious and great effect on the trainee’s writing performance.

The important pre-concept for the GLMRM statistical method is that its variance-covariance independent variables matrix shape is circle. It means that the dependent variable consisting only two levels which in turn, display its spherical shape. Therefore, the pre-hypothesis is validated and it value is equal to 1, that indicates it is absolutely sphere.

For surveying the significant interaction of the dependent variables of Training brain storming strategy in the model, the Table (2) showing the intra-test scores including the proved sphericity concept for the variance-covariance shape of dependent variable, is administered.

<table>
<thead>
<tr>
<th>Table 2. Test of Within-Subjects Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source</strong></td>
</tr>
<tr>
<td>Time</td>
</tr>
<tr>
<td>Time * Group</td>
</tr>
<tr>
<td>Error(Time)</td>
</tr>
</tbody>
</table>

The value 0 for the last column in the table, indicate the significant variable of the trainee’s writing performance. In other word, the mean values of the posttest are greater than the pretest values. It is also obvious that the sig. values for the second column in the table (i.e. 0) due to the interaction of the time and training of brainstorming in every levels are significant. It means that pre and posttests trainee’s writing performances’ scores in both experimental and control groups are significantly different. In other words, the experimental training writing skills of students are much promoted in posttest rather than pretest.

Figure 1, indicates that the mean values of experimental posttest trainees (the right point on green line) are higher than all other means (other points on the green and violet lines). It is concluded that trainee’s writing performance are significantly affected by Training brain- storming strategy. It is also indicating (by the violet line) that there are not any differences between the pre and posttests in the control group.

3.1. Hypothesis 2

There is a significant relationship between the students
social class and their general English proficiency level.

At first, student’s social living level is classified in three levels including high, middle and low. It is noticeable that the variable of social living level itself composed of numbers of other variables such as family income, parent's education, parent's occupation (job) and children's number. So all variables homogenized by the researcher to be totally meaningful.

Returning to hypothesis 2, the mean and Std. Deviation of the student’s social living level and their general English proficiency level are displayed in Table 5.

Table 3. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- Grammar</td>
<td>10.2101</td>
<td>2.95723</td>
<td>84</td>
</tr>
<tr>
<td>Social Level</td>
<td>10.13</td>
<td>2.638</td>
<td>84</td>
</tr>
</tbody>
</table>

The mean and Std. deviation of trainee's general English proficiency level are 10.21 and 2.957, whereas those parameters' scores for their social living level are 10.13 and 2.638. The quantitative values of student's social living level and their general English proficiency level are needed to be examined with their intensity and cause as described by the Pearson correlation value (Table 6).

Table 4. Correlations

<table>
<thead>
<tr>
<th></th>
<th>Pre- Grammar</th>
<th>Social Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson</td>
<td>1</td>
<td>0.301</td>
</tr>
<tr>
<td>Correlation</td>
<td>0.005</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>84</td>
<td>84</td>
</tr>
</tbody>
</table>

The Pearson correlation Sig.=0.005 (Table 6) indicates that null hypothesis displaying non-relationship between two variables for any error level ($H_0$: $\rho=0$) is rejected. In other words, the assumption based on no-correlation between the student’s social living level and their general English proficiency level, is rejected. It confirms existence of a significant relationship between those variables and represents that the relationship is not accidental or chance-based. Also, the Pearson correlation value of $+0.301$ (the positive signs direct relationship) between these variables, indicates a relatively average relationship. It means, the higher the social level, the higher the children general English level. Figure 2 displays the correlation between the student’s social living level and their general English proficiency level. The distribution pattern shown in the Figure indicates that there is almost an average correlation between those variables. It means that, the higher the children social living (vertical line), the more their general English proficiency(horizontal line).

3.2. Restatement of Related Literature

Beyond the direct studies on the effect of strategy learning on writing skills some more researches have done on teaching writing.

Holden (1996) compared the effectiveness of two approaches to teaching writing (formal grammar instruction and the process approach) in students' knowledge of grammar and writing improvement.

The sample of the study consisted of 70 college students divided into two groups: experimental and control. The experimental group was taught using the process approach. No formal grammar instruction was given to the experimental group.

Results indicated that the experimental group scored a higher number of correct answers on the posttest than the control group did. Furthermore, the experimental group attempted to answer more test questions on the posttest than the control group did.

Furthermore, findings revealed that the process approach to teaching writing, which deemphasizes formal grammar instruction, is more effective in improving students' knowledge of grammar than formal grammar instruction. Regarding at the social effects on language performance in one experiment, individuals in experimental groups listened to an audiotape containing 30 ideas attributed to a prior brainstormer, whereas individuals in control groups brainstormed without listening to any tape. Motivation to attend to the ideas on the tape was manipulated in the experimental groups by instructing half of them to memorize the ideas for a later recall test. The results indicated that participants who received memory instructions generated more ideas than both participants in the control group who heard no ideas and participants in the experimental groups who heard ideas but were not instructed to memorize them. In addition, idea generation increased as the number of ideas recalled increased. These results suggest that idea generation can be enhanced by exposure to ideas when people are motivated to attend to the ideas they encounter.

In a second experiment, Dugosh et al. (2000) exposed
participants in experimental groups to either 30 or 60 ideas from an audiotape during an initial brainstorming session. Participants in control groups heard no tapes. The number of ideas generated during the initial session and during a subsequent session in which there was no further exposure to ideas was assessed. All participants were instructed to memorize any ideas that were presented to them, and a free recall test was given between the two brainstorming sessions. Participants who heard audiotapes containing 60 ideas generated more ideas than did participants who heard no tapes. In addition, participants who heard either 30 or 60 ideas generated more ideas than did control participants in the second session when no further ideas were presented. There was a tendency for participants who initially heard 60 ideas to generate more ideas during the second session than participants who initially heard only 30 ideas. Finally, recall for the stimulus ideas was positively correlated with performance during both sessions. The results of these experiments suggest that cognitive stimulation through exposure to ideas can occur when attention to those ideas is enhanced. Yet performance gains in these situations may not be entirely attributable to cognitive factors. It is possible that participants in these experiments engaged in social comparison processes because they were exposed to ideas that they believed were generated by another person. Past research has often shown that the motivation to generate ideas during group brainstorming can increase as a result of social comparison (Coskun, 2000; Paulus & Dzindolet, 1993; Paulus et al., 1995).

Consequently, the performance gains observed by Dugosh and her colleagues reflect in part the effect of an upward comparison that increased the participants' motivation to generate ideas of their own.

Hashem (2005) investigated the effectiveness of a proposed program in developing the creative thinking abilities of Egyptian third preparatory pupils in English language.

Tools of the study included an opinion-seeking questionnaire, the suggested program and the teacher's guide, the creative thinking abilities test and an observation sheet.

The sample of the study consisted of 132 pupils classified randomly into experimental and control groups.

The experimental procedures of the suggested program lasted for eight weeks. Ten hypotheses were presented by the researcher to test their validity.

To implement the suggested program, the researcher followed several strategies including brainstorming, creative problem solving, discussion, role playing, simulation, self-assimilation, open-ended stories, wordless stories, language games, puzzles and riddles, attribute listing, and skits (innovating a comic solution to a certain character).

Results revealed the effectiveness of the suggested program in developing pupils' creative thinking abilities.

Pupils of the experimental group performed much better on the post-test in the overall creative thinking abilities (fluency, flexibility, originality and elaboration) than the control group pupils.

4. Conclusion

It was proved that teaching the writing skill to the students of experimental group by the help of the proposed technique; i.e., brainstorming was more successful than the same teaching to control group but training non-brainstorming. Teaching under the brainstorming strategy showed progress in their essay writing skills in terms of content and organization, mechanics of writing, language used as well as skills emerged from creative thinking abilities (fluency, flexibility, originality and elaboration) and considerable changes in strengthening the learners' cooperation to write their essays.

Training brainstorming strategy has a significant effect on the mean scores of the student's English writing skill scores. In other words, the mean scores of student's English writing skill showing significant variation between experimental and control study groups.

Using the Spearman correlation for the second hypotheses of the study indicated that the assumption based on no-correlation between the student's social living level and their general English proficiency level, is rejected. It confirms existence of a significant relationship between those variables and represents that the relationship is not accidental or chance-based.

Also, the Pearson correlation value of +0.301 (the positive sign direct relationship) between these variables, indicates a relatively average relationship. It means, the higher the social level, the higher the children general English level.

Surveying on the facts indicated by the tables and graphical figures leads concluding to brainstorming strategy effect on learners' writing skill and also the fact that learners' general English proficiency may highly affected by their social living level at least in the sample learners' participated in the present study. There is a hope that regarding at present work, learning strategy effect along with social effect both taken as two important factors instructional procedures.

The paper has some implications for language teaching and learning. The students can become better learners if they become more aware of their learning processes and then decide to act on that awareness. Teachers may increase their students' confidence in writing by familiarizing them with the brainstorming strategy. Likewise, the paper has some implications for syllabus design. Process-focused (approach) can help students to classify and to reinforce the students' creativity and self-awareness. Not only is this way of teaching useful for writing but also enhances students' sense of retention, understanding, problem-solving ability and classroom performance. Hence, it will be very useful for teaching other skills too.

Although the present study suggests that the strategy of brainstorming is beneficial to university students, there are
areas that need to be studied further. One area for further research is integrating learning strategies into classroom instruction. The teacher may provide some models for applying various strategies in different skills.

Another area for doing more research is to conduct such studies with a variety of language students, including school-aged students and students with different educational backgrounds.

Applying the brainstorming strategy is neither the only way nor the best way to improve students' writing skill. There are many methodological issues which need to be explored in order to improve the process described here. However, one of the important considerations in preventing or overcoming writing difficulties is helping EFL writers master the cognitive aspects of composing.

References