The Impact of Employing Brainstorming Strategy on Improving Writing Performance of English Major Students at Balqa Applied University in Jordan

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Abstract
The study aimed at identifying the impact of employing brainstorming strategy on improving writing performance of English Major Students at Balqa Applied University in Jordan. The sample of the study which consisted of 80 male and female university students was distributed into two groups; experimental (taught by brainstorming strategy) and control (taught traditionally). The instrument for collecting the data was writing essay. The data were analyzed by using t-test. The analysis showed that the scores of the students of the experimental group were significantly higher than the scores of the students in the control group indicating the positive impact of employing brainstorming strategy on improving writing performance of English Major Students at Balqa Applied University in Jordan.

Keywords: brainstorming strategy, writing performance, improving.

1. Introduction
Using English language proficiently, one has to master the writing skill. But it is believed that writing as a skill is one of the most challenging skills for students to master (Negari, 2011). Writing skill has considered one of the most important skill besides listening, reading, and speaking in teaching and learning English as a foreign Language (EFL). Traditionally, a great number of studies conducting on writing skill focused on this skill as a productive one rather than the process of writing itself. Therefore, teaching writing focused greatly on having writing that is free of mistakes in grammar, punctuation and vocabulary. But nowadays, this way of teaching writing is no longer acceptable. Much more attention has been given to the process of the writing itself and to the student’s problems in writing for example, his lack of ideas and generating them and vocabulary items. Researchers believe in the necessity of having new strategies that provide the students with ideas, many more vocabulary items in addition to that, ways of thinking creatively. Brainstorming strategy has been seen as a practical solution to the students’ problems in writing. Therefore, and due to the belief of importance of brainstorming strategy as an innovative teaching strategy in improving writing performance, this study aims to examine the impact of this strategy in improving the students’ writing performance.

2. Statement of the problem
As an EFL instructor at the university level, I always have students who struggle with academic writing. As a productive skill, writing requires many skills for example, brainstorming, creating, generating, and communicating ideas. At the university level, students need to write more complex texts, and they need to know and use more cognitive skills. “Writing is both cognitive and emotional activities, so it has a useful effect on all phases of writing process” (McLeod, 1987) and therefore the teachers have to know more about the students’ skills and capabilities in generating meanings in addition to their ways of comprehending topics and the amount of lexical items they have through adopting innovative teaching strategies that improve the students’ writing performance. Consequently, since the traditional strategies in teaching writing are no longer effective in the field of improving the students’ writing performance and their creative thinking skill, the researcher will examine the impact of the two innovative teaching strategies (brainstorming and concept mapping) on improving the students’ writing performance and creative thinking skill.

2.1 Questions of the study
1. Are there any statistically significant differences in the means of writing performance post-test between the experimental group 1 (taught by brainstorming strategy) and the control group (taught traditionally) due to the impact of the teaching strategy?
2. Are there any statistically significant differences in the means of writing performance post-test between the experimental group 2 (taught by brainstorming strategy) and the control group (taught traditionally) due to the impact of gender variable?

3. Significance of the study
The significance of the study emerges from the importance of its variables; brainstorming and the writing skill. There were very few research studies which evaluated the usefulness of brainstorming strategies at university-level.
level of English major students. Moreover, this study is expected to enable the Jordanian universities to improve and develop outcomes of the educational process mainly through adopting new teaching strategies that improve students’ writing skill, to provide TEFL Curriculum designers with the innovative teaching writing strategies as brainstorming to be taken into account while designing TEFL curriculum. In addition to provide EFL instructors with suitable strategies to develop their students’ writing performance.

3.1 Limitations of the study
The generalization of the findings of this study will be restricted to the English major students (second year) at Al-Balqa Applied University in the second semester in the scholastic year 2013-2014, evaluating students’ writing performance will be restricted to the chosen strategies that are adopted by the researcher.

3.2 Definition of terms:
- Brainstorming strategy: defining a problem or a topic and coming up with possible solutions or related ideas which are recorded and evaluated.
- Writing performance: “it is conveying meaning using which have been selected and put together in written or print form” (Fabrin & Winch, 1996).

4. Theoretical frame & Previous studies
Brainstorming strategy is one of the most important strategies in improving and motivating creativity. Brainstorming strategy was introduced by Alex Osborn, an American advertisement company manager in 1938. Brainstorming strategy means the use of brain to the active problem solving and the brainstorming sessions aim at developing creative solutions to problems (Jarwan, 2005).

El-Sobery (2001) suggests some procedures to obtain the brainstorming:
1. Dividing the students in groups of (5-8) and monitoring them.
2. Introducing the clarifying the problem to be discussed.
3. Ensuring that every student understand the problem and the topic to be discussed.
4. Encouraging every student express his opinion about every problem.
5. Warning against pre-formed judgments of others onions.
6. Fixing the time: its beginning and end.
7. Asking the students to answer the questions following the lesson.

Previous studies
The study of Manouchehry, A., Farangi, M., Fatemi, M., & Qaviketf, F (2014) aimed to investigate the effect of two brainstorming strategies on English as foreign language (EFL) learners’ writing performance. The sample of study which consisted of 60 Iranian EFL intermediate students were divided into three groups; two experimental groups and one control group. The three groups were exposed to pretest and posttest in writing an essay. Results revealed the experimental groups’ performances (taught by brainstorming strategy) on the posttest were considerably higher than that of their performance on the pre-test and also it was higher than the performance of control group (which was taught traditionally) in the posttest indicating instruction of brainstorm strategies had a positive effect on EFL learners’ writing achievements and this strategy made them more active and more aware of writing process.

Haririan, M., & Madani (2014) aimed to investigate the effect of brainstorming strategy on EFL learners' writing performance. The sample of the study which consisted of eighty four Iranian EFL intermediate students were distributed to experimental and control groups and they were exposed to pretest and posttest in writing. Findings showed the experimental group’s performance on the post test was considerably higher than that of their performance on the pre-test indicating that brainstorming strategy had a positive effect on EFL learners’ writing achievements and it also made them more active in learning process.

Ibnian (2011) aimed at investigating the effect of using the brainstorming technique on developing first secondary grade students' essay writing skills in EFL. The sample of the study which consisted of 84 first secondary grade students was randomly assigned to four groups, two served as an experimental group and the other ones as control. The researcher used a checklist to identify the essay writing skills needed for first secondary grade students in EFL as well as a pre-post essay writing test. Results revealed the proposed technique (brainstorming), had a positive effect on developing first secondary grade students' essay writing skills in terms of content and organization, mechanics of writing, language use.

The study of Fransisca & Zainuddin (2012) aimed at investigating the effect of applying Brainstorming Technique on the students’ achievement in writing descriptive paragraph. The researcher selected 60 students who were assigned to two groups; experimental and control. The researcher used an achievement essay writing to collect data. Results showed Brainstorming Technique significantly affects the students’ achievement in writing descriptive paragraph.
Rao’s study(2007) aimed to investigate the effects of training in brainstorming strategy on learners' performance and perceptions about writing. Two complete classes of sophomores in a Chinese university received instruction in brainstorming and there was one control group. The researcher applied an attitudinal survey. Results indicated that the students felt positive about the brainstorming strategy and they also revealed that EFL teachers in universities or colleges 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.

Addressing the previous studies regarding brainstorming it is clear that this strategy affects positively the students’ writing skill as well as the superiority of these this strategy over the traditional strategy. Many studies asserted the significance of using brainstorming. The previous studies and others enrich the researcher’s scientific knowledge concerning the subject of the current study and they helped her in preparing and developing the study’s instruments. Moreover, the previous studies’ results helped the researcher to develop the problem of the current study.

In light of the lack of studies that addressed the impact of brainstorming strategy on the university’s students’ writing performance (according to the researcher knowledge), in addition to the variables which are addressed together in a way that was not addressed before, the researcher decided to conduct this study.

6. Methodology
The study adopts a quasi-experimental design comprising three groups made up of two experimental groups and one control. The experimental is taught by brainstorming strategy, while the other is taught traditionally.

6.1 Population & sample of the study
The population of the study, which represents all of students enrolled in English major at Balqa Applied University, consists of 129 students. 80 male and female university students participated in the study. They are studying English. They are randomly assigned to control and experimental groups.

<table>
<thead>
<tr>
<th>Table (1) Distribution of the sample of the study</th>
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<tbody>
<tr>
<td>group</td>
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<tr>
<td>Experimental</td>
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<td>Control</td>
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<td>Total</td>
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Instruments of the study
A pre - post writing performance tests will be prepared by the researcher to examine the impact of using brainstorming and concept mapping strategies on improving the students’ writing performance.

To guarantee the validity of the writing performance (prepared by the researcher), a number of TEFL specialists in Jordanian universities will assess the test. To check their reliability, the researcher will conduct a pilot study and modify the test accordingly.

6.2 Variables of the study
First : Independent variables :
1- Teaching strategies, three levels:
   a- Brainstorming strategy
   b- Concept mapping strategy
   c- Traditional strategy
Second : Dependent variables :
1- Writing performance

6.3 Procedures
a Pre-Testing
Before the students in the two experimental groups received any instruction, all the students in these groups will be asked to write an essay about a given topic. The allotted time for the topic will be 50 minutes. The papers were collected and corrected.

b Strategies Instruction
The brainstorming strategy instructions phase started a week after the students participated in the pretest. They participated in twelve weeks, twenty- four classes, fifty-minute study sessions. The students in the experimental group received the instructions for brainstorming strategy..

aPost-Testing
A week after the instruction period of the strategy of brainstorming, all the students in experimental group and the control group again will write essays about a given topic. The papers were collected and corrected.
b Scoring
To measure the students’ writing performance, they will be asked to write essays which will be scored based on a criteria prepared by the researcher and approved by a group of EFL academic staff in Jordanian universities.

7. Results & Discussion
The study aimed to identify the impact of employing brainstorming strategy on improving writing performance of English Major Students at Balqa Applied University in Jordan.

To answer the first question: “Are there any statistically significant differences in the means of writing performance post-test between the experimental group (taught by brainstorming strategy) and the control group (taught traditionally) due to the impact of the teaching strategy, independent–sample t-test was used comparing between the two groups.

Table (2) T test comparing students’ writing performance between experimental and control groups according to their post test scores.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>sd</th>
<th>t</th>
<th>Df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>40</td>
<td>47.56</td>
<td>2.74</td>
<td>23.24</td>
<td>78</td>
<td>0.00</td>
</tr>
<tr>
<td>Control</td>
<td>40</td>
<td>35.30</td>
<td>1.88</td>
<td></td>
<td></td>
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</tbody>
</table>

It is clear from table (2) that the post test mean scores of student’s writing performance for the experimental group that was taught using brainstorming strategy was (47.56) with standard deviation (2.74) while the mean scores of the students’ writing performance for the control group taught traditionally was 35.32 with standard deviation 1.89.

Table (2) showed that the mean of the experimental group was higher than that of the control group. This difference between the post-test means scores was significant as $t$ value was 23.24 with degree of freedom (78) in favour of the experimental group indicating the experimental group’s writing performance was significantly better than the control group. The researcher attributed this result to the efficiency of employing brainstorming strategy in enhancing students’ awareness of writing process and their enthusiasm towards this skill. Additionally, this strategy meets the students needs and take their individual differences into account and therefore their performance was improved.

The result is line with studies of (Fransisca & Zainuddin, 2012; Rao’s study, 2007; Ibnian, 2011) which assured that brainstorming strategy has many positive effects as improving students’ performance.

To answer the second question: “Are there any statistically significant differences in the means of writing performance post-test between the experimental group 2 (taught by brainstorming strategy) and the control group (taught traditionally) due to the impact of gender variable? independent–sample t-test was used comparing between the two groups.

Table (3) T test comparing students’ writing performance between male and female experimental group

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>sd</th>
<th>t</th>
<th>Df</th>
<th>Sig.</th>
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<tbody>
<tr>
<td>Males</td>
<td>20</td>
<td>47.38</td>
<td>2.96</td>
<td>-0.41</td>
<td>38</td>
<td>0.67</td>
</tr>
<tr>
<td>Females</td>
<td>20</td>
<td>47.76</td>
<td>2.56</td>
<td></td>
<td></td>
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</tbody>
</table>

It is clear from table (3) that the post test mean scores of student’s writing performance for the females was (47.76) with standard deviation (2.56) while the mean scores of the males’ writing performance was 47.38 with standard deviation 2.96.

Table (3) showed that the mean of the females was a little bit higher than that of the males. This difference between the post-test means scores was not significant as $t$ value was -0.41 with degree of freedom (38). Therefore, males and females were equal in their writing performance. The researcher attributed this result to the truth that students; male and female were interested to follow the new strategy (Brainstorming) and the students were equally enjoying and interested to follow teaching learning writing. The result is line with studies of (Manouchehry, A., Farangi, M., Fatemi, M., & Qaviketf, F, 2014; Haririan, Maghsoudi & Madani, 2014) which assured that brainstorming strategy has many positive effects as improving students’ performance.

8. Recommendations
1. Encouraging English instructors to employ brainstorming strategy in teaching writing skill.
2. Conducting training courses for the university instructors in general and English ones in particular in using Brainstorming strategy.

References
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