Abstract
Writing is one of the most important and challenging skills in English Language that learners often find difficult to master. Brainstorming is a strategy that is considered effective in facilitating learners with their writing tasks. The present action research focused upon the impact of two brainstorming techniques - diagramming and scratch an outline on the writing skills of undergraduate business students who used English as L3. This study investigated the level of impact it had on English academic writing. A need analysis was conducted and it was revealed that other than the grammar, mechanics and syntax problems, the students also struggled to generate, connect and organize ideas. The researcher used two brainstorming techniques; diagramming and scratch an outline to overcome the hurdles of generating ideas and idea organization faced by the students. It was thus concluded that the business students who were otherwise weak in the English language were also able to improve their writing skills by using brainstorming strategies.

Keywords: Brainstorming, Business school, Diagramming, Scratch an outline, Undergraduate business students
Introduction

Pakistan is a multilingual society where English has not only become the first international language but it also enjoys the highest symbol of prestige in all domains of power since its independence in 1947 (Rahman, 2002). English is further used as the international language for business, education, disquisition, and scholarship paving way for English language as a medium of instructions from grade 6 under the government of Pakistan (Shamin, 2008). According to Warsi (2004), although the students study English for about 6-8 years, the lack of linguistic ability in terms of listening, speaking, reading and writing are noticeable among students in Pakistan. In fact, students are not provided a proper platform with the much needed communicative competence in classrooms. Thus, teaching and learning at tertiary level focuses more on writing (Hyland, 2011).

Writing is considered as the most important and primary tool in language learning. It is one of the areas amongst the four skills (reading, writing, speaking, and listening) that learners often find difficult to handle. Writing is also a neglected field which creates a ‘writer’s block’ for learners. Recently, practitioners and teachers have focused their attention towards this skill where researchers have devoted a great deal of work searching for ways to improve students’ writing and providing practical ways to handle writing tasks. Some of the findings and recommendations of researchers clearly suggested pre-writing strategies which focus to help learners break away from the writing block that hinders in generating ideas at the beginning of a writing task. One of the strategies is brainstorming, a technique which is believed to facilitate students’ writing activities. The main purpose of brainstorming is to generate a list of ideas that can be used as clues to guide students in accomplishing their writing tasks. In fact, the first step in the writing process is to choose a topic and collect information about it, often called pre-writing. After the topic is narrowed down, the next pre-writing step is to collect information and develop ideas through outside sources, such as newspaper, magazines, library books, or the internet (Oshima, Hougue 2006).

Moreover, Al-khatib (2012) believed that brainstorming is a strategy that encourages students to generate the highest number of ideas that are varied and creative in a spontaneous and free open climate that is not critical and does not limit the freedom of launching ideas. He further stated that the main idea of brainstorming is preparing students to participate in the sessions enhancing their communication skills in the form of transaction among all students helping them to foster thinking and decision making skills that help them to generate more ideas.

Even though there are numerous researches from Pakistan that discuss writing strategies, yet, a study specifically focusing upon the brainstorming techniques of diagramming and scratch an outline were not found by the researcher. Considering the two types of brainstorming, the present study aimed at exploring and comparing the effectiveness of diagramming and scratching an outline strategy on the writing performance of a group of first year Academic students of a private University in Karachi, Pakistan. Thus the following research question was formulated:

To what extend is there a significant difference between the writing performance of students who use outlining strategy as a sequel of diagramming and scratch an outline after being trained in these brainstorming skills?
Literature Review

Pakistan is a multilingual country with a high impact of English language learning among students. The challenges faced by the students are manifolds. The students lack proficiency in writing including precision, cohesion, coherence and stylistics even after thirteen years of English education as it has been observed by the Pakistan University teachers. According to Mansoor (2003), hurdles in English language teaching include providing English teachers, updated knowledge of the latest pedagogies for English teaching and the access to English text books. These hurdles need to be overcome for obtaining the desired results. The academic literacy that students develop at the tertiary level paves way for their ability to write at their future work, Hyland (2011). Hence, paragraph writing is an essential skill in order to observe the writing capabilities of students at university level. Kaplan (1996) claims that paragraph structure of every language is distinct and different in nature and understanding this unique structure is important to learn and analyze that language.

Writing becomes a challenging task for students when they adapt to criteria such as grammatical rules, sentence structures, and choice of words. Commonly, students find it difficult to develop ideas for their writing. They spend time thinking until the last minute before they start writing and thus do not give themselves an opportunity to be creative thinkers or let their ideas flow.

Brainstorming is a technique that was developed by Osborn in 1953 and is used for encouraging students to deal with the problem of writing by generating ideas (Ibnian, 2010). Osborn believed that through brainstorming strategies, students output could be doubled and in this way, students’ can have a pull of information to extract from. Thus, brainstorming is one of the most useful and well-known tools for effective thinking. It motivates students to generate ideas and helps them through the task of writing, making the classrooms more interactive. Hyde (2005) restates Osborn’s definition of brainstorming and interprets it as a solution for a particular problem through pouring list of ideas suggested by a group of learners. Brainstorming should preferably be followed by certain rule; such as, it should not be judged but the larger the list of ideas, the better the quality of writing would be. Moreover, in brainstorming, students are encouraged to note down each other’s ideas in order to let the writing ideas emerge.

According to Harmer 2004, brainstorming is a technique that helps students to think freely about the topic and instigate their minds for ideas. The learners do not worry about the language and usefulness of ideas which they generate, in fact, the main task is to think, analyze, arrange, eliminate or add ideas as they make use of their minds. Brown (2007), states that in brainstorming there is no judgment of ideas; this helps students to recognize ideas as they have not been aware of before embarking on brainstorming.

The writing process begins with the five techniques which helps learners to think and develop a topic and get words on paper: (1) Free writing (2) Questioning (3) Making a list (4) Diagramming/mind-mapping/clustering (5) Preparing a scratch outline. These techniques could be used to present associations among concepts; thoughts and information which help reveal prior knowledge by encouraging creativity, retention and effective learning.
There are a number of studies which have attempted to probe the effects of brainstorming strategy on the writing performance of learners. A few recent studies are reviewed to determine the effects of writing strategies through the brainstorming techniques. Veli Batdi (2015) investigated the effects of mind mapping techniques on learners’ academic achievements, attitudes and retention scores through the meta-analysis method. The findings of this study indicated that using mind mapping had a positive effect on academic achievement, attitude and retention.

Damayanti (2013/14) aimed to improve students’ skill in writing narrative paragraph by using Journalistic questions (who, what, where, when, why and how). The action research was conducted in two cycles on the second semester students. The technique was implemented to increase their writing skill. The results of this study showed that journalistic questions as pre-writing could develop students’ writing by helping them generate ideas to organize a paragraph and assisting them to communicate their ideas and increasing their motivation and self-confidence in writing activity.

Similarly, Sabet and Ghorbanpur (2014) conducted a study on the Iranian EFL learners to investigate the impact of two brainstorming techniques (Individual and group) on the writing performance of a group of 30 students (both males and females) who participated in a five-week writing class during which a pre and post-test were administered. The results of paired-samples t-test showed an improvement in students’ writing after the classes. The findings showed that brainstorming strategy is useful in improving EFL learners’ writing skill.

Getting started with writing is a natural phenomenon that creates a mental block when students’ sit down before a blank sheet of paper. They may have trouble coming up with relevant details to support their topic. The pre-writing techniques help learners’ to think about and develop ideas and get words on paper. Diagramming, also known as clustering or mapping is one of the strategy that can be used to generate material for a paper. This kind of method is helpful for those learners who like to think in a visual way. In diagramming, learners use lines, boxes, arrows, and circles to show relationships among ideas and details that occur to them. This technique begins with a few words or a word related to the subject in the center of a blank sheet of paper. Then as the ideas and details flow, these are added in boxes or circles around the subject and a line is drawn to connect them to each other and to the subject. Minor details and ideas are put into small boxes or circles and the connecting lines show how they relate to each other. Generally, there is no fixed rule of diagramming. It is a way to think on paper about various ideas and details that relate to one another. In addition to helping generate material, diagramming can provide an early sense of how ideas and details relate to one another.

A scratch outline is another strategy amongst the other pre-writing techniques. It is a sequel to free-writing, questioning, list-making, or diagramming. Writing through a scratch outline is a good way to see if learners require doing more pre-writing. If students cannot come up with a solid outline, then they need to do more pre-writing to clarify their main point or its several kinds of support. In a scratch outline, learners often think carefully, about the point they are making, the supporting items for that point, and the order in which they arrange those items. Thus, the scratch outline is a plan or blueprint to help students achieve a unified, supported, well-organized paragraph (Langan, 2000 p. 29-30).
Globally, writing is one of the most important skills that should be learnt. In recent years, writing has become a problematic area for students in Pakistani universities. Teaching academic skills is particularly new to the freshmen at business institutes of Karachi. With a diversified class, it is a challenging task to remove the writer’s block in order to write using different strategies focusing mainly on brainstorming skills which includes using an outline and diagramming. This technique allows students to generate ideas before they begin writing a paragraph. In conclusion, brainstorming is a useful strategy that helps learners to develop ideas connected to their topic. It provides a quick solution to gain information related to the main theme of the paragraph.

Methodology

Research Design

Action research was used in order to measure students’ progress and analyze the effectiveness of pedagogical practices using outline as a strategy; a sequel of diagramming and listing an outline after students were trained in these brainstorming skills. According to Harmer (2007), action research is a series of procedures adapted by the teachers wishing to bring about a change in teaching. Then these procedures are evaluated in terms of success they bring to the students in either understanding concepts or learning a skill which otherwise the students find difficult. The trouble area is normally identified by the practitioner who decides to try out a new strategy through collecting data and analyzing it, enabling the educators to reach a decision about what they and their students do in class and implement changes according to their findings. In short, action research provides a platform for practitioners to reflect on their own practices. This action research was initiated to investigate the gap learners underwent while writing a paragraph. The researcher wanted to find out what made students reluctant to write and what motivated them to remove the writer’s block in their writing assignments. Moreover, the researcher felt the need to gauge the interest of the students through generating certain topics that would engage learners bringing the effectiveness of activity type through group, pair-work and individual work.

Sample collection and size:

The population of this research consisted of freshmen of a business Institute in Karachi, Pakistan. The sample size comprised of 7 male undergraduates who were repeating the Academic English course for either improvement or to pass the subject. These students came from a wide range of educational backgrounds and experiences. The most challenging consideration was that English for most of the students was their third language and had not been encouraged at home, school, among friends or by relatives. Their English proficiency level was basic and these students were significantly weak in reading and writing. Moreover, reading to learn was an abstract concept, while they highly valued writing skills.
Techniques used for data collection:

The data was collected through: (a) Needs analysis (b) Assessment method (c) Instructor

The course: COM 107

Com 107 is a well-defined course at the Institute and is generally known as a gateway to other business courses. It is pre-dominantly a challenging course for those who have not been successful in their first attempt. The concept of intensive reading, critical thinking, analyzing and writing are problematic for these students. It is usual for these students to take the course more than once before they successfully satisfy the requirements.

The summer intensive program consisted of 20 lectures (including one mid-term and a final exam). Each lecture lasted 2:15 minutes of 18 weeks session. The course was offered twice a week during the weekday classes. The course outline was followed in the allotted time frame. The mode of teaching was through the multi-media, handouts, white board and a compiled resource book.

Needs Analysis/Assessment method

• The research action plan was carried out on the three weeks of the total summer program to focus on the diagramming and scratching an outline technique through various topics. The instructor asked students to write about themselves. They were given 25-30 minutes to write non-stop but during the facilitation round, students struggled to write more than a sentence. One student wrote about ten lines but was on the movie he had seen rather than about himself. A quick feedback showed that the students had difficulty in putting the words on paper. They knew what they wanted to write but were blank to think of how to write. Besides, thinking of what words to use about themselves, they also faced hindrance in placing the sentence in correct order and writing the accurate sentence structure. Thus, the following problems enabled the researcher to put forward an action plan that would help overcome the stated problems.

• Generating Ideas: The students started off with the sentence “My name is……” with the exception of 1 student who started off with, “One must keep in mind,”. Therefore, novelty in writing through generating ideas was missing in their writing.

• Connecting Ideas (Organizing Ideas): The students had no idea of how to structure a paragraph. How same type of ideas are bracketed and put together in form of a paragraph. Each sentence seemed to be a new topic sentence.

• Repetitive Ideas: All students repeated the same ideas, mainly because 1) they ran out of ideas and 2) because they did not know what the standard length of an academic paragraph should be.
**Putting a Plan in Action**

The instructor had three weeks to teach paragraph writing. Table 1 shows how three weeks were used in order to obtain a more cohesive written expression. 

*Table 1. The three week plan in action*

<table>
<thead>
<tr>
<th>Week</th>
<th>Activity</th>
</tr>
</thead>
</table>
| Week 1 2:15 hours of class | • Explanation of the Diagramming Technique using the topic ‘Fear’  
  • Students wrote a paragraph using this technique  
  • Checked in the class and feedback was given  
  • Corrections were made and resubmitted to the instructor |
| Week 2 2:15 hours of class | • Explanation of Scratch an outline technique using a sample on the topic ‘Movie-going’  
  • Students wrote a paragraph using this technique  
  • Checked in the class and feedback was given  
  • Corrections were made and resubmitted to the instructor |
| Week 3 2:15 hours of class | • Students were given a challenging topic ‘Registering for University Classes - a frustrating experience for new students’  
  • They were asked to use any one of the techniques taught in the class in order to write a paragraph  
  • This was a graded assignment of 10 marks |

**Week 1**

The second week began with the topic ‘Fear’. The students were introduced to the topic sentence, controlling idea, identifying supporting details along with collocations and using the present perfect. Lastly, they were asked to write a paragraph using the diagramming technique.

As a writing task, they were asked to brainstorm about a common fear. The instructions were to think about fears they had or other people had. They had to plan their paragraph by looking back at their diagramming technique and writing a topic sentence. Students were also instructed to organize their paragraph and describe a common fear. They had to pay attention to their paragraph structure, especially the topic sentence and supporting details.

Students’ paragraph was checked in the class and the feedback helped the students identify their mistakes and a room for further assistance was open to students within and outside the class. The students were instructed to submit the final draft.

**Week 2**

During the third week, a new topic on ‘movie-going’ was introduced in the class. Since preparing a scratch outline is a good way to see if more pre-writing is required, students can
do more of it to clarify their main points or its several kinds of support. A student sample on scratch an outline on movie going was shown to the students focusing on how carefully the points were made on the topic, the supporting items for that point, and the order in which they were arranged. The students were guided to identify the blueprint of the student sample that would help achieve a unified, supported, well-organized paragraph. The students were further guided in identifying the topic sentence, controlling idea, supporting details and a concluding sentence from the sample. Their work was checked in the class and feedback was given individually. The students had to submit their final draft.

Week 3

The fourth week was challenging for the students. They were given a 10 marked assignment on ‘Registering for University Classes - a frustrating experience for new students’. The students had to write a paragraph using the topic and the controlling idea and building upon this sentence, they were also provided with a few transitional words like ‘therefore, however, firstly, lastly, although’ to create a well-knitted paragraph. Students were given 45 minutes to work on the brainstorming technique- scratch an outline before writing a 180 word paragraph in an hour’s time. Before giving an overall feedback on the marked assignment, students evaluated their own work keeping the marking grid as a guideline. It was later crossed checked by their peers and eventually the instructor finalized the marks.

Instructor’s reflection

The reflections were taken by the instructor to improvise on learning ability of the students. The instructor used brainstorming strategies during the three weeks summer program and reflected upon each class with a positive and a negative comment and further implemented another strategy to reflect its outcome on the students.

Results

By the end of the three week course, the students had built up confidence in using the brainstorming strategies for generating ideas for various topics in academic English. The progress in diagramming and scratch an outline was almost tangible. Paragraphs written by students on ‘Fear’, ‘Movie-going’ and ‘Registering for University Classes - a frustrating experience for new students’ demonstrated that these students knew the importance and usage of brainstorming strategies and were confident in using them. During the fourth week when students attempted the marked assignment, it was observed they were dedicated in applying the brainstorming strategies keeping the check-list to avoid unnecessary errors. Moreover, it was also observed that each student participated in order to hone their own skills. They gave new vocabulary words a try and did not hesitate for clarification.

This constant engagement of brainstorming technique in order to generate ideas for paragraph writing proved beneficial for these learners. Moreover, the students had the clarity of connecting ideas to paragraph writing and they were careful in avoiding the repetitive words in a sentence and generally in a paragraph. The following grid shows the improvement students experienced through the brainstorming techniques. The improvement shown by the students is depicted in table 2.
Table 2. Improvement in the writing skills of students through brainstorming

<table>
<thead>
<tr>
<th></th>
<th>Highly Improved</th>
<th>Improved</th>
<th>Not Improved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generating Ideas</td>
<td>5</td>
<td>2</td>
<td>Nil</td>
</tr>
<tr>
<td>Connecting Ideas</td>
<td>5</td>
<td>2</td>
<td>Nil</td>
</tr>
<tr>
<td>Repetitive Ideas</td>
<td>5</td>
<td>2</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Table 2 shows that all seven students showed improvement in all three areas of paragraph writing whereas five out of seven students achieved marked improvement. The students who were undertaking the course for the second time were all boys from the rural areas of the Province. When the students were informed about the instructor’s challenge of teaching a small classroom, they were comfortable to voice their efforts in learning from the instructor and were glad that they would be given an individual attention which was not possible in a large class of 40. In fact, these students informed that they were all back benchers and never participated in their previous class. Consequently, their instructors did not notice their existence in class and the students themselves had fear to participate amongst the other students. The students also felt the course was aligned with their typical style of learning, and they enjoyed it more than a traditional, more lecture based course. Therefore, it can be concluded that these brainstorming techniques are more effective in smaller classes where students are provided with continuous feedback and the instructor is involved in continuous reflection and improvement.

The instructor reflected that after the first week, students were introduced to the concept of diagramming as they participated and added ideas to the given topic. This exercise also helped to build confidence. During the second week, another topic was introduced for paragraph writing through brainstorming and the learners considered scratch an outline a better option where they had to think and re-write their ideas keeping the paragraph structure in mind. By the third week, the students had to select one option of either diagramming or scratch an outline to write their marked assignment. The instructor reflected from the three weeks that the students found scratch an outline more aligned with their learning than diagramming as the connectivity between ideas is easier to achieve in an outline than in a diagramming method.

**Discussion**

Diagramming and scratch an outline provides a firm platform for students to write academically and professionally, helping them to analyze their own creativity. It also helps in multiple thinking which helps in breaking up old ideas, making new connections, enlarging the limits of knowledge and the onset of wonderful ideas (Fasko, 2001). This further adds credibility in other business courses where critical thinking and writing skills plays an important role. After going through various techniques to reinforce writing skills, it was decided by the instructor to introduce diagramming and scratch an outline as brainstorming.
techniques to students in order to overcome their writer’s block and for the students to compose a more focused well knitted piece of writing.

By the end of 3 week session, the students’ progress was encouraging. They were able to use diagramming technique for their mid-term exam as well as scratch an outline for their final one. According to Gardner, Richard, Angle and Ann, (1999), brainstorming techniques are designed to help and generate new and different solutions to using new creative skills. Both the brainstorming strategies helped students to connect their ideas in a well-knitted paragraph and the importance to ideas were generated through these techniques.

During the sessions, it was observed that the students had built-up courage to speak on a given topic through warm-up activities such as using predictions through pictures, eliciting ideas through the questioning technique, general discussion and through encouraging students to use white-board to generate their ideas. This also helped them to avoid using repetitive ideas in their initial stage of brainstorming technique. The strategy not only helps in producing a list of various ideas but can be used as clues which give students a chance to express their ideas and share those ideas with others and generate new ideas (Al-blwi, 2006).

Students reflected that it was the first Academic course that simulated their skills through using prior knowledge on various topics used for the sessions. Consequently, they felt the teaching methodology was in line with their learning needs than following a typical and traditional method of giving lectures through slides. According to Al-Khatib (2012), brainstorming enhances students’ communication skills in the form of transaction among all the students and helps them to foster thinking and decision making in order to generate more ideas.

While the students were motivated to articulate thoughts and vocabulary in a similar manner for the paragraph writing, the instructor worked hard to make adjustments to the teaching methodology in order to adapt to the learners’ need. The reflective document after each class would help the instructor analyze the best and the worst strategy used and to make immediate alteration in the class. There was always a back-up plan if one strategy did not work for a session. The two strategies that were picked for the research worked well keeping the objectives to cover in a short duration of time. The weak students had the opportunity to strengthen their own knowledge reinforcing the concepts that were vague to them. It also gave an opportunity to the learners to work with their peers in a shortened time, therefore exposing them to more opinions and a variety of styles and strategies to improve their own learning. Wilson and Glazier (2003) are of the view that writing strategy which helps to focus on levels of structures about words connecting to forms phrases, clauses and sentences are valuable in organizing a coherent paragraph. These techniques further help in building confidence to generate ideas through exploring students’ own creativity.

Overall, the techniques of diagramming and scratch an outline helped students to write a paragraph, yet they struggled to construct a sentence structure, and find new vocabulary words. They tried to use new words from the text given to them and avoid using repetitive ideas in their paragraph writing. The exercises gave them a chance to build confidence and they could easily connect ideas, identify and write a topic sentence, controlling idea, supporting details and a concluding sentence. Subsequently, the learners’ elaborated on a
given topic through brainstorming techniques, they could organize and connect ideas to write a well-knitted paragraph.

**Conclusion**

The teaching approach was well-perceived by the learners at the Business Institute in Karachi keeping in mind the aims and the objectives of the course and the level of the learners, however, these strategies can also be applicable to learners around the globe in different contexts. The topics used could easily be modified and appropriately fit for different learning environments.

Brainstorming strategy can be used in a short-term for intensive courses and is not only recommended but is highly valuable for the students who take academic English as their course. Prior information and preparation can help achieve the outcome of the course enabling the strengths and weaknesses of learners’ skills. Moreover, faculty and course time are all critical to an effective approach in the classroom if the future researchers use the result of the current research as information and reference to the same research.
References


