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## BRAINSTORMING APPROACH AND MIND MAPPING IN WRITING ACTIVITY

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### Abstract

*Brainstorming approach is the key to working through a problem, breaking down ideas and finding the best way to solve an issue. This approach is by far the most essential step to solving any problem and it is even more effective when done by using mind maps. Mind maps have long been used as a teaching tool. Evidently, mind maps are used to generate, visualize, structure and classify ideas. They have also been used to study and organize information, solving problems, making decisions and writing. Basically, writing is a way of expressing thoughts, and good writing comes from good thinking and preparation (Harmer, 2001). In order for students to write something, it seems workable to offer them the opportunities to think about the topic in question. Through brainstorming activities, students can be guided to overcome some problems that they face in writing tasks. This paper discusses the value of brainstorming and mind mapping as approaches that can help students in their writing process. The paper also explores the use of technology in facilitating brainstorming and mind mapping activities.*

**Keywords:** Brainstorming, mind mapping, writing, approach, activity.

### INTRODUCTION

Writing is one of the language skills that will never be left in education. Writing skills are complex and sometimes difficult to teach, requiring mastery not only of grammatical and rhetorical device but also of conceptual and judgmental elements (Heaton, 1988). Flower and Hayes (1980) indicated that writing is a complex and creative process that is an essential skill for effective communication; it comprises the refining ideas and their expression, coupled with presentation and editing. Writers move back and forth between these aspects of composing as their document evolves. Omaggio Hadley (1993) stated that 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. Thus, it is best viewed as a continuum of activities that range from the more mechanical or formal aspects of writing down on the end to the more complex act of composing on the other end. Writing in second language (SL) is regarded as equally complex, if not more as it poses further challenges to learners especially children and inexperienced writers, due to competing attention demands such as using the SL writing system, deciding on content knowledge relevant to a writing topic, selecting proper vocabulary and grammar to form sentences, organizing sentences into a paragraph and paragraphs into an essay with appropriate organizational patterns, considering the writing purpose and intended readers, etc. These demands create an extra burden that overcomes the limited capacity of short-term memory

and causes the differences between expert and inexpert writers' writing process and written products (Flower & Hayes, 1981). According to Richards (2002), one of the most difficult skills for L2 learners to master is certainly writing.

Writing is an elementary skill that needs to be mastered by all students in the Malaysian English Language curriculum (Ministry of Education Malaysia, 2000). Despite learning English for many years, many of these students remain weak in the English language, especially in their writing skills. Chitravelu, Sithamparam and Teh (2005) pointed out that writing is the skill most Malaysian students are less proficient in and they do not know how to accomplish the written tasks in satisfactory ways. In the classroom, teachers play an important part of guiding their students to produce more quality ideas that could be used later in their writing. There are several ways the teachers can use to assure that these students will come up with ideas that are logical and acceptable way to be used by others. Thus, brainstorming method as one of the ways allows every participant to speak openly and honestly about whatever idea that comes into their mind. However, the process needs the students just to write down as many ideas as possible first without worrying whether it will be accepted by other members of the brainstorming group. Then, all judgement is supposed to be reserved until the idea is thoroughly discussed. This brainstorming method also need to use pen and the ideas must be put on paper, then each one is discussed and the pros and cons will be considered.

### **Brainstorming Approach**

Brainstorming is the process of coming up with ideas. We can brainstorm in order to decide on a topic, to explore approaches to our paper, or to deepen our understanding of a certain subject. According to Harmer (2001), the sort of teaching we propose for our students as teachers requires that we encourage active learning and that we become knowledgeable about the ways in which our students hear, understand, interpret and integrate ideas. One way of helping students to overcome some problems that they face in writing tasks is the use of brainstorming activities. According to Scane, Guy and Wenstrom (1991), brainstorming activities motivate students who do not usually want to write by creating a nonthreatening atmosphere. Thus, in an ESL environment where students typically struggle with writing tasks, a nonthreatening atmosphere might assist in the development of their writing skills.

This brainstorming approach was disseminated by Osborn, 1953 in his book. He demanded that learners can enhance their creative output by the help of brainstorming. This approach is use to guide people to new ways of thinking and break from the common way of reasoning. It is an automatic act of note taking of ideas in preparation for different steps of writing. MacDowell (1999) defined brainstorming as "the act of defining a problem or ideas and coming up with anything related to the topic. No matter how remote a suggestion may sound. All of these ideas are recorded and evaluated only after the brainstorming is completed.

Finding a topic or main argument for a paper is a difficult task for many writers, but one of the best ways to help is to brainstorm. It seems reasonable to offer the students with opportunities to think about the topic in question before they start to write something. This brainstorming stage can assist students to activate their prior knowledge and skills to apply to the writing task, and find out what information they already have and what they still need (Rao, 2007). In addition, in each classroom, it is valuable to teach students different brainstorming techniques in order to activate their thinking and create ideas which are essential to second language acquisition (Harmer, 2001). Nevertheless, the ideas obtained at this stage may or may not be directly related to the topic, so brainstorming is beneficial in giving students the opportunity to see their ideas down on paper before they actually begin to write (Harmer, 2001). Buzan (1993) mentioned that one of the biggest advantages of brainstorming is that it requires virtually no preparation and it can be used with classes at any level and under any situation.

Tomlinson (1998) stated that brainstorming is a prewriting activity in which a writer taking notes everything he can think of on as a set of subject without deciding the thoughts. Then, the writer looks at the results for patterns or other helpful data about the subject. One of the important points about brainstorming is that there should be no pressure on the writer. As a matter of fact, the issue of teaching writing ESL by starting with brainstorming and its relation to learners' motivation has become increasingly important to instructors as well as to learners. Though, having been ESL teachers of English for a long time, we have had the chance to consider that many ESL

teachers apply various methods for brainstorming without evaluating how they impact learners writing motivation.

Numerous studies were conducted on these aspects of studies. Rao (2007) conducted a study on the effects of brainstorming strategy instruction on learners' writing performance and perception. One hundred eighty sophomore students of Normal University in Chinese in the foreign languages college at Jiangxi were subjects of this study. They were divided into three groups. Two of them were experimental groups and another one as a control group. Instruments of the study were pre and post-test and attitudinal survey. The study's findings shed light on the significant effects of explicit instruction of brainstorming strategy on writing performance and the questionnaires indicated the positive attitudes of learners toward brainstorming strategy. Another research done by Maghsoudi and Haririan (2013) carried out the study on the impact of brainstorming strategies on Iranian EFL learners writing skill regarding their social class students. Findings of the study provided the evidence that the instruction of brainstorming strategy had a positive effect on EFL learners writing improvement and also make them more active. Manouchehry, Farhangi, Fatemi, and Qaviketf (2014) piloted a study on the effect of two brainstorming strategies on the improvement of Iranian intermediate EFL learners writing skill. Results of the study revealed that brainstorming strategies instruction had positive effects on EFL learners writing achievement. It also made them responsible for their better learning.

Today, brainstorming is still sustained in English texts as a prewriting technique and is grouped with clustering, looping, and prewriting (Ramage, 2000). Though it fell out of trend, brainstorming is once again emerging as a technique for group idea generation and business leaders are utilizing the Internet as an arena for group meetings. Many internet sites are available for research, though not all of the information is reliable.

## **THE MIND MAPPING TECHNIQUE**

### **Mind Mapping**

Mind maps go under variety of names. They are also known as concept maps, semantic mapping, knowledge mapping, think links, graphic organizers or cognitive maps (Svantesson, 1989). According to Buzan (1993), mind maps attempt, visually and graphically, to portray a relationship of ideas or concepts. Tony Buzan's mind mapping technique is one of effective visual note-taking strategy. Buzan also suggests a spatial, non-linear approach to note-taking since it taps the mind's natural ability to work in an integrated, interlinked, complex manner. Mind maps feature tree-like branches of information that display key concepts as well as relationships. However, mind maps are more global in the approach compared to linear concept maps. Students quickly create a "big picture" of their topic. Mind maps are useful for several objectives. They assist in organizing and remembering written verbal information, preparing to write essays questions, planning and evaluating projects and events, or making a visual record of a meeting in progress. Both students and teachers will find this strategy is useful. Buzan stresses the importance of colour and graphic as well as a form to make the information memorable. Buzan, the inventor of mind maps claimed that mind mapping is vastly superior to traditional note-taking methods. According to McGriff (2007), mind-mapping is seen as a powerful tool to help students overcome problems with the organization of their ideas and thoughts. In addition, it was also found that relating images to concepts is a creative task which requires thinking instead of memorizing.

### **Mind Mapping as a Technique for Planning of Writing**

Planning writing before the transcription process begins would appear to be a supportive strategy and research shows that expert writers differ from novices in the amount of time spent in planning. Scardamalia and Bereiter (1985) found that children under nine years of age made list like-plans, which were transferred into slightly fuller written texts with a little revision or reorganization.

Mind mapping comprises writing down a central idea and coming out with new and related ideas from the centre. The mind mapping strategy can be used to explore a wide range of topics in writing and also used in every kind of writing such as: narrative, descriptive, recount, persuasive and argumentative (Riswanto & Prandika, 2012). A recent study demonstrates that students who could express their learning with visual skills had a 40% higher retention rate than that of just verbal learners (Adam & Mowers, 2007). This displays the potential importance of using this technique in

writing classes, and it seems it is a useful strategy to support students during writing tasks. Even with the research that has been presented about the advantages of using the mind mapping technique, mind mapping has been considered by some writers not to be a useful skill. For example, sometimes it could be time consuming for the teacher to present and for the student to grasp, especially if the student is inexperienced, or uncreative (Buzan, 1993). This may be especially true when using this strategy in an exam situation if students are not familiar with the concept of the mind mapping strategy in such conditions. Therefore, it could be said that teachers need to give students plenty of opportunities to practice this strategy before the exam so they can use it in exams wisely and effectively. A study done by Padang and Gurning (2014) on improving students' achievement in constructing descriptive written text through mind mapping strategy which was conducted among 30 students of class VIII SMP Swasta HKBP Pardamean showed that Mind Mapping Strategy could increase the students' achievement in writing and also help the teacher in their lessons of teaching writing. This improvement not only resulted in the increment of the mean of the students' score, but also greatly enhancing the students' enthusiasm, motivation and expression in writing. Warsidi, Arafah and Makka (2014) stated that the students' writing ability can be improved through the collaboration of mind mapping and organizational pattern. The improving items in writing were contents, organizations, vocabularies and language use. Hence, the use of collaboration of mind mapping and organizational pattern builds the students' positive attitudes because it can motivate and help them to write an essay.

#### **Benefits of Mind Mapping in Writing**

There are a lot of advantages of using mind map technique in writing. Zaid (1995) argued that mind mapping is an outline for the writing of a short essay on the topic, or that a segment of the map is used in the writing of a paragraph. Moreover, Mercer (2002) argued that mind mapping helps students to see the relationship among ideas and connect known information with new information. He added that mind mapping has proven useful before, during and after writing. He also mentioned that mind mapping can help writers stick to the topic by having their ideas in front of them as they are writing. It also helps the writer to write in the correct sequential order. Therefore, mind mapping is recognized as a tool that can guide students through the four stages of the writing process that are prewriting, drafting, editing and revising. Unlike most writing processes, mind mapping supports and even encourages nonlinear thinking. It allows the map maker to move around, to follow their interests. But it does all of this within an organized framework. In one of the studies conducted by Yunus (2016), most of the students (92%) generally have positive responses to the use of mind mapping strategy in their MUET writing and they stated that mind mapping does help them in writing essay. To sum up, mind mapping gives many benefits to their writing like it helps them to organize ideas before they move on writing, create more ideas in their writing as they can give many examples based on it, allow them to list their points and they can easily elaborate their points and they can develop their ideas more easily. Therefore, mind mapping technique would be an effective tool to help students planning and organizing their writing by encouraging students to gain a comprehensive or in-depth understanding of the writing topics.

Keles (2012) also claimed that mind mapping can assist learning by providing an opportunity for visual stimuli, assessment, checking understanding, elaboration, note-taking, summarizing, illustrating sequence of events and other creative ways of instruction. Besides that, Bharambe (2012) also mentioned that mind mapping provides a useful focus for students to organize their thoughts and ideas to present information clearly and attractively.

#### **USING TECHNOLOGY TOOLS FOR BRAINSTORMING AND MIND MAPPING ACTIVITIES**

The advancement in technology has revolutionized the human life. Nowadays, application of cutting-edge technologies can be seen in every facet of life. Thus, the need for innovation and finding new strategies has always been the concern of the teachers who seek professional development, and are interested in enlightening students' skills and motivating them to work specifically for the complex subject like teaching writing skills is still difficult to master it. Because of its complexity, mind mapping is a new graphic tool is suggested in an attempt to increase the students' motivation and ability in organizing and developing the skill of writing.

Conventionally, mind maps were drawn with coloured pens and papers. Today, with presently available technology, it is possible to create mind map by using computer, which make it easy to make, review, revise and save mind maps. Furthermore, such computer technology provides us to create mind maps with more beautiful presentations. Online mind map is a productive way to engage students' interest and teach complex or multifaceted topics, from the web of characters in a novel, to the complex cultural challenges of a global economy, to the interplay of factors affecting climate change.

Recently, there are various mind mapping software and mind map application tools such as *FreeMind*, *Mindmeister*, *MindMapple*, *NovaMind*, *Edraw* and *Mind Map* that allow us to use for brainstorming, organizing and presenting ideas. Figure 1 shows a sample of diagram software which brainstorms a main topic. This map was augmented with mind mapping software that aids the mapping process. Students start a mind map by writing the main topic in a square in the middle of the paper. Then, nodes are drawn from this square. From each idea, other nodes are drawn to write the sub-ideas from which examples or details are sent on other nodes.

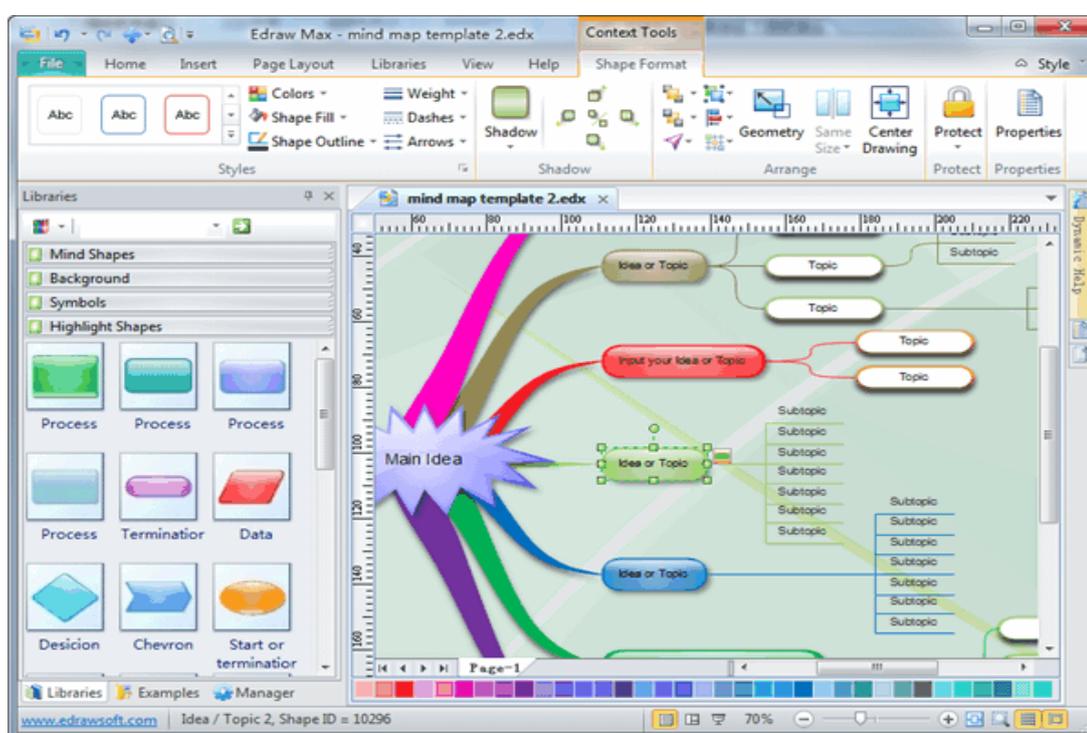


Figure 1. Example of Brainstorming diagram software by using *Edraw Mind Map*.

An important step in creating a mind map is to use colours as they help to differentiate the sub-topics or sub-ideas. Budd (2004) identified that using image, icons, tags and other visuals as video films in the case of computerized mind mapping is useful as it helps to associate ideas in a more interesting way. Dominic (2014) pointed that one of the ways to create mind map is via mind mapping software which facilitates the manipulation, colourization and restructuring of the mind map and its nodes and branches and make the process of creating mind maps faster and easier. In contrast to creating mind maps by hand, creating mind maps on paper can consume too much time, material and effort. Additionally, Al-Jarf (2009) employed software mind mapping with experimental group but not with the control group to assess its effects on students' writing achievement. The result showed that the experimental group scored significantly higher than the control group. The results from the survey afterwards reported that the mind mapping tool encouraged creative thinking and they became faster at generating and organizing ideas for writing. This study also was supported by Liu (2011) who explored the effect of different computerized mind mapping treatments (no mapping, individual mapping and cooperative mapping on the performance of pre-writing phase of students with different writing proficiencies). The results found that both

computerized mapping treatments had equally positive effects on low-level and middle-level learners compared with the no-mapping treatment. However, high-level learners performed significantly better with the individual-mapping treatment than with the other two treatments.

## CONCLUSION

This paper explored the various values of brainstorming approach and mind mapping in writing activity. As a matter of fact, the reviewed studies showed that brainstorming and mind mapping is very useful tool for that can help both teachers and students to overcome the complexity of writing and make it more enjoyable. Hence, this technique should be recommended and to be used in other language skills courses. Furthermore, the paper also highlights a transformation from traditional conventional ways of teaching to a new innovative one that involves technology in these activities. However, further research is needed to confirm the present results and have more insight into the benefits of mind mapping.

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