USING MIND MAPPING IN TEACHING THE PLOT OF A NOVEL

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Abstract: This paper discusses about using Mind Mapping in teaching the plot of a novel. This study used a one-group quasi experimental with equivalent time-samples design and was conducted on a group of Form 5 students in one of the schools in Johor Bahru district. The instruments utilized in the inquiry were tests. The results showed that Mind Mapping method did improve the students' understanding by having them focus not only on the main ideas but also on the elaborations and examples that are stated in the novel. With examples and elaborations, students would find it easier to understand the events in the novel.

Key words: *mind mapping, plot, novel*

The use of literature in ESL/EFL teaching can be traced back to over one century ago. According to Erkaya (2005), in the nineteenth century, English was taught with the help of Grammar Translation Method. Students would translate literary texts from English to their native language. When this method was replaced by methods that emphasized structures and vocabulary, literature was no longer used. Thus, neither the Direct Method nor the Audio-lingual Method utilized literature to teach English.

Literature has now found its way back into the teaching of ESL/EFL; however, it is not as the way it was used with Grammar Translation Method. Teachers have realized that literature can be used to reinforce the skills and complement language teaching. Muyskens (1983, p.413) affirms that with students at the beginning and intermediate levels, teachers can use literary texts for "language practice, reading comprehension, and possible aesthetic appreciation". In contrast, with advanced students literary texts may be utilized for the "development of knowledge of world literature, practice in reading and discussing creative work, and the introduction of literary concepts, genres, and terminologies—e g, recognition of figures of speech, levels of meaning, and other stylistic features" (Muyskens, 1983, p.413). Moreover, students can gain insight into literature by gaining entrance to a world familiar or unfamiliar to them due to the cultural aspects of stories, and taking a voyage from the literary text to their own minds to find meanings for ideas, leading to critical thinking.

Reading is an important factor in students' language development (Wells, 1986). As students become more experienced readers and writers, they develop more sophisticated abilities to construct meaning by analyzing and evaluating literature (Kelly & Farnan, 1991). Comprehending literary texts involves the ability to identify, understand, and interpret information, and read for practical purposes in order

to obtain information. In addition, students must also be able to analyze information critically and to read between the lines. Competency in English would be of enormous advantage in this case.

Responding to literature refers to the way in which one reacts to something that has been read or listened to (Cooper, 1993). This process begins before reading as one thinks about what is to be read and continues during and after reading (Martinez & Roser, 1991).

Writing is one form of responding to literature, and by giving written responses to literature students learn to construct meaning through writing. They further develop their ability to think critically (Tierney & Shanahan, 1991). It is therefore important for teachers to model different types of responding behaviors for students (Martinez & Roser, 1991). Reading and writing are mutually supportive and interactive processes. Good readers tend to be good writers, and good writers tend to do well in reading (Strickland, 1991; Teale & Sulby, 1989). Both reading and writing requires the novice reader to focus and think about the print and the relationship between sentences. This is important because both reading and writing introduce students to elements that are parts of texts or stories (e.g., characters, settings, conflicts, and resolutions). Familiarity with story elements contributes to understanding stories and reading achievement.

Teaching literature in an ESL/EFL context can be a daunting task. This is especially because in the context of teaching literature most students who lack the mastery of English struggle to deal with their literary texts or materials. The problem is further compounded if these students also experience problems in such areas as thinking, memory, concentration, motivation, and organization of ideas, planning, and decision making. Such situations create problems for English teachers in the teaching of literary works, such as short stories and novels, in schools. Therefore, literary works should be introduced as early as possible to improve students' competency in English. As stated by Saraceni (2003), literary texts as one of the language teaching resources can be beneficial to students in three main areas; they are language development, personal growth, and cultural enrichment. In other words, literary texts presented in the classroom would be a source for developing students' language competency; a source for eliciting strong emotional responses from students; a means for providing students' personal opinions, reactions, and feelings; and a tool for enriching students' cultural awareness. The upsurge of interest and concern in how literature can be used with language students has been a key issue in language teaching and learning methodology. The students should be guided and directed with a proper reading method which will at the same time enable them to understand and remember the important points in the literary texts. Therefore, an appropriate teaching method is vital in enhancing students' comprehension of the literary texts.

Rosenblatt (1976, 1978) has contended for many years that individuals construct their own meanings by transacting with the text. It is therefore important that students are provided tools that will help them develop understandings and help them relate what they have read to their personal experiences. It is through this process that students learn to construct meaning and/or comprehend information.

Researchers have found that readers respond to literature in a variety of ways—by retelling, summarizing, analyzing, and generalizing (Applebee, 1978). It is therefore important to seek

ways of helping students read literary texts.

In order to teach students to read literary works, there is a need to identify an appropriate strategy which would help them understand the underlying meaning of a literary text. Strategy like Mind Mapping can be a good means of developing a variety of mental models to represent students' understanding of what they have read.

According to Buzan (2006), Mind Map is a dynamic and exciting tool to help all thinking and planning become a smarter and faster activity. He further states that the creation of a Mind Map is a revolutionary way to tap into the infinite resources in our brain, to make appropriate decisions, and to understand our feelings. Mind Map is closely related with the functions of the mind, and it can be used in nearly every activity where thought, recall, planning, and creativity are involved. Such a visual tool enables teachers to help students to assemble ideas, make, and represent connections between ideas, concepts, and information aided by colors, symbols, numbers, lines, and arrows. In order to guide students in the initial stages of their brainstorming and mind mapping session, the teacher has to help students to structure their thoughts and mind maps using hierarchy and categorization.

In English teaching and learning, especially in literature, students' involvement is vital for they need to comprehend the stories well in order to know the important elements in the story. Only if they are able to identify and remember these elements, they will be capable to provide relevant evidence for their points. The activity of remembering information involves memory, whether short-term or long-term memory; and it was found that Mind Mapping is effective in improving student's short-term and long-term memory as Farrand, Hussain, and Hennessy (2002) found in their study. They found that Mind Mapping improved long-term memory of factual information. They further reported that Mind Mapping provides an effective study technique when applied to written material and is likely to encourage a deeper level of processing for better memory formation.

A study by Toi (2009) also showed that Mind Mapping can help students recall words more effectively than using lists, with improvements in memory of up to 32%. Besides, Glass and Holyoak (1986) found that by gathering and highlighting key branches within a boundary, such as a highlight cloud, students are using a memory technique known as chunking. Students' short-term memory is only on average of storing seven items of information, and chunking can help students use this storage space more effectively.

Mind mapping is also a convenient way for encouraging students' creativity and enabling them to generate new ideas in brainstorming sessions. The spatial layout helps students gain a better overview and makes new connections more visible, so they can create an infinite number of thoughts, ideas, links, and associations on any topic. A study by Al-Jarf (2009) proves that Mind Mapping offers a powerful approach for improving students' ability to generate, visualize, and organize ideas. Al-Jarf's study reported that Mind Mapping encouraged students' creative thinking and furthermore students became faster at generating and organizing ideas for their writing.

Besides, Goodnough and Woods (2002) discovered that students perceived Mind Mapping as a fun, interesting, and motivating approach to learning. Mind Mapping has been shown to bring a renewed sense of enthusiasm to the classroom because it increases students' confidence and sense of skill in mastering assigned

materials, such as literature (Mento, Martinelli, & Jones, 1999).

As a pedagogical tool, the visibility of Mind Mapping provides an effective approach for promoting better understanding in students. Its flexibility also means that it possesses several uses in the classroom. Using Mind Mapping in the classroom is a successful way to support students' exploration and presentation of ideas. For literature classroom, Buzan (2006) mentions that explaining stories with the aid of key words and pictures in the form of a Mind Map will have a powerful and permanent impact on the ways in which students will take in, retain, and recall information. Ralston and Cook (2007) also state that an exercise involving Mind Mapping provides a useful focus for students to organize their thoughts and to present information clearly and attractively. It also facilitates communication between students.

Mind Mapping is chosen in this study as an appropriate teaching method for fulfilling the objective of teaching. This choice is based on previous studies which reported a positive role of Mind Mapping in teaching and learning (Al-Jarf, 2009; Buzan, 2006; Farrand, Hussain, &Hennessy, 2002; Glass & Holyoak, 1986; Goodnough & Woods, 2002; Mento, Martinelli, &Jones, 1999; Ralston & Cook, 2007; Toi, 2009). However, only few studies dealt with using Mind Mapping in teaching literature. Therefore, this study is intended to examine the feasibility of Using Mind Mapping in teaching literature, i.e. plot of a novel.

RESEARCH METHOD

This study was a one-group quasi experimental study and was carried out to find out whether or not using Mind Mapping is effective in teaching the plot of a novel, i.e. whether or not it will bring impact in students' understanding of the plot of a novel.

The aim of this study was to find out if the use of Mind Mapping in teaching novel would help students to comprehend and recall the plot of a novel better as compared to the conventional method of teaching literature, i.e. using the 'Chalk and Talk' method, i.e. a method where the teacher explains and discusses the plot orally and writes the points on the board.

This study was carried out by using equivalent time-samples design and was conducted on a group of Form 5 students in one of the schools in Johor Bahru district, Malaysia. The selected students were from one class, i.e. 5SN1. The equivalent time-samples design was used to find out the effect of two methods on the same group of Form 5 students in which "the effect can be measured by alternating the treatments" (Hatch & Lazaraton, 1991). In other words, the time-samples design attempts to assess whether an intervention has a significant effect greater than the other trend. The effect was measured after each of the method, i.e. conventional method and mind mapping method (Figure 1).

Figure 1shows that the students learnt the novel entitled 'The Pearl' by John Steinbeck, which was one of the novels in English Syllabus for Form 5. Due to time constraint, this study was conducted for two weeks consecutively where four chapters of the selected novel were taught. In the first week, the students were exposed to the conventional way of learning literature, i.e. 'Chalk and Talk' method.
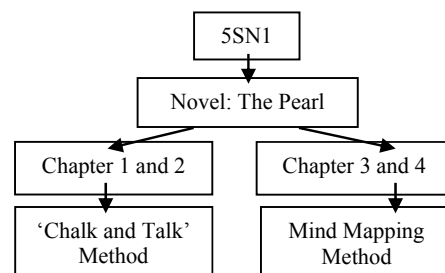
Figure 1. Research Design

Next, they were given a test. On the following week, they were given the treatment in which they were taught using Mind Mapping and again a test was given to measure the effect. The data of the test for each treatment was recorded to measure the effects of both methods. Each treatment took two periods where each period was equivalent to approximately one hour and ten minutes.

Sample and Sampling Method

The sampling method used was purposive sampling in which the sample was chosen because they had mixed ability in terms of their English proficiency level. The purpose of having mixed proficiency students was to investigate the effect of using Mind Map in teaching literature for all students regardless of the differences of their proficiency level and indirectly would strengthen the validity of this study.

There were 24 Form 5 students participated in this study consisting of 8 boys and 16 girls. However, there were only 19 students who completed the second test as the other 5 students were absent due to prefect meeting.

Instrumentations

There were two tests, i.e. Test 1 and Test 2, used in this study. While Test 1 was to assess students' understanding of Chapter 1 and 2 of the selected novel, Test 2 was intended to measure students' understanding of Chapter 3 and 4. Both of the tests consisted of two subjective questions. The first question of each test measured the overall plot of the selected chapters of the novel while the second question was to measure the specific plot of the selected chapters of the novel. For the assessment of the tests, the scoring system followed the SPM English literature marking scheme. Since this study only tested the students' ability to recall the plot of the novel and expand it, it would be more appropriate to refer to the English literature marking scheme for content or plot expansion rather than the normal SPM English literature marking scheme. The maximum point was adjusted to widen the range of the scores that the students could achieve in the tests. Therefore, each test had the maximum point of 20 marks.

Research Procedures

The procedures of the study were:
1) Developing the research instrument
2) Selecting the sample from the population
3) Giving the first treatment (using 'Chalk and Talk' method)
4) Conducting a test (Test 1)
5) Analyzing the test scores
6) Giving the second treatment (using Mind Mapping method)
7) Conducting a test (Test 2)
8) Analyzing the test scores
9) Analyzing the results of both tests

FINDINGS AND DISCUSSION

The findings of the study were discussed in terms of the mean score of each test. First, the researcher compared the score of each test in both methods. Then, the researcher compared both tests as a whole.

As mentioned previously, the data was collected through tests administered in each treatment, i.e. 'Chalk and Talk' method and Mind Mapping method. At first, 24 students took part in the study, but 5 students were absent during the administration of the second test; therefore they were

excluded from the study. Table 1 summarizes the mean scores attained by the students in both tests administered after each treatment as well as its mean difference and significance level.

Table 1
Mean Scoresand Significance Level

Question	'Chalk and Talk' Method (Test 1)	Mind Map Method (Test 2)	Diff.	Sig.
Overall Plot	10.052	11.263	1.21	.009
Specific Plot	3.368	3.421	0.05	.790
Total	**13.421**	**14.684**	**1.26**	**.005**

Table 1 shows that for the question regarding the overall plot of the novel, there was a significant improvement of the mean score in Mind Mapping method with mean difference of 1.210 and significance level of 0.009 (i.e. below 0.050). However, for the question regarding the specific plot of the novel, there was no significant improvement of the mean score in Mind Mapping method with mean difference of only 0.052 and significance level of 0.790 (i.e. above 0.050).

The no-significant difference in the mean score for specific plot might be due to the limited content used to answer the question given. Therefore, most students could not answer the questions better than the overall plot of the chapters of the novel. However, totally there was a significant improvement of the mean score in Mind Mapping method with mean difference of 1.263 and significance level of 0.005 (i.e. below 0.050).

In order to know whether the null hypothesis (H0) is accepted or rejected; in other words, to know whether or not Mind Mapping significantly improved students' understanding of the plot of a novel, we need to refer to Table 2.

Table 2
Interpretation of Significance Coefficients
(Santoso, 2000)

Significance Coefficient	H0
< 0.050	Rejected
0.050	Accepted

Based on this interpretation, the null hypothesis (H0) was rejected since the significance level of the test results was 0.005, i.e. below 0.050. Therefore, the alternative hypothesis (Ha) was accepted. It can be inferred that Mind Mapping significantly improved students' understanding of the plot of a novel. This has successfully answered the research question of this study.

Figure 2 below shows the total scores each student obtained on both tests administered.
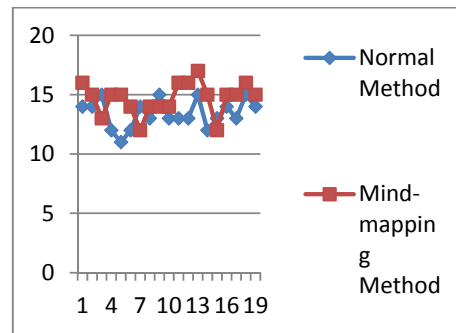
Figure 2. Distribution Chartof Individual Score on Both Tests

The increase of the scores from the first test to the second test might be due to the different methods conducted during the treatment. In the 'Chalk and Talk' method, the students only listened and took note of the points that the teacher had explained, without referring to the actual text itself. This, therefore, created fewer chances from them to find extra information from the text which could help them in doing their test. Without the information, students were deterred from giving elaborations and examples for the points which they had written in their first test.

For the second treatment, the students were required to work on the text on their own. In order to finish their Mind Map, they had to read

through the text to find the main ideas using their own understanding. By doing this, the students would come across other information and examples which might not be elaborated by the teacher in the class. Therefore, the students gained more points when using this information to elaborate the ideas in their second test.

For students who gained a high positive difference of scores between both tests, they might find that the mind-mapping method was easier for them to remember the plot of the novel. On the contrary, in the normal method, they might find it hard to remember plots when it was only being explained by the teacher. For the students who had negative differences in scores between both tests, they might find that the conventional method agreed more to their learning strategies. They might prefer the teacher to explain the plot with the elaborations and examples taken from notes prepared by the teacher.

Another factor which could lead to the difference in the test scores might be the experience of the test itself. Both tests were similar in questions and as the students had gone through the first test, they might guess what questions would be asked in the second test. They might also have time to make themselves ready with the ideas before going through the actual test.

Based on the discussion above, both 'Chalk and Talk' and Mind Mapping methods have their role in the students' understanding of the plot of a novel. However, Mind Mapping method did improve the students' understanding by having them focus not only on the main ideas but also on the elaborations and examples that were stated in the novel. With examples and elaborations, students would find it easier to understand the events which happen in the novel.

PEDAGOGICAL IMPLICATIONS

As mentioned earlier, Buzan (2006) articulates how the nature of Mind Mapping can facilitate richer and broader associations; hence, it can facilitate better learning. Mind Mapping can enhance students' understanding of literary texts; therefore, using Mind Mapping as a classroom method is beneficial. It can also enhance more active learning than 'Chalk and Talk' method because students are creating their own mind maps, not simply by looking at the one created by the teacher. By using Mind Mapping method in the classroom, students are engaged in active learning as they wrestle with ideas, associations, and categories in creating a Mind Map.

As a pedagogical tool, the visibility of Mind Mapping provides an effective approach for promoting better understanding in students. Its flexibility also means that it possesses several uses in the classroom. One of the uses is to support students' exploration and presentation of ideas as Ralston and Cook (2007) found that an exercise involving Mind Mapping provides a useful focus for students to organize their thoughts and to present information clearly and attractively. It also facilitates communication between students.

LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDIES

A few limitations of this present study are worth addressing because they will provide agenda for further studies. First, the scope of literary text used in this study was only limited to the plot of a novel. Therefore, for future studies, it would be of good value to use more literary texts, so students' performance can be measured more accurately.Second, the present study involved only a single-group model. Therefore, uncontrolled factors might influence the students' performance on the tests. This could bias the findings.

For future research, it would be interesting to include another group which can produce in-depth data to achieve more reliable results. Finally, the scope of sample used in this study was only limited to Form 5 students. Therefore, for future studies, it would be of good value to use students from various learning milieus, including college students, to achieve more reliable results.

CONCLUSION

To increase interest in literature independently, certain method and tool need to be administered to provide students with a path or direction towards achieving understanding. Reading aloud, mere discussions, or 'Chalk and Talk' method can drown their interest and cause boredom.

The findings of this study have successfully shown how students could demonstrate their understanding of literary texts using Mind Mapping. By using Mind Mapping, students are automatically thinking critically as well as creatively in the literature classroom. Students will face less difficulty in transferring written texts to graphic information and will easily remember what they have presented graphically.

The roles of the teacher are also crucial in implementing Mind Mapping. Teacher can plan and support activities which allow students to plan themes and activate their relevant prior knowledge; thus, supporting them in reading and responding to literature in appropriate ways. Learning becomes independent when students begin to use Mind Mapping individually reflecting their thoughts, memory, and understanding of the text.

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