Using Mind Map in Programmed Learning of Literary Text: Shakespeare's "Merchant of Venice"

Ethar Riyadh Abdullah Almaroof ¹, Abdelmoneium Hussein Babikir ²
1,2 Alneelain University /Faculty of Education

ABSTRACT:
The scientific paper hypothesizes that, the use of mind map technique as a strategy in teaching literary texts in the secondary schools, is better than the use of the traditional teaching method. Therefore, the paper aimed to verify the effectiveness of applying educational technology, through the use of Mind Map strategy, according to the technique of programmed learning, compared with the use of the traditional teaching method.

The experimental method was used, where three lessons of the English literary text “Merchant of Venice” were designed, according to the technique of Mind Map strategy, in order to facilitate understanding literary text; also two Standardized tests pre and post were designed.

The scientific paper's population was the second grade-girls students in secondary school in Bahri district. The researcher has chosen second level in Bahri model school for girls as a sample for the scientific paper.

The scientific paper Sample was randomly divided into two equal groups, control and experimental group. To ensure equality of the two groups, a standardized pretest applied. The statistical treatment proved the equality of the two groups.

The control group; was taught with the traditional teaching method, while the experimental group was taught with the technique of mind map strategy. To verify which of the two methods is best in teaching the literary text in English language curriculum, both groups were subjected to a standardized post test.

The scientific paper used the t-test in SPSS statistical software to deal with the two groups degrees in the post test in a statistically way.

The scientific paper results confirmed that, the use of mind map strategy in teaching literary text of English language curriculum is better than the use the traditional teaching method, because it is more effective in:
1. Helping students to remember the names of the characters in the literary text.
2. Increasing the students' motivation and their interest, which leads them to understand the characters role in the literary text
3. Helping the students to follow the details, and the events of the literary text in a clear enjoyable way.

The scientific paper, recommended the necessity to encourage using the mind map in teaching English literary texts, and urged the teachers to use the technique of Mind Map strategy in teaching literary texts of English language curriculum for secondary school students.

المستخلص

تفترض هذه الورقة العلمية أن استخدام تقنية الخرائط العقلية كاستراتيجية في تدريس النص الأدبي الإنجليزي، هي أفضل من استخدام الطريقة التقليدية في التدريس. لذا تهدف الورقة للتحقق من فاعلية تكنولوجيا التعليم، وفق تقنية التعليم المبرمج، من خلال استخدام تقنية استراتيجية خرائط العقل في تدريس النص الأدبي في مقرر اللغة الإنجليزية لطالبات الصف الثاني بمراحل التعليم الثانوي، مقارنةً
The usage of educational technology in teaching English literary texts for secondary students becomes necessary, because it helps the students to develop their language skills. Also, it is one of the interesting factors in teaching, which facilitates the interaction between the teacher and his students.

Global trends are now concentrating on the ways and methods of teaching the English language, and imperative the use of active learning. Therefore, this scientific paper attempt to use the mind map, as a tool of programmed learning, to present the English literary text in a simple form, which facilitates the way of handling it by the students.

The Problem:
This scientific paper attempts to find out the solution for these problems:
1. Continuous deterioration in English language.
2. Absence of applying educational teaching method to improve the students English language skills.
3. Difficulty of comprehend and memorize the names of the characters in the Literary texts.

The Objectives:
The scientific paper aims to achieve the following objectives:
1. Verify the effectiveness usage of the technique of Mind Maps strategy in teaching English literary text, for the second grade
students of secondary schools, compared; with the usage of the traditional teaching method.

2. Provide practical model, for teaching English literary texts to solve students’ problems to remember the characters’ names, and the events of the literary text.

3. Provide a theoretical framework, which, explain the concepts of technology, educational technology and its application that, increases students' motivation towards learning English.

4. Dealing with the concepts and applications, concern the technique use of the mind maps strategy in teaching literary texts in English language.

The Hypotheses:
The hypothesizes of the mind map usage were as follows:

a. A suitable tool of programmed learning to solve the problem of memorizing the name of the characters in the literary texts that students have to read in their under-graduate stages.

b. Helpful tool for the students to comprehend the roles of the characters in the literary text.

c. Helpful tool for the students to follow the events and the plot of the literary text clearly.

The Significance:
The scientific paper states the following significances—

1. Adjusted the negative role between English language teachers and students; also adopting a new method in teaching and learning which applying an effective teaching methods. Such a research can improve the teaching-process effectively.

2. Investment educational technology in using teaching methods, which solve the problem of overcrowding students in the class which; leads to improve the process of teaching. Also, present these texts by the use of mind map strategy; the texts will be easily understood and handled by the students. Reach their stage to master the material subject.

3. According to the researcher knowledge, the scientific paper is the first that tackles such an attempt regarding literary texts in Sudanese schools.

The Methodology:
An experimental approach was adopted, where an instructional program was taught by two methods, also two tests, pre and post, was designed. Then a number of statistical methods for data analysis were used.

The Limitations:

a. Place: Sudan, Khartoum, Bahri, al-Sababy district in Bahri model Secondary school for girls.

b. Time: The scientific paper takes place in 2014.

c. Topic: To verify the effectiveness usage of mind map strategy in teaching English literary text, for the second grade students of secondary schools, compared; with the usage of the traditional teaching method.

Terminology:
The following terms has been defined as:-

a. Mind map defines d. Najib al-Rifai (directed for students): it’s a successful way of means of research to link information read in books and memorizes by graphics and words on a map, you can shortcut in one paper size (http://uqu.edu.sa/page/ar/87922).

b. Programmed learning: is teaching technique in which, a learner is presented with a small chunk of information, and is asked to answer a question after understanding it. (http://www.businessdictionary.com/definition/programmed-learning.html).
c. **Text (literary theory):** is a text in any object that can be "read" (http://en.wikipedia.org/wiki/Literary_text).

d. **Merchant of Venice:** a play by Shakespeare thought to have been written in 1596. It is about a merchant (http://www.oxfordlearnersdictionaries.com/definition/english/the-merchant-of-Venice).

**Concept of Mind Map Strategy:**

* A mind map is a diagram used to visually outline information. It is often created around a single word or text, placed in the center, to which associated ideas, words and concepts are added. Major categories radiate from a central node, and lesser categories are sub-branches of larger branches. Categories can represent words, ideas, tasks, or other items related to a central key word or idea (John W. Winter, 2004, pp.350).

Mind maps can be drawn by hand, either as "rough notes" during a lecture or meeting, for example, or as higher quality pictures when more time is available. They are considered to be a type of spider diagram. Dictionary.cambridge.org. Retrieved 2013-07-10. A similar concept in the 1970s was "idea sun bursting" (Mind-mapping.org, Retrieved 2013-07-10).

**Mind Map Origins:**

Diagrams that visually map information use branch and radial map, trace back centuries. These pictorial methods record knowledge and model systems, and a long history in learning, brainstorming, memory, visual thinking, and problem solving by educators, engineers, psychologists, and others. Some of the earliest examples of such graphical records were developed by porphyry of tyros, a noted thinker of the 3rd century, as he graphically visualized the concept categories of Aristotle. Philosopher Ramon Llull (1235-1315) also used such techniques.

The semantic network was developed in the late 1950s as a theory to understand human learning and developed further by Allan M. Collins and M. Ross Quillian during the early 1960s (Buzan, T. 1974).

**Generations from Natural Language:**

(Asmaa Hamdy.; Mohamed H. ElHoseiny, RadwaElsahn, Islam Kamal,2009) presented the first prototype that can generate mind maps out of small text to fit in a single screen. In 2012, Mohamed H. ElHoseiny, Ahmed Elgammal, was extended into a more scalable system that can work from larger texts.

**Use of images in Mind Maps:**

Images commonly accepted convey much more information than a key word, or even a whole sentence. But there are other reasons to use them, these are:

a. **Memory:** Novak (1998), Rico (1983), and Shone (1984) all point out that, the economical way Mind Maps summaries information into visual symbols, helps you to remember that information i.e. the Mind Map can be clearly pictured in your mind’s eye.

b. **Creativity:** According to Margulies (1991), before children learn a language, they visualize pictures in their minds, which linked to concepts. Unfortunately, once children trained to write only words in one color on lined paper, their creative channels and mental flexibility diminishes. Images keep this creativity fired up.

c. **Impact:** A study has proved the benefits to utilize visual elements in presentations and tightly integrating them with words. By comparing visual presentations with verbal presentations, the results were vastly in favor of visualizations. Presenters who used visual language were perceived by the audience as
more effective than those using no visuals – they were clearer, more concise, more interest, more professional, more credible and better prepared (The Wharton School 1981).

**Mind Map Guidelines:**

(Buzan 1974; 2000) makes the following recommendations to create mind maps:

1. Start in the center with an image of the topic, use at least 3 colors.
2. Use images, symbols, codes, and dimensions throughout your mind map.
3. Select key words and print using upper or lower case letters.
4. Each word/image is best alone and on its own line.
5. The line should be connected, starting from the central image. The central lines are thicker, organic and thinner as they radiate out from the center.
6. Make the lines with the same length as the word/image they support.
7. Use multiple colors throughout the mind map, for visual stimulation, and also to encode or group.
8. Develop your own personal style of mind map.
9. Use emphasis and show associations in your mind map.
10. Keep the mind map clear by using radial hierarchy, numerical order or outlines to embrace your branches.

These guidelines were more concise than a prose version of the same information, and intended to be more memorable, and quicker to scan than either the prose or the list. This is the latest technique used by today’s psychologists (Willis, CL. 2006).

**English Literary Text at Secondary Schools:**

1. Teaching English language starts at grade fifth, at Primary school, in Sudan.
2. Teaching literary text starts at grade one, at secondary school, in Sudan.
3. The students take two texts, in the year, one for each term.
4. Literary text helps the students to know and memorize new words.
5. Literary text helps the students to speak fluently.

**Previous Studies:**

1- **Farrand, P., Hussein, F. and Hennessy E. (2002).** In their study aimed to examine the effectiveness of using the Mind Map technique to improve factual recall from written information, looking at whether Mind Map overcomes many of the limitations of more conventional study techniques.

Medical undergraduate students participated in the study were exposed to a 600 word passage of scientific text and given three short tests based upon the text to establish baseline data. They were then divided into two groups before being tested again. A week later the students sat a third test to evaluate long-term memory. Only the Mind Map group maintained their improvement after one week. It was concluded that “Mind Maps provide an effective study technique when applied to written material” and are likely to “encourage a deeper level of processing” for better memory formation.

2- **Budd, J. (2004).** In his study gives a result from an in-class exercise which introduced a group of students to Mind Maps, and then a topic to Mind Map, supported the idea that students were engaged in active learning. Students 49 were divided into groups of three to facilitate more in-depth analysis of the topic, and to collaborate with others. In particular, students with higher scores for a ‘doing’ learning style agreed that they learned a lot from the Mind Map exercise.
3- A. M. D. Abdul Karim Abdul Samad Sudanese & ketaam Adnan (2011). In their research in title "The effectiveness of teaching mind maps in the development of creative thinking”. It aimed to find out the effectiveness of using mind maps in the development of creative thinking among students of First grade level. To achieve the goal of research, the researcher conducted two-month experiment. The researchers chose bright future secondary school for girls to apply on (46) student and divided them into two groups, each group has (23) students, the researchers uses the experimental research and the (pre and post-tests). The statistical data showed that the performance of the experimental group was higher and better than the performance of the control group.

**Previous Studies Comments:**
The researcher presented a set of previous studies on the use of Mind Maps technology strategy . These studies attempt to present new technology methods in teaching. Which, help in improve the process of education, and increase the students' motivation for learning. Most of these researches were experimental, which divide the students into two groups or more; an experimental group, which studied by the use of mind map strategy, and a control group, which taught by the use the traditional teaching method.

These researches dealt with various fields that help the students in improving their writing skills, strengthen their memory skills, and increase the motivation to learn. The results were for the benefit of teaching method that used techniques of mind map strategy.

**Methodology:**
The researcher used the experimental approach and two tests (pre and post) in order to find out the results of this scientific paper:

1. **The experimental approach:** It means "Changing intentional controlled to the conditions specified for an event with a note changes located in the same event and interpret” (http://www.alukah.net/Web/khedr/0/50226/).

2. **The experimental group:** Are individuals who are exposed to the experience (http://www.alukah.net/Web/khedr/0/50226/).

3. **The control group:** is a group similar to the experimental group not exposed to the experience, but the researcher used to compare the experimental group and adjust the extraneous variables (http://www.alukah.net/Web/khedr/0/50226/).

**Tools:**
The tools that used in the research were the mind map, as well as two tests (pre and post).

1. **Mind Map:**
The researcher used the mind map (Appendix2), to present the subject material of the selected literary text “The Merchant of Venice”.

Mind map software can be used to organize large amounts of information; combining spatial organization, dynamic hierarchical structuring and node folding. Software packages can extend the concept of mind map by allow individuals to map more than thoughts, and ideas with information on their computers and the Internet, like spreadsheets, documents, Internet sites and images (Trade Mark, 1424476; UK Intellectual Property Office, filed Nov, 1990 ). Note-taking software such as Microsoft OneNote often incorporates mind map capabilities. It has been suggested that, mind map can improve learning/research efficiency up to 15% over conventional note-taking (US Trademark,
USPTO Trademark Application and Registration Retrieval system).

2. The Pre-Test:
The test which was applied by the researcher before starting the experiment (Appendix2) has two goals to achieve:

a. To determine the achievement of individuals before applying the program, or it is a tool by which we can determine the entire behavior of learning processes.

b. Determine whether, the experimental group and the control group are equal or not.

3. The Post-test:
It’s a test applied after the end of the experiment by the researcher, (Appendix3). It enables the researcher to be sure of the effectiveness usage of mind map technique in teaching English literary text for the secondary level, compared with the use of the traditional teaching method.

The Population:
Private schools, (35) of them are governmental schools for boys, and (34) of them are governmental school for girls, and (22) are private schools for boys, and (36) are private school for girls (http://dalilee.com/ar/browse_categories.php?id=188&page=5). The Sample:
The researcher chooses the secondary level of Bahri model school for Girls as a sample for the paper. (18) students (pilot group) were randomly selected from class (a) to examine the instructional program on them, and another (60) students from class (b) were divided in to two groups (control and experimental group) to carry out the program.

Pilot the Experimental Program:
After the researcher design the instructional program, and the two tests, she consulted the supervisor,. Then, she consulted six experts who work in the field of educational technology, curriculum and method of teaching, and English language (Table 1). They showed their opinions and gave comments on the whole steps and materials of the instructional program and the two tests. They suggest some observations to be, omitted, and some words, phrase, or statements, to be modified. The experiment was done after the experts’ opinions were taken.

Communication with the Schools:
The researcher got from the Headmaster of Bahri model school of girls, an approval to carry out the experiment.

The Reliability and Validity of the Two Tests:
Reliability refers to whether the instrument can produce the same or very similar results, if it is conducted again under the same or very similar condition. There are two types of reliability: internal and external reliability. Internal reliability refers to whether replicating the mind map by other researcher produces similar results.

1. The Pre-Test Validity and Reliability:
The researcher was used the correlation coefficient law to find the validity and reliability of the pre-test:

It found that, (r) equals (0.558), validity equals (0.678) and readability equals (0.823). These results proved that, the pre-test is valid and reliable to use for the sample.

2. The Post-Test Validity and Reliability:
The researcher was used the correlation coefficient law to find the validity and reliability of the post-test. It’s found that (r) equals (0.91) and the validity equals (0.953), and, the reliability equals (0.976). The results prove that
the post-test is valid and reliable to use for the samples.

**The Implementation:**
The researcher got the approval of the headmaster school of Bahri model secondary school for girls to conduct the experiment in three lessons. Before starting the conduct of the subject material, the researcher told the students, that these materials were designed to increase their ability in memorization, and comprehension, in the literary text, with the use of mind map.
The researcher divided the class room into two groups of students. Each group consists of (30) students. The first group is the control one, and the second is the experimental. In this regard, the two groups have undergone the pre-test in the same time (Appendix 1) which, aims at including diagnostic and achievement testing programmed in which, the researcher requested to find out the strength and the weakness points of the students before giving them the mind map.
Then, the researcher gave the three lessons in literary text of “The Merchant of Venice” by using the mind map technique (Appendix2). The next step is to subject the students to the post-test (Appendix3) that the researcher has conducted, Which aims to investigate the effectiveness of using the instructional technology through the use of the mind map in teaching, compared with the use of the traditional teaching method, in three aspects: memorizing the names of the characters in the literary text, comprehending the characters’ roles, and following the details and the events in the literary text. All the three aspects would be measured after the selected students were given the material using mind map method, and the result was gathered by the researcher.
After two weeks, the researcher conducted a sudden test (Appendix3) for the two groups of the students, (the experimental and the control) in the subject matter at the same time. This test was important to measure the extent of memorization and comprehension of the students

**3. The Statistical Procedures:**

To check out the effectiveness of the Mind Maps strategy technique in teaching English literary text, compared with the traditional method in teaching. T- Test was used through the following formula:-

\[
T = \frac{M_1 - M_2}{\sqrt{\frac{X_1^2 + X_2^2}{N-1}}}
\]

Where:
- \(M_1\) = the arithmetic mean of the experimental group
- \(M_2\) = the arithmetic mean of the control group
- \(X_1\) = the standard deviation of the experimental group
- \(X_2\) = the standard deviation of the control group
- \(N\) = the number of students

Comparison between the Performance of the control group and the Performance of the experimental Group in the standardized Pre-Test:
From the students degrees in the pre-test, the researcher construct (table 1)
Table (1) Shows the mean and standard deviation of the control and the Experimental group students in and the standardized pre-test.

<table>
<thead>
<tr>
<th>The group</th>
<th>Students No.</th>
<th>The standard deviation</th>
<th>The arithmetic mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>control</td>
<td>30</td>
<td>34.3</td>
<td>3.85</td>
</tr>
<tr>
<td>experimental</td>
<td>30</td>
<td>34.9</td>
<td>3.73</td>
</tr>
</tbody>
</table>

T standard which is equal (2.045) and the researcher found that the T. calculated equals (0.603). This proves that, there is no statistically significant differences between the performance of the two groups (experimental and control). Moreover, it proves the equality of the two groups.

Table (2) Shows the mean, standard deviation, values of the T for the control and the Experimental group students in the standardized post-test.

<table>
<thead>
<tr>
<th>The group</th>
<th>No.</th>
<th>The mean</th>
<th>Std. deviation</th>
<th>T-test calculated</th>
<th>T-test standard</th>
<th>Std. error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>30</td>
<td>35.0</td>
<td>3.83</td>
<td>2.75</td>
<td>2.045</td>
<td>0.711</td>
</tr>
<tr>
<td>Experimental</td>
<td>30</td>
<td>37.3</td>
<td>2.0</td>
<td></td>
<td></td>
<td>0.371</td>
</tr>
</tbody>
</table>

Data Analysis and Results Discussion

Comparison between the Performance of the control group and the Performance of the experimental group in the standardized post-test:

From the students degrees in the post-test, the researcher construct (table 2)

Table (2) Shows the mean, standard deviation, values of the T for the control and the Experimental group students in the standardized post-test.

Comparison between the Performance of the control group and the performance of the Experimental in the standardized unplanned post-test:

From the students degrees in the unplanned post-test, the researcher construct (table 3)

Table (3) Shows the mean, standard deviation, values of the T for the control and the Experimental group students in the standardized the unplanned post-test.

<table>
<thead>
<tr>
<th>The group</th>
<th>No.</th>
<th>The mean</th>
<th>Std. deviation</th>
<th>T-test calculated</th>
<th>T-test standard</th>
<th>Std. error mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>30</td>
<td>35.9</td>
<td>3.67</td>
<td>3.42</td>
<td>2.045</td>
<td>0.683</td>
</tr>
<tr>
<td>Experimental</td>
<td>30</td>
<td>38.4</td>
<td>1.4</td>
<td></td>
<td></td>
<td>0.261</td>
</tr>
</tbody>
</table>

Table (3) shows the results of the two groups in the unplanned (sudden) standardized post-test after two weeks from the instructional program implementation, which indicated:

1. The average scores in the unplanned long-term test (after two weeks) the experimental method reached (35.9), with standard deviation of (3.67), while it finds that the average score on the sudden long-term test (after two weeks) of the experimental method was (38.4), with a standard deviation of (1.4).
2. The value level of moral is (.001) sig. It is less than (0.01), which means that there were differences with significant moral and large
meaningful statistical significance between the two methods due to the benefit of the experimental teaching method when conducting the unplanned sudden long-term test (the students did not review the material for testing and relied mainly on their attendance the lessons and recalled the information that they took two weeks ago).

3. Therefore, it shows that the experimental method in the innovative method of teaching by

Table (4) Shows the mean, standard deviation, values of the T for Experimental group students in the standardized the post-test and the unplanned post-test.

<table>
<thead>
<tr>
<th>The Test</th>
<th>No.</th>
<th>The mean</th>
<th>Std. deviation</th>
<th>T-test calculated</th>
<th>T-test standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Post test</td>
<td>30</td>
<td>37.3</td>
<td>2.00</td>
<td>2.44</td>
<td>2.045</td>
</tr>
<tr>
<td>The unplanned Test</td>
<td>30</td>
<td>38.4</td>
<td>1.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (4) shows statistically significant differences for the performance of the experimental group in the sudden post-test, after two weeks. This indicates that using the technique of mind map strategy in teaching English literary text at the secondary level, increases the student’s ability of remembering the material, compared with the use of the traditional teaching method.

Results Discussion:
In the light of the study problem, the theoretical framework, and through the use of the appropriate statistical methods, the study concluded the following results, which are displayed as follows according to the hypotheses of the study:

It shows that the results of the study ensures that, the use of mind maps strategy as a method of teaching influenced the students’ achievement positively, the arithmetic average of the grades of the experimental group (who were taught throughout using Mind Map) is higher than the arithmetic average of the grades of the control group (who were taught by the traditional way), see Table (2), (3).

Moreover, the results show that the use of mind map technique in teaching English literary text helps the students to memorize the names of the characters and the events of the text. The second post-test proved that the mind map technique helps students on the conservation level, and remembering the materials. See Table (3) this comes in accordance with Farrand, Hussein, and Hennessy (2002), who says that “spider diagrams (similar to concept maps) had limited, but significant, impact on memory recalling in undergraduate students”. This is agreed on by Wai Ling, (2004), who revealed that most students found Mind Map to have considerable value as a pre-writing planning strategy. They believed that, it enabled them to plan more organized and systematic points, generate more ideas, order these ideas much easier, improve the clarity of ideas, decide the number and structure of paragraphs to be included and write faster by following the framework of the mind map. In
this regard, Keith Polsen; 2003/2004), admits that mind map can be used as a teaching and learning tool, and students perceived mapping as an enjoyable, interesting and motivating approach to learning, it helps them understanding concepts and ideas. Improved confidence and more positive attitudes towards learning were also apparent as (Gemma Boyson, 2009), in his study, “The Use of Mind Mapping in Teaching and Learning” indicates that using mind maps as a note-making tool can develop the teacher’s own subject knowledge. Mind Maps is an excellent tool to present information to students in lessons. The student’s attitude toward English language and literary text is positively created and there were differences between the two groups. The results showed improvement in the attitudes of the students in favor to the experimental group. This comes in accordance with the study that is conducted by the Maureen E. Cain who says in his research “Using Mind Maps to raise standards in literacy improve confidence and encourage positive attitudes towards learning” that the use mind maps in teaching, can improve children's confidence, develop their culture in teaching and learning and motivate students and teachers. Brian Holland, Lynda Holland and Jenny Davies, (2003-2004) said in their research, “Mind Map for improving student academic performance” The authors state that, there is clearly scope for Mind Map to improve academic performance both in written and practical work, by providing students with the ability to plan and structure their projects more effectively.

The Findings:
The Paper was built to investigate the difficulties and problems that face the students in remembering and comprehending English literary text. The researcher used the experimental method, the technique of mind map strategy and the tests as tools. The authors proved that, the use of mind map strategy, decreases the problems that the students of secondary school facing in understanding and comprehending English literary texts they have to read. Finally, students in under-graduate stages need to learn how to use mind map in reading English literary texts. Moreover, using the techniques of mind map strategy for English literary texts, will be easily understood and handled by the students.

The Results:
Using mind map helps in understanding the texts and handling it easily by the students, in three aspects:
1. The mind map helps the students to memorize the names of the characters in the literary text effectively.
2. The mind map helps the students to comprehend the roles of the characters in the literary text vividly.
3. The mind map helps the students to follow the details and the events of the literary text clearly.

Recommendations:
1. Ministry of education in Sudan has to make considerable attention to mind map, by the rearrange the methods of teaching English language programs.
2. English language teachers should be trained on how to use mind maps, and they need to attend courses, which qualify them to help their students.

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