Semantic Mapping Strategy

Masters, Mori, & Mori (1993) discuss the use of semantic mapping strategy. They define semantic mapping technique as being "used to motivate and involve students in the thinking, reading, and writing aspects. It enhances vocabulary development by helping students link new information with previous experience." The instructional sequence of semantic mapping is as follows:

1. Select a word central to the topic.
2. Display the target word.
3. Invite the student to generate as many words as possible that relate to the target word.
4. Have the student write the generated words in categories.
5. Have the student label categories.
6. From this list, construct a map.
7. Lead the class in a discussion that focuses on identifying meanings and uses of words, clarifying ideas, highlighting major conclusions, identifying key elements, expanding ideas, and summarizing information. (p. 118)

From here examples of how to use selections in the Under the Sea unit in the development of the semantic mapping technique.


Semantic Mapping Technique


The instructional sequence given in Masters, Mori, & Mori (1993) will be elaborated upon through the use of the above resource: (This can be done as an individual or group activity.)

1. Select a word central to the topic.
   For this book, the central word of the topic will be WHALE.
2. Display the target word.
   Display the word WHALE.
3. Invite the student to generate as many words as possible that relate to the target word.
   As students brainstorm, record the words on a chart or on the chalkboard.
4. Have the students write the generated words in categories.
   After all the brainstorming has taken place, discuss how the information could be placed into categories. For instance, each different whale could have its own group and add information to each group afterwards.
5. Have the student label categories.
   Label and add extra information to each category.
6. From this list, construct a map.

7. Lead the class in a discussion that focuses on identifying meanings and uses of words, clarifying ideas, highlighting major conclusions, identifying key elements, expanding ideas, and summarizing information. Various ideas and elements of the story may need elaboration. This could be done during the brainstorming/classifying activity or afterwards. A summarizing activity could be completed whereby the student writes or creates a project about the story.


Chapter One
Background of the Study

The ultimate goal of teaching English in Jordan is to enable students to communicate. Communication does not only take place with two or more speakers, but also it takes place between a speaker and a text. There should be a kind of interaction between the learner (reader) and the text which is being read in order to be good readers.

Reading is a necessary skill that any learner needs. Unfortunately, how to teach reading has not been given due care in our schools. In the past, according to the traditional view, reading begins with the child's mastering the names of the letters, then mastering the letter-sound relationships, then learning some easy words in isolation, and finally reading simple stories with highly controlled vocabularies (Harp, B and Brewer, J 1996). Researchers and teachers as well complain that most learners are not able to understand what they read.

The teacher's notion of reading is very important to determine the most suitable strategies and methods for reading effectively; it can also help in the way teachers tend to teach reading texts. In the past, teachers used to present a subject in the textbook and ask students to read whether silently or loudly, and then students had to answer the questions that follow. Students, naturally, had no choice but to read even if they had not technical ways of how to read. What reinforced this perception of having any interest were the teachers' traditional techniques for teaching reading comprehension.

The result is that students hate to read, they only read the required textbook in order to be able to set for the achievement routine exams. In such case, students lacked motivation to read, even if they read, they show negative attitudes. For most of the learners, reading is an extremely difficult task that requires integrated body of skills, which also does not get easier with the passage of time and the accumulation of experience.

It is widely believed, however, that teaching reading is more difficult than teaching other language skills. Hence, to read effectively, the learner should be able to use two competences simultaneously: the linguistic and
rhetorical. The latter is concerned with the style-system in cultural patterns of language. It is the rhetorical competence that most second language learners lack; unfortunately, having controlled the linguistic competence is not expected to read effectively or meaningfully. Therefore, students should be taught how to read in order to create lifelong readers (Harp, B and Brewer, J 1996).

Learner should probably develop reading comprehension skill much like learning to drive. Reading comprehension becomes so automatic that most skilled readers forget that they had to develop their reading comprehension skill. Learning reading comprehension requires a strategy where lesson plans progressively develop and reinforce reading comprehension skill, but a student does not seem to really get it by reading; this means that the student is successfully decoding words, but decoding without reading comprehension will not get him far.

So, what is Reading Comprehension? Reading comprehension skills separates the "passive" unskilled reader from the "active" readers. Skilled readers do not just read, they interact with the text. Skilled readers, for instance: Predict what will happen next in a story using clues presented in text, create questions about the main idea, message, or plot of the text, monitor understanding of the sequence, context, or characters (Sanders, M. 2001).

All teachers want their students to be good readers, but not all Agree on the best ways to teach reading. Effective reading requires not only accurate reading skills, but also to be able to comprehend easily and automatically (Lyon, 2001).

Many students who struggle to learn how to read are able, with appropriate instruction, to compensate for initial reading problems by becoming accurate decoders, but fail to reach a level of sufficient fluency to become fast and efficient readers (Adams, 1990). Further systematic research is needed to give us more comprehensive answers to questions concerning the best teaching reading strategies.

Learners comprehend better when they see the text organized in such a way which can easily be understood, which indicates the relationships between ideas. One of the ways that may have a significant impact on the teaching reading process is the semantic mapping strategy.

**Semantic mapping** strategy can be used for at least several different instructional purposes. They can assist teachers in planning for instruction by helping them identify the patterns of organization of ideas and the concepts. A semantic mapping strategy can be useful for introducing the important vocabulary in a selection to be read. It shows students how the terms are interrelated. Teachers can use a semantic mapping to activate and tap student's background knowledge. Also, it can be a helpful reference for students to use in clarifying confusing points as they are reading. Once students are familiar with the nature of the semantic mapping strategy, they can create their own as a during-reading or post-reading activity.

Steps in the creation of semantic mapping strategy particularly the concept and word mapping strategies are: Analyze the concepts and vocabulary in the text. Arrange the words in a map that depicts the interrelationships between the concepts. Add to the diagram the words or concepts that are already understood by the students in order to depict the relationships between what they know and the information in the text (Chall, J. 1996).

The semantic mapping strategy or Structured Overview, as it is sometimes called is a schematic diagram of the major concepts in a portion of text. The researcher of this study uses the semantic mapping strategy because this strategy can easily be taught and implemented by the students, in addition to its significant role in developing students' thinking skills and reading comprehension. The purpose of this study is to apply the semantic mapping strategy, particularly, the word mapping, the concept mapping and the story mapping in transferring three reading comprehension texts taken from the Action Pack of the Student's Book of the Eighth grade and teaching students the maps created by the researcher to measure the effect of using these semantic maps on the students' reading comprehension.

**Statement of the Problem**

Most of Jordanian students do not know how to read meaningfully. They only read the textbook required to be able to perform well in the achievement tests. Students are reluctant to read English texts other than their school textbooks. They do not learn the processes for reading.

In spite of this, most of them get low marks in reading comprehension exercises. The problem may due to the way they used to follow while reading. They read the text as if it is consisted of discrete elements. Students do not interact with the passage they read, nor they build relationships between the terms in the text to build up the meaning, and then to lead themselves toward reading comprehension. Students are not aware of the strategies that may help them in reading, because they are not taught to do so nor are they immersed in reading activities to follow such strategies.

The main concern of this study is to determine the effect of the semantic mapping reading strategy on the students' reading comprehension, and to teach students how to use this strategy in reading through teaching them how to build up the structure of the maps. It is widely believed that learners learn better if they are taught to build up relations between the terms in such a text. Semantic mapping strategy is based on building up new relationships between the components of the text. (Mayer, R.2003) discussed the use of semantic mapping
strategy. He defined the **semantic mapping technique** as being used to motivate and involve students in the thinking, reading, and writing aspects. It enhances vocabulary development by helping student link new information with previous experience.

Accordingly, the researcher believes that it is necessary to use **semantic mapping** strategy for teaching reading comprehension. Students need to read about what they are interested in and to interact and communicate effectively.

**The Significance of the Study**

The study aims at measuring the effect of using the **semantic mapping** strategies on the students' reading comprehension. The researcher uses three types of **semantic mapping** strategies; they are: Word mapping, concept mapping and story mapping.

The techniques of teaching language skills developed from using the teacher-centered technique into the learner-centered approach. Students need their teachers as facilitators and coordinators to improve their reading in an interactive and enjoyable manner (Clark-Edmonds, S. 1998).

**The purposes of the study are:**

1. Using the **semantic mapping technique** to change three lessons taken from the Action Pack of the Eighth grade into three **semantic** maps: word map, concept map and story map.
2. Teaching students the **semantic** maps in an effective way.
3. Testing the effect of using the **semantic mapping technique** on students' reading comprehension.

The researcher uses three types of maps as a kind of variation not as a comparative study. She uses them to let students be aware of more than one type of **semantic** maps and for the students to be able to use the **semantic** map which suits for the type of reading comprehension text that they read.

**The Questions of the Study**

The study aims at answering the following questions:

1. Is there a statistically significant difference between the mean scores attained by the experimental group on the pre-test and the post-test that can be attributed to the effect of using the **semantic mapping** strategy.
2. Is there a statistically significant difference between the mean scores attained by the experimental group and the those attained by the control group on reading comprehension on the post-test that can be attributed to the **semantic mapping** strategy.

**The Hypotheses of the Study**

1. There is no significant difference at ($\alpha=.05$) between the mean scores attained by the experimental group on the pre-test and the post test that can be attributed to the **semantic mapping** strategy.
2. There is no significant difference at ($\alpha=.05$) between the mean scores attained by the experimental group and those attained by the control group on reading comprehension that can be attributed to the **semantic mapping** strategies.

**Limitations of the Study**

1. As the study will be conducted on two classes of the Eighth grade students in a public school called Al-Ramleh Elementary School for Girls in Zarqa District in the second semester of the academic year 2006/2007, the results can not generalized beyond its population.
2. There are several strategies of the **semantic mapping**. In this study, only three strategies will be implemented: Word mapping, concept mapping and story mapping.
3. The scope of the study will also be restricted to females and to the procedures of carrying the study out.
4. The instrument of the study is the pre and post achievement tests for both: The experimental and the control group.
5. The implementation of the study will last only for two weeks because of the short specified time.
6. The study will be limited to certain types of reading comprehension; that is to say, three lessons of reading comprehension of the Action Pack of the Eighth grade will be transferred into maps and taught to the eighth grade female students.

**Definitions of Terms**

**Semantic Mapping**: It is a visual strategy which shows the major ideas of a certain topic and how they are related (Raymond C. Jones, 2006). In this study, word mapping, concept mapping and story mapping are used in teaching reading to display the interrelationships among ideas, words and the components of the story.

**Word Mapping**: An effective method, by which students enhance their understanding of key words by graphically mapping them. (see Appendix one)
Concept Mapping: It is a way to organize information about a problem or subject. It is consisted of nodes and labeled lines. Nodes are usually depicted with circles drawn around the term or concept. And the lines between nodes show which concepts are related (see Appendix Two).

Story Mapping: is a visual representation of the logical sequence of events in a narrative text. The elements of characters, setting, major events, problem, theme…etc. (see Appendix six)

Reading Strategy: The processes by which individuals analyze given information in a contextually specific situation and create new ideas and concepts based on their reading (Marier, R.2000).In this study, the strategy which has been used is the semantic mapping, more specifically, word mapping, concept mapping and story mapping

Traditional Strategy: the strategy in which the teacher presents the new vocabulary items first, and then he asks them to read the reading passage silently. After that, they answer the questions that follow.

Reading Comprehension: As defined by Partnership for Reading (2005), reading comprehension is understanding a text that is being read, or the process of “constructing meaning” from a text. Comprehension is a “construction process” because it involves all of the elements of the reading process working together as a text is read to create a representation of the text in the reader’s mind. In this study, it means that to what extent students comprehend the interrelationships between the ideas presented in the reading comprehension texts by the semantic mapping strategy and to what extent students can create similar maps as done by the researcher.

Chapter Two
Review of Related Literature

This chapter is divided into two main sections: theoretical and practical. Theoretically, the researcher will attempt to shed light on the meaning of semantic mapping in addition to the meaning of the reading comprehension, some examples of semantic mapping strategies, how can students reading comprehension be increased by using this strategy and the shared role between teachers and students in using this strategy.

On the practical level, the study summarizes the results of relevant research studies. So, the study helps to direct the attention of English language teachers in general and the English language teachers of the elementary stage, in particular, to the significant role of the semantic mapping strategies in teaching reading in the English textbooks, particularly, the Action Pack textbooks, and perceive how students interact effectively with this strategy.

Theoretical Section

This review of literature covers studies related to strategies of semantic mapping. (Harvey, et al. 2000) mentioned that semantic mapping strategies are valuable instructional tools. Unlike many tools that just have one purpose, semantic mapping is flexible and endless in application. One common trait found among semantic mapping strategy is that they show the order and completeness of a student’s thought process - strengths and weaknesses of understanding become clearly evident. Many semantic maps show different aspects of an issue in close and also the big picture, since many semantic maps use short words or phrases, they are ideal for many types of learners, including English Language readers with intermediate proficiency. Tree maps can be used to show classifications, analysis, structures, attributes, examples, and brainstorming.

Raymond C. Jones, (2006) added that semantic mapping can be a helpful reference for students to use in clarifying confusing points as they are reading. Once students are familiar with the nature of the semantic maps, they can create their own as a during-reading or post-reading activity.

Williams, C. R. (1994) once said that semantic mapping enables students not only to visualize relationships, but to categorize them as well. As a direct teaching strategy that includes brainstorming and teacher-led discussions, it provides opportunities for schema development and enhancement, as well as prediction, hypothesizing and verification of content when used as a pre-reading activity. It is also referred to as a web or concept map. The teacher can introduce semantic maps to the class in different appearances. They can be shown as circles, squares, or ovals with connecting lines. The students read an assigned text. Through class discussion, the teacher writes the main idea of the text in the middle of the top
circle. The students share the supporting details of the main idea and place them in circles that are connected to the main idea by lines. This activity can also be used by students in cooperative groups or individually.

Thomas, H. Estes (1999) explained that semantic mapping is a strategy for graphically representing concepts. Semantic maps portray the schematic relations that compose a concept. It assumes that there are multiple relations between a concept and the knowledge that is associated with the concept. Thus, for any concept there are at least three types of associations:

1. Associations of class; the order of things the concept falls into.
2. Associations of property; the attributes that define the concept.

He continued that the major purpose of the semantic map is to allow students to organize their prior knowledge into these formal relations, and thus to provide themselves a basis for understanding what they are about to read and study. Comprehension can be thought of as the elaboration and refinement of prior knowledge. What the semantic map provides is a graphic structure of that knowledge to be used as the basis for organizing new ideas as they are understood.

Heimlich, J. E., & Pittelman, S. V. (1986) explained that a semantic Map is one type of graphic organizer. It helps students visually organize and graphically show the relationship between one piece of information and another. This strategy has been identified by researchers as an excellent technique for increasing vocabulary and improving reading comprehension. As a pre reading activity, semantic mapping can be used to activate prior knowledge and to introduce key vocabulary words. As a post reading activity, words, categories, and new concepts can be added to the original maps to enhance understanding.

**Practical Section**

Zaid, M. (1995) applied the semantic mapping technique in teaching reading to his students at Abha college of Education. He explained that semantic mapping has been shown to be a beneficial learning/teaching technique for native speakers of English at all grade levels in regular and remedial classrooms as well as for those who are learning-disabled. He added that students who use semantic mapping manifest considerable improvement in reading comprehension, written expression, and vocabulary development. He suggested some areas of correlation between what a semantic mapping activity does and the principles and objectives of communicative language teaching (CLT). For the students, the map was providing a graphic conceptualization of their randomly given ideas. There are three places in a lesson where semantic mapping may be used as he clarified:

1. As a pre-assignment strategy to activate students’ prior knowledge or to help the teacher in assessing the students’ readiness to do the assignment.
2. As a strategy to allow students to record what they are learning during the assignment.
3. As a post-assignment strategy to allow them to integrate or synthesize what they have studied. He concluded that semantic mapping is interactive, it allows for sequential negotiation. It is an information-gap activity since students must fill in gaps in the map and in their personal schemata of the topic as the map takes shape. Moreover, it is a predictive activity. It is student centered because the semantic map makes use of the students’ prior knowledge and because students control the input at each stage of the map’s building. It is teacher-friendly because it allows the EFL teacher unobtrusively to pre-assess the students’ readiness to do an assignment, take immediate steps to enhance their preparation and to post-evaluate how well the students integrated or synthesized what they had studied. And finally, it is an integrative activity, since it allows students to connect previous knowledge with new knowledge, thereby expanding their reservoir of knowledge through that interrelationship. He recommended that there should be inclusion of semantic mapping activities in the technical repertoire of CLT.

Al Kouny, (1999) compared the effectiveness of three classroom methods for teaching semantic mapping to college-level learners of English as a foreign language (EFL). Subjects were 187 freshmen at an Egyptian university; they were randomly assigned to three treatment groups: teacher-initiated semantic mapping, student-mediated semantic mapping; and teacher-student interactive semantic mapping. Treatment was administered over 5 months in one session per week. Subjects were pre- and post tested in reading comprehension. While the pretest indicated no significant differences in the groups, post test results revealed students in the teacher-student interactive semantic mapping group scored significantly higher than the other two groups, which had similar results.

Schlesinger, C and et al (2000) elaborated on their beneficial experiences from incorporating semantic maps into their classes, and the students recognizable academic improvement that resulted from utilizing this new teaching strategy. The authors quoted an eleventh grade student who reflects on her growth of knowledge while comparing her pre- and post-semantic maps she created on a six-week unit on Africa. The authors depicted semantic mapping as a graphic representation or picture of one’s thoughts, ideas, and attitudes toward a key concept. Semantic mapping focuses on categorizing and connecting these thoughts, ideas, and attitudes in relation to the key concept. The authors detailed the process of semantic mapping as starting with teachers asking students to brainstorm the ideas, images, or descriptions they associate with a particular concept, then students group related terms into categories, providing a label for each category. Then students graphically...
displayed their ideas in a *semantic* map. The authors described the multi-purpose usefulness of *semantic mapping* in the classroom. They evaluated the advantageous learning experiences for teachers and students through developing maps, either by individual students, or small groups or by the class. The authors then discussed the purposes *semantic* maps serve at different times during a unit. The authors concluded that the process of *mapping* techniques may improve reading comprehension, increase content-area achievement, enhance recall of material, and reduce student anxiety.

Kuo and et al (2002) investigated the effect of concept *mapping* to enhance reading comprehension and summarization. They designed three concept *mapping* approaches: Map correction, Scaffold fading and Map generalization to determine their effects on the readers' comprehension and summarization ability. The experimental results of 126 fifth grader showed that the map correction method enhances reading comprehension and summarization abilities and that the scaffold fading method facilitates summarization ability.

Darayseh (2003) explored the effect of a proposed program based on *semantic mapping* and brainstorming strategies on developing the first scientific secondary students' English writing and reading ability. The findings of the study indicated that there were significant differences between the mean scores of the students in the experimental groups which can be attributed to the use of the *semantic mapping* teaching strategy. The researcher recommended that teachers should activate the prewriting phase and reading by using appropriate teaching strategies such as brainstorming and *semantic mapping* in particular.

Canas, J.D et al (2004) conducted a study about text concept *mapping*, the contribution of *mapping* characteristics to learning from texts. The effects of text concept *mapping* were tested during one school year (4 classes, 112 eighth graders; two classes were taught using concept *mapping* with practicing. The other two classes were taught through regular learning skills). The classes were tested on language *mapping* comprehension after the teaching process. The findings indicated an advantage of using text concept *mapping* on reading comprehension. The researchers recommended that text concept *mapping* is a potent mediator for learning with texts and for conducting complex learning tasks, compared with concept *mapping* only.

Grigaite (2005) conducted a study to investigate the effect of using *semantic mapping* strategies on developing child’s thinking skills. She defined *semantic mapping* as a strategy in which information is categorically structured in a graphic/visual representation. She examined the cognitive outcomes stimulated by the teachers’ use of *semantic mapping* as a strategy for accelerating two cognitive operations, classification and seriation in a child’s seventh year. Fifty-seven children at the age of six took part in the research. The findings revealed that students in the experimental group who participated in the training were creative. They revealed high degrees of cognitivism.

Saqqa (2005) investigated the effect of computer assisted *semantic mapping* and brainstorming on Jordanian upper basic stage students' reading comprehension and writing in English. The findings revealed that students were very active, they read the texts from their textbooks, and then suggested some changes like deletion and additions on the first *semantic* map they drew. The researcher recommended that more computer assisted *semantic mapping* and brainstorming programs to be conducted to improve the students' reading and writing abilities.

Roy, B et al (2006) conducted a study to confirm a computer-based approach that can be used to score concept maps and then describe the concurrent criterion –related validity of these scores. The results indicated that automatically derived concept map scores can provide a relatively low- cost, easy to use, and easy to interpret measures of students’ science content knowledge.

In conclusion, many studies revealed almost the same findings; they showed that the effects of using the *semantic mapping* do not only improve the learner's reading comprehension, but also their thinking, brainstorming and writing abilities.

**Chapter Three**

**Methodology and Procedures**

Chapter three deals with:

- Data collection procedures
- The population and subjects, design, instruments, validity and reliability of the instruments.

**The population of the Study**

The sample of the study consists of two classes of Eighth grade female students with thirty five students each in Al-Ramleh elementary school for girls in Zarqa district. The two classes were selected randomly. The
researcher selected randomly fifteen female students from each class; fifteen female students to represent the experimental group and fifteen female students to represent the control group.

The Design of the Study

The design of the study is a complete experimental design. It consisted of two groups: The experimental and the control with pre-test and post-test for each group.

R O X O
R O O

It promotes both teacher and learner in taking part in the teaching learning process. The teacher will give the two groups the pre-test. The control group will be taught the three reading comprehension lessons taken from the Action Pack of the Eighth grade in a traditional way while the experimental group will be taught the same reading comprehension lessons by using the **semantic mapping** strategies by teaching the three maps (see Appendix one, two and six). Then both groups will be given the post-test to investigate the effects of both strategies. Students are expected to be able to create new maps following the teacher’s steps.

The Instrument of the Study

1- An achievement reading comprehension test which is to be used as a pre-test to both: the experimental and the control group.
2- An achievement reading comprehension test which is to be used as a post-test to both: the experimental and the control group with some modification related to the ways each group is taught accordingly.
3- A proposed three **semantic** maps (word map, concept map and story map) and activities for learning reading comprehension done by the researcher.

Procedures of the Study

The study will go to preparing the reading pre-test through the following procedures:

1. Preparing the reading pre-test to test the two groups.
2. Testing the two groups, correcting their papers, and calculating the mean scores to the experimental as well as the control groups.
3. Preparing the sample lesson plans, **semantic** maps and activities.
4. Establishing the required validity and reliability of the instrument.
5. Dividing the classes to be given for two weeks, six classes per week.
6. Planning the traditional way for teaching the control group. In the traditional way, the researcher teaches the control group the reading comprehension lessons in the traditional way which is illustrated in the teacher’s book. The other three classes are used to teach the experimental group the **semantic** maps of the same comprehension lessons. In the second week, three classes are given to immerse the experimental as well as the control group in activities suit for the way each group was taught accordingly. The teacher then asks the students who belong to the experimental group to create similar maps to the other lessons in the same way. Then the two groups are given the post-test to measure the effects of using the two teaching reading strategies to calculate the two groups achievement scores and mean scores.
7. The traditional way is presenting the topic of the questions, asking students who belong to the control group to read silently and sometimes loudly, then asking students to answer the questions that follow each reading comprehension lesson. Next, students are asked to do the exercises in the work book.
8. The **semantic mapping** strategy is changing the three reading comprehension lessons into concept map, word map and story map by relating each idea to the other next one (see appendix one two and six...), then teaching students who belong to the experimental group the maps created by the researcher. Students then asked to create similar maps to the next reading comprehension lessons.

The procedures that the researcher followed when teaching each map:

Procedures of the Story Map

1- The teacher selects the story from the Action Pack of Eighth grade which is entitled “The Boy from the Past”.
2- The researcher prepares questions to lead students through the story map, for example ‘where did the story take place?’ ‘When did the story take place?’ etc.
3- The teacher discusses the organization of a story by explaining that any story has a beginning, middle and an end.
4- The teacher explains the visual story map (see Appendix six) and relates to story organization.
The researcher asks students to read the story and to fill out the map but without looking on the ready-made story map done by the researcher.

6. The researcher asks students about other stories they learned and asks them to compare them to the story they have been taught by the story map.

**Procedures of the Concept Map**

1. The researcher selects "Be Creative" reading comprehension lesson from the Action Pack of the Eighth grade.
2. The researcher constructs a map through nodes and lines bond through establishing relationships between the concepts.
3. The researcher clarifies the way the concepts are constructed in a map. And teaches them how to read the concept map done by the researcher (see Appendix two).
4. The researcher prepares questions to ask students about the concepts illustrated on the map.
5. The researcher asks students their attitudes toward this reading strategy. And ask them to create similar to the map they were taught by the researcher.

**Procedures of the word map**

1. The researcher selects "The Famous Scientist or Inventor" reading comprehension lesson.
2. The researcher built a word map to teach students the word 'scientist' through teaching them about one of the greatest Arab Muslim scientist called Alhazen. The researcher follows the following steps when constructing the word map:
   1- The researcher selects a word or concept central to the topic, which is 'Scientist'.
   2- The researcher displays the target word or concept such as 'scientist'.
   3- The researcher generates as many words as possible that relate to the target word such as investigator, discoverer … etc (see Appendix one).
   4- The researcher leads the class in a discussion about the word map
   5- The researcher then asks students to create similar word maps on the other next lessons.

**Validity and the Reliability of the Instrument**

**Validity of the Pre-and Post-test**

To determine the validity of this research instrument, both of the pre and post tests are given to a group of judges. The juries are two teachers with ten years experience each in teaching the basic and the secondary stages with B.A and higher Diploma in English teaching methods. In addition, the test is given to a supervisor with six years experience with M. A. degree. Also it was given to a teacher with M.A. degree in English teaching methods. They all suggest some changes in the post-test to be able to investigate the differences. The researcher modifies the post-test accordingly.

**The Validity of the Semantic Maps**

To investigate the validity of the semantic maps created by the researcher, the researcher follows some models of concept maps which were done by a well-known researchers whose studies are trusted and published in a well-known data base, such as EBSCO and ERIC data bases. Moreover, the semantic maps are given to two supervisors with six years experience. They enrich the maps with some related ideas which in turn will have significant role on the students' reading comprehension.

**The Reliability of the test**

<table>
<thead>
<tr>
<th></th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE</td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.909(**)</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>15</td>
</tr>
</tbody>
</table>

In order to ensure the reliability of the pre- and post-test of the study, the researcher administers a test-retest on an experimental sample of fifteen subjects who are taken from the population. Their tests are corrected. A statistical formula of Cronbach Alpha is calculated. The result is (.909) which is a very high internal contingency coefficient. This is a very appropriate for the reliability of the test and for the purpose of the study as shown in the following table.
** Correlation is significant at the 0.01 level (2-tailed).

Chapter Four
Findings of the study

The main aim of the study is to investigate the effect of using the semantic mapping strategies on the reading comprehension for the Eighth grade students. To achieve this purpose, the researcher selects randomly two classes from (Al-Ramleh elementary school for girls) with thirty five students each. The researcher selected randomly fifteen students from each class. The first fifteen students are considered as an experimental group which is taught by the semantic mapping strategies and the other fifteen students are treated as a control group which is taught by the traditional way that is clarified in the teacher's book. Each group consists of 15 students of the Eighth grade.

Findings related to the First Questions

The first question of this study is: Is there a statistically significant difference between the mean scores attained by the experimental group on the pre-test and the post-test that can be attributed to the effect of using the semantic mapping strategies.

To obtain data related to this question, the researcher administrated the reading achievement pre-test in the second semester of the academic year 2006/2007 on Wednesday, 15 of April at (Al-Ramleh elementary school for girls), just before the beginning of the experiment. Both the experimental and control group sat for the same format of the pre-test.

(Table one).

Means and standard deviations obtained by the experimental group and the control group on the pre-test.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE experimental group</td>
<td>15</td>
<td>3.53</td>
<td>2.356</td>
<td>.824</td>
<td>28</td>
<td>.417</td>
</tr>
<tr>
<td>Control</td>
<td>15</td>
<td>2.87</td>
<td>2.066</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this table, the data collected on the pre-test are represented in the reading achievement –mean scores attained by the control group which is 2.87 while the experimental group is 3.53 on the pre-test. Using the t-test for dependent samples, the calculated t-value (.824) shows insignificance at (α=.05) which indicates that the two groups are equivalent in their reading achievement; therefore, the researcher premeditated to use the t-test to work out all the comparisons regarding the two groups' total reading achievement scores on the post-test.

The Findings Attained on the Reading Achievement Post-Test

The second question is: is there a statistically significant difference between the mean scores attained by the experimental group and the those attained by the control group on reading comprehension on the post-test that can be attributed to the semantic mapping strategy.

Table (Two)

Means and standard deviations obtained by the control and the experimental groups on post-test.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POST Experimental Semantic mapping</td>
<td>15</td>
<td>12.07</td>
<td>2.052</td>
<td>11.353</td>
<td>28</td>
<td>.000</td>
</tr>
<tr>
<td>Control</td>
<td>15</td>
<td>3.33</td>
<td>2.160</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Teaching the semantic strategies to the experimental group lasted for two weeks, in addition to teaching the control group the traditional way.
Upon finishing the experiment, the experimental and the control groups sat again for the same test which is referred to as the post-test. The data collected from the post-test are represented in (Table two). The table illustrates quite clearly the mean scores the students in the control and experimental groups get on the post-test. The total mean score achieved by the experimental group is 12.07 while the total mean score achieved by the control group is 3.33.

(Table Three):
Means scores obtained by the experimental group on the semantic strategies of reading on the post-test

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Mean scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Story map</td>
<td>15.2</td>
</tr>
<tr>
<td>Concept map</td>
<td>13.5</td>
</tr>
<tr>
<td>Word map</td>
<td>14.3</td>
</tr>
</tbody>
</table>

In this table, the researcher calculated the mean scores of the subjects of the experimental group on the semantic mapping different strategies to investigate if there are any significant differences between them. The researcher found out that the mean scores of three types of semantic mapping used by the researcher to teach students are almost the same.

Chapter Five
Discussion, Conclusion and Recommendations

The Final chapter aims at presenting summary of the results and discussions of the findings attained by implementing the semantic maps designed by the researcher who tried to transfer three lessons taken from the Action Pack of Eighth grade into three different maps: Story map to the "The Boy from the past", word map to "The Famous scientist or Inventor" and concept map to "Be Creative". The second section includes the recommendations based on the findings.

The researcher uses three types of maps as a kind of variation not as comparative study. She uses them to let students be aware of more than one type of semantic maps and for the students to be able to use the semantic map which suits for the type of reading comprehension that they are reading.

Discussion of Findings

The findings of the study indicate that there are statistically significant differences between the experimental group and the control group. The mean scores of the students in the experimental group on the reading comprehension achievement post-test is 12.07. It is considered higher than the mean scores achieved by the students in the control group which is only 3.33. The t-value calculated on the t-test is 11.353 showing a significant difference at (α=.05) as illustrated in Table two. Consequently, the null hypothesis “That there is no statistically significant differences at (α=.05) between the experimental and the control group which can be attributed to the semantic mapping strategies” is rejected while the alternative one “that there is statistically significant differences at (α=.05) between the experimental and the control group which can be attributed to the semantic mapping strategies” is failed to reject. Similarly, Al koumy (1999) investigated that the relatively high mean scores of the experimental group is evidently due to the effect of the implementation of the semantic mapping strategies.
One major purpose for story mapping is to assist teachers in planning and conducting reading instruction. Therefore, in preparing to have students read narrative selection, it is recommended that teachers analyze the structure of the story and create a map. The process of creating such a map helps teachers determine what is important enough about a story to be emphasized in class. For example, the theme often indicates background knowledge that students will need to use to comprehend, and this can become the focus of a pre-reading discussion. (See Appendix three).

The researcher observes how enthusiastic students were with this way of teaching reading. They were very active to the extent that they started giving their suggestions to develop the story map. One of their suggestions is to include the good things and the bad things of the characters and how they should behave in the story (see Appendix one). Their suggestions were unexpected and great. This proves what Raymond (2006) once said that once students become familiar with the nature of the semantic maps, they can create their own as a during-reading or post-reading activity. The mean scores of the students’ achievements on the story map is 15.21 which reflects the improvement of the student’s reading comprehension.

Moreover, using story maps to create questions will guide the discussion of the story; this discussion in turn will enhance students' understanding of the order of the questions posed by the teacher follows the organization of the story map. Also, consistently discussing stories in their logical sequence will strengthen students’ sense of the important story grammar elements, and thus increase their ability to comprehend stories they will read in the future. The following are the questions suggested by the researcher that can be asked about each of the story elements:

1. Where does the story take place?
2. When does the story take place?
3. Could the setting have been different?
4. Why do you think the author chose this setting?

The researcher used to design the pre- and the post-test accordingly. Student's achievement scores are very high on the post-test questions related to the story map.

Utilizing the word mapping strategy is useful for helping students develop a general concept of definition. It makes them aware of the types of information which make up a definition and how the information is organized. When the researcher taught the lesson which is entitled “The Famous Scientist or Inventor”, most of the students become aware of the real definition of the word 'scientist' through teaching them one of the greatest figures of scientists in the Islamic Arab world and through teaching them his real achievements (see Appendix one). One of the students raised her hand and volunteered to give a definition of the word “scientist”. She said that “scientist is a well-known and famous one who creates, investigates, and discovers great and new things.” It was something wonderful from a student of Eighth grade to give such definition; this indicates that students interact with the way they were taught by: which is the semantic mapping, particularly, word mapping as suggested by Heimlich (1986) that this strategy has been identified by researchers as an excellent technique for increasing vocabulary and improving reading comprehension. And as Zaid (1995) explored that students who use semantic mapping manifest considerable improvement in reading comprehension, written expression, and vocabulary development. The mean score of the students’ achievements on the word mapping question is 14.3 which also indicates how word mapping is fruitful.

The third strategy of semantic mapping used by the researcher is the concept mapping. It is a good way to organize information about a problem or subject. Construction of concept maps helps us pull together information we already know about a subject and understand new information as clarified by Schlesinger et al. (2000) who depicted semantic mapping as a “graphic representation or picture of one’s thoughts, ideas, and attitudes toward a key concept.” They also added that semantic mapping focuses on categorizing and connecting these thoughts, ideas, and attitudes in relation to the key concept. The concept maps consist of nodes and labeled lines. Node is the name for important terms or concepts. Nodes are usually depicted with circles drawn around the term or concept, such as the node for “be creative” “ability” (see Appendix Two). The lines between nodes show which concepts are related. The label on the line “is” “to” as in the word map created by the researcher tells how or in what way the concepts are related. For example, “Creativity is the ability to invent, to imagine” The students at the beginning showed little interest when they were taught by the concept mapping strategy. Later, when the students were informed how to read the concept maps, they showed great enthusiasm toward it because they feel that they can build similar maps as built by the researcher depending on the steps they were taught and their background knowledge and their schemata as indicated by Thomas (1999) in reference to how semantic maps portray the schematic relations of the readers that compose a concept and how it assumes that there are multiple relations between a concept and the knowledge that is associated with the concept. Moreover, William (1994) explained that direct teaching strategy that includes brainstorming and teacher-led discussions provides opportunities for schema development and enhancement, as well as prediction, hypothesizing and verification of content as a pre-reading activity. The mean score of this strategy on the students’ achievement post-test is 13.5 which is significant.
In conclusion, all the researchers who have conducted their researches on semantic mapping strategy agreed upon the significant role of applying the semantic mapping strategy in teaching reading comprehension for its great benefits that may serve a variety of learning purposes. They may serve as a student’s journal or record or instruction, providing students with a systematic means to integrate their new knowledge with their prior understanding, activating students prior knowledge and stimulating them to use that knowledge to interact with the text and promoting semantic mapping as a pre-reading activity that encourages students to map out their ideas.

Recommendations of the Study
In light of the findings of this study, the researcher puts forward the following recommendations; they are expected to be taken into consideration by the English teachers of Action Pack, the material producers and the curriculum designers:
1. The researcher recommends that the textbooks which are going to be adopted at Jordanian schools should include some guidelines that help students in the reading process.
2. Students should be fully engaged in the reading process: Pre-reading activities, drawing semantic maps… etc.
3. Encouraging students to gather ideas and develop them in a well organized concept maps.
4. Students should be encouraged to read for authentic purpose even if they are asked to read about certain topic chosen by the teacher.
5. Reading needs time and this time is necessary for students to grow, develop and improve their reading comprehension. Improvement entails practice. Time allocated for any reading task should be limited and agreed on for students to know how to read in an effective way using the semantic mapping strategy to plan to their reading.
6. Students need an environment that promotes reading and provides opportunities for individuals to work together in creating such maps. Teachers can to some degrees provide students with some technical ways of how to organize the reading process.
7. Training students to use the innovative reading strategies and techniques in their classroom such as the semantic strategy.
8. Students need modeling for teaching reading by using the semantic strategy; therefore, teachers should familiarize students with the semantic mapping strategy by providing them with some models of maps.
9. Teaching vocabulary using the word mapping strategy.
10. Encouraging students to read stories and make maps following the general story map as illustrated in figure one and two.

References
-El-Koumy, Abdel Salam(1999) The Effects of Three Semantic Mapping Strategies on EFL Students’ Reading Comprehension, College Freshmen; College Instruction.


Appendix one

Word map
contributor
creator
Inventor

Ibn Al Haytham
Scientist
Physicist
Pioneer

light
vision

Drawing accurate diagram of the human eye

Author
Investigator

Kitab Al-Manazir

Discoverer

The world of light

Study of eye

Light goes into eye

Light travels in straight lines

reflections

mirror

Rainbow

Appendix two (Concept map)

Dramatic

gradual

Putting ideas together

network

computer

Changing approach

Photographic films

Work on ideas

Solve problems

imagine

invent

Evolution of ideas

ability

Ways of being creative

Changing how we do things

Finding a new use for things

plastic

plastic

Making balls

Send small tube into person's body

Different solutions
Making balls
Different solutions

Appendix Three (Story Map)
The story is divided into six episodes. Three of them are taught in the first semester. The other three are to be taught in the second semester. All of the six episodes are mapped by the researcher because they complement each other, they cannot be separated as in the following:
1- The first episode is entitled "The discovery".
2- The second episode is entitled "The boy's story".
3- The third episode is entitled "The mysterious collector".
4- The fourth episode is entitled "The thin man".
5- The fifth episode is entitled "Laila's investigation".
6- The sixth episode is entitled "The buried treasure".

Students were taught the whole story starting from the first episode till the sixth one by the story map. Students and the teacher of English welcomed the idea and liked it. Students were energetic, they work in groups as a team. In addition, they asked the researcher to let them map the rest of the second semester lessons in the same way.

Appendix Four (Story Map)
Figure (one)

General Story Map

<table>
<thead>
<tr>
<th>Setting</th>
<th></th>
<th>When:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Characters:
Initiating event:
Problem /Goal:
Major Events:
Resolution:
Theme/ Main Idea:
Appendix Five (Story Map)

Figure (Two)

Story Map for Teacher Planning

Theme/Main Ideas:
Setting: When:
Where:

Main Characters:

<table>
<thead>
<tr>
<th>Name</th>
<th>Traits</th>
<th>Function in Story</th>
</tr>
</thead>
</table>

Initiating event:
Problem/Goal:
Major Events:
Resolution:
Important Vocabulary:
Important reader's aids:

Appendix Six (Story Map)

Done by the Researcher

General Story Map
(The Boy from the Past)

Action Pack 8

Setting: When: In the middle of the school days

Where: Uncle Abbas' house, the well, restaurant, garden, the land of the treasure

Characters: Yousef and Laila (sister and a brother), Abbas (Uncle), Mariam (Aunt), Ibrahim (gardener), Harry Dark (the dangerous man), professor Najjar (old friend of the family), thin man, the bald man, the short man (thieves of land treasures), grandfather (of Yousef and Laila), detective (the one who arrest the thief), Amer (a boy from the past).

Initiating event: Discovering an old Phoenician stone and a map in the well of the garden in Abbas' house.
**Problem:** The thieves attempted to steal the old valuable stone and the map to get the land treasure. They kept watching the house in the evening to steal them both.

**Major Events:** Laila and her brother Yousef surfed the net asking for a help to know about the old stone. They found unexpected e-mail from Harry Dark. They met Harry Dark who tried to take the old stone claiming that he is interested in the old things, but Laila refused. In one day evening, Laila saw a man watching the house, she hide the stone in the well. Laila and Yousef asked their uncle’s help. They noticed directions on the map, they follow the map instructions and discovered the land treasure. Harry was following them to steal the land treasure, but he was arrested by the detective.

**Resolution:** Laila and Yousef decided to give the land treasure as a gift to a museum. And to keep their land treasures.

**Theme/ Main Idea:**
1- Preserving our land treasures.
2- The land’s treasures are not one’s own property.

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**Appendix Seven (Pre-test)**

**A famous Scientist**

**Question Number One:**

Read the following text carefully then answer the questions in the space provided.

Abu Ali Al-Hassan Ibn Al-Haytham, or Alhazen, was born in Basra, Iraq in 965 AD, and died in 1040. He was probably the greatest physicist of his time. He investigated the world of light, including mirrors, reflections, rainbows and shadows.

Among other things, he discovered that light goes into the eye and that light travels in straight lines. He drew the first accurate diagram of the human eye.

He wrote over 90 works, including a study of the eye and vision called *Kitab A-Manazir*. In 1270, it was translated into Latin. It was published as a book in the west in 1572. Many later scientist used Alhazen's work.

Perhaps the most important contribution he made was the modern scientific method. He created theories which he tested with experiments. This is how scientists still work today.

What does the word "scientist" mean?

A. Who is Al-hazen?
B. What did he investigate?
C. Was he the first one to discover that light goes into the eyes?
D. Mention some of his writings.
E. Write down the sentence which means that Alhazen's book was very important one.

**Be Creative**

**Question Number Two**

Creativity

-Read the following text carefully to answer the questions that follow:

Creativity is the ability to invent or imagine something new. There are many ways of being creative and creativity can help us solve problems.

**Evolution of ideas:** Car development is an example of this. If a car designer creates a more comfortable car, he builds on all changes made by designers in the past.

**Putting ideas together** can be combined to create a new idea. If you join the ideas of a computer and a network, you get the Internet.

**Changing how we do things:** Sometimes new ideas bring about a change to how we do things. In the past all surgical operations involved cutting the patient. But if you send a small tube with a camera in a person's body, you can treat him from the inside.

**Finding a new use for things:** If you look at something that exists, you can think of another use for it. For example the first plastic was developed for making balls, but now for photographic film.

**Changing approach** help us find other solutions to the problem.

A. What does 'creativity' mean?
B. Mention the ways that can help us be creative?
C. May the thing have more than one use? Give example and write it on the sun shape.
D. Compare between the past and nowadays in terms of surgical operations?
question number three

Laila and her brother Yousef surfed the net asking for a help to know about the old stone. They found unexpected e-mail from Harry Dark. They met Harry Dark who tried to take the old stone claiming that he is interested in the old things, but Laila refused. In one day evening, Laila saw a man watching the house, she hide the stone in the well. Laila and Yousef asked their uncle's help. They noticed directions on the map, they follow the map instructions and discovered the land treasure. Harry was following them to steal the land treasure, but he was arrested by the detective.

1. Who are the characters that have been mentioned in the text?
2. Who arrested Harry Dark?
3. What are the major event that has occurred to Laila and Yousef?
4. Describe Harry Dark?
5. Where did the story take place?

The end

Good Luck

Appendix Eight (Post-test)

A famous Scientist

question number one

Read the following text carefully then answer the questions in the space provided.

Abu Ali Al-Hassan Ibn Al-Haytham, or Alhazen, was born in Basra, Iraq in 965 AD, and died in 1040. He was probably the greatest physicist of his time. He investigated the world of light, including mirrors, reflections, rainbows and shadows.

Among other things, he discovered that light goes into the eye and that light travels in straight lines. He drew the first accurate diagram of the human eye.

He wrote over 90 works, including a study of the eye and vision called Kitab A-Manazir. In 1270, it was translated into Latin. It was published as a book in the west in 1572. Many later scientist used Alhazen's work.

Perhaps the most important contribution he made was the modern scientific method. He created theories which he tested with experiments. This is how scientists still work today.

What does the word "scientist" mean?

F. Who is Al-hazen?
G. What did he investigate?
H. Was he the first one to discover that light goes into the eyes?
I. Mention some of his writings.
J. Write down the sentence which means that Alhazen's book was very important one.

Be Creative

question number two

Creativity

Read the following text carefully to answer the questions that follow:

Creativity is the ability to invent or imagine something new. There are many ways of being creative and creativity can help us solve problems.

Evolution of ideas: Car development is an example of this. If a car designer creates a more comfortable car, he builds on all changes made by designers in the past.

Putting ideas together can be combined to create a new idea. If you join the ideas of a computer and a network, you get the Internet.

Changing how we do things: Sometimes new ideas bring about a change to how we do things. In the past all surgical operations involved cutting the patient. But if you send a small tube with a camera in a person's body, you can treat him from the inside.

Finding a new use for things: If you look at something that exists, you can think of another use for it. For example the first plastic was developed for making balls, but now for photographic film.

Changing approach help us find other solutions to the problem.

F. What does 'creativity' mean?
G. Mention the ways that can help us be creative?
H. May the thing have more than one use? Give example and write it on the sun shape.
I. Compare between the past and nowadays in terms of surgical operations?
J. How does changing approach help us be creative?

The end
Question Number Three

**General Story Map**
*(The Boy from the Past)*

**Action Pack 8**

**Setting:**
*When:* In the middle of the school days

*Where:* Uncle Abbas' house, the well, restaurant, garden, the land of the treasure

**Characters:** Yousef and Laila (sister and a brother), Abbas (Uncle), Mariam (Aunt), Ibrahim (gardener), Harry Dark (the dangerous man), professor Najjar (old friend of the family), thin man, the bald man, the short man (thieves of land treasures), grandfather (of Yousef and Laila), detective (the one who arrest the thief), Amer (a boy from the past).

**Initiating event:** Discovering an old Phoenician stone and a map in the well of the garden in Abbas' house.

**Problem:** The thieves attempted to steal the old valuable stone and the map to get the land treasure. The kept watching the house in the evening to steal them both.

**Major Events:**
- Laila and her brother Yousef surfed the net asking for a help to know about the old stone. They found unexpected e-mail from Harry Dark. They met Harry Dark who tried to take the old stone claming that he is interested in the old things, but Laila refused.
- In one day evening, Laila saw a man watching the house, she hide the stone in the well. Laila and Yousef asked their uncle's help. They noticed directions on the map, they follow the map instructions and discovered the land treasure. Harry was following them to steal the land treasure, but he was arrested by the detective.

**Resolution:** Laila and Yousef decided to give the land treasure as a gift to a museum. And to keep their land treasures.

**Theme/Main Idea:**
1. Preserving our land treasures.
2. The land's treasures are not one's own property.

Read the following story map then answer the questions that follow:

1. Who are the characters that have been mentioned in the text?
2. Who arrested Harry Dark?
3. What is the major event that has occurred to Laila and Yousef?
4. Describe Harry Dark?
5. Where did the story take place?

The end

Good Luck


Teaching Composition Writing through Semantic Mapping
An integral part of ESL learning is composition writing. Raimes (1983) has this to say with regard to including writing as a part of our second language syllabus:

"First, writing reinforces the grammatical structures, idioms and vocabulary that we have been teaching our students. Second, when our students write, they also have a chance to be adventurous with the language, to go beyond what they have just learned to say, to take risks"  

(Raimes, 1983: p.3)

Thus when we teach composition, we are actually reinforcing grammatical structures which the students have learned in class. For example, the simple past tense is taught and practised in class for the first week and the next week a topic is given to the students which requires them to use the simple past e.g. describing an accident. What exactly happens is that a simple past tense schema is activated during this composition class. There is a play on students' prior knowledge here. Semantic mapping is one such activity which can safely be said to activate existing schemata in a student in relation to a topic.

Semantic mapping is a technique developed by Johnson & Pearson (1978). A semantic map is a graphic arrangement of words and it shows how new words and ideas are related to each other within a text. It is also an effective diagnostic tool. It is not my intention here to advocate semantic mapping but it is felt that a variation of semantic mapping which is given in the lesson plan below will benefit lower level ESL learners in coming to grips with composition writing. The lesson plan below goes one step beyond semantic mapping. Hague (1987) outlines the major steps to semantic mapping as below:

1. Write target topic on chalk board;
2. Have students brainstorm words related to topic;
3. Write/list the words by categories in the form of a map;
4. Have the students provide labels for each category (optional);
5. Discuss the words on the semantic map;
6. Revise map after discussion.

Figure 1 shows a simple semantic map with the categories of Appearance, Where Found, Food Use and Needs of the Cow.
Similarly, Culyer (1978) in his guidelines for skill development suggested developing vocabulary related to a particular topic (e.g. seasons, holidays) that is in thematic terms. As suggested by Fry (1987) in Figure 1, words related to a topic are generated. Thus, a study of "weather" words might include brisk, sultry, squall, alert, high pressure, torrid, tornado, cyclone, barometer, traveler's advisor, etc.

How does semantic mapping relate to composition writing? A basic problem voiced by most, especially lower-level, ESL learners is the lack of vocabulary to write good compositions. However, it is felt that lack of vocabulary is not the issue here, but poor activation of existing vocabulary knowledge. Composition topics are normally selected for a class, keeping in mind the grammatical structures and idioms that the students have learnt. Thus it is not in the practice of ESL teachers to assign topics for which students do not have the vocabulary and grammatical structures at all. Therefore, an activating prewriting technique is required here. The very purpose of semantic mapping is to activate known terms in relation to a topic. The present paper considers a further step to semantic mapping leading to composition writing for lower level ESL learners. A slow transition from word mapping to sentence production is suggested within the framework of semantic mapping. A word of caution is in order, however. To conclude my introduction, several assumptions concerning the nature of lexical competence are given here:

**Assumption 1:**
For many words, we also 'know' the sort of words most likely to be found associated with the word.

**Assumption 2:**
Richards (1976) says that knowing a word entails knowledge of the network association between that word and other words in language. He goes on to offer eight assumptions that are related to lexical competence which can be used as a frame of reference to realise objectives related to vocabulary teaching. It is felt that the above two assumptions further support the practice of semantic or network mapping.

**The Lesson Plan**

**Step 1**
The teacher writes the target topic on the blackboard, for example 'A Bank Robbery'. The teacher has the class brainstorm verbs in the past tense related to the topic. Everyone must contribute. The teacher writes items on the board.

**Step 2**
Once the verb list has been exhausted, the class brainstorms things and people (nouns) related to the topic. The teacher writes items on the board.

**Step 3**
Once all or most of the nouns have been elicited and written on the board, brainstorming is done for adjectives.

**Step 4**
The teacher has a brainstorming session for adverbs related to the topic or to the verbs given on board. Suggested adverbs are written on the board.
Step 5
The teacher goes over the items, asks for any more suggestions and discreetly adds in any new vocabulary which she/he wished students to use in composition or add to their collection.

Step 6
Now students are asked to brainstorm some simple sentences using any of the words in the map. The teacher writes around 15 or 20 sentences on the blackboard. The teacher writes the original sentence given by the student. No correction of errors is made at this stage. Students are encouraged to form simple sentences of the subject + verb + object pattern in order to avoid subordinate clauses at this stage.

Example

1. Three robbers suddenly rushed into the bank;
2. One robber had a gun;
3. There was a car waiting outside;
4. They threatened the customers;
5. The customers were afraid;
6. One robber slashed the cashier;
7. He had a sharp knife;
8. One gunman guarded the door;
9. They shot the security guard;
10. They demanded cash;
11. He put all the money in a bag;
12. They ran quickly out of the bank;
13. They drove off in the car;
14. The manager phoned the police;
15. The police rushed to the bank;

Step 7
The teacher has 15 sentences on the blackboard. ShG goes through each sentence to correct any errors.

**Step 8**
The students read through all the sentences. They are given 10-15 minutes to rearrange the jumbled up sentences. Since it is a narration of events, students are given some of the devices used to convey chronological order. They also learn that in a composition of chronological order, the verbs are all in the same tense. The chronological order devices that are given to them include first, second, third, then, next, after that, finally which may be used to clarify sequence to the reader.

**Step 9**
The students write out the whole composition in paragraph form, keeping to the limit of 150-200 words.

**Discussion**
As stated earlier, semantic mapping helps map out a list of words related to topics and themes. The above activity using semantic mapping as a prewriting technique has been found to be successful by the writer in the following ways:

1. There are a lot of words thrown about in class.
2. Everyone comes up with a word somehow or other.
3. The class atmosphere becomes lively and small group discussions are heard.
4. As the teacher writes on the board, some students spell out the words.
5. Even weak and shy students utter a word or two.
6. Towards the end, students become enthusiastic about putting the parts together, like a jigsaw puzzle.
7. They are actively involved in the session because the brainstorming warms them up and the comfort of their chairs and friends around encourages even the very weak and shy to suggest words and sentences.

The teacher is a facilitator here. She writes the words and sentences on the board, and corrects errors at the end. She is also an adviser, giving hints on certain words.

**Some problems do crop up:**
1. Students are always at a loss as regards technical terms like nouns, verbs, adjectives and adverbs. They may know the items but forget the categories.
2. Since this lesson deals with the linguistic aspect of writing, non-linguistic factors such as organisation, paragraph management and topic sentences may hinder the composition writing process. Here, the teacher is the one who determines the necessary steps to train the students in the non-linguistic aspect, either incidentally or directly.

**Follow-up Activities**
This lesson is meant to be a prewriting activity. Therefore, the teacher could follow it up with another topic along the same lines for the next composition class. However, she/he should stop at the semantic mapping stage and instruct the students to construct the sentences individually in their notebooks. It is assumed that the previous lesson has provided a base to start their writing, in this case, a narrative or chronological order of writing.

It has been suggested in the earlier paragraph that topics along the same lines should be chosen. The reason is that students remember and learn better as they use the same words again and again. Raimes (1983: p.14) says:- "... the longer the students grapple with the subject, the more their command of the necessary vocabulary and idioms develops....the more they discuss a topic, the more ideas they develop". Therefore, to ensure that the students explore the subject as fully as possible, a few excellent topics of interest should be found and whole series of assignments should be built around them. For example, a reading passage, a dictation exercise, role-playing activities, unscrambling jumbled up sentences, a form to fill out, etc.

**Conclusion**
This technique of teaching composition writing may be more useful for lower-level ESL learners who are still struggling with basic structures in the language. Complaints like lack of ideas and lack of vocabulary may find some practical solutions through this technique. Finally, through this session of brainstorming and semantic mapping, composition writing can become more lively and adventurous.

**References**


