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## **Abstract**

The purpose of this study was to examine the effects of an educational program for teaching the skill of writing, using semantic mapping and brainstorming as prewriting strategies on developing students' writing ability and evaluating the role of these strategies that may play in increasing students' motivation for learning. The population of the study consisted of all the tenth grade students in the public schools of Dubai Educational Zone year 2014-2015. The sample of the study consisted of (74) students (males and females).

The main question was about the effect of two pre-writing strategies: semantic mapping and brainstorming on students' writing ability and motivation for learning.

To answer this, the researcher proposed a writing program and a motivation for learning questionnaire. Afterwards, each experiment group was taught according to one of the two teaching writing strategies (semantic mapping or brainstorming); while the control groups were taught in the traditional way.

The findings of the study indicated significant differences in favour of the experimental groups taught in general and semantic mapping in particular according to the educational writing program.

In the light of these findings, the researcher ended the research with some relevant recommendations to be utilized for further researches.

## ملخص الدراسة

هدفت هذه الدراسة الى بحث أثر برنامج تعليمي قائم على استراتيجيات قبلية ( العصف الذهني وخرائط المفاهيم ) على مهارة الطلبة في الكتابة وعلى مدى إثارة دافعيتهم نحو تعلم اللغة الانجليزية . تكون المجتمع الاحصائي لهذه الدراسة من طلبة الصف العاشر لمنطقة دبي التعليمية , كما تكونت عينة الدراسة من شعبتين لنفس الصف : واحدة للطلبة الذكور و الاخرى للإناث. و قد بلغ عددهم الاجمالي (74) طالبا و طالبة.

تناولت الدراسة سؤالا عاما تعلق بمدى أثر تلك الاستراتيجيات القبلية على قدرات الطلبة في الكتابة و على إثارة دافعيتهم لتعلم اللغة الانجليزية و للإجابة على هذا السؤال ، قام الباحث بتصميم برنامج تعليمي قائم على استراتيجيات العصف الذهني و خرائط المفاهيم كاستراتيجيات ما قبل الكتابة ، كما صمم استبيان لقياس مدى دافعية الطلبة نتيجة لتطبيق هذه الاستراتيجيات بعد ذلك تم تدريس المجموعات التجريبية باستخدام الاستراتيجيات المقترحة ، أما المجموعة الضابطة فقد تم تدريسها بالطريقة التقليدية. اشارت نتائج الدراسة الى وجود فروق ذات دلالة إحصائية لصالح الاستراتيجيات القبلية المطبقة بشكل عام و استراتجية خرائط المفاهيم بشكل خاص.

## **Chapter One: Introduction**

The Ministry of Education in the United Arab Emirates has known that people are the real capital for the country to develop for a future's economy that is dependent on knowledge. Therefore, the country is aware that education is one of the important resources for this knowledge. Each student is targeted by UAE, the country is determined to have a good learning experience where students have opportunities to learn and excel. The students are supposed to gather all their needed skills through education. This helps them to solve problems, think critically and cope up with the changing world. On the one hand, the traditional practices that hinder learning can be listed as: teacher-centred classes, single sense stimulation, single media, passive learning, knowledge-based learning, artificial contexts, and information delivery. On the other hand, techniques that are related to new learning strategies can be summarized as: student-centred learning, multi-sensory stimulation, multimedia, inquiry-based learning, critical thinking, genuine context, group work and exchanging information. In addition, technology should not be ignored by educators because this enriches the learning environment and enables students to reach their objectives according to Abdel Ghani (2000).

The writing skill is vital for any student, whose target is to have effective in English because writing is important in relation to other skills such as reading, listening and speaking. Richards and Rogers (2002) believe that the learners write what they have listened to and this make them try to be aware of the whole concept. Zhang and Jin (2003) state that writing is a broad skill which have grammar included in addition to lexical items , and several other components; it is directly related to the other three skills of the language . Raimes (2001) also mentions that writing is important for communication, lexical items usage and to reveal the students' ideas. As a result, writing has come to have a big space root in the process of learning a second language, especially through on-going assessment systems. Writing plays an important role in the whole process. It is mainly used to tell about students' thoughts and to deliver the ideas in a correct way. Barras (1996) states that writing can help the students to recall things, notice things and express themselves in an efficient way.

Hobelman and Wiriyachitra (1999) assert that writing should be looked at as a communicative act since students are asked to think of their audience, the readers and their purpose of writing.

Ivanic (2003: 384) said:

"The process approach of the teaching of writing concentrates on how to write rather than what they finally produce should be like, but is often applied to writing composition on topics set by the teacher".

In addition, Zamel (2000: 196) stresses what Ivanic mentioned by saying;

"Recently, however, the focus of research on composition has shifted. Rather than investigating what students write, teachers and researchers are beginning to study the composing process itself. They are now working under the assumption that we know how to teach writing; we must first understand how we write".

Zamel (2000) adds that writing refers to make meanings and this leads to the importance of generating ideas and thoughts. For him, writing is not about putting words on a piece of papers, because other processes are involved too. Such processes might occur before and after the process of writing itself. The stage that precedes writing is essential (cited in EIA bed, 1998), the researcher confirms that during the pre-writing stage, the learners choose an issue and build on it. They organize things and prepared for the final presentation.

Moreover, Smadi (1996: 35) mentions:

"The traditional method of teaching writing composition does not go beyond putting a title on the chalkboard, providing the students with some pertinent ideas and then letting the write their composition".

Khwailah (1991) also adds:

“Nearly most teachers of English as a foreign language usually ask their students to write a short composition on a certain topic without giving the adequate support or help apart from the meaning of a few related words”.

Therefore, students who are not given this chance, become unable to write, and Smadi (1996) stressed this point when he said:

“It is my conviction that the students' inability to write a comprehensive and acceptable English passage is due to the method used in EFL teaching in general and composition in particular.” (Smadi, 1996: 35)

The current study is meant to use this program and to see if the program designed by the researcher will benefit the students' and improve their writing ability or not. This program will depend on brainstorming and semantic mapping strategies to motivate students' and encourage them to use their knowledge to generate ideas for writing. It is expected to formulate a clear outline for the target topic and relevant supporting ideas. It is worth mentioning that semantic mapping is the graphic arrangement (a map) which shows the major ideas of a certain topic and the related words and concepts are linked with key concept by means of lines and arrows, while brainstorming is a means of getting a large number of ideas from a group of people in a short time, it is used as a strategy for teaching creative writing.

The idea of brainstorming was devised and used during the 1930s by Alex Osborn (Rawlinson, 2006). It has been described as a group of people sitting around a table and throwing out ideas. Gaol, Mars & Saragih (2014) point out that brainstorming is considered a non-threatening strategy to motivate students to participate. They also add that students working on papers can use brainstorming as a strategy for generating fresh ideas about the material.

On the other hand, many researchers consider semantic mapping as an important and essential part of the writing process. As a strategy utilized during the pre-writing stage, semantic mapping is expected to be effective if it is implemented accurately. Zipprich (1997) asserts that the pre-writing stage is the most important stage, and the semantic

mapping strategy is suggested to make the pre-writing stage work for students who suffer from problems in learning.

For the issue of motivation, when students are stimulated through interesting and enjoyable activities, they become interested in participating in these activities. Despite the type of motivation, whether it is extrinsic or extrinsic, once the students are motivated their brain will be activated to generate and create new ideas.

### **1.1 Significance of the Study**

The researcher first reviewed the previous related literature, and then discovered that no similar studies have been done to examine the effect of these two pre-writing strategies on the students' ability to write, particularly tenth grade learners in Dubai. Some studies have been done to see the effect of brainstorming and semantic mapping on students' reading comprehension as in Mohaidat's study in 1997 and Alhijawi's in 1999. That's why, the researcher knows that it is important to conduct the present research to investigate the effect of brainstorming and semantic mapping as two innovative teaching strategies on developing students' ability to write, and evaluate the role these strategies may play in increasing the students' motivation for learning.

The researcher wants to reach conclusions and offer recommendations that might improve the methods of teaching in general and writing in particular. So, this study will determine the extent to which the students benefit from the various teaching techniques that satisfy their interests and needs.

### **1.2 Statement of the Problem**

The study aims to investigate: "The Effect of semantic mapping and Brainstorming as pre-writing strategies on developing the English writing an ability and motivation of the tenth grades in Dubai Educational Zone"

The writing skill is given enough importance in both especially in secondary curricular frame work in UAE. By the end of each stage, pupils are expected to be able to write properly structured sentences and a well-developed essay. (Ministry of Education, 1999; 6) Nevertheless, the researcher experience in teaching tells that students in the secondary cycle in particular still face problems when tackling a writing task. Both parents and educators are not happy with the students' ability to write. Students themselves feel

dissatisfied with their writing productions; as a result they have passive attitudes towards the writing lessons. Moreover, it has been noticed that few students produce coherent and well-developed essays. Most of them commit mistakes in grammar and are unable to choose the suitable lexical items. Therefore, most of the teachers are concerned about the final product rather than the process itself. (McGee, 2004)

Consequently, since the writing process as mentioned above is more effective than the final product, the researcher has proposed a writing system that depends on brainstorming and mind mapping to develop students' writing ability and make them become motivated to learn meaningfully. The researcher wants to suggest research implications that might help solving the problems of writing that face secondary students.

### **1.3 Questions of the Study**

This study aims at answering the following research question: "What is the effect of Semantic Mapping and Brainstorming as pre-writing strategies on developing the English writing ability and learning motivation for the tenth grade students in Dubai Educational Zone?"

The following sub-questions are derived from the main question:

- 1- Is there any statistical difference ( $\alpha = 0.05$ ) in the writing ability post- test mean score between the experimental groups that are using the teaching strategy (semantic mapping or brainstorming)?
- 2- Is there any statistical difference ( $\alpha = 0.05$ ) in the ability to write for post-test mean scores between the experimental groups that are using interaction of the gender variable and the teaching strategy (semantic mapping or brainstorming)?
- 3- Is there any statistical difference ( $\alpha = 0.05$ ) between the motivation for learning of the experimental and control groups that are using the teaching strategy (semantic mapping or brainstorming)?
- 4- Is there any statistical difference ( $\alpha = 0.05$ ) in the motivation for learning between the experimental groups that are using the interaction of the gender and the used teaching strategy?

#### **1.4 Objectives of the Study**

This study aims at covering the following objectives:

- 1- To find out the effects of using semantic mapping and brainstorming strategies on improving the writing ability of tenth grade students and motivation for learning.
- 2- To find out which of these two strategies is more efficient in developing the students' ability to write?
- 3- To find out if there are any differences in students' achievement in writing due to gender difference or to the interaction of gender with the teaching strategies.
- 4- To find out if there are any differences in the learning motivation level mean score of the experiment and control group due to the change in teaching strategies.

To reach conclusions and suggest recommendations which may help in facilitating the teaching/learning process of the writing skill in the UAE schools and as a result in improving students' writing ability.

## **Chapter Two: Literature Review**

This chapter is divided into two sections: the theoretical background, and the practical studies. In both of the two sections, three issues are discussed: semantic mind mapping, brainstorming and motivation for learning. In the second section: several related studies will be presented.

### **2.1-Theoretical Studies**

Many scholars have expressed their own views about the effectiveness of pre-writing strategies such as mind mapping and brainstorming. Those strategies are considered crucial for students because they activate the students' background knowledge and encourage them to generate as many ideas as possible. De Bono (1992) defines brainstorming as a way of improving strategies to solve problems. The brainstorming strategies operate through seeing what kind of problem is involved; and then searching purposefully for many creative solutions. This is achieved through pushing the ideas as far as possible. Blanchard and Root (1997) mentioned that brainstorming can be done alone or through group work. The steps of brainstorming are as follows: suggesting a broad topic, writing many associated ideas, adding more ideas by answering questions that begin with "What, How, When ...etc.", and finally crossing out unrelated ideas. While MacDowell (1999) states that brainstorming is the act of defining a problem and searching for different possible solutions and ideas regardless of how far-fetched those ideas may sound. All these ideas are recorded and evaluated only after brainstorming is completed. Ghani (2000) also stated that

"It has been noticed that during the brainstorming session, students tend to be less conscious of their English and concentrate on the ideas, thus using English in a more natural, meaningful way"... "It has been noticed that brainstorming sessions promote diversity, as opposed to the uniformity that teachers tend to foster."

Semantic mapping on the other hand, is known to improve the students' linguistic development and progress. This strategy is helpful because it organizes the subject in a visual way. Teacher - directed semantic mapping webbing can help them see relationships between ideas. Later, the same student may be able to draw webs on their

own. Meyer (2001) believed that organizers using graphics can assist students to remain on topic through having their thoughts visualized right there for them during the time they attempt the writing process. This also supports the writers and provides the ideas in the correct order. This way of organizing things graphically is considered a valuable way to direct students to the right direction through the different phases of writing, which are mainly; writing first drafts, prewriting, publishing and revising.

In addition, it is obvious that motivation is closely related to the learning process because when the students are motivated enough they will be encouraged to proceed despite all the mistakes they commit. Okolo (1999) states that there are two types of motivation; there is extrinsic motivation and intrinsic motivation. The first relates to the factors outside the subject matter such as parents, school administration, peers and avoiding punishment, while the second type relates to the subject matter itself when students are eager to learn just because they enjoy learning. Kang (2002) expresses the significance of motivation in learning as it helps learners increase their knowledge, predict their own behaviour, directs it towards achieving their objectives, and raises their expectations of learning. Zamel (2000) claims that there is an important aspect of the writing process, this aspect is about the stages before the commencement of the writing process. It is mainly about the ideas the writer has to acquire before starting to write, and it was found that most of students found it important to have classroom discussions about the topic before starting to write.

Raimes (2001) asserts that prewriting techniques ( e.g. brainstorming ) give students the opportunity to use all their linguistic skills to help them explore and get started with their ideas on a given topic, or to allow a topic to emerge out of communicative classroom activities. Botle (1997) also believes that prewriting is related to motivating student taking part in debating the subject, speaking, interacting with peers, and taking part in the writing activities that are thought to be original components of the tasks. Specific activities that are done before writing such as group brain storming, clustering and looping help students master the second language in a better way. It is clear that Raimes, Zamel and Botle consider the prewriting phase as an important phase that should be utilised and activated properly, so as to help students form ideas and acquire the target

language more effectively before commencing the writing process. Therefore, the researcher is totally convinced with the same opinion.

Chaetham (1996) discusses the importance of incorporating traditional prewriting techniques such as free-writing, round questions, discussions and exercises in a workshop. The author's workshop aimed at outlining and conducting brainstorming in a ninth grade high school curriculum to teach composition and creative writing. She concludes that it is necessary to make traditional prewriting activities as innovative and creative as possible to capture and sustain adolescents' attention in order to help them develop their creative minds, and teach them how to approach a writing assignment. On the other hand, Zaid (2005) suggests that a map is the outline of a short essay. He reminds us that the map, like a picture, can be worth a thousand words. It can stimulate students to talk, and at the same time encourage them to listen.

Many students face difficulties in organizing cognitively what they hear or read. Therefore, teacher-directed semantic mapping can help recognize the relationship between ideas and characters of a story as an example. In a later stage, students can draw their own semantic webs. Johnson (2000) indicates that semantic mapping is based on schema. It reflects on the previous information and gives space for the learners to know new ideas and realize the connections between the different elements. So in general, semantic mapping begins by assigning a topic to students to recognise its concept and see the relationship among its components. Semantic mapping starts with deciding an issue for the learners, then asking them to list everything they know that is related to that topic. Then, the students search for the ways to classify words into categories. Then, the last point is to analyse the issue and relate lexical items and make titles for the ideas to be incorporated in the writing task. All the mentioned scholars clearly assert that using semantic mapping is an effective prewriting strategy for activating the prewriting phase. This activation in turn will positively affect the whole writing process.

Moreover, Okolo (1999) believes that motivation is directly related to the learning process. It can help teachers plan to achieve the objectives they desire. One can realize that there are two types of motivation: extrinsic and intrinsic. Extrinsic motivation emerges from external sources. Its relationship with the subject matter is weak as the students are eager to learn only to get high grades, avoid punishment and obtain praise.

While the Intrinsic motivation, as mentioned previously, comes from the students' inner feelings. In this case, the students learn because they like the subject matter and enjoy learning without being pushed to do so. Motivation, as it is related in a direct way to the learners process of acquiring the language, it is very essential. Learners who are highly motivated become able to academically perform well. While, students who have lower levels of motivation do not. This fact was stated by Keefe and Jenkins (1993).

## **2.2 Practical Studies**

Some studies have been conducted to investigate the effectiveness of various pre-writing strategies, especially brainstorming and semantic mapping. Some other studies have been conducted to test the effectiveness of the two strategies on improving students' learning comprehension and learning of lexical items. In the following section, there will be a brief description for some of those studies.

### **2.2.1 Semantic Mapping Studies**

Melendez (1997) examined the impacts of semantic mapping on the students' understanding for reading in students who came from different cultures , particularly Filipino-Americans. It was found that there was an evident link between semantic mapping and understanding reading. It was also found that there is a link between semantic mapping and the students' level in reading. On the other hand, Osman (1998) examined the efficiency of using mapping techniques in writing. While summarizing ideas, the control group didn't use any specific technique, while the experimental group used semantic mapping. The second group were proved to be more successful than the control group in transforming the ideas. On another level, Paterson (1996) examined the importance of semantic maps ninth grade students who suffer from learning disabilities. A pre-test and a post-test of general reading ability was given to students assess the effective use of semantic maps. Eight learning disabled ninth grades students who were enrolled in a regular English class were the subjects of research, then, baseline data were collected for five weeks on all three target behaviours after the pre-test on general reading ability. Next, a post-test on general reading ability was conducted. The data were analysed through descriptive statistics and visual inspection and the results indicated the effectiveness and efficiency of semantic maps. In twenty two behaviours, there was an

improvement in scores due to the introduction of semantic maps. The results of these two studies made it clear that the semantic mapping strategy is effective and appropriate for teaching the different language skills. Furthermore, Schultz (1991) researched the effectiveness of a semantic organizer as a strategy to write for improving the expository abilities of first grade students. Seventy-three of first grade students from four classes comprised the sample of the investigation. Classes were assigned in a random way to a control group. The researcher conducted a pre-test and ten writing sessions. The treatment group used a semantic organizer, and the control group did not. ANOVA and Post Hoc tests were used to analyse the data. The results indicated that the students who used semantic mapping produced better expository writing pieces than a similar group which did not. The results also showed that the semantic organizer was an effective strategy for developing the ability to address content, organization and purpose in expository writing. In another study, De Fina (1991) examined the effect of semantic mapping with next discussions for the ability to understand the reading in university students. Participants included 73 developmental track students who were randomly distributed into three groups: two experimental (mapping with discussion and mapping without discussion) and one control. The results indicated that semantic mapping didn't improve the students' understanding of written material.

More studies was performed on the same subject; for example, there is the study of Dryk (2000) who evaluated the use of semantic mapping as a pre-writing activity to improve the writing product of fourth grade students. The subjects were 100 students in six intact classrooms, each child being instructed by his regular classroom teacher. The experimental group used semantic mapping as a pre-writing technique, while the control group used other pre-writing strategies such as listening to a book, outlining, brainstorming and role playing. Important variations were identified among the groups on measurement of holistic scores, content, organization and vocabulary, while Hitchcock (2000) studied the effect of instructional activities (brainstorming and graphic organizer) on students' ability to transfer meaning from their reading to their writing. One class of students read essays, worked through the instructional activities, and then wrote some essays. The effectiveness of transfer was measured against a control group who were not using a specific instructional activity. Three independent graders using a six-point holistic

scale rated the writing samples of the experimental and control groups. The experimental group demonstrated larger and more significant improvements during the study than did the control group. So, the qualitative analysis indicated that the instructional activities did indeed improve the effective relationship (attitudes) between students and reading/writing tasks.

In the same context, Meyer (2002) in his study looked into the difference in exam scores among students whose instruction methods depended on using organizers that is based on graphics for their writing and the other learners who didn't follow this way. Two classes of third grades were chosen from two schools in the same area participated in the pre-test and post-test. Results showed that learners who used the graphic organizers improved in writing.

Furthermore, the researcher would like to shed light upon two more studies in the same context. The first was conducted by Sturm (2002), who searched for the impact of two types of concept mapping. Those were made by hand and made by the computer. The research was conducted on writing essays for middle school students who suffered from difficulties in learning. The sample consisted of 12 eighth grade students who wrote essays but there were three aspects to be considered: first, there was no map support of any kind. The researcher compared the essays putting into consideration four aspects; the word count, the maturity on the syntax level, the T-units number and the writing score in general. The researcher also looked into the writing attitude of the students. Finally, the researcher concluded that there was a significant increase in the level of the essays written by the students at the time of using computer as well as hand mapping. This increase covered the aspect of word count and the T-units as well as the general score. It was also noted that the attitudes of the students also became more positive.

On the other hand, the researcher would like to stress the importance of motivation in promoting students' ability in writing. The last study to be mentioned in this section is the study of Svenconis (2002) who examined the efficiency of semantic mapping techniques in second language lexical items teaching. Subjects in the control group studied the words in the traditional "word listing" (i.e. alphabetical format). Subjects in the experimental group studied the words under the semantic mapping format whereby maps displayed the relationships among the words. A post-test was given immediately; another,

approximately two weeks later. Data analysis was done through MANCOVA and one way ANOVA, and the results indicated a larger score for mapping than the word listing. It is also worth to mention that McGee (2003) tried to discover (a) whether there was a difference between students who used the semantic organizer as a prewriting strategy and those who did not; and (b) whether there is a difference in such writing performance between the high and the low readers. Students in the experimental group wrote essays using semantic organizer as a prewriting instructional technique; whereas, the control group followed the regular teacher –directed social studies lessons. The conclusion of this study revealed insignificant variations among the experimental and control groups.

### **2.1.2 Brainstorming Studies**

Many scholars examined the use of brainstorming in ESL teaching. For example, Mohandas (1997) investigated the impact of brainstorming on the development of reading comprehension. For this study the sample was randomly selected. It consisted of four ninth grade sections (119) students. The experiment group consisted of two sections (56 students) and the control group consisted of two sections (63 students).

Brainstorming technique was used to teach reading comprehension for the experimental group while the control group was taught with the traditional method. The findings of the study indicated a significant increase ( $p < 0.05$ ) between the mean scores of the two groups in favour of the experimental group due to the effect of using the brainstorming technique.

In another study about the same subject, Collado (2002) tried to find which type of practice (instruction standard or brainstorming) is more effective for increasing creative thinking with words in tertiary level students. Fifty students: 26 females and 24 male students were enrolled in this study. The data was analysed and the results indicated that brainstorming instruction increased the students' fluency and originality more effectively than did standard instruction. The results of this study indicated also that brainstorming strategy could be utilized to help students generate ideas they need to execute their writing tasks. In the same context, Alhijawi (1991) investigated the effects of using two metacognitive strategies, semantic mapping (SM) and experienced – text relationship (ETR) on the learner's reading comprehension achievement in Arabic. The subjects of the study were 150 Arab college freshmen who were students at the university of Yarmouk-

Jordon. They were all taught the same reading curriculum, and the period of their study was approximately one month.

The students learning styles were tested right before and after the study using a protocol test and a questionnaire. Upon finishing the study, the researcher concluded that the efficiency of the effect of meta-cognitive strategies on the level of reading comprehension competency in Arabic is related to the students' different learning methods and styles. Moreover, the semantic mapping strategy has proved to be effective in improving Arab learners' reading comprehension. So, this strategy could also be utilised to improve Arab learners' writing ability and their attitudes towards writing. On the other hand, Troyer (2000) tested the effectiveness of three instructional strategies on students' reading comprehension and writing performance. The sample of the study consisted of one hundred and seventy three fourth, fifth and sixth graders, who participated in a six-week study. Those students were given the task on a random basis with three conditions to be considered: mental modelling, graphic organizer or a control read/answer group. They received instruction in the characteristics of three text structures: attribution collection, and comparison. The reading comprehension results indicated significant effects in favour of graphic organizer's strategy; while delayed writing results indicated significant effects in favour of both mental modelling and graphic organizer strategies.

Moreover, Hurley (2002) looked into the possible existence of relationship between the discussion content and the content of the post-discussion written work of students. Students read assigned texts, wrote summaries and responses after discussion. Data analysis revealed that changes were evident in students' post summary writings, as scores consistently improved as students incorporated new ideas into their summaries after discussion. Results also revealed that even students who made little or no contributions to the talk still showed improvement in their post-summary writing.

Furthermore, Hayn (2003) studied the effectiveness of teaching prewriting strategies to beginning writers compared with traditional instruction. The sample consisted of 63 students enrolled in freshmen composition classes at a Midwestern American university.

Four groups were involved: two on campus and two from two high schools in the same city. At the end of the semester, two teachers trained on the holistic philosophy evaluated the essays generated by the two experimental groups. The findings showed no significant differences in writing ability in favour of any group of students, no matter what teaching methodology was used. The researcher believes that the small number of students in each class (about 8 students) might not enable the teachers to have satisfactory discussions about the target topics.

In another study, Brondey (2003) investigated which of four prewriting treatments (i.e. reading paired with prewriting, prewriting only, reading only, and neither reading nor prep rewriting prior to composing) produced significant differences in expository compositions written by fifth grade students. The subjects included five classes of fifth grade students (n=120) randomly assigned to classes. Four classes were randomly designated as treatment group while the fifth class was designated as a control group. MANCOVA statistical procedure was used to compare the effects of the four prewriting treatments. The results indicated that the type of prewriting treatment does significantly affect scores on expository composition. It was found that reading paired with prewriting was the most effective treatment.

While Zhang and Vukelich (1998) explored the influences of pre-writing tasks on the level of students' writing for both genders and the sample selected consisted of students who were at different proficiency levels among the four graders. The sample consisted of public school students in grades four, five, nine and eleven. Students were divided into two groups: one group was for writing and those were given pre-writing activities. The second group was given writing tasks only. The researchers graded each student's writing using the holistic approach with five criteria to determine the quality of writing. The researcher concluded that, students in the second group had higher grades. In addition, the researcher also concluded that the gender of the students and their academic level had strong impact on the efficiency of their pre-writing, with females consistently scoring higher than males.

In addition to what is mentioned above, to compare the production of turn-taking groups in of brainstorming groups, Manning (1999) performed his study. In this study, the utility of turn-taking was compared to an idea of generation technique called syntactic, and to compare computer-aided brain storming. The data from those students suggested that turn-taking may yield a greater number of ideas per group than brainstorming. The production of both small groups (four participants) and large groups (seven to ten participants) was evaluated for quantity and quality under two topic conditions. The results indicated that participants in turn-taking groups produced a greater number of ideas per group than participants in brainstorming groups.

### **2.1.3 Motivation Studies**

This section will be dedicated to studies about motivation. This is due to the significant importance of motivation in the teaching and learning process and its direct relation to the brainstorming and semantic mapping strategies. For instance, Commare and Sedlack (2002) who studied the writing abilities among 94 American first and third grade pupils for the purpose of increasing the writing abilities of these students concluded that factors influencing the low writing abilities were; the absence of motivational strategies and low self-esteem .While Wigfield, Guthrie, Tonks, and Peerencevich (2004) who discussed the nature of domain specificity of writing motivation and examined how the two writing programs influenced third grade motivation to write, in analysing the children responses to the writing motivation questionnaire, that there was an increase in the children's intrinsic motivation to write and there was also a significant increase in their writing self-efficacy.

In general, the researcher believes that the pre-writing techniques of semantic mapping and brainstorming have strong effect on students' motivation and it leads them to write more effectively as they become encouraged to generate more ideas, organize their ideas and make them enjoy the process of writing. This is supported by Guthrie (2006) who examined increasing reading comprehension's motivation and science knowledge through concept-oriented reading instructions. The results showed that reading motivation increased multiple outcomes in science and reading, and that interest in reading was a prominent factor generating reading comprehension growth.

On the other hand, Poskiparta, Niemi, Lepola, and Laine (2003) studied the idea of vulnerability in both motivation and emotions. The aim was to see if there is a link between this kind of vulnerability and problems in learning to write and spell. A total of 127 children were followed longitudinally from the pre-school stage up to the secondary stage. The findings showed that early problems in learning writing and spelling are directly linked to motivation and motivational aspects in the process of learning in the school contexts. In another study; Wang and Guthrie (2004) examined the ability of motivation to make understanding texts better and at the same time they examined the importance of culture in 145 Chinese and American fourth-grade students. They investigated the effects of intrinsic motivation, extrinsic motivation, and the relationship between them, the amount of reading achievement, and text comprehension on the students' understanding. They found that intrinsic motivation was vital to both groups in terms of better understanding and performance. Extrinsic motivation negatively predicted text comprehension; while reading amount did not predict text comprehension.

## **2.2 The Educational Experience in UAE**

The educational experience in UAE is rather different. The Ministry of Education in the United Arab Emirates is aware of the importance of writing as a process, but not as a product. The educationalists in the ministry know that the students suffer when they are asked to write an essay, especially in the secondary cycle. As a researcher and as an English Language teacher, I noticed that most of the students couldn't express themselves or organize their ideas coherently.

To help students write meaningfully and process what they write, several workshops were implemented to train the teachers on how to deal with the skill of writing as a process. The textbook (On Location) focuses on writing as a number of steps. The small project the secondary students have to prepare and implement throughout the year based on the process of writing. In Al Ghad Schools, in particular, the students should write a first draft, the teachers revise it and return it to the students to write it again in the light of the comments of the teachers.

One of the significant studies in this respect was Jahjah (2008) study. He investigated the effectiveness brainstorming and mind mapping on students motivation to write well in UAE Western Zone. The main purpose of the study was to see how students are

motivated and encouraged in writing essays that are free of mistakes. In general UAE students know how to speak in English well because they live in a multi-cultural community and they practice speaking all the time. However, they do face difficulties in writing because they do not practice a lot.

Therefore, there was a need to see what motivates those students to improve their writing. The sample of the study consisted of (74) grade eleven students in two schools that were selected for the purpose of the study: one for males and another one for females. For the male students; two sections were considered as experimental groups and were taught through brainstorming and semantic mapping and one section was a control group which was taught through traditional way. The same procedure and division were applied to female students. Participant teachers were cooperative and helped the researcher to reach the study objective and the researcher made a lot of efforts to explain the methodology and to give details about the study. The results showed that the prewriting strategies of brainstorming and mind mapping had significant effects on students' motivation to express their thoughts during the writing process. It also showed that the female students were more motivated than the male students. The results of the study were very significant to teachers and educators. They led to a major change in policies and strategies in the educational zone. Brainstorming and mind mapping has become an inseparable part of the writing teaching process in most of UAE schools.

To sum up, in most of the literature reviewed by the researcher for the purpose of writing this dissertation; it was found that studies and investigations supported the importance of semantic mapping and brain storming in improving the writing process and outcomes for most of students' levels. It was also found that there is a direct link of those strategies with motivation.

## **Chapter Three: Methods and Procedures**

This chapter is about the design of the study, the sample, the population, and the variables. It will also deal with the instruments and how their validity and reliability are established as well as the procedures followed to implement the study.

### **3.1 The Research Question & Research Approaches**

The research question of this dissertation is "The Effect of Semantic Mapping and Brainstorming as Prewriting strategies on Developing the English Writing Ability and Motivation for Learning of the Tenth Grade students in Dubai Educational Zone." The overall objective is to develop effective strategies in teaching writing.

To address this question properly, and to answer other questions that are derived from the main question, some statistics about the performance of the students and the change that occurs (if any) to the quality of their writing work must be presented. In addition, there was a need to thoroughly examine the students' writing samples and analyse them qualitatively. Therefore, the approach used in this dissertation depended on qualitative and quantitative approaches. That was a necessity that emerged during the planning stages for this dissertation to be able to answer the research question and all the questions derived from it.

Traditionally, researchers have investigated this area through the same approaches. There was always the need to use qualitative approaches to examine the students' writing samples before and after applying the new strategies in the process of teaching. It was also important to see what the results mean from the statistical point of view. Therefore, the researcher decided to follow the same steps of previous peer-reviewed research to gain accurate results for the purpose of this dissertation. Although the researcher acknowledges the fact that each research method has its strength and weaknesses, however, the researcher decided that using mixed methods can cover most of the weaknesses and makes the study more comprehensive because those methods cover all the needed aspects for this dissertation.

### **3.2 Rationale for Using the Selected Methods**

According to Creswell (2002) Qualitative methods help researchers to understand the reasons and the motivations of the sample population; they also help in identifying the problem and creating new ideas and cover the common trends when it comes to views and perceptions.

As for the sample addressed in this study, quantitative methods use a small number, and in this case the sample covers a certain idea. For the data collection, it is done through using interviews or other techniques; finally the data analysis is done without depending on numbers or statistics and the outcomes are usually exploratory as the results are not meant to make a certain generalization about the sample but they only help to understand the issue and make a base for further actions.

On the other hand, quantitative methods depend on quantifying the data and to measure the occurrence of opinions and perceptions. In some cases, this kind of method requires the use of qualitative approaches as a supplementary to complete all aspects of research. The sample is usually selected randomly. The data collection is done using certain pre-prepared techniques like questionnaires, observational sheets, etc. statistics are done using certain software or manual calculations. The results of such studies are descriptive and may lead to conclusive decisions. For the outcomes of quantitative research, they usually lead to a certain course of action.

Therefore, the researcher decided to use mixed methods to be able to get statistical data about the development in the students' writing using the new strategies and because this will give decisive results and conclusions about the true development of the students. At the same time, it was a must to use qualitative methods to get a closer view on the students' writing samples. Qualitative methods were a must also to decide the difference between the students' performance before applying the new strategies and after doing that. This was done through the diagnostic test given to the students before the commencement of the study and the post test that should reveal the change in the students' quality of writing if any.

So, in general, it was very difficult to do this study and maintain its accuracy using only one method of research and the use of combined methods was a key factor for this study to be comprehensive and give consistent results that may lead to an appropriate course of

action or a change in policies. Qualitative and quantitative methods helped the researcher to obtain the required data, analyse the data and at the same time gain some interesting outcomes that proves to be beneficial for applying the new writing strategies in the future. The researcher intends this dissertation to make a useful contribution to educational policy in Dubai educational zone and hopes that teachers may utilize the results to improve the ways of teaching writing in the related schools.

### **3.3 Sample & Site Selection**

The sample of the study consisted of all male and female tenth grade students in the public schools of Dubai Educational Zone in the scholastic year (2014/2015). Their ages were between 14-15 years old. The sample of the study consisted of 74 students in two selected schools, one for males which is Al Ma'arif Secondary School and the other one was for females, which is Al laissali secondary school. The number of 10<sup>th</sup> grade students was (37) divided into three sections; while the number of female students was also (37), and they were also divided into three sections.

This sample was chosen purposefully because both of the schools were in the same educational zone, they teach the same text books, and they have the same educational environment. The researcher is a teacher in one of these two schools and that's why it is easier for the researcher to contact the volunteering teachers in both schools and explain to them the steps they should follow to implement the experiment in their schools. Grade 10 in the male school was divided into three sections: two experimental groups: 12 students in the semantic group and 12 students in the brainstorming group, and the other group was a control group, and it consisted of 13 male students.

On the other hand, three sections from the female school were chosen, and the total number of the female students was 37. Two of them were experimental groups: one for brainstorming and the other for semantic mapping, and the third section was a control group of 13 female students. So, the total number of the study sample was 74 students, from both genders; males and females. The control group was exposed to the traditional method of teaching writing, while the experimental group learned English writing through semantic mapping and brainstorming strategies.

The English teachers in both schools are B.A. holders, they are experienced in teaching English as a foreign language and they participated in the same training courses under the

same conditions. They use the same teacher-guide and teach the same textbooks, which are constitutive factors that ensure teaching is done almost in the same way.

Table (1) shows the distribution of the subject so of the study:

Group		Males	Females	Total
Control		13	13	26
Experimental	Semantic mapping	12	12	24
	Brainstorming	12	12	24
Total		37	37	74

Table (1) Distribution of the subjects of the study

### 3.4 Design of the Study

This study is based on a Quasi-experimental research design where samples (students, classes, teacher and school) are not chosen randomly but purposefully as explained in the previous section of this chapter. Conditions for the experimental groups are manipulated by applying the brainstorming technique and semantic mapping technique variables. The data of these groups will be compared with the outcomes from the control group where more traditional methods of teaching writing are applied. Effects on both groups are first recorded based on the collected data; this data is in the form of writing samples and then it will be compared for further analysis.

### 3.5 Variables of the Study

The independent variables of this study are:

- The teaching strategy at three levels; semantic mapping, brainstorming, and traditional strategies.
- Gender: male and female students.
- The interaction of the strategy with gender.

The dependent variable

- Students' writing ability.
- Students' motivation for learning.

### **3.6 The Instruments of the Study**

Many instruments were used in this dissertation; first there was a diagnostic test which assesses the students' writing ability; this test was used before the commencement of the study and it was repeated at the end of the study. Second, there was a proposed writing program which included the following components:

a- Teachers' lesson plans (see Appendix A)

b- Writing criteria; the researcher used the writing criteria used by the Ministry of Education for the secondary cycle. (See Appendix B)

c- Students' worksheets with a special focus on writing. (See Appendix C)

A questionnaire designed to measure students' motivation for learning and after conducting the experiment. The questionnaire was designed to investigate the effect of motivation on a five-point Likert scale which are; strongly agree, agree, undecided, disagree, strongly disagree. The questionnaire was based on 40 positive and negative items which are gathered from the review of related literature.

### **3.7 Validity of the Study**

To establish the validity of the instruments of the study, the lesson plans, the reading texts, and the questionnaire were reviewed by a number of experienced supervisors and English Language teachers in Dubai Educational Zone in order to determine to what extent these structures can encourage students to write about the selected topics. The writing rubric used is of high validity since it is the only rubric being used by the Ministry of Education for grading the secondary cycle students' essay writing and it is designed and tested by several experts.

### **3.8 Reliability of the Study**

To establish the reliability of the questionnaire, which is comprised of 40 items, it was distributed to a pilot sample of 20 students within the sample of the study. The reliability coefficient was computed using Cronbach alpha Formula. The obtained value was (0.88).

### **3.9 Procedures of the Study**

The researcher implemented the following procedures in conducting the study during the first trimester of the scholastic year (2014/2015)

Month			Procedures
September	October	December	
√			Reviewing the related literature to cover the theoretical side of the study
√			Preparing the components of the proposed educational writing program
	√		Designing the motivation for learning questionnaire which was used afterwards to evaluate the motivation for learning of the subjects in both experimental and control groups before and after the experiment
	√		Defining the topic of the writing task in the pre- and post-tests. In doing that, the interests and background of the students were considered.
	√		Establishing the required validity and reliability of the instruments
	√		Coordinating with Dubai Educational Zone to select the sample of the study.
	√		Holding a meeting with the participant teachers to clarify the purpose of the study, how to execute the steps of each strategy and to hand out the paperwork. Two writing tasks were administered: one for semantic mapping and the other was for brainstorming.
	√		Administering the writing ability pre-test and the motivation questionnaire to evaluate the writing ability and the motivation for learning of students in the experimental and control groups to guarantee the homogeneity before commencing the experiment. The pre-test sheets were collected and corrected according the adopted writing rubric.
	√		The achieved scores of the writing pre-test and the questionnaire

			were statistically analysed
		√	The experimental groups were taught according to proposed educational program, while the control group was taught in the traditional way.
		√	By the end of the experiment, all groups of students (experimental and control) sat for the writing post-test. Their motivation for learning was evaluated using the same questionnaire as before.
		√	The writing sheets were corrected according to the adopted writing rubric
		√	The overall data were collected and analysed statistically to reach a conclusion.

### **3.10 Statistical Analysis**

The researcher used the SPSS: (Statistical Package for Social Science) to analyse the collected data, Cronbach Alpha Formula means and standard deviation. In addition, two-way ANOVA and Post-Hoc comparisons Newman Keuls were all used.

### **3.11 The Educational Program**

The educational program is a writing program for the tenth grade students based on semantic mapping and brainstorming as teaching strategies. Those strategies were looked at from the cognitive point of view. The researcher was interested to know what happens in the students minds using those strategies and link that to previous research. This program which lasted for one trimester included worksheets that were given to students and sample lessons for teachers. Students in the experimental groups (semantic mapping and brainstorming) were expected to write about four suggested topics during the whole trimester.

#### **3.11.1 The Selection of the Writing Topics**

After revising the topics in the tenth grade textbooks, seven topics were chosen and presented to a group of experienced teachers, supervisors, and advisors of the English subject. This group of professionals selected the most appropriate four topics that were to

be introduced to the tenth grade students. The researcher stressed the importance of using the selected ones and wrote four texts about them to be utilized by the semantic mapping group.

### **3.12 Objectives of the program**

The writing program aimed at achieving the following objectives:

- 1- To instill in students the values of cooperation and self-confidence through positive competition, discussion and group work.
- 2- To develop students' creative thinking by encouraging them to generate as many ideas as possible.
- 3- To write a coherent, properly punctuated and well-structured essay about a topic of general interest.
- 4- To increase students' motivation for learning.
- 5- To activate the pre-writing phase and help students get clear outlines for their writing tasks.
- 6- To change students' negative attitudes towards writing to positive ones by minimizing the feeling of frustration which students usually have when they execute a writing task.
- 7- To make students fluent in writing.

### **3.13 Components of the Program**

This program consisted of the following:

- 1- Teachers' lesson plans: the researcher prepared action lesson plans for teachers of both experimental groups (brainstorming and semantic mapping) each plan included the objectives of the lesson, the introduction, and the procedures to be followed and finally the evaluation of the lesson.
- 2- Students' worksheet: these worksheets included the instructions and steps for students to follow.
- 3- Semantic maps: semantic maps which were prepared by the researcher to show the teachers how to form such maps in the classroom to make writing stimulating on the part of the students

- 4- The reading texts: they consisted of four texts written for teachers by the researcher as a guide to be used while teaching according to the semantic mapping strategy.
- 5- Optional stimulating statements: teachers of the brainstorming group were asked to utilize these motivation statements to encourage students to generate their ideas, or they can have their own statements.

#### 6-Writing evaluation Criteria (Rubric)

This program adopts the evaluation criteria used by the UAE Ministry of Education to evaluate students' writing in the secondary cycle. A quick review of the criteria would show that a good balance is made between linguistic and rhetorical accuracy. This indicates that teachers should never emphasize grammatical, lexical accuracy, correct spelling and the use of mechanics at the expense of the macro level and the organizational level.

The criteria included in this program are as follows:

- a- **Content** : This criterion emphasizes the realization of the task, the relevancy of the content to the writing topic, and the extent to which the content is communicative
- b- **Mechanics of writing:** This criterion puts emphasis on the extent to which the mechanics of writing (handwriting, spelling, and punctuation) are well observed in the writing texts.
- c- **Organization:** It is concerned with the degree to which the ideas are clear, coherent and well-organized. Paragraphing is essential in this regard.
- d- **Vocabulary:** Attention is given to the effective use of word choice and idioms.
- e- **Syntax:** These criteria deal with language accuracy. It takes care of grammatical mistakes and whether these mistakes impede communication.

Table (2) shows the details of the writing rubric used by the Ministry of Education

	<b>Content</b>	<b>Grammar/Syntax</b>	<b>Vocabulary</b>	<b>Organization</b>	<b>Spelling/punctuation</b>
5	Writes with a clear purpose. A range of ideas that are	Writes using a combination of sentences – simple, compound	A wide range of accurate and appropriate word choices	Logical sequence introduction, body,	Uses sentence level punctuation most of the time. Spells complex words

	well structured.	and complex where meaning is clear. Maybe be some minor errors.	that fully express complete ideas. May use idioms.	conclusion Ideas supported in the body of the text.	correctly most of the time. Spelling of common words is consistently correct.
4	Writes with some understanding of purpose. Presents some ideas on the topic.	Writes using simple sentences. Meaning is mostly clear.	Appropriate vocabulary used but not always clear.	Uses paragraphs with some sequence and organization evident but lacks an element e.g. introduction or conclusion.	Uses some sentence level punctuation e.g. commas. Spells complex words correctly intermittently. Spelling of common words is correct.
3	Presents one idea within the topic with some elaboration.	Writes with some errors of tenses, prepositions, pronouns, subject/verb agreement.	Simple vocabulary choices. Common words used appropriately	Uses paragraphs with some sequence evident e.g. within the body only.	Uses capital letters and full stops. Spells some common words correctly.
2	Presents only one idea within the topic without any elaboration. Content limited.	Writes simple sentences with some confusion.	Simple vocabulary used appropriately sometimes.	Sequence is not clear.	Punctuation sometimes used correctly. Spelling interferes with meaning.
1	Content	Writes a list of	Limited	Sequence is not evident,	Capital letters and full stops not used.

	vaguely address the topic or question.	words with a little / very confusing meaning.	expression / repeated structures and vocabulary.	could be a list of words.	Spelling interferes with meaning.
0	Non Attempted / Off-point				

### 3.14 Teaching Methods

This program adopted two teaching methods for writing: semantic mapping and brainstorming. These two strategies are used as pre-writing strategies and they are supposed to make writing more stimulating, motivating and more relevant to the students' needs. The steps of these two strategies are as follows:

#### 3.14.1 Semantic Mapping:

Semantic mapping is a visual strategy for the purpose of vocabulary expansion and knowledge extension. It utilizes the prior knowledge of students. During the activity based on semantic mapping, students are encouraged to suggest ideas, sub-ideas and find the relationships between them in form of categorizations. The steps followed in semantic mapping are as follows:

- 1- The head word of the topic is written in an oval on the whiteboard or displayed on a slide.
- 2- Students in pairs or in groups generate as many ideas and sub-ideas as possible about the headword.
- 3- The teacher writes students' ideas on the whiteboard and asks the students to categorize them according to the associations among these ideas.
- 4- Students read the text about the headword. Then, they are asked to suggest any changes (additions or deletions) on the first semantic map they have just copied.
- 5- Out of students' ideas, the teacher makes any logical changes (additions and deletions) so as to get the post semantic map.
- 6- Students start writing a short essay individually utilizing the details of the post-reading semantic map.

The program deals with semantic notions since the semantic maps which will be prepared and utilized; they will mainly include notions and ideas.

### 3.14.2 **Brainstorming**

Brainstorming is a strategy that help students generates as many ideas as possible. It is a good training for them to suggest creative ideas. It deals with the prior knowledge of students. When it is run in a relaxed atmosphere, students will stretch their minds further and therefore produce more creative ideas. Brainstorming is an excellent pre-writing strategy because it facilitates the task of writing on the parts of students. The steps followed are as follows:

- 1- Teachers start the session by suggesting a stimulating statements or phrases, and ask students to work individually or in groups to suggest as many ideas about that prompt as possible.
- 2- Each group of 4-5 members generates as many ideas as they could. The group leader writes down all the suggested ideas.
- 3- The teacher gives limited time for each step.
- 4- The members of each group vote for the best 4-6 ideas they were in favor of.
- 5- The teacher writes the best ideas on the whiteboard or on a flipchart.
- 6- The whole class is asked to vote for the most relevant ideas to be considered as an outline for the required essay.
- 7- Students start writing their essays individually.

In order to utilize the two adopted teaching strategies, the researcher prepared action lesson plans for the teachers who will teach according to either of the two. It is intended to be a scaffold for the target teachers. The researcher also prepared worksheets to be used by students who will write according to either of the two approaches.

### 3.15 **Classroom Management**

The researcher held meetings with the participant teachers to clarify the way by which the students should be involved while applying the semantic mapping or the brainstorming strategies. The focus was on some selected Kagan (2009) structures, namely , " Think , Pair, share " where each student think for him/herself , generate ideas , then works with the partner for exchanging ideas, and finally the students work in teams to share all the

suggested ideas. The second structure suggested for teachers was “RallyRobin” where the students are divided into As and Bs. Each A students cooperates with B students and both of them exchange their ideas till they finish the task. The third structure was “Rally Round Table” where the students sit together in form of circles. Each student takes part in mapping or brainstorming then hands over the task to the one sitting adjacent to him/her. All the members of the team keep working in turns till all of them take part and finish the task. The advantages of these structures are two-fold. First, students practice semantic mapping or brainstorming. Second, they enjoy working together, cooperate with one another, and encourage one another to generate as many ideas as possible.

### **3.16 Research Ethics**

The researcher confirmed with the school administration that the same of the schools will not be revealed in the study. In addition, the researcher held several meetings with the participating students and their parents or guardians. In those meetings, the researcher explained the purpose of this study and the benefits of trying new teaching strategies in English. All participating students in this study were informed that they will be anonymous and that their names and grades will not be disclosed to any party. They were also assured that their collected writing samples will be used for research purpose only. The teachers were also assured the anonymity of the information they provided and that their performance in classes will not be judged according to the students’ results. The researcher finally distributed a consent letter to all the participants of the study and asked them to read it and sign it to confirm their approval.

### **3.17 Research Procedures**

After finishing this dissertation plan, the researcher wrote a letter to Dubai education zone to express the interest and the purpose of doing this study. Upon receiving the reply and the confirmation from the education zone, the researcher decided to start immediately. Therefore, the school administrations were shown the confirmation letter and they were informed about the purpose of the study. The researcher explained that she will need to hold meeting with the participant teachers and to visit the schools to select the sample students.

Then, the next step was to show the criteria for students' selection to the school administrations and to explain that for a whole semester, the methods and techniques for teaching writing will change. The changes included using the strategies of brain storming and mind mapping in some groups, while other groups were supposed to continue learning in the same traditional/usual ways. Mind mapping was looked at from the cognitive point of view. The researcher wanted to know what actually happens in the minds of the students when they learn through mind mapping and link that to previous literature on the same subject.

After that, several meetings were held with the teachers to explain the subject further and to hand them the needed material. The next step was to collect the data at the end of the trimester and the researcher started the data analysis to get the required conclusions. The last step was to record all steps, procedures and results in writing to produce the content of this dissertation.



## Chapter Five: Results and Discussions

This study aimed at investigating the effect of semantic mapping and brain storming as pre-writing strategies on grade ten students' writing ability and motivation for learning.

In this chapter, we will see the effect of the traditional way of teaching on students' writing ability and whether they have enough motivation to learn English in general and writing in particular. On the other hand, the question about the role of the pre-writing strategies in making students write fluently and in an organized way will be answered. The concept of motivation is focused on this chapter as it is one of the variables. Here, motivation is associated with the approach used by the teachers and the way the students deal with this approach. Some questions about the attitudes of students towards writing after experiencing the new ways of teaching will also be answered.

The achieved scores of the writing ability and the effect on motivation as a result of the questionnaire were analysed statistically. The tables 2-9 show the results

Table 2: Mean scores and standard deviation of Students in All Groups on the writing Ability Post-Test.

Group	Gender	Mean	Std. Deviation	N
Control	Males	4.46	1.330	13
	Females	3.77	1.589	13
	Total	4.12	1.479	26
Semantic Mapping	Males	6.83	1.403	12
	Females	6.92	1.621	12
	Total	6.88	1.484	24
Brainstorming	Males	5.42	1.311	12
	Females	5.67	.985	12
	Total	5.54	1.141	24
Total	Males	5.54	1.643	37
	Females	5.41	1.922	37
	Total	5.47	1.777	74

Table 2 shows some differences between the mean scores of students' overall performance on the writing post-test in the different groups. Statistically, and while

focusing on the mean scores of all students, we find that the control group got lower scores than the experimental groups. The students who were taught in the traditional method were passive writers. The class was teacher-centred. The topics were selected by the teachers without concern for the students' interests.) Since there was no pre-writing activity, it was difficult for students to write fluently because they lack enough relevant vocabulary and text structure. From my experience, the students suffer from "dry-up" which means that when they come to write they feel that they cannot think of relevant ideas and they cannot use a variety of words. This dry-up phenomenon can be the gap that can be filled by the scaffold provided to students in form of brainstorming or mind mapping. So, this study revealed that the pre-writing strategies were effective on the students' performance. Additionally, having a look at the results within the experimental groups, we found that the female students were better in writing than the male students. (6.83 and 6.92) respectively in semantic mapping and (5.42 and 5.67) respectively in brainstorming. As a researcher, I need to know whether these differences are statistically significant or not. Before jumping on to the significance of these figures, I can say that the students in the control group did not get the chance, as they were not exposed to pre-writing activities like the experimental groups.

And to determine whether these differences were significant TWO-WAY ANOVA was used. The results are shown in table 3

Table 3: TWO-WAY ANOVA Results for the differences between the Mean Scores Post –Test of Students in All Groups on the writing Ability

Source	Sum of Squares	Df	Mean Square	F	Sig.
Pre-Test	.769	1	.769	.393	.533
Group	75.465	2	37.733	19.308	.000
Gender	.197	1	.197	.101	.752
Group + Gender	3.594	2	1.797	.920	.404
Error	130.937	67	1.954		
Corrected Total	230.446	73			

Table 3 shows that (f) equals ( 19.308 ) and this value is related with significance level that = ( 0.00 ) at (  $\alpha \leq 0.5$  ) which means that there are significant differences in the writing ability post-test mean scores between the experimental groups due to the method of instruction . This result meets with previous studies like Hitchcock ( 1998 ), Osman ( 1998 ), Schultz ( 1999 ), Dryk ( 2000 ), Meyer ( 2001 ), Fowler ( 2001 ), Sturn ( 2002 ) , Hurly ( 2002 ) and Brondy ( 2003 ) showing that when students are prepared to writing through some pre-writing activities , their brains will be more stimulated to react. As it is proved in studies, semantic mapping or brainstorming invites students to know more new ideas and discuss them in teamwork activities. In addition, the students' will be highly motivated to generate many other ideas stemming from the ideas provided to them through these two pre-writing strategies. As a result the researcher accepts the hypothesis that "There are significant differences in the writing ability post-test mean scores between the experimental groups attributed to the used teaching strategy (semantic mapping or brainstorming).

Additionally, Table 3 shows that (f) equals ( .920) and this value is related with significance level = ( .404 ) at (  $\alpha \leq 0.5$  ) which means that there are no significant differences between the experimental groups attributable to the interaction of the gender variable and the used teaching strategy ( Semantic mapping or brainstorming ) in the writing ability post-test mean scores .It is clear that these two writing strategies are not affected by gender as they are mental abilities and not emotional ability. As a result, the researcher rejects the hypothesis that there are significant differences in the writing ability post-test mean scores between the experimental groups attributed to the interaction of the gender variable and the used teaching strategy (semantic mapping or brainstorming)

Table 4: Estimated Marginal Means Scores and Standard Error of Students in All Groups on the Writing Ability Post-Test

Group	Gender	Mean	Std. Error	N
Control	Males	4.53	0.40	13
	Females	3.80	0.39	13
	Total	4.16	0.28	26
Semantic	Males	6.73	0.43	12

Mapping	Females	6.90	0.40	12
	Total	6.82	0.30	24
Brainstorming	Males	5.42	0.40	12
	Females	5.67	0.40	12
	Total	5.55	0.29	24
Total	Males	5.56	0.23	37
	Females	5.46	0.23	37
	Total	5.51	0.16	74

Table 4 shows some differences between the mean scores of students' overall performance on the writing post-test in the different groups. Still, the results are persistent. In other words, the pre-writing strategies were more effective than the traditional ones and the female students are better in performance than male students.

Table 5: Newman-Keuls Test Results to determine the source of Differences in the Writing Ability Post-Test.

Group		SM	BS	Control
	Means	6.82	5.55	4.16
Semantic mapping(SM)	6.82		1.27*	2.66*
Brainstorming (BS)	5.55	-	-	1.38*
Control	4.16			-

Significance at  $\alpha = 0.05$  level

It is evident from Table (5) that there were significant differences between writing ability post-test mean scores of the students in the control and semantic mapping groups in favour of semantic mapping. However, the table shows significant differences between writing ability post-test mean scores of the students in the brainstorming and semantic mapping groups in favour of semantic mapping. These results indicate that the proposed writing program has reflected positively upon the writing ability post-test mean scores of the students who got involved in its activities. Besides, the semantic mapping in particular was more distinguished and effective than the brainstorming one.

For sure, the students in the experimental group worked together to deal with brain storming. Under this strategy, students work together to generates as many ideas as

possible. They also discuss all the related issues of writing. Each and every student is free to suggest any idea without any restrictions. As a result, the writing ability of students gets better in the content, organization, syntax, and mechanics of writing according to the rubric used. The semantic mapping has an effect on the students' writing, a well. The students under this strategy go through two skills: reading when they were asked to read a text and analyse it in terms of the ideas organization, then a mind map on that text is provided to students to build on. Here, all the target students in general and the visual learners in particular find their way to deal with different ideas, generate more ideas, and organize them in a logical way. Because the students are exposed to a reading text and a mind map, they do better than brainstorming.

Table 6: Mean scores and standard deviation of Students in All Groups on the Motivation for learning questionnaire.

Group	Gender	Mean	Std. Deviation	N
Control	Males	2.72	0.64	13
	Females	2.63	0.83	13
	Total	2.67	0.73	26
Semantic Mapping	Males	4.11	0.27	12
	Females	3.46	0.48	12
	Total	3.78	0.51	24
Brainstorming	Males	3.35	0.34	12
	Females	3.25	0.82	12
	Total	3.30	0.61	24
Total	Males	3.37	0.73	37
	Females	3.10	0.80	37
	Total	3.24	0.77	74

Table (6) shows some differences between the mean scores of students' overall performance on Motivation for Learning Questionnaire in different groups. Motivation in this context is very important .When the students in the control group were asked to write an essay about a topic they were not interested in when they were not provided by any help, writing became very difficult and consequently boring. As a result, the students lack motivation to proceed on writing and their writing process had some gaps. So, the

students produced poor writing in terms of content, organization, grammar, vocabulary, and mechanics of writing. On the other side, the students got motivated when they found themselves exposed to some help embodied in brainstorming or semantic mapping, and when they were asked to write about interesting topics, they felt that what they wrote about topics related to them. In this case, the students were highly motivated to proceed on writing joyfully and meaningfully.

And to determine whether these differences were significant TWO-WAY ANOVA was used. The results are shown in Table (7).

Table 7: TWO-WAY ANOVA Results for the differences between the Mean Scores Post –Test of Students in All Groups on the Motivation for learning questionnaire

Source	Sum of Squares	Df	Mean Square	F	Sig.
Pre-Test	1.725	1	1.725	4.930	0.030
Group	13.366	2	6.683	19.097	0.000
Gender	1.190	1	1.190	3.401	0.070
Group + Gender	1.247	2	0.620	1.782	0.176
Error	23.446	67	0.350	-	-
Corrected Total	43.399	73	-	-	-

Table (7) shows that (f) equals ( 19.097 ) and this value is related with significance level that = ( 0.000 ) at (  $\alpha \leq 0.05$  ) which means that there were significant differences on the Motivation for Learning Questionnaire mean scores between the experimental groups due to the method of instruction. The researcher accepts the hypothesis that says: "There are significant differences in the Motivation for Learning Questionnaire mean scores between the experimental groups attributed to the used teaching strategy (semantic mapping or brainstorming)

Thus, Table (7) shows that (f) equals ( 1.782 ) and this value is related with significance level that = ( 0.176 ) at (  $\alpha \leq 0.05$  ) which means that there are no statistically significant differences in the Motivation Questionnaire mean scores between the experimental groups attributed to the interaction of the gender variable and the used teaching strategy (

semantic mapping or brainstorming ) . As mentioned before, the two writing strategies utilized have nothing to do with gender as they are mental abilities, but not emotional ones. All the students: males and females do the same mental abilities: generating ideas, analysing them and organizing the coherently.

As a result, the researcher rejected the hypothesis that there are statistically differences in the motivation for Learning Questionnaire mean scores between the experimental groups attributed to the interaction of the gender variable and the used teaching strategy (semantic mapping or brainstorming " .

Table 8: Estimated Marginal Means Scores and Standard Error of Students in All Groups on the Motivation for Learning Questionnaire

Group	Gender	Mean	Std. Error	N
Control	Males	2.71	0.16	13
	Females	2.67	0.17	13
	Total	2.69	0.12	26
Semantic Mapping	Males	4.04	0.17	12
	Females	3.42	0.17	12
	Total	3.73	0.12	24
Brainstorming	Males	3.39	0.17	12
	Females	3.28	0.17	12
	Total	3.33	0.12	24
Total	Males	3.38	0.10	37
	Females	3.12	0.10	37
	Total	3.25	0.07	74

Table (8) shows some differences between the mean scores of students' overall performance on the writing post-test in the different groups. The result here is persistent. I mean that the pre-writing activities had effective impacts on the students' writing abilities contrasting with the control group who was instructed traditionally. The female students were better than the male students in both of the two pre-writing strategies. They were more highly motivated for different reasons to be discussed later.

Table 9: Newman-Keuls Test Results to determine the source of Differences in the motivation for Learning Questionnaire

Group		SM	BS	Control
	Means	3.73	3.33	2.69
Semantic mapping(SM)	3.37		0.39*	1.04*
Brainstorming (BS)	3.33	-	-	0.69*
Control	2.69			-

Significance at  $\alpha = 0.05$  level

It is evident from Table (9) that there were significant differences between Motivations for Learning mean scores of the students in the control and semantic mapping groups in favour of semantic mapping. Moreover, the table shows significant differences between Motivation for Learning Questionnaire mean scores of the students in the brainstorming and semantic mapping groups in favour of semantic mapping. The results indicated that the proposed writing program has reflected positively upon the Motivation for Learning Questionnaire mean scores of the students who got involved in its activities. Besides, the semantic mapping strategy in particular was more distinguished and more effective than the brainstorming one.

To shed light on the questionnaire designed for students, the statements written for students reflected their actual feelings towards: teaching strategies, teachers' behaviour, classroom environment, the procedures of the two writing strategies and the students' reactions towards all these issues. The questionnaire was not that long in order not to make students feel boredom.

When the students respond to the questionnaire seriously, the result is supposed to reflect their attitudes, feelings, and stances. And because the questionnaire is comprehensive, the students can judge the whole of the process from the beginning to the end.

Some examples of the items included in the questionnaire are as follows:

- I can achieve my academic goals in the English writing skill by working hard.
- I find most English writing tasks exciting.
- Before I start writing an English assignment, I plan out how I am going to do.
- I worry a lot when English writing exams and assignments are coming up.
- I often think about my progress in learning the English writing skill

- I like to read and write English articles
- I attend my English writing lessons regularly
- If I don't understand something in the English writing task, I try to figure it out myself.
- I enjoy the challenge of learning new materials in the English writing skill
- I feel very pleased with myself when I understand what I am taught at the English language writing class
- I like to go to school to attend the English language writing
- I go to school because school is fun in the English language writing class
- When my English writing assignment is bad, I try to ask the teacher what is wrong with it.

It is clear that when the students enjoy writing, they move from the level of extrinsic motivation to the level of intrinsic motivation which is the ultimate goal of teaching English as a foreign language. Students feel that they are motivated and attracted to learn English. As an English language teacher, I found that most of the students learn English for external reasons. That is, they want to be praised by their teachers and parents, or they want to avoid teachers' and parents' punishment. They learn English just to get marks by which they can leave the school and join university. None of these reasons deal with the language itself. While the questionnaire reveals the deep trend of students towards English classes in general and writing classes in particular. When a student responds positively to a statement " I read and write things in English because I am interested in this language." this means that he/she likes English because of English, but not because he/she wants to avoid punishment.

This study proves that the pre-writing strategies were so effective on the students' writing abilities that they moved from extrinsic motivation level to intrinsic motivation level.

According to the table above, the motivation of students towards semantic mapping is higher than their motivation towards brainstorming. It is because semantic mapping was closed to their interests and enjoyment. The challenge in the strategy of semantic mapping made the students enjoy reading and writing. The students did better in

writing while instructed through semantic mapping more than brainstorming simple because they can generate more ideas and organize them logically and coherently.

What made the students highly motivated in the writing classes is some of the kagan structures used by the volunteering teachers. The structures used were :( Think, Pair and Share), (Rally Round Robin) and (Talking-chips)

In the first technique, students think for themselves or write on a topic or question, preferably one demanding analysis, evaluation, or synthesis, provided by the teacher. After 30 seconds, students turn to partners and share their responses, thus allowing time for both rehearsal and immediate feedback on their ideas. Finally, they share their thoughts with the class. Through this structure, all students have an opportunity to learn by reflection and by verbalization. This works well for generating and revising hypotheses, inductive reasoning, deductive reasoning, and application. In the second technique (Rally Round Robin) in pairs, students alternate generating written responses or solving problems. . Teacher poses a problem or provides a task to which there are multiple possible answers, steps, or procedures. Finally, in groups, students take turns passing the paper and pencil, each writing an answer or making a contribution. In the third technique, this activity equalizes the opportunity for participation. It also helps the teacher to monitor individual accountability. . Students are asked to discuss a topic in groups. Second, as each student talks, he/she places his/her chip in the centre of the table (a pen or pencil will work in place of chips). Third, once a student finishes talking, he/she cannot talk until every other “chip” has been tossed into the centre. If a student doesn’t have anything to share on this particular topic, they can place a chip in the centre at the end. Finally, when all chips are down, students retrieve their chips and start over.

During the writing lessons, the teachers managed the activities using these techniques. The students were equally involved in the discussions and in all the writing process. The students enjoyed working together and thinking together as team work. Based on my observation as an English language teacher, the students learn more when they work in teams away from the teacher's supervision. They no longer feel shy about making mistakes and are inspired to compete with one another in producing more ideas.

Kagan structures and the suggested prewriting strategies contributed in getting the students highly motivated to like writing classes and consequently proceed to write fluently and logically.

## **Chapter Five: Conclusion and Recommendations**

The purpose of this final chapter is to draw conclusions based on the main four questions of the study, and the proposed recommendations for implementation of the findings, and for further research.

### **5.1 Summary**

#### **5.1.1 The First Question:**

The first question investigated if there are statistically differences ( $\alpha = 0.05$ ) in the writing ability post-test mean scores between the experimental groups attributed to the used teaching strategy (semantic mapping or brainstorming). The findings indicated that there were statistically significant differences between the experimental groups on the one hand as a whole, and the control group on the other. The mean score of the students of the experimental groups' semantic mapping on the writing ability post -test was (6.82) and the brainstorming was (5.55) which were higher than the control groups (4.16). Newman-keuls Test Results showed significant difference ( $\alpha = 0.05$ ) between the mean score of the students of the experimental groups and the mean scores of those of the control groups in favour of the experimental groups.

The relatively high mean score of the experimental group was probably due to the effect of teaching students according to the educational writing program. Utilizing brainstorming and semantic mapping strategies might contribute a lot to arousing students' interests, activating their background knowledge, and providing them with basic ideas and vocabulary items to compose their essays. Thus, activating the pre-writing phase successfully has probably enhanced the quality and quantity of students' writing. Besides, the researcher believes that the steps implemented while teaching writing according to this proposed program were simpler than those required to teach the "

Writing " lessons included in the students' regular text books . Most of the job was done by students themselves, while teachers played the role of guides and supervisors. Thus, superior performance of the experimental group is logically justified and expected.

The preceding result is in line with the findings of Hitchcock ( 1998 ), Osman ( 1998 ), Schultz ( 1999 ), Dryk ( 2000 ), Meyer ( 2001 ), Fowler ( 2001 ), Sturn ( 2002 ), Hurly ( 2002 ) and Brondy ( 2003 ) whose results provided evidence in favour of the subjects of the experimental groups who utilized different kinds of instructional strategies , activities or techniques during the phase prior to the actual writing. However, this result is incongruent with the findings of some other studies such as McGee (2003) and Hayn (2003) whose results indicated no significant differences in favour of the students of the experimental groups. The disagreement between the last two studies and the current study might have resulted from two main factors; the age of the subjects and the size of the sample. In McGee, the subjects were six grade pupils who probably were unable to participate effectively in the oral discussions and generate good ideas. Besides, they probably were unable to employ the generated ideas properly in their writing. In Hayn, the sample of the study was very small. The subjects were (36) students only assigned to four experimental and control groups. The small number of the participating students in the experimental groups might not have permitted active and positive participation and interaction to take place.

Furthermore, this result agrees with Zamel (2000), Raimes (2001) and Botle (1997) who emphasizes the period before the actual writing begins. They point out that the prewriting activities and techniques help students acquire good language skills and use their linguistic skills to explore and get started with their ideas on a given topic.

The findings of the study also indicated that there were significant differences between two experimental groups in favour of the semantic mapping group. The mean score of the students in the semantic mapping group on the writing ability post-test (6.82) was higher than the mean score of their brainstorming group (5.55)

Newman-Keuls Test results showed significant differences at ( $\alpha = 0.05$ ) between the mean scores of the students of the two experimental groups in favour of the semantic mapping group.

This comparatively high mean score of the semantic mapping could be attributed to the effectiveness of this strategy in learning and teaching writing. This strategy attracted effective participation of students, which created a lively discussion through which the students were able to activate their schema and generate as many ideas as possible. Teachers who taught according to semantic mapping stressed the importance of the reading texts which they presented during the writing phase. Those reading texts helped students generate more basic ideas and showed them how language could be used logically and communicatively.

Although the brainstorming strategy was also fruitful in getting students involved in oral discussion to generate ideas and in supporting the feeling of cooperating and working together, the semantic mapping strategy was more distinguished and more effective. Semantic mapping was a clear graphic representation of the major ideas of the target topic and how those ideas were related. Teachers were more satisfied and pleased to use the semantic mapping strategy, since it proved to be an effective prewriting framework for generating and organizing ideas. The researcher believes that perhaps combining the two strategies in teaching writing is more effective than using each strategy alone.

Furthermore, the preceding result is in harmony with the theoretical assumption cited in the background of the study in chapter one. Meyer (2001) points out that graphic organizer can help writers keep on writing about the topic by having their ideas in front of them as they are writing. Zaid (2005) asserts that a semantic map can serve as an outline for the writing of the short essay on the topic; or one segment of the map can be used in the writing of a paragraph. Johnson (2000) also remarks that semantic mapping builds on schema. It draws on prior knowledge and allows students to recognize concepts and see the relationship among the components.

In addition, this result sheds light on the importance of activating the prewriting phase utilizing innovative strategies in general, and semantic mapping in particular. Therefore, the higher mean scores achieved on the writing ability post-test by male and female students who were assigned to the semantic mapping groups sound logical and justified.

Furthermore, the findings of the study also revealed differences between the quality of writing of male and female students in favour of females. The mean scores of female students was (6.90) in the semantic mapping strategy, and (5.67) in the brainstorming

strategy. This means that female students whose mean scores was (6.73) in the semantic mapping strategy and (5.42) in the brainstorming strategy.

Although female and male students receive the same training and taught by similar teachers of the same qualifications and coming from the same social background, female students were superior and much better than their male counterparts. However, one could ascribe this discrepancy in female and male quality to a number of reasons: Firstly, most educationalists in UAE public schools consider female students more serious and more cooperative than, male students. This surely reflects upon the shaping of female students' behaviour when tackling learning matters. Secondly, the researcher has noticed that female students have always been more disciplined as a result of cultural uprising. Thirdly, females seem more competitive than their male peers. More elaboration, female students show a stronger desire and ambition to have a university studies. They feel that they are in a competing position with their male peers. Therefore, female students usually work harder. Finally, several writers ascertain that females are better language learners than males. Thorn and Henley (1995), for example, suggest that females possess certain abilities that make them better than males in learning languages. . Al Omari (1996) conducted a study on reading comprehension skills, and found that there are important differences favouring girls over boys in all aspects of language development. Thus, the researcher thinks that the superiority of higher level of the writing ability of female students during the experiment is a natural and logical outcome.

The preceding result is in line with the findings of Zhang and Vukelch (1998) who have shown evidence that student' gender and academic level can influence the effectiveness of prewriting activities, with females consistently scoring higher than females.

### **5.1.2 The Second Question**

The second question investigates whether or not there are any statistically significant differences ( $\alpha = 0.05$ ) in the writing ability post-test mean scores between the experimental groups attributed to the interaction of the gender variable and the used teaching strategy ( semantic mapping or brainstorming ). The results showed no significant differences ( $F= 0.920$ ) in students' mean scores attributed to the interaction between gender and the teaching strategy at the level of (0, 05). To interpret this result, two main points could be raised here. Firstly, it is probable that the four writing sessions

during the trimester and the proposed writing program were not long enough to allow the interaction to take place. Secondly, the chance for interaction to take place between the gender variable and the teaching strategy was unexpected, since both strategies (semantic mapping and brainstorming) mainly depended on mental activities, and they did not require special physical or emotional characteristics. This means that male characteristics or female emotional characteristics did not play any role in this result.

### **5.1.3 The Third Question**

The third question investigates if there are any statistically significant differences ( $\alpha = 0.05$ ) between the motivation for learning of the experimental and control groups attributed to the used teaching strategy (semantic mapping, brainstorming and traditional). In relation to the subjects' motivation for learning, the findings of the Post-Hoc comparisons (Newman-keuls) indicated significant differences between the mean scores of the control groups and the mean scores of the two experimental groups (semantic mapping and brainstorming) in favour of the experimental groups. They also revealed significant differences between the mean scores of the experimental groups in favour of semantic mapping. It was noticed that the semantic mapping and the control occupied: the first (3.73), the second (3.33) and the third (2.69) respectively on the motivation for learning questionnaire (see Table 9)

To interpret these results, some important points should be mentioned it has been noticed that semantic mapping and brainstorming strategies encouraged students a lot to get involved in the prewriting students through working in groups and exchange ideas. Students wrote about topics which were approved by teachers and supervisors and mostly related to their interests and background knowledge. Also, teachers reported that the steps followed in the experiment were simpler and shorter than those required in the textbooks. In addition, teaching through semantic mapping and brainstorming strategies was students-centred rather than teacher-centred. . Most of the job was done by students. The process of writing was very clear in the students' minds. The teachers were just helpers, facilitators and a source of motivation. The semantic mapping in particular was the most distinguished teaching strategy, since the general ideas of each topic and the relationships

among them were displayed graphically (maps) in front of the students while they were writing. Therefore, the researcher, who had a close look at a sample of the students' writing during the different stages of the experiment, noticed a clear and real progress in the quality and quantity of their production. Consequently, the researcher would attribute the higher mean scores of the experimental groups on the motivation for learning questionnaire to the implementation of the proposed writing program.

The afore-mentioned result is in line with the findings of Hitchcock (1998) which indicate that using brainstorming and graphic organizer as experimental instructional strategies does improve the effective relationship between students and reading/writing tasks. It was also in harmony with the findings of Sturn (2002) which show that students' attitudes towards writing are significantly more positive in the computer mapping condition when compared to non-mapping condition.

#### **5.1.4 The Fourth Question:**

The fourth question investigates if there are any statistically significant differences ( $\alpha = 0.05$ ) in the motivation for learning between the experimental groups attributed to the interaction of the gender and the used teaching strategy. The results showed that there were no statistically significant differences ( $\alpha = 0.05$ ) in the motivation for learning between the experimental groups attributed to the interaction of the gender and the used teaching strategy. This result is attributed to the two teaching strategies used: semantic mapping and brainstorming which have been designed to be convenient for male and female students, so that the students' motivation for learning will be the same without any bias towards any gender and in the same degree. In conclusion, the findings of this study provide clear evidence for the effectiveness of the writing program in developing the quality and quantity of students' writing, and in promoting and increasing students' motivation for learning the English writing skill.

## **5.2 Conclusion**

The following conclusions can be drawn from the study:

- 1- The prewriting stage is as crucial as while and post writing stages. It is really a significant phase when it is used properly. Thus, the activation of this stage is a basic step for successful writing.
- 2- It is Important to implement different instructional strategies suiting both students and teachers. The combination of two strategies is also fruitful. For instance, the combination of certain steps from both semantic mapping and brainstorming could be utilized to enhance effective writing.
- 3- It is always necessary to choose the writing topics that relates to students' background knowledge and interest. This will surely reflect on the quality and quantity of students' writing.
- 4- The whole process of writing should be emphasized, not only the final product. In order to get a satisfactory output, it is very important to activate the steps that lead to this output.
- 5- The combination of rhetorical and linguistic accuracy is needed to create accurate and intelligible writing texts. This should be reflected upon the way the teachers correct and score the students' writing.
- 6- Promoting the students' motivation for learning should be a top priority, since the psychological side of the students plays a major role in creating the required desire to write. This in its turn reflects positively upon the quality and the quantity of the written products.

### **5.3 Recommendations**

- The Ministry of Education should invite some specialized scholars for a plenary conference to discuss the reasons why this skill of writing is a real problem for students and find the best solutions for that problem.
- English language supervisors are called upon to hold writing workshops for teachers who find themselves unable to run effective writing classes.
- The ministry of Education is also called upon to adapt the steps of process writing and inject them into the textbooks of grade ten.
- Teachers are advised to emphasize on the pre-writing phase to let students generate enough ideas and create suitable and relevant vocabulary.

- It is recommended that teachers allow enough time for students to write in the classroom, and under their supervision to monitor their skills of writing and give them positive immediate feedback.
- Researchers are called upon to investigate the effect of other writing teaching strategies, other than semantic mapping and brainstorming.
- Researchers are also called upon to conduct similar studies on other levels of school learners. .
- Teachers of English are advised to adapt some of Kagan structures as prewriting activities as they promote cooperative learning.

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**The Effect of Semantic Mapping and Brainstorming as Prewriting strategies on Developing the English Writing Ability and Motivation for Learning of the Tenth Grade students in Dubai Educational Zone**

دراسة حول أثر برنامج تعليمي قائم على استراتيجيات (العصف الذهني و خرائط المفاهيم) على مهارة الطلبة في الكتابة و على مدى إثارة دافعيتهم نحو تعلم اللغة الانجليزية

**By**

**Student ID number 2013201019**

Dissertation submitted in partial fulfilment of Master of Education

(Concentration: TESOL)

Faculty of Education

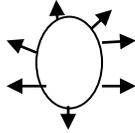
Dissertation Supervisor

Dr. John McKenny

29 March 2015

## Appendix A Daily Lesson Plan

Date	Class	No. of students	Period	Unit/Lesson
Thursday, 21 <sup>st</sup> September, 2014	Grade 10 A /3	12/12	2 + 6	Unit 6 writer's workshop Brainstorming technique ( Kagan Structure)

Objectives	Ways of Assessment	Teaching/Learning Activities	Resources
<p>To play the game (Hot seat) .</p> <p>To write an essay using brainstorming technique using the first technique (Think) .</p> <p>To use the second technique of brainstorming (Pair).</p> <p>To use the third technique of brainstorming (Share).</p> <p>To elicit ideas and write them on the board.</p>	<p>Students play the game and revise pre taught vocabulary items.</p> <p>Ss. Write ideas individually using (Think) brainstorming technique.</p> <p>Ss. work in pairs and exchange ideas.</p>	<p>-T. asks Ss to work in pairs and play the game (Hot seat).</p> <p>One of the Ss chooses a word and writes it on a sheet of paper without showing it to her classmate , she acts it , mime it and try to explain it for her in order to help her guess the word .</p> <p>T. asks the students to read the title then start giving ideas.</p> <p>T. asks Ss to think individually for 5 minutes and give ideas related to the topic on her own sheet.</p> <p>(Are you for or against early marriage?)</p> <p>T. asks Ss. to work in pairs and share her ideas with her friend near her for 5 minutes and add for her ideas.</p> <p>T. asks Ss to work in groups of 4 in order to exchange their ideas and add to every ones ideas on her sheet.</p>	<p>Sheet</p> <p>Sheet</p> <p>White board</p> 

<p>To disregard the unrelated ideas cluster, and mind mapping ideas.</p> <p>To write the first draft of the essay.</p> <p>To complete the exit card</p>	<p>Ss. Work in groups to exchange ideas.</p> <p>Ss. Give out their created words and ideas.</p> <p>Ss. Use the right side of the board / sheet to do mind mapping.</p> <p>Ss. Cluster ideas and write the first draft.</p> <p>Ss complete the exit card.</p>	<p>T. asks every group to choose a representative to share the generated ideas with the class.</p> <p>T. divides the board into 2 parts (left and right) On the right part , T. draws a circle inside which key words of the topic are written.</p> <p>T. brainstorms as many ideas as possible and writes them randomly round the circle.</p> <p>T. trains Ss to disregard (cross out) the unrelated ideas and cluster the rest in form of outlining or mind mapping by using the right side of the board. ( 15 minutes )</p> <p>Ss are asked individually to utilize the clustered ideas and write the required essay as a first draft.</p> <p>-Using codes, teacher edits and revises the mechanics of writing and the arrangement of the ideas (paragraphing).</p> <p>_ Students peer check their mistakes and write the second draft.</p> <p>T. evaluates the students’ writing in the light of a suggested rubric.</p> <p>T. distributes the exit cards on the students and get them to write one sentence about things they learnt today and one sentence about what they liked in the lesson today.</p>	<p>Exit card</p>
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After the current lesson: Students refer to the internet and search for extra information about the topic .

Reflection: Some Students might find it difficult to follow the procedures of organizing and writing an essay.

## Appendix B

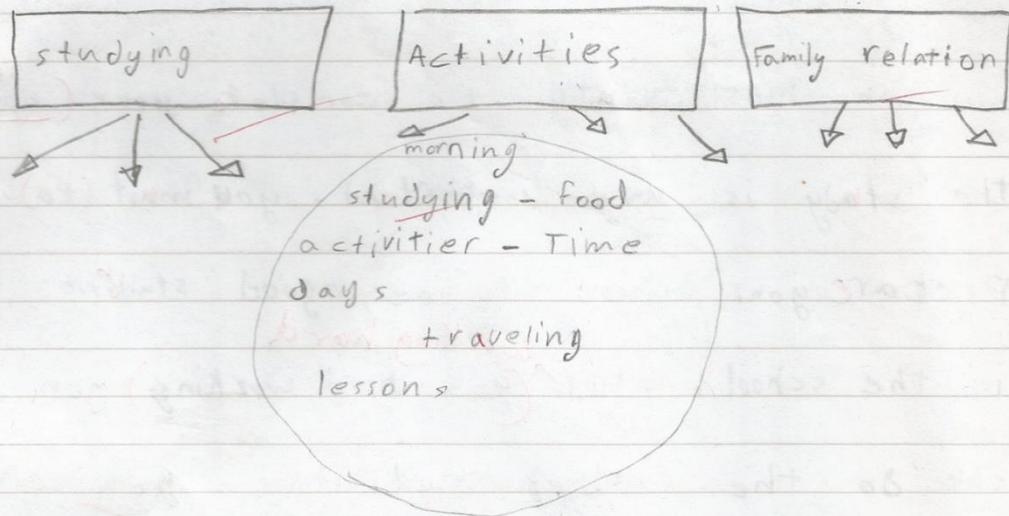
The following table shows the details of the writing rubric used by the Ministry of Education

	<b>Content</b>	<b>Grammar/Syntax</b>	<b>Vocabulary</b>	<b>Organization</b>	<b>Spelling/punctuation</b>
5	Writes with a clear purpose. A range of ideas that are well structured.	Writes using a combination of sentences – simple, compound and complex where meaning is clear. Maybe be some minor errors.	A wide range of accurate and appropriate word choices that fully express complete ideas. May use idioms.	Logical sequence introduction, body, conclusion Ideas supported in the body of the text.	Uses sentence level punctuation most of the time. Spells complex words correctly most of the time. Spelling of common words is consistently correct.
4	Writes with some understanding of purpose. Presents some ideas on the topic.	Writes using simple sentences. Meaning is mostly clear.	Appropriate vocabulary used but not always clear.	Uses paragraphs with some sequence and organization evident but lacks an element e.g. introduction or conclusion.	Uses some sentence level punctuation e.g. commas. Spells complex words correctly intermittently. Spelling of common words is correct.
3	Presents one idea within the topic with some elaboration.	Writes with some errors of tenses, prepositions, pronouns, subject/verb agreement.	Simple vocabulary choices. Common words used appropriately	Uses paragraphs with some sequence evident e.g. within the	Uses capital letters and full stops. Spells some common words correctly.

				body only.	
2	Presents only one idea within the topic without any elaboration. Content limited.	Writes simple sentences with some confusion.	Simple vocabulary used appropriately sometimes.	Sequence is not clear.	Punctuation sometimes used correctly. Spelling interferes with meaning.
1	Content vaguely address the topic or question.	Writes a list of words with a little / very confusing meaning.	Limited expression / repeated structures and vocabulary.	Sequence is not evident, could be a list of words.	Capital letters and full stops not used. Spelling interferes with meaning.
0	Non Attempted / Off-point				

## Appendix C:

Time organization:



Studying:

- 1- get a good job in the future.
- 2- become hard working student.
- 3- I prepare my lessons.

Activities:-

- 1- meeting my friends.
- 2- I went to the trip.
- 3- do the exercise.

Family relation:-

- 1- sitting with my family.
- 2- playing with my sisters.
- 3- visiting my grand mother.

## Essay writing

(A) Your friend has a complaint about her homework, she can't get organized write an essay of advice to help her solve her problem.

Home works can help students a lot, It can help them ~~students~~ when they have a problem with some subjects, I know that you Amina have a problem with your home works I will help you by follow these tips:

firstly you should organize your time by doing a schedule for example, ~~from~~ you came from the <sup>School</sup> ~~at~~ 1:00 o'clock eat your dinner and start to write ~~your~~ <sup>your</sup> home work. start with the default subject and then move to the easiest → first

I advise ~~you~~ you to put a goal it will helps you, so you can do your home work when you happy, always think and put in your mind that if you do your home work well you will get high grade ~~s.a~~ <sup>s.a</sup> if your ~~teacher~~ <sup>teacher</sup> loves her student when she ~~do~~ <sup>do</sup> her home work on time.

and ← what about loving your subjects, when you love your subjects you love doing your home work start to love ~~your~~ <sup>your</sup> every subject you ~~do~~ <sup>do</sup> take.

finally study well ~~and~~ and do all your home work and dont forget that if you ~~has~~ <sup>has</sup> interest ~~if~~ when you do it you will not complain and I wish for you all the best.

## Working Women

In the past women<sup>s</sup> was not allowed to work they always said its mens<sup>s</sup> responsibility and womens has nothing to do with it but in the few years womens tried so hard to change that idea from people's mind, they studied and worked in different areas.

for example teachers in schools, Soldiers in military nurss in hospitals, anyone can see that the women in Dubai has advanced greatly in recent years making the UAE a leader in womens rights in arab world, woman in todays society are struggling for equal opportunities but when it comes to rise a family it takes a lot of responsibility, on my opinion every working mother is a superwomen.

She organiz her schedule daily to do all the required assignmen<sup>t</sup>, i really appreciate all working mothers they sucricife a lot for their family to keep them happy and satisfy everyone should thank and respect this kind of womens and make them our daughters idol to be like them in the future and develope our country

Excellenb.

Essay Writing

Grade

Student name--

Write an article for a magazine about any *food chain* you prefer, add any other information you think is important or interesting.

Your essay should be between 150-200 words. Make sure to include different subtopics in your paragraph

Pay attention to grammar, vocabulary, punctuation, and spelling.

1) The food chain is very important in our life. So there are many chains in land and sea. So I will give you an example in food chain in the sea and the food chain in the land.

2) In land food chain is very easy than sea. I will give you example of a chain. The bottom of the chain is leaf or grass. The caterpillar eat the plant. So he will eaten by wren. The wren is a bird. he get energy from caterpillar. The wren eaten by hawk. No one eat hawk because he is the stronger and he is in the top. I will give you an example in the sea.

3) In sea the bottom is plankton or red plan. he is the base. there are many of animals eat plants but he I will eat wren. I want herring he is eat the plankton, and the herring eaten by seal. the wild shark eat the seal and he is in the top and no one eat it in the chain.

4) All organisms eat something and eaten by eat. So we found her the food very important in the life so we get energy from it. the bottom in the food chain is plants and the plants get energy from sun.