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The Effectiveness of a Proposed Program Based on a Mind Mapping Strategy in Developing the Writing Achievement of Eleventh Grade EFL Students in Jordan and Their Attitudes Towards Writing

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Abstract

The purpose of this quasi-experimental study was to explore the effectiveness of a proposed mind mapping program on developing writing achievement skills of first secondary students and to evaluate that the role that this strategy may play in promoting students' attitudes towards writing in Jordan. Throughout her experience as a teacher, the researcher noticed that many students find it difficult to write in English. Even when they write, they look worried, hesitant, and disorganized. They may have some ideas, but they are usually unable to convey them using proper language, diction, and cohesion. The researcher thinks that this could be due to the teaching strategies used, the types of feedback students receive, the types of writing activities in textbooks, or lack of opportunities to practice writing. Many teachers also complain that teaching writing skills is difficult because these skills are not easy to measure, they do not have due emphasis in the class because of time pressure. This study may derive its significance from the attempts to highlight the characteristics of Mind Mapping Program for teaching writing skills of Jordanian schools since these are normally ignored or least attended to by many teachers. The subjects of the study consisted of 91 female students who were purposefully chosen from eleventh grade students at Sands National Academy, Amman Second Directorate of Education during the first semester of the academic year 2013/2014. The experimental and control groups were randomly assigned. The treatment group was instructed by using the mind mapping strategy for teaching writing skills whereas students of the control group were tutored by using the conventional method of teaching writing. At the end of the experiment, the different groups (experimental and control) sat for the writing achievement post-test, filled the attitudinal questionnaire. Multivariate analysis of covariance (MANCOVA) was used to measure statistical differences in the mean scores of subjects of the study. The results of the study showed that there were statistically significant differences at *(α =0.05)* in the mean scores of students regarding their writing achievement and their attitudes towards writing. Those differences were in favor of the experimental group. However, the results of the study revealed no significant interaction between the method of instruction and students' general levels of English (good, average, or poor) in students' writing achievement or attitudes towards writing. Based on these results, it was recommended that more research be carried out to provide additional knowledge with regard to the replication of the current experiment by investigating other aspects of the English language and at different grade levels. Training courses for teachers on the mind mapping strategy should be encouraged to equip those teachers with the necessary knowledge and practice needed to apply mind mapping instruction in their classrooms. The mind mapping strategy can also be integrated into the EFL curriculum in Jordan to develop students' attitudes toward writing. Teachers are also advised to use the mind mapping technique to increase students' interest and motivation to write more often.

Keywords: Mind Mapping, Mind Mapping-Based Program (MMBP), Conventional method, Process writing, Writing achievement test, Writing achievement scale, Attitudes towards writing, Students' general level of English.

1.Introduction

People generally express their emotions, feelings, and ideas in writing. Writing is one of the important English language skills because it is a transformational process of our thoughts into language. It is a comprehensive skill that helps reinforce vocabulary, grammar, thinking, planning, editing, revising, and other elements. Writing helps to improve all the other skills of listening, speaking and reading as they are all interrelated. Accordingly,

Lindsay (2000: 10) stated that "writing is a precious skill for helping students communicate and understand how the parts of language go together and several students learn and remember more through the written words." Writing plays a central role in communication. Gelb and Whiting (1993) demonstrated that writing is a method of human communication by means of visual marks. As a result, writing takes up an eminent role in foreign language teaching and learning. Reid (1993) pointed out that writing differs according to the purpose and the audience for whom the tasks are addressed. Another reason students need to write is for assimilation. Kroll (1993) also asserted that writing is an effective way of reinforcing what students have already been studying. Writing is important since it serves as a permanent documentation of interaction or communication. Therefore, to manage teaching writing skills the teachers have to act efficiently; teachers must become comfortable when they deal with their students to carry out a writing task.

1.1 Background of the study

Many researchers believe that writing is learning how to mean. Writing is essentially a reflective activity, which requires students to use their background knowledge to convey a meaningful message to readers. Writing is continuing method of discovering how to find the most effective language for expressing one's thoughts and feelings. (Rao, 2007) believes that writing is essentially a way of expressing thinking and good writing comes from good thinking.

Writing is an essential skill in the teaching and learning of English as a Foreign Language (EFL). Hyland (2003) points out that writing is a sociocognitive activity which involves skills in planning and drafting. It stimulates thinking, compels students to concentrate and organize their ideas, and cultivates their abilities to summarize, analyze, and criticize (Scane, Guy & Wenstrom, 1991). On the other hand, it reinforces learning, thinking, and reflecting on the English language (Harmer, 2001). Nevertheless, students find composing in English difficult because the writing process demands that they utilize many cognitive and linguistic strategies of which they are uncertain (Peregoy & Boyle, 2005).

Oxford (2002) argues that explicit teaching of writing strategies improves learners' language proficiency. Accordingly, different teachers use different teaching and assessing strategies. Recently, mind mapping has been used as a tool for learning and teaching different language skills. Mind maps are tools that make ideas visual. They allow prior experience and understanding to be taken into consideration when building new concepts into the perceptual framework. By using mind maps, learners make a link between unknown and known information that leads to deeper understanding. (Novak and Canas, 2010).

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In Jordan, the methods of teaching writing skills are generally similar to those in other parts of the world. However, teaching English language in Jordan has been influenced by modern instructional trends. For example, The EFL curriculum has been developed around activities in which students are expected to participate in different type of writing under the guidance of the teacher. Students are also expected to acquire a sufficient knowledge of English that enables them to write smoothly. By this, it is hoped that students are given the opportunity to practice the target language as much as possible in a meaningful way (MOE, 2006).

1.2 Statement of the problem

Throughout her experience as a teacher, the researcher noticed that many students find it difficult to write in English. Even when they write, they look worried, hesitant, and disorganized. They may have some ideas, but they are usually unable to convey them using proper language, diction, and cohesion. The researcher thinks that this could be due to the teaching strategies used, the types of feedback students receive, the types of writing activities in textbooks, or lack of opportunities to practice writing. Many teachers also complain that teaching writing skills is difficult because these skills are not easy to measure, they do not have due emphasis in the class because of time pressure.

By analyzing the EFL curriculum guidelines and assessment framework for the eleventh grade (MOE, 2006), the researcher realized that mind mapping is barely addressed in the intended learning outcomes (ILOs) or in the textbook's activities despite the substantially emphasis on it in related literature as effective teaching strategy (MOE, 2006).

By conducting this study, the researcher intends to highlight the use of mind mapping program in teaching writing to eleventh grade EFL students in Jordan.

1.3 Purpose of the study and research questions

The purpose of this study is to investigate the effectiveness of a proposed program based on the mind mapping strategy on eleventh grade EFL students' writing achievements and attitudes towards writing. Therefore, the following research questions will guide this study:

1- Are there any statistically significant differences in the writing achievement mean scores of eleventh grade EFL students that can be attributed to the teaching method (mind mapping program vs. conventional method)?
2- Are there any statistically significant differences in the mean scores of students' attitudes towards writing that can be attributed to the teaching method (mind mapping program vs. conventional method)?
3- Are there any statistically significant differences in the writing achievement mean scores of students that can be attributed to the interaction between the mind mapping program and students' general levels of English (good, average, or poor)?
4- Are there any statistically significant differences in the mean scores of students' attitudes towards writing that can be attributed to the interaction between the mind mapping program and students' general levels of English (good, average, or poor)?

1.4 Significance of the study

This study may derive its significance from the attempts to highlight the characteristics of Mind Mapping Program for teaching writing skills of Jordanian schools since these are normally ignored or least attended to by many teachers. It is hoped that students will find this strategy effective. It is also hoped that mind mapping will develop students' thinking abilities as writers. The present study may also give teachers insights into students' preferred learning activities that make writing both useful and fun. EFL curriculum specialists and researchers in Jordan may use this study to include more mind mapping outcomes that promote thinking skills among learners in different grade levels. This study may also help English language supervisors and teachers in Jordan to adapt the activities of writing skills in the Action Pack 11 student's book and teacher's book in light of the mind mapping strategy. Other researchers may build on this study to develop writing skills using mind mapping and investigate other aspects or skills of students' learning.

2.Literature Review

Writing is not only a matter of writing words or sentences, but it is a means of communicating ideas to people. For example, Bello (1997) remarked that the written word is a reflection of the writer's identity. Graham and Harris (2005) also stated that writing is the primary platform for students to express their knowledge, and a means for students' self- expression of their creativity. Anthony (2007) asserted that writing is a powerful instrument of thinking because it helps students to have control over their thoughts and shapes, their perceptions of themselves, and the world around them. Conley (1995) added that writing makes our thoughts and experiences vivid and long lasting as well as helps us learn things in every subject area. In other words, writing is the way we make sense of our world.

Moreover, Ahangari and Behzady (2011) mentioned that writing is one of the best ways to keep track of learning. Riswanto and Putra (2012) stated that writing is one of the language skills that will never be left in education. It is a very essential part of the lesson, not only in language class, but also in other classes such as Biology, Mathematics, History, etc. Furthermore, French and Rhoder (1992) pointed out that writing could be viewed as the main area in the curriculum that we associate with creativity, noting that writing is one of the tasks that we can be asked to perform the most. Consequently, improving students' writing is believed to be one of the most important skills which EFL learners need to develop throughout their schooling.

On the other hand, writing has always been considered an essential skill in teaching and learning English language. Lerstrom (1990) pointed out that the development of language skills affects a person's productive

ability. He also added that many researchers have demonstrated that personal success in disciplines is strongly related to a person's ability and depends on good writing skills. Rao (2007) also remarked that writing has two benefits. First, it motivates students' thinking, organizes ideas, and develops their ability to summarize, analyze and criticize. Second, it strengthens students' learning, thinking and reflecting on the English language.

There are many other reasons why writing takes a considerable place in language teaching and learning. For example, Bello (1997) stated that writing plays an essential role in promoting language acquisition as learners experiment with words, sentences, and large chunks of writing to communicate their ideas effectively and to reinforce the grammar and vocabulary they learn in class. He added that traditional curriculum did not pay enough attention to the teaching of writing which leads to better thinking. White (1987) wrote that writing provides a way to examine a student's performance in English which is not only used by teachers to test understanding and find faults, but it is also used by parents to assess their children's progress and by students to recognize their successes or failures. Writing also allows the teacher to add interest and variation to the classroom.

The mastery of writing skill is an important need for any learner whose final goal is to control other language skills logically. Richard and Rogers (1986) reported that the students usually write what they read, listen, or speak about so as to have a step towards true mastery of any concept. Zhag and Jin (1989) pointed out that writing is a comprehensive ability involving vocabulary, grammar, mechanics, and other elements; it has everything to do with reading, speaking, and listening. Therefore, Raimes (1983) remarked that writing is used not only for communicating but also for learning idioms, vocabulary, and structures, and for expressing ideas. Accordingly, writing is considered as an important part in learning other language skills of a foreign language.

Pratt (1987) pointed out that the learners are weak in writing because although they do practice it regularly, there is a noticeable imbalance in instruction in favor of grammar, punctuation, and spelling drills rather than actually having students write. He also indicated that the methods and strategies of teaching writing inside the classrooms should be practical and convenient for the students so that they can translate the broad objectives of teaching writing into behaviorist patterns revealing that students are really able to express themselves in graphically and logically written forms. The process of development in writing means the learning of techniques for structuring sentences in larger wholes.

Sayer (2005) indicated that, lately, the focus of research on composition has shifted. Rather than investigating what students write, researchers and teachers have started to study the composing process itself. They have worked under the assumption that educators know how to teach writing; they should first understand how students write. Ivanic (1992) also stated that the process approach concentrates on the development rather than the final product, but teachers often set the topic of compositions which can be counter to the creativity of the process.

As a result of what has been mentioned above, the methods and techniques of teaching need to be revised and adjusted. Littlewood (2000) asserted this point and said that it is the conviction of teachers that students' inability to write comprehensive, acceptable English passages is due to the method utilized in EFL teaching in general and composition in particular.

Accordingly, different teachers use different teaching and assessing strategies. Recently, mind mapping has been used as a tool for learning and teaching different language skills. Kyoko and Hiroko (2011) stated that mind mapping was first proposed by Tony Buzan in the late 1960s, and Ahangari and Behzady (2011) mentioned that mind mapping was developed by Joseph Novak and his research team at Cornell University in the early 1970s. Additionally, mind mapping was derived from Ausubel's meaningful learning. According to Ausubel, the most important single factor influencing learning is what the learner already knows (Woolfolk, 1987). The fundamental idea in Ausubel's cognitive psychology is that learning takes place by the assimilation of new concepts and propositions into existing concept and propositional frameworks held by the learner. This knowledge structure as held by a learner is also referred to as the individual's cognitive structure (Novak and Canas, 2006). Thus, they also reported that meaningful learning results when a person consciously and explicitly ties new knowledge to relevant concepts and knowledge he/she already possesses. This is why meaningful

learning is lasting and powerful whereas rote learning is easily forgotten and not easily applied in new learning or problem solving situations. Its use showed significant results in improving composition.

Zaid (1995) argued that mind mapping is an outline for the writing of a short essay on the topic, or that a segment of the map is used in the writing of a paragraph. He described mind mapping like a picture which is worth a thousand words. It motivates students to talk, listen, and encourage them to write. Additionally, Mercer (2002) argued that mind mapping helps students to see the relationship among ideas and connect known information with new information; it is a valuable tool for developing the vocabulary and the conceptual understanding of students. He added that mind mapping has proven useful before, during, and after writing. Moreover, Johnson (2000) asserted that mind mapping builds on schema. It draws on prior knowledge and allows students to recognize concepts and see the relationship among the components. Mind mapping begins by assigning a topic to students, then asking to list everything they know that is related to the topic. Next step, the students think of ways to classify words into categories. Finally, students analyze the topic, related words and headings for the ideas to be incorporated in the writing composition. Accordingly, Meyer (1995) pointed out that mind mapping can help writers stick to the topic by having their ideas in front of them as they are writing. It also helps the writer keep things in the correct sequential order. To sum, mind mapping is credited as a tool that can guide students through the four stages of the writing process (prewriting, drafting, editing, and revising).

3.Methodology

3.1 The subject of the study

The subjects of the study consisted of 91 eleventh grade female students in four sections at Sands National Academy in Amman, Jordan. Two of these sections comprised the experimental group while the other two comprised the control group. The two sections of the experimental group and two sections of the control group were randomly assigned. Each of the two groups consisted of one section from the scientific stream while the other was selected from the IT sections. The fifth section (pilot) was randomly selected to establish the reliability of the research instrument through the test-retest formula.

3.2 Research instruments

For the purpose of this study, the researcher developed three instruments: a writing achievement pre-post test, a writing achievement scale, and a questionnaire to investigate students' attitudes towards writing in English. A description of the proposed program is also provided at the end of this section.

A pre-test and a post-test were given to students of both groups (control group and experimental group) to measure their writing achievement. Each one of the two tests consisted of three different optional topics related to the theme of Action Pack (11) units and the writing genres they were taught. Both tests were corrected based on a special scoring scale. To score the writing achievement test, the researcher developed a writing achievement scale based on related literature such as Hill (2008) the West Virginia Writing Rubric Grade 11, Hill (2006) a rubric for assessing students writing, listening, and speaking in high school, and Hill (2009) a general rubric for holistic evaluation. This scale covered four areas (i.e. organization, grammar, mechanics, and content). A grade was assigned to each writing area (organization 6 marks, grammar 6 marks, mechanics 6 marks, and content 7 marks) and the sum of theses sub-grades compromised the total grade of 25 for each student on both writing tests (the pre-test and the post-test). The researcher developed a questionnaire based on the related literature such as Freedman (1987), Petri (2001), Jweihan (2007), Erkan, and Saban (2010), and Yong (2010). The questionnaire was intended to investigate the students' attitudes towards writing in English. It contained forty items with a five-point Likert scale (i.e. strongly agree 5, agree 4, neutral 3, disagree 2, and strongly disagree 1). Thirty four of the questionnaire items were positively stated, and 6 of them were negatively stated. For the negatively worded items, the points obtained were conversely calculated from point 1 to 5 points. The questionnaire included four parts: Part one consisted of 11 items which aimed at exploring students' feelings towards writing in English. The second part of questionnaire consisted of 10 items which aimed at exploring students' beliefs about writing in English. The third part consisted of 9 items which aimed at exploring writing practices in English. The forth part consisted of 10 items which aimed at exploring students' preferences about writing in English. Students were

asked to choose the answer which mostly represented their feelings, beliefs, practices, and preferences in writing English.

3.3 Validity of the research instruments

To ensure the validity of the writing achievement test, a pre-test and a post-test were given to students of both groups (control group and experimental group) to measure their writing achievement. Each one of the two tests consisted of three different optional topics related to the theme of Action Pack (11) units and the writing genres they were taught. Both tests were corrected based on a special scoring scale.

The validity of the writing achievement test was established by asking a panel of 9 EFL experts: (i.e. university professors, supervisors, and a curriculum designer to evaluate the chosen writing prompt in terms of appropriateness, structural accuracy, and relevance to purpose. There were no major comments made regarding content validity of the two tests.

The validity of the writing achievement scale was achieved by asking the same group of experts to judge it in terms of appropriateness, accuracy, appropriate distribution of marks, and relevance to purpose. Based on the feedback obtained from the panel of experts, the researcher changed some weights of the writing achievement scale.

The validity of the writing attitude questionnaire was ensured by consulting the panel of experts. The experts' comments and recommendations included adding, deleting, and rephrasing some items. They agreed on 40 items out of 65 to be included in the questionnaire. Upon the recommendations of the panel of experts, the questionnaire items were translated into Arabic to ensure better understanding and response of students.

3.4 Reliability of the research instruments

In order to establish the reliability of the writing achievement test, it was applied to thirty students of a pilot study group. The reliability was established via two methods. The first measure was the Cronbach alpha formula which revealed the following values of reliability: (0.79) for the organization, (0.81) for the grammar, (0.88) for the mechanics, (0.83) for the content, and (0.90) for the overall test. The second measure was the test-retest formula using the Pearson reliability coefficient. The obtained values were (0.88) for organization, (0.87) for grammar, (0.85) for mechanics, (0.83) for content, and (0.89) for the overall test. All calculated values were considered acceptable to achieve the purpose of this study.

To ensure the reliability of the raters, the researcher and another experienced rater used the writing achievement scale to evaluate students' writing. First, a sample of 30 students was corrected by each of the two raters independently. Each rater read each piece of writing and assigned a grade based on the writing achievement scale. Inter-rater reliability was measured by averaging the scores given to each student by the two raters. The equation of agreement and disagreement between raters was used to reveal that raters' agreement was (0.89), which was considered appropriate to correct the papers of the sample of the study using the same writing achievement scale.

In order to establish the reliability of the writing attitudes questionnaire, it was applied to the pilot group of 30 first secondary students from outside the sample of the study. The reliability was ensured by applying two methods. First, the consistency coefficient of the writing attitudes questionnaire which was measured by using the Cronbach alpha formula; the calculated values were (0.88) for the feelings, (0.85) for the beliefs, (0.84) for the practices, (0.86) for the preferences, and (0.89) for the overall questionnaire. Second, the test-retest method was used where the Pearson reliability coefficient was calculated to be (0.82) for feelings, (0.88) for beliefs, (0.90) for practices, (0.83) for preferences, and (0.91) for the overall questionnaire. All those values were also considered satisfactory to be used to collect data for this study.

3.5 Design of the study

This is a quasi-experimental design because the subjects of the study were purposefully selected from one private school (Sands National Academy) in the Amman Second Directorate of Education in. The reason was that this school was the only school where the principal and English teaching staff agreed to apply the proposed program. The independent variable was the teaching method (program), which has two levels: the conventional method of teaching writing as described in the eleventh grade Teacher's Book, and the mind mapping program. The two dependant variables were the writing achievement mean scores and students' attitudes means score towards writing. This design can be represented statistically as follows:

EG: O1 O2 **X** O1 O2

CG: O1 O2 ---------- O1 O2

O1: writing achievement pre- and post-test

O2: attitude towards writing pre- and post-test

X: the treatment: using mind-mapping strategy to teach writing.

------- : no treatment

3.6 Statistical analysis of the study

To answer the questions of the study, the researcher used descriptive statistics (i.e. means and standard deviations) followed by the Multivariate analysis of covariance (MANCOVA) to detect any significant differences in the mean scores of the two groups on writing achievement and attitudes. A Two Way MANCOVA was also performed to detect any significant differences in the post-test mean scores on writing achievement and attitudes of students that can attributed to the interaction between applying the proposed program and students' general level in English.

4. Findings of the Study

Results of the first question: Are there any statistically significant differences in the writing achievement mean scores of eleventh grade EFL students that can be attributed to the teaching method (mind mapping program vs. conventional method)?

In order to answer the first question of the study, the researcher calculated the adjusted means and standard errors of the subjects of the study regarding their writing achievement. The results are presented in Table (1) below.

Table 1: Adjusted means and standard errors for the subjects of the study regarding their writing achievement

Dependent Variables	Group	Adjusted Means	Std. Errors
Organization	Control	3.95	0.16
	Experimental	4.72	0.16
Grammar	Control	4.37	0.19
	Experimental	5.07	0.20
Mechanics	Control	3.57	0.16
	Experimental	4.20	0.16
Content	Control	3.49	0.14
	Experimental	4.39	0.15
Total	Control	15.33	0.61
	Experimental	18.53	0.62

Table(1) shows that the adjusted mean scores of the experimental group are higher than those of the control group regarding all fields of writing (i.e. organization 4.72> 3.95; grammar 5.07> 4.37; mechanics 4.20 >3.57; content 4.39> 3.49; and total 18.53 >15.33).

In order to find out if these differences were statistically significant or not, the researcher used Multivariate Analysis of Covariance (MANCOVA).

Table 2: The Results of MANCOVA of the subjects of the study regarding their achievement

Source	Dependent Variable	Sum of Squares	Df	Mean Square	F	Sig.	Eta Squared
Group	Organization	10.667	1	10.667	10.520	*0.002	0.110
	Grammar	8.732	1	8.732	5.832	*0.018	0.064
	Mechanics	7.065	1	7.065	6.794	*0.011	0.074
	Content	14.308	1	14.308	17.295	*0.000	0.169
	Total	180.582	1	180.582	12.162	*0.001	0.125
Error	Organization	86.182	85	1.014			
	Grammar	127.266	85	1.497			
	Mechanics	88.393	85	1.040			
	Content	70.320	85	.827			
	Total	1262.046	85	14.848			
Corrected Total	Organization	118.110	90				
	Grammar	176.571	90				
	Mechanics	125.670	90				
	Content	107.604	90				
	Total	1895.297	90				

***. The mean difference is significant at the .05 level** (α=.05)

Table (2)shows that all the differences in the mean scores were significant (α=.05). All these differences were in favor of the students of the experimental group as shown in Table (1). This means that teaching writing based on the mind mapping program was more effective than using the conventional method.

Results of the second question: Are there any statistically significant differences in the mean scores of students' attitudes towards writing that can be attributed to the teaching method (mind mapping program vs. conventional method)?

In order to answer the second question of the study, the researcher calculated the adjusted means and standard errors of the subjects of the study regarding their attitudes towards writing. The results are presented in Table (3) below.

Table 3: Adjusted means and standard errors of the subjects of the study regarding their attitudes towards writing

Dependent Variable	**Group**	**Adjusted Mean**	**Std. Error**
Feelings about Writing in English	Control	32.62	0.83
	Experimental	39.08	0.83
Beliefs about Writing in English	Control	32.69	0.50
	Experimental	35.43	0.51
Teaching Practices in English	Control	28.20	0.89
	Experimental	35.93	0.91
Learning Preferences	Control	35.83	1.31
	Experimental	42.33	1.33
Total	Control	129.34	2.50
	Experimental	152.76	2.53

Table (3) shows that the adjusted mean scores of the experimental group are higher than those of the control group regarding all fields of attitudes towards writing (i.e. feelings 39.08 >32.62; beliefs 35.43> 32.69; teaching practices 35.93> 28.20; learning preferences 42.33> 35.83; and the total 152.76 > 129.34).

In order to find out if these differences were statistically significant or not, the researcher used the Multivariate Analysis of Covariance (MANCOVA).

Table 4: The results of MANCOVA of the subjects of the study regarding their attitudes towards writing

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Group	Feelings about Writing in English	856.692	1	856.692	28.878	*0.000	.254
	Beliefs about Writing in English	152.822	1	152.822	13.945	*0.000	.141
	Teaching Practices in English	1221.278	1	1221.278	35.006	*0.000	.292
	Learning Preferences	862.887	1	862.887	11.522	*0.001	.119
	Total	11226.069	1	11226.069	41.134	*0.000	.326
Error	Feelings about Writing in English	2521.625	85	29.666			
	Beliefs about Writing in English	931.475	85	10.959			
	Teaching Practices in English	2965.411	85	34.887			
	Learning Preferences	6365.532	85	74.889			
	Total	23198.019	85	272.918			
Corrected Total	Feelings about Writing in English	3789.824	90				
	Beliefs about Writing in English	1347.824	90				
	Teaching Practices in English	5189.956	90				
	Learning Preferences	7795.824	90				
	Total	39178.462	90				

***. The mean difference is significant at the .05 level** (α=.05)

Table (4) shows that all the differences in the mean scores were significant (α=.05). All these differences were in favor of the students in the experimental group as shown in Table (3). This indicates that using the mind mapping program has improved students' attitudes toward writing in English.

Results of the third question: Are there any statistically significant differences in the writing achievement mean scores of students that can be attributed to the interaction between mind mapping program and students' general level of English(good, average, or poor)?

To answer this question, the researcher calculated the means and standard deviations of the students regarding their writing achievement. The results are presented in Table (5).

Table 5: Means and standard deviations of the subjects of the study with regard to their writing achievement

Dependent Variable	Group	Students' general level	Pre-test		Post-test		N
			Mean	Std. Deviation	Mean	Std. Deviation	
Organization	**Control**	**Good**	3.38	1.06	4.13	0.99	8
		Average	3.71	1.21	4.04	1.00	28
		Poor	3.40	1.17	3.80	1.03	10
		Total	3.59	1.17	4.00	0.99	46
	Experimental	**Good**	3.44	1.24	4.44	1.24	9
		Average	3.24	1.22	4.52	1.21	29
		Poor	3.86	0.90	5.57	0.79	7
		Total	3.38	1.17	4.67	1.21	45
	Total	**Good**	3.41	1.12	4.29	1.11	17
		Average	3.47	1.23	4.28	1.13	57
		Poor	3.59	1.06	4.53	1.28	17
		Total	3.48	1.17	4.33	1.15	91
Grammar	**Control**	**Good**	3.00	1.07	4.50	1.31	8
		Average	3.36	1.37	4.57	1.35	28
		Poor	3.00	1.05	4.00	1.33	10
		Total	3.22	1.25	4.43	1.33	46
	Experimental	**Good**	3.33	1.23	4.78	1.64	9
		Average	3.28	1.22	4.86	1.48	29
		Poor	3.86	0.90	5.86	0.38	7
		Total	3.38	1.17	5.00	1.43	45
	Total	**Good**	3.18	1.13	4.65	1.46	17
		Average	3.32	1.28	4.72	1.41	57
		Poor	3.35	1.06	4.76	1.39	17
		Total	3.30	1.21	4.71	1.40	91
Mechanics	**Control**	**Good**	3.00	1.07	3.50	1.51	8
		Average	3.32	1.19	3.68	1.31	28
		Poor	2.90	0.74	3.30	1.34	10

		Total	3.17	1.08	3.57	1.33	46
	Experimental	**Good**	3.00	1.23	4.11	1.05	9
		Average	2.86	1.16	4.10	0.90	29
		Poor	3.29	0.95	4.71	0.76	7
		Total	2.96	1.13	4.20	0.92	45
	Total	**Good**	3.00	1.12	3.82	1.29	17
		Average	3.09	1.18	3.89	1.13	57
		Poor	3.06	0.83	3.88	1.32	17
		Total	3.07	1.10	3.88	1.18	91
Content	**Control**	**Good**	3.75	1.39	3.38	1.19	8
		Average	4.00	1.31	3.64	1.03	28
		Poor	3.70	1.16	3.30	1.06	10
		Total	3.89	1.27	3.52	1.05	46
	Experimental	**Good**	3.33	1.12	4.33	0.87	9
		Average	3.59	1.35	4.21	0.98	29
		Poor	4.29	1.11	5.00	1.00	7
		Total	3.64	1.28	4.36	0.98	45
	Total	**Good**	3.53	1.23	3.88	1.11	17
		Average	3.79	1.33	3.93	1.03	57
		Poor	3.94	1.14	4.00	1.32	17
		Total	3.77	1.27	3.93	1.09	91
Total	**Control**	**Good**	13.13	4.39	15.50	4.75	8
		Average	14.39	4.89	15.93	4.49	28
		Poor	13.00	3.92	14.40	4.43	10
		Total	13.87	4.56	15.52	4.46	46
	Experimental	**Good**	13.11	4.37	17.67	4.53	9
		Average	12.97	4.57	17.83	4.37	29
		Poor	15.29	3.64	21.29	2.87	7
		Total	13.36	4.39	18.33	4.32	45

	Total	**Good**	13.12	4.24	16.65	4.62	17
		Average	13.67	4.74	16.89	4.49	57
		Poor	13.94	3.86	17.24	5.13	17
		Total	13.62	4.46	16.91	4.59	91

Table (5) shows that there are differences in the mean scores of good, average and poor students with regard to their writing achievement. In order to examine whether these differences were statistically significant or not due to the interaction between their general level in English and the teaching program, the researcher used a Two Way Analysis of Covariance (MACNOVA). The results are presented in Table (6).

Table 6: The results of a Two Way MACNOVA of the students' writing achievement due to the interaction * between group (control and experimental) and students' general level of English

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Group	Organization	10.762	1	10.762	10.626	.002
	Grammar	9.122	1	9.122	6.000	.016
	Mechanics	6.955	1	6.955	6.446	.013
	Content	15.000	1	15.000	17.805	.000
	Total	179.710	1	179.710	11.899	.001
Students' general level of English	Organization	1.481	2	.740	.731	.485
	Grammar	.175	2	.088	.058	.944
	Mechanics	.078	2	.039	.036	.964
	Content	.541	2	.271	.321	.726
	Total	7.019	2	3.510	.232	.793
Group * students' general level of English	Organization	**3.182**	**2**	**1.591**	**1.571**	**0.214**
	Grammar	**4.097**	**2**	**2.049**	**1.348**	**0.266**
	Mechanics	**.985**	**2**	**.493**	**0.457**	**0.635**
	Content	**1.779**	**2**	**.889**	**1.056**	**0.353**
	Total	**35.455**	**2**	**17.728**	**1.174**	**0.314**
Error	Organization	82.036	81	1.013		
	Grammar	123.147	81	1.520		
	Mechanics	87.388	81	1.079		

	Content	68.237	81	.842		
	Total	1223.327	81	15.103		
Corrected total	Organization	118.110	90			
	Grammar	176.571	90			
	Mechanics	125.670	90			
	Content	107.604	90			
	Total	1895.297	90			

*** The mean difference is significant at the .05 level** (α=.05)

Table (6) shows that there was no significant interaction between the method of instruction and students' general level of English since the total writing score was 0.314, Organization 0.214, Grammar 0.266, Mechanics 0.635 and Content 0.353. All these values are greater than .05

4.1. Results of the fourth question: Are there any statistically significant differences in the mean scores of students' attitudes towards writing that can be attributed to the interaction between the mind mapping program and students' general level of English (good, average, or poor)?

To answer this question, the researcher calculated the means and standard deviations of the students regarding their attitudes towards writing. The results are presented in Table (7).

Table 7: Means and standard deviations of the subjects of the study regarding their attitudes towards writing

Dependent Variable	**Group**	**Students' general level**	**Pre-test**		**Post-test**		**N**
			Mean	**Std. Deviation**	**Mean**	**Std. Deviation**	
Feelings about Writing in English	**Control**	**Good**	**31.00**	**7.05**	**32.13**	**4.09**	**8**
		Average	**31.82**	**2.97**	**33.21**	**4.37**	**28**
		Poor	**31.00**	**5.62**	**31.00**	**4.71**	**10**
		Total	**31.50**	**4.42**	**32.54**	**4.40**	**46**
	Experimental	**Good**	**30.11**	**4.96**	**36.33**	**7.62**	**9**
		Average	**29.41**	**4.92**	**39.48**	**6.23**	**29**
		Poor	**28.43**	**5.19**	**41.43**	**6.63**	**7**
		Total	**29.40**	**4.88**	**39.16**	**6.62**	**45**
	Total	**Good**	**30.53**	**5.85**	**34.35**	**6.40**	**17**
		Average	**30.60**	**4.22**	**36.40**	**6.21**	**57**
		Poor	**29.94**	**5.44**	**35.29**	**7.55**	**17**
		Total	**30.46**	**4.74**	**35.81**	**6.49**	**91**

Beliefs about Writing in English	**Control**	**Good**	**31.25**	**2.55**	**32.25**	**3.41**	**8**
		Average	**32.04**	**3.21**	**32.93**	**3.39**	**28**
		Poor	**32.10**	**1.37**	**31.20**	**1.14**	**10**
		Tot`al	**31.91**	**2.77**	**32.43**	**3.07**	**46**
	Experimental	**Good**	**32.67**	**3.39**	**35.00**	**4.72**	**9**
		Average	**32.97**	**2.10**	**36.00**	**3.86**	**29**
		Poor	**34.00**	**2.31**	**35.29**	**3.59**	**7**
		Total	**33.07**	**2.41**	**35.69**	**3.94**	**45**
	Total	**Good**	**32.00**	**3.02**	**33.71**	**4.27**	**17**
		Average	**32.51**	**2.72**	**34.49**	**3.92**	**57**
		Poor	**32.88**	**2.00**	**32.88**	**3.14**	**17**
		Total	**32.48**	**2.65**	**34.04**	**3.87**	**91**
Teaching Practices in English	**Control**	**Good**	**26.88**	**4.58**	**29.75**	**5.15**	**8**
		Average	**26.04**	**3.23**	**28.57**	**5.77**	**28**
		Poor	**24.50**	**4.53**	**25.20**	**4.69**	**10**
		Total	**25.85**	**3.77**	**28.04**	**5.57**	**46**
	Experimental	**Good**	**24.33**	**3.08**	**34.22**	**8.20**	**9**
		Average	**24.59**	**4.08**	**35.76**	**7.19**	**29**
		Poor	**25.43**	**4.50**	**39.86**	**5.84**	**7**
		Total	**24.67**	**3.90**	**36.09**	**7.27**	**45**
	Total	**Good**	**25.53**	**3.96**	**32.12**	**7.11**	**17**
		Average	**25.30**	**3.73**	**32.23**	**7.42**	**57**
		Poor	**24.88**	**4.40**	**31.24**	**8.97**	**17**
		Total	**25.26**	**3.86**	**32.02**	**7.59**	**91**
Learning Preferences	**Control**	**Good**	**33.63**	**13.08**	**31.25**	**10.49**	**8**
		Average	**33.43**	**12.04**	**37.36**	**9.99**	**28**
		Poor	**39.00**	**13.88**	**34.90**	**13.70**	**10**
		Total	**34.67**	**12.55**	**35.76**	**10.95**	**46**
	Experimental	**Good**	**36.56**	**11.20**	**42.00**	**5.52**	**9**

		Average	**38.41**	**9.94**	**41.79**	**5.72**	**29**
		Poor	**39.57**	**10.77**	**45.43**	**5.22**	**7**
		Total	**38.22**	**10.12**	**42.40**	**5.64**	**45**
	Total	**Good**	**35.18**	**11.83**	**36.94**	**9.69**	**17**
		Average	**35.96**	**11.21**	**39.61**	**8.33**	**57**
		Poor	**39.24**	**12.33**	**39.24**	**12.01**	**17**
		Total	**36.43**	**11.49**	**39.04**	**9.31**	**91**
Total	**Control**	**Good**	**122.75**	**12.53**	**125.38**	**16.34**	**8**
		Average	**123.32**	**12.35**	**132.07**	**16.98**	**28**
		Poor	**126.60**	**14.03**	**122.30**	**15.65**	**10**
		Total	**123.93**	**12.55**	**128.78**	**16.78**	**46**
	Experimental	**Good**	**123.67**	**9.59**	**147.56**	**17.50**	**9**
		Average	**125.38**	**10.38**	**153.03**	**17.03**	**29**
		Poor	**127.43**	**11.87**	**162.00**	**15.24**	**7**
		Total	**125.36**	**10.29**	**153.33**	**17.05**	**45**
	Total	**Good**	**123.24**	**10.72**	**137.12**	**20.01**	**17**
		Average	**124.37**	**11.34**	**142.74**	**19.90**	**57**
		Poor	**126.94**	**12.80**	**138.65**	**25.11**	**17**
		Total	**124.64**	**11.44**	**140.92**	**20.86**	**91**

Table (7) shows that there are differences in the mean scores of good, average and poor students with regard to their attitudes toward writing. In order to examine whether these differences were statistically significant or not due to the interaction between the general level in English and the teaching program, the researcher used a Two Way Analysis of Covariance (MACNOVA). The results are presented in Table (8).

Table 8**:** The results of a Two Way MACNOVA of the students' attitudes towards writing due to the interaction * between group (control and experimental) and students' general level of English

Source	**Dependent Variable**	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Pre attitudes	Feelings about Writing in English	118.879	1	118.879	3.951	0.05
	Beliefs about Writing in English	1.502	1	1.502	0.117	0.733
	Teaching Practices in English	46.732	1	46.732	1.146	0.287
	Learning Preferences	291.794	1	291.794	3.964	0.05

	Total	1128.679	1	1128.679	4.178	0.044
Group	Feelings about Writing in English	678.329	1	678.329	22.866	0.000
	Beliefs about Writing in English	101.506	1	101.506	9.132	0.003
	Teaching Practices in English	1003.674	1	1003.674	28.589	0.000
	Learning Preferences	1132.372	1	1132.372	15.255	0.000
	Total	10292.371	1	10292.371	38.069	0.000
Students' general level of English	Feelings about Writing in English	46.347	2	23.174	.781	0.461
	Beliefs about Writing in English	23.921	2	11.961	1.076	0.346
	Teaching Practices in English	.449	2	.224	.006	0.994
	Learning Preferences	115.298	2	57.649	.777	0.463
	Total	372.492	2	186.246	.689	0.505
Group * students' general level of English	Feelings about Writing in English	**68.259**	**2**	**34.130**	**1.150**	**0.322**
	Beliefs about Writing in English	**4.624**	**2**	**2.312**	**0.208**	**0.813**
	Teaching Practices in English	**121.039**	**2**	**60.520**	**1.724**	**0.185**
	Learning Preferences	**255.032**	**2**	**127.516**	**1.718**	**0.186**
	Total	**900.110**	**2**	**450.055**	**1.665**	**0.196**
Error	Feelings about Writing in English	2402.919	81	29.666		
	Beliefs about Writing in English	900.307	81	11.115		
	Teaching Practices in English	2843.707	81	35.107		
	Learning Preferences	6012.552	81	74.229		
	Total	21899.241	81	270.361		
Corrected Total	Feelings about Writing in English	3789.824	90			
	Beliefs about Writing in English	1347.824	90			

	Teaching Practices in English	5189.956	90			
	Learning Preferences	7795.824	90			
	Total	39178.462	90			

***. The mean difference is significant at the .05 level** (α=.05)

Table (8) shows that there was no significant interaction between the method of instruction and students' general level of English since the total attitudinal score was 0.196 >.05, feelings 0.322, beliefs 0.813, teaching practices 0.185 and learning preferences 0.186.

5.Discussion of the results

The results of using MANCOVA to answer the first question revealed statistically significant differences in the students' achievement mean scores on the writing post-tests due to the teaching strategy. Those differences were in favor of the students of treatment group who were taught using the mind mapping strategy as shown in Table 1. The mind mapping program emphasizes the different steps of the writing process. Students were encouraged to overcome the difficulty of getting started by eliciting any ideas in the first place. This brainstorming stage may have helped students to generate ideas and develop them through group work. This, in turn, provided students with learning opportunities which resulted in a significant improvement of their writing achievement. In particular, the prewriting stage seemed to have activated students' background knowledge to draw their first preliminary writing map, which enabled them to discuss their ideas using proper vocabulary; structure and organization

Students of the experimental group also showed better control of the drafting phase compared to those of the control group. This result revealed that students who used mind mapping strategy to organize and summarize information in their draft of writing produced more transformations of ideas in their summaries than the students who did not use this strategy. The drafting stage focuses primarily on what the writer wants to say while redrafting progressively focuses on how to say it more effectively. The students should consider how to make meaning, then how to organize their ideas, and finally how to express themselves.

As for the revising phase of the process of writing, graphic organizers may have helped students to see the relationship between the main ideas and sub-ideas. Graphic organizers give students the opportunity to solidify their ideas before writing. The students' ability to transfer meaning to write summaries improved significantly; they were able to write more complete and well organized summaries after the intervention. On the other hand, using the editing form which was suggested in the mind mapping program seems to have helped students of the treatment group develop a list of things to look for while revising their written pieces. This might explain why those students outperformed their counterparts of the control group although the latter were required to focus more on writing mechanics such as spelling, punctuation and structure.

It is worth mentioning that students of the treatment group were reluctant at the beginning to share their written pieces with rest of the class or get them published, but the teacher kept encouraging them to present their writing and feel proud of it. They were advised that the more they publish, the more they will develop a sense of themselves as authors and grow in the writing process.

On the other hand, model writing as a mind mapping technique may have provided students with clear guidelines to follow in order to fulfill the task requirements. Model writing was helpful to the students because they were led through process writing step by step with clear input and enough practice within a short period of time.

More specifically, the results showed that the greatest improvement in the writing of the treatment group was in grammar, organization, and content respectively. (Mean scores were 5. 00, 4.67, and 4.36). This indicates that the program was effective in developing all aspects of the writing skill compared to the conventional method that overemphasizes the writing mechanics at the expense of other important aspects. In short, exposing students to the various stages of the writing process may have helped developed students as writers.

It can be realized that the program was successfully implemented within a tight schedule, though it would be more desirable if the duration of the program could be longer. This may indicate that the steps of such a program can be incorporated in the writing lessons of English language curriculum for the secondary grade in Jordan.

The results of the second question revealed statistically significant differences in the students' attitudes mean scores on the post-test due to the teaching strategy. Those differences were in favor of the treatment group as shown in Table 3.

It seems that the students who were taught using the mind mapping program enjoyed working in groups because they had more chance to interact and share ideas. Mind mapping seems to have motivated students to participate a lively discussion of ideas in a supportive and non threatening classroom environment under the guidance of the teacher. Social support from the teacher is an important component that may have influenced students' academic achievement. When students perceive that they are supported by their teacher, they tend to engage more actively and make a greater effort in their academic work. The participants might have felt less anxious when they recognized that they obtained more academic support from their teacher. In fact, the cooperating teacher remarked that most of the job in the mind mapping program was done by the students themselves.

Another reason why the treatment group developed more positive attitudes toward writing compared to those of the control group is that the former group wrote on topics related to their interests and background knowledge and not on topics imposed by the teacher or required by their textbooks (Action Pack Eleven). Mind mapping involved students in matching photos with relevant information (in activity number three of each unit of the proposed program) and in reading articles to draw mind maps of what they have read (in activity number six of each unit). Learners were also involved in brainstorming, drawings and moving from one part to another according to their needs interests and abilities. This indicates that design of the program attracted students because it met their individual learning styles and preferences.

The results of questions three and four showed that there was significant interaction between the teaching strategy and students GPA either with regard to students' writing achievement or their attitudes toward writing in English. This means that there were no significant differences between good students, average students, and poor students with regard to their benefit from the proposed mind mapping program. In other words, this implies that all students regardless of their GPA in English benefited greatly from the mind mapping program.

One interpretation of this result could be that teachers in Jordan are expected to use the same teaching strategies to teach all students in the same class regardless of their GPAs. In other words, the cooperating teacher did not use different procedures, steps, instructional materials, or assessment techniques to achieve the objectives of the mind mapping program. Another explanation could be that students who are good at writing are not necessarily so good at other language skills (i.e. Speaking, listening, grammar, or reading) which are included estimating students' GPAs.

5.1 Conclusions

The following conclusions can be drawn from the results of this study:

1. Similar to some other studies, this study confirmed that the mind mapping strategy improved students' writing achievement because it provided them with a strategy to organize their thoughts and broaden their writing skills. In addition, it has led to much greater improvement in students' attitudes towards writing skills.
2. Prewriting activities and brainstorming in can engage students in thinking about the topic and they activate their prior knowledge to generate ideas through group work and oral discussion.
3. The mind mapping program is an effective teaching program because it can improve the writing skills of different levels of language learners (good, average and poor).
4. Using the mind mapping strategy for teaching writing not only activates the schema of writing sub-skills but also organization and content.
5. The learning environment plays a major role in teaching writing since this skill requires much thinking, processing and meaning making. This, in turn, is reflected upon the quality and quantity of written product. Therefore, teachers should do their best to involve students and remove all the frustrating barriers to create a supportive learning environment for writing.

6. Students may produce good writing pieces when they write about topics of interest, and when they have good background knowledge about the topics they write about.

5.2 Recommendations

Based on the findings of this study, the following recommendations can be made:

1- Curriculum developers and textbook writers may incorporate teaching strategies can help students write using the mind mapping techniques or steps to help them develop as creative writers.
2- More time and effort should be given by EFL teachers to teach all the five steps of process writing so that students enjoy writing and get more motivated to learn.
3- Teacher training programs should include mind mapping as a teaching technique that enhances thinking and promotes sharing and publishing of written pieces.
4- Researchers are invited to conduct other studies to investigate the effect of mind mapping on developing other language skills among students at different levels.
5- Teachers are advised to place more emphasis on the prewriting phase which, if employed skillfully, can motivate students and activate their prior knowledge.
6- Teachers are also advised not to limit their writing skill instruction to correct spelling, mechanics of writing, and grammatical and lexical accuracy at the expense of organization and communication. They need to provide students with of non-corrective feedback on their writing development to help them feel a sense of achieve as developing rather than developed writers.

References:

Ahangari, S. and Behzady, L. (2011). The Effect of Explicit Teaching of Concept Maps on Iranian EFL Learners' Writing Performance**.** *American Journal of Scientific Research***,** 61, 100-112.

Ahangari, S. and Behzady, L. (2011). The Effect of Explicit Teaching of Concept Maps on Iranian EFL Learners' Writing Performance. *American Journal of Scientific Research,* 61, 100-112.

Anthony, B. (2007). *Making Students' Writing Bloom: The Effect of Scaffolding Oral Inquiry Using Bloom's Taxonomy on Writing in Response to Reading and Reading Comprehension of Fifth Graders*, Unpublished doctoral dissertation, Auburn University, Alabama.

Bello, T. (1997). Writing Topics for Adult ESL Students, *Paper presented at the 31st Annual Teachers of English to Speakers of Other Language Convention*. Orlando, Fl, USA.

Conley, M. (1995). *Content Reading Instruction: A Communicative Approach 2nd edition.* Mc Graw- Hill, Inc.

Erkan, D. and Saban, A. (2010). Writing Performance Relative to Write pprehension, Self-efficacy in Writing, and Attitudes Toward Writing. *Asian EFL Journal, The EFL professional's written Form***.** 13 (1), 146-192.

Freedman, S. (1987). *Responses to Student Writing*. National Council of Teachers of English.

French, N. and Rhoder, C. (1992). *Teaching Thinking Skills*. Garland Publication, INC, NY, USA, 238.

Gelb, I. and Whiting, R. (1993). *Academic American Encyclopedia*, Grolier Inc, Danby, Connecticut, 20, 293.

Graham, S., and Harris, K. (2005). Improving the Writing Performance of Young Struggling Writers: Theoretical and Programmatic Research from the Center on Accelerating Student Leaning. *The Journal of Special Education*, 39, 19-33.

Harmer, J. (2001). *The practice of English Language Teaching (3rd ed.).* Harlow: Longman.

Hill, M. (2009). General Rubric for Holistic evaluation Writer's Choice. Retrieved August 2013 from www.ucdenver.edu/.../Rubrics/.../ex_general%20_writin.

Hill, M. (2006). Glencoe Literature: The Reader's Choice, *High School*, *Rubrics* for *Assessing Student Writing*, *Listening*, and *Speaking*. Leather Bound, Retrieved August 2013**from** http://www.glencoe.com/sec/glencoewriting/HighSchoolRubrics_876544.indd.pdf

Hyland, K. (2003), *Second language writing (3rd Ed.).* Cambridge: Cambridge University Press.

Ivanic, R. (1992). Writing by Tricia Hedge. *ELT Journal*, 46, (4), 384-386.

Johnson, S. (2000). Content definition mapping and the Frayer model. Retrieved September 2013 from http://www.longwood.edu/staff/jonescd/projects/educ530/ajohnson/cdmtfmback.html

Jweihan, T. (2007). *The integration of English language skills in the first secondary EFL curriculum in Jordan and speaking in English*. Unpublished master's thesis, University of Jordan, Amman.

Kroll, B. (1993). *Second Language Writing: Research Insights for the Classroom.* Cambridge Applied Linguistics, Cambridge: Cambridge University Press.

Kyoko, O. and Hiroko, T. (2011). *A Study on the Effect of Hierarchical Concept Mapping on Writing by Junior High School Students,* Chiba University, Japan, 59, 223-228.

Lerstrom, A. (1990). *Speaking across the Curriculum: Moving Toward Shared Responsibility? Paper Presented at the Annual Meeting of the Conference on College Composition and Communication,* Chicago, IL.

Lindsay, P. (2000). *Teaching English World Wide: A new practical guide to teaching English* . San Francisco : Alta Book Center Publishers.

Littlewood, W. (2000). Do Asian Students Really Want to Listen and Obey? *ELT Journal,* 54 (1), 31-36

Mercer, N. (2002). *Multicultural Education Programs.* University of Southern California.

Ministry of Education (2006). *General Guidelines and General and Specific Outcomes for the English Language Curriculum for the Basic and Secondary Stages.* The English Language National Team.

Novak, J. D and Canas, A.J. (2010). *Learning, Creating and Using Knowledge: Concept Maps (tm) as Facilitative Tools in Schools and Corporations (2nd Ed).* New York: Routledge.

Novak, J. D. and Canas, A. J. (2006). The Origins of the Concept Mapping Tool and the Continuing Evolution of the Tool. *Information Visualization Journal*, 5 (3), 175-184

Oxford, R. (2002), Language learning strategies in nutshell: update and ESL suggestions. *Methodology in language teaching; an anthology of current practice.* Cambridge: Cambridge University Press.

Peregoy, S. and Boyle, O. (2005), *Reading, writing and learning in ESL (4th ed.)* Boston: Pearson Education Inc.

Petri, B. (2001). Students' Attitudes Towards Writing and Development of Writing Skills. *Writing Center Journal.* 22, (2), 9-27.

Pratt, D. (1987). *A Process Approach: The Formulation of a Simplified Conceptual Framework Showing the Stages of the Writing Process, and an Investigation into the Effects on Writing Behavior of Communicating this Framework Directly to the Learners.* Unpublished master's thesis, University of Natal.

Raimes, A. (1983). *Techniques in Teaching.* New York: Oxford University Press.

Rao, Z. (2007). Training in brainstorming and developing writing skills**.** *ELT Journal,* 61 (2), 100-106.

Reid, J. M. (1993). *Teaching ESL Writing. Englewood Cliffs*, N.J.: Prentice Hall
Report No. 23. Urbana, IL: National Council of Teachers of English.

Richards, J. C., and Rogers T.S. (1986). *Approaches and Methods in Language Teaching.* Cambridge: Cambridge University Press.

Riswanto and Putra, P. (2012). The Use of Mind Mapping Strategy in the Teaching of Writing at SMAN 3 Bengkulu, Indonesian. *International Journal of Humanities and Social Science,* 2 (21) 60-68.

Sayer, P. (2005). An Intensive Approach to Building Conversation Skills. *ELT Journal***.** 59(1), 14-22.

Scane, J., Guy, A. M., and Wenstrom, L. (1991). *Think, Write, Share: Process Writing for Adult ESL and Basic Education Students* . Toronto : The Ontario Institute for Studies in Education .

White, R.(1987). Approaches to writing In M. Long J. Richards (Eds.).
Woolfolk, A. (1987). *Educational Psychology*. New Jersey: Prentice- Hall, Inc.
Yong, F. (2010). Attitudes toward Writing of Foundation Students at an Australian- based University in Sarawak. *European Journal of Social Science*, 13 (3), 471- 477.

Yong, F. (2010). Attitudes toward Writing of Foundation Students at an Australian- based University in Sarawak. *European Journal of Social Science*, 13 (3), 471- 477.

Zaid, A. (1995). Semantic Mapping in Communicative Language Teaching. *English Teaching Forum,* 3, 6-9.

Zhang, X. and Jin, C. (1989). Techniques to Teaching Writing. *English Teaching Forum,* XXXVII (2) 34-36.

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