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Faculty of Graduate Studies

The Influence of Applying Map Concept Strategy on Improving Students' Writing Skills in Ramallah District

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This Thesis is Submitted in Partial Fulfillment of the Requirements of the Degree of Master of Methods Teaching English Language, Faculty of Graduate Studies, An-Najah National University, Nablus, Palestine.

2015

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Dedication

I dedicate my dissertation work to my family and friends. A special feeling of gratitude is to my loving parents whose words of motivation and encouragement for tenacity still ring in my ears. And for those who have never left my side.

I would like to thank my colleagues and wish them all success in their study and happiness in their life. For those who will soon start working on their dissertation; Fardous Ismael, Amal Marabaa, Doaa' Aboura, Abeer Aqtash, Nayira Risheq and Islam Fayed. I wish them all success and luck.

Last but not the least; I want to appreciate all the support that my best friends; Majed Zahran and Saeed Abu Zir give to me throughout my life.

Acknowledgment

First, I would like to express my sincere gratitude to my advisor Dr Ahmed Awad for the continuous support of my MA study; for his patience, effort, motivation and immense knowledge. Besides, I would like to thank the rest of my thesis committee Dr Fawaz Aqel and Dr Ziyad Tanni for their fruitful comments, encouragements and for their hard questions which incented me to widen and modify my research.

الإقرار

أنا الموقع أدناه، مقدم الرسالة التي تحمل العنوان

The Influence of Applying Map Concept Strategy on Improving Students' Writing Skills in Ramallah District

أقر بأن ما شملت عليه هذه الرساله انما هو نتاج جهدي الخاص، باستثناء ما تم الاشارة اليه حيثما ورد، وان هذه الرساله ككل، وأي جزء منها لم يقدم من قبل لنيل اي درجه او لقب علمي لدى اي مؤسسة تعليمية او بحثية أخرى

Declaration

The work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

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Date: 20/12/2015 **التاريخ:**

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The Influence of Applying Map Concept on Improving Students' Writing Skills

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Abstract

This study aimed to investigate "the influence of applying map concept on improving students' writing skills". To achieve this, the researcher used a writing test. This test was applied to (60) students from eighth grade, divided into two groups, (30) students in each group. The students are from Bitonyia public school for boys in Ramallah. The researcher distributed the writing pretest on the control and the experimental groups. The same sample was used to answer the posttest for the same groups after teaching the students in the experimental group how to use map concept strategy.

One of the major findings is that students in general have positive results concerning the improvement of writing skills by using map concept. In the light of this finding, the researcher recommended the extension of applying map concept for all students in schools. Another divergent recommendation was directed to the Ministry of Education. Some for teachers to apply map concept strategy, others for students to use it when writing, while the rest are addressed for both the Directorate of Education and The Palestinian Center for Curriculum.

Chapter One

Introduction and Theoretical Background

1.1 Introduction and Theoretical Background:

1.2 Statement of the Problem

1.3 Purpose of the Study

1.4 Questions of the Study

1.5 Significance of the Study

1.6 Limitations of the Study

1.7 Definitions of Terms

1.8 Summary

Chapter One

Introduction and Theoretical Background

1.1 Introduction and Theoretical Background:

English language is a universal and highly important language. Consequently, the central matter of the EFL programs in the Palestinian public schools is to assist learners to communicate in English and learn the fundamental skills of English language since it’s the language of knowledge, commerce, and universally spoken and written by academicians worldwide. Also, it’s used as a connection language or as it’s called "Lingua Franca" (Mourtaga, 2004).

EFL programs are planned to teach the non-native speakers to use English functionally and communicatively. Thus, learners should learn and obtain the various skills of English i.e. listening, speaking, reading and writing.

Writing is one of the four basic skills in any language. Writing is vital to academic accomplishment. It is a vigorous, creative skill. Hence, learning to write in a foreign language faces numerous challenges. One of which is that writing requires thinking approaches that enable learners to convey themselves proficiently. It is a complex pursuit that requires a particular level of linguistic knowledge, writing conventions, vocabulary and grammar. As remarked by Mercia (1991), conveying one’s ideas in written forms in a second or foreign language, and doing so with sufficient accurateness and coherence, is a major accomplishment (Bander, 1983).

English Writing is a productive skill by which learners enhance and present their knowledge. The skill to express students' thoughts successfully in writing is based on the individual's belief of ability concerning the skill, which he/she gains in his/her learning. On the other hand, writing can be a highly prevalent method by which teachers assess their students' knowledge.

English writing skill is not a skill to be learned easily; it is a complicated process that needs a number of procedures to be performed. Writing typically emphases on the central topic, logical supporting, facts, strong organization, a logical order, message clarity, unity, coherence, and smooth transitions. Mourtaga (2004) affirmed that writing is a central method of communication within an organization .He also clarified that writing is a significant way of communication.

Tan (2012) indicated that writing well unlocks the door to advancement in virtually any field of study a learner might select in the future. Chappell (2011) considered that writing is a crucial job skill, which helps the learner understands how knowledge is recognized in any specified field. Furthermore, it raises the learners' capability to clarify complicated views to person who reads clearly. In brief, writing is one of the most important skills that teachers must concentrate on as it leads to better thinking and communicating.

Traditional methods of teaching writing skills proved to be ineffective. So, it's not sufficient to teach learners English grammar and vocabulary; they

have to learn how to organize their thoughts before they tend to write, AL Sharawneh (2012) asserted that teaching English grammar only has an adverse influence on learners because it usually leaves some instructions and practice in actual composition, even a harmful influence on the development of writing. Indeed, the strongest deduction attained by Hillocks (1986) was that traditional grammar instruction was the most unproductive method of improving writing.

The unproductive traditional methods of teaching writing skills seem to be ineffective and many studies proved that. For example, a study conducted by Khalil (2002) who found that most of the mistakes made by the non-native speakers of the Arab learners are in writing, due to such traditional methods, especially in sentence formation, usage and mechanics of writing.

A study conducted by Mahmoud (2012), he indicated that non-native speakers of English face difficulties in punctuation. Based on this assumption, the researcher looked for methods to develop the learners' writing skills. The researcher chose to investigatet the influence of map concept as a teaching method on learners' writing skills. Recently, map concept has been used as a tool for learning, teaching and evaluation.

Map concept is an instrument that makes ideas visual; and permits prior experience and understanding to be taken into consideration when building new concepts into the perceptual framework. By using map concept, learners use their prior knowledge to understand the new concepts. It

makes a link between unknown and known information that leads to deeper understanding (Novak, 2010).

By choosing concepts and linking words carefully, learners can use map concept as a teaching strategy to grasp every levels of meaning, and outline their knowledge and help students brainstorm and generate new ideas allowing them to more clear information and thoughts, then they should link between these ideas and sub ideas together illustrating the relationship between them to strengthen learners' understanding and knowledge about the subject

1.2 Statement of the Problem

Arab learners of English commit a lot of errors in their writing especially in sentence formation, message clarity and in punctuation. Therefore, the researcher tried to suggest solutions to such problems and improve students' writing ability by the use of the strategy of map concept as a pre-step in writing tasks.

Any learner commits lots of mistakes when writting and facing difficulty to improve his ability and reduce the mistakes he almost always commits. The purpose behind the use of map concept can be expressed in its influence on the preparation process used in writing, discovering appropriate words, expressions and organizing knowledge. Therefore, the study considers that learners who are not very good in writing English might benefit from map concept. This study tried to answer the following

main question which states that "**What is the influence of applying map concept on improving Students' writing skills?"**

1.3 Objective of the study

This study aimed to achieve the following objective:

1- To investigate the influence of applying map concept on improving students' writing skills and Finding out if there are any significant differences in the learners' performance in writing due to the influence of applying map concept on improving students' writing skills.

1.4 Questions of the study

The study tried to answer the following questions:

1. What is the influence of applying map concept on improving students' writing skills in terms of language level, cohesion, and message clarity?
2. Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test of the experimental and control groups?
3. Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post-test of the control group?
4. Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post-test of the experimental group?

5. Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the post-test of the experimental and control groups?

1.5 Hypotheses of the study

The main question of this study underlies the following null hypotheses:

1. There are no statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills (language level, cohesion, and message clarity) in the pre-test between the control and experimental groups?
2. There are no statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre- test and post-test of the control group?
3. There are no statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post- test of the experimental group?
4. There are no statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the post-test of the control and experimental group?

1.6 Significance of the study

It's hoped that this research will be beneficial in improving students' writing skills due to using the strategy of map concept successfully as a pre-step in writing and motivating teachers of English to apply it when teaching writing. The importance of this study stems from two main points:

First, Students nowadays have many concerns rather than studying, and they are addicted to different kinds of technology and they like chatting with friends on social media. Hopefully, this could be a motivation for students to find a strategy by which students can write much better and effectively, based on this; it would be significant to conduct such a research.

Besides, students' academic performance in English especially in writing is not proficient as it should be because they do not have the passion to learn through traditional methods. It'important to investigate the influence of using map concept in increasing students' enthusiasm and ability to learn the English writing skills effectively.

Moreover, it's hopped to be helpful since it could help teachers find other different methods to apply while teaching English writing skills.

Finally it's also hopped to be considered a preliminary investigation on which follow-up work could be based. It would be interesting to assess whether students' writing performance improves after training on self-efficacy, apprehension, and attitude related to writing.

1.7 Limitations of the Study

This study considered the following limitations: locative, temporal, human and topical.

1- **Locative Limitations**: The study covers all the eighth graders in one school which is Bitonyia High Basic School.

2- **Temporal Limitations**: This study was carried out during the second semester in the scholastic year 2014-2015.

3- **Human Limitations**: The population of the study contains all students in the eighth grade in the mentioned school which was (30) students in each group, and (60) students in total.

4- **Topical Limitations**: The study examined the influence of using map concept on improving the eighth graders' writing skills**.**

1.8 Definitions of Terms

Writing: is to recognize how to express your own feeling and ideas taking into account not only grammar, vocabulary and punctuation but also to comprehend when , why and in what ways we produce language. (Cunningham, 1999)

According to the study, it refers to the ability of the intermediate school students to write a well-formed paragraph

Traditional Education: Gauci, et al (2009) described the traditional education as it focuses on teaching, not learning.

According to the study, it refers to any teaching method of writing excluding map concept.

Map concept: is a technique of forming ideas in a method which permits them to emerge plainly and rationally. Infrequently mentioned to as clusters or concept webs, map concept comprise a dominant theme or topic and connected subdivisions showing how the ideas are connected (Sturm & Rankin-Erickson, 2002).

According to the study, it refers to the students' abilities in drawing their own map to organize their knowledge, starting with a main idea and then to show how this idea can be broken down into sub ideas. The relations between these ideas have to be indicated by a connecting lines or arrows.

1.9 Summary:

The chapter dealt with basic components of this study, the researcher introduced the chapter with significant sub titles such as, the statement of the problem, the questions of the study, the significance of the study, different kinds of the limitations of the study and the methodology used to conduct this study. Finally, a list of definitions of terms related to the main subject is added at the end of this chapter.

Chapter Two

Review of Related Literature

2.1 Introduction:

2.2 Writing Skills:

2.3 Map Concept :

2.4 Map Concept Theory:

2.5 Review of Related Literature:

2.6 Summary

Chapter Two

Review of Related Literature

2.1. Introduction:

This chapter dealt with the review of related literature. The researcher reviewed the available literature which is relevant to the nature of the study. Moreover, summaries of results of different studies for different researchers and linguists in various issues related to map concept were given. The researcher divided the chapter into sections according to their importance to simplify the information that is discussed.

2.2 Writing Skills:

English language learning is the focus point of many studies and research papers like bandoura's and novak's. These studies highlight various language skills; and the different methods of teaching and learning those skills.

Writing skills received a little attention of these studies due to the difficulties related to teaching and learning this skill while many others consider writing as the most important gifts given to human beings because it entails capability to generate ideas and convert them to effective communication (Wright, 2012). In addition, Writing is a channel for ideas and feelings. Despite the fact that writing skill takes time to develop for the learners; it's still a very important constituent of second language learning (Fageeh, 2011).

Besides, writing necessitates that learners not only recognize how to create specific components of a certain language such as grammar, pronunciation, or vocabulary, but also they comprehend when, why and in what ways to produce language (Cunningham, 1999).

So, with the rising significance of writing as one of the productive language components, choosing accurate and suitable approaches of teaching writing has gained a fundamental part (Elbow, 1999).

Writing is also considered as one of the complicated skills in EFL context. Hyland, (2003) pointed out that writing is a sociocognitive activity which involves skills in planning and drafting. Writing is always seen as one of the most prominent skills in EFL pedagogy whose paramountcy is especially underscored in academic and higher educational settings. However, for the students, writing is mostly regarded as a challenging and unmanageable task. This leaves an immense responsibility on EFL teachers and writing instructors who are expected to bring the learners into terms with this focal, yet undervalued skill.

In order to develop students' writing performance, teachers should reinforce them and make them confident of themselves because self-efficacy beliefs are exceedingly important in terms of writing and even in everyday life. For example, self-efficacy beliefs can affect health, cognitive factors, career development, and academics (Bandura, 1997). They predict writing performance but also have far-reaching influence. Self-efficacy beliefs can affect perceived usefulness of writing and writing apprehension,

both of which are key factors in terms of writing performance (Pajares & Valiante, 1999).

However, Negari (2011) affirmed that writing in a second language appears to be the most problematic language skill for language learners to attain in academic setting.

Leki (2001) also indicated that routine complications of teaching EFL writing can involve managing large class size, time, and teachers' shortage of skill and experience to teach writing skills and the student's absence of education in writing. This reveals that there is really a serious problem in schools in teaching writing, so the idea of conducting such a research might hopefully helps.

We should solve such problems but it seems that writing instruction is a hard task for teachers and needs attention because when students write freely, they feel more comfortable rather than when writing a formal writing task (Lavelle, 2006). So we have to take into account the psychological needs of the students and look for a way to relax him using effective strategy that ease the written task form such as using the strategy of map concept.

Lavelle (2006) classified two independent phases in writing: conceptualizing the and expressing the : Conceptualizing the in writing require thinking approaches that permit the learner to convey himself successfully. It is a complex process that requests a clear level of linguistic skill, writing rules, wordlist and syntax. As mentioned by Celce-Mercia (1991), stating one's thoughts in written form in a second language, and

doing so with sufficient correctness and coherence, is a major accomplishment.

Expressing the which entails the message clarity of and the capability to outline the learners' ideas successfully in writing, is based on the learners' sense of effectiveness to the skill which he/she gains in his/her learning. As students pass through the phase of learning to read to the phase of reading to learn, writing assists them to establish and state their ideas. Writing requires logical analysis, learners are obliged to have straight teaching in how to arrange their writing, give their coherent choices founded on the key theme, and generate acceptable statements.

Harmer in the year 1998, suggested that the writing skill had finally been recognized as an important skill for language learning. Having said that, through extensive research, a number of approaches and techniques have been provided regarding ESL or L2 writing during the last decade. But this study aims at surveying whether map concept knowledge has a great impact on self-efficacy and expository writing performance of Iranian EFL learners. And the results show that it has a great impact on the EFL learners. This is exactly what the researcher wants to prove throughout investigating whether the strategy of map concept can be that influential on the writing performance of intermediate students.

2.3 Map Concept:

There have been diverse strategies of teaching writing; map concept is one of these strategies. The idiom was coined by Buzan. (1974) as a

brainstorming instrument and thinking method of visually organizing thoughts and their connections; it is a method of organizing related ideas with figures rather than with words (Abdeen et al., 2009).

Mapping strategy puts the notion that learners also need to be taught something about brain mechanisms and knowledge organization (Novak and Canas, 2006). Mapping strategy which is among visual learning strategies enhances learning as imagination and association are the keys to high-level memory and creative thinking (Cuthell and Preston, 2008). There are different kinds of mapping strategies and consequently each type has its own impact and is used for a specific domain thus needing its own structure (Ruiz-Primo, 2004).

Map concept was initially studied by Novak in the 1970s, as an illustrative ways of conveying scientific notions to children. Since then, map concept have been applied in a various situations and environment (Wu et al, 2012). According to him, they are pictorial instruments applied for establishing and generating ideas. It can also be defined as a visual way representing knowledge in which concepts, relationships and propositions exist (Ur, 2006.p 461). Besides, it has revealed to be an important instrument in diverse learning fields (Hsu & chang, 2009).

According to McLeod & Bandura (1987) map concept has an observable influence on all phases of writing process. McLoad illustrates that writing is cognitive and emotional. So, the instructors should study students' beliefs about their writing capabilities, their attitudes towards writing, and their level of apprehension about writing. Bandura recommended that self-

efficacy beliefs were developed primarily through inactive attainment; in other words, people's confidence will grow as they attempt and complete tasks and the feeling of success will increase confidence but failure might decrease it.

As for Bandura, it was acknowledge that the verbal persuasion was a message that students will receive from authority figures, could reinforce and increase self-efficacy. As well as helping students with writing apprehension, self-efficacy and attitude. Teachers should also make efforts to help students understand how their affective processes could influence students' EFL writing performance. Briefly, teachers should make every effort to help their students increase competence through confidence. As we noted from the findings, their investigation provided evidence for the roles and importance of writing apprehension, attitudes towards writing, and writing self-efficacy in relation to actual writing performance.

The main qualities of a map concept can be noticed on its ranked constructs which classifies particular ideas, typically bounded in boxes, and the linking ranks between these concepts which specify how ideas about a concept is related to the other ideas. The main concepts are located at the peak of map, while the subordinate concepts are positioned underneath (Wang et al,2010).

Map concept encourages students to explore and think deeply. It has also been applied as an organizer and as an improvement instrument; and makes students more confident (Stoica, et al, 2011).

It has also been applied as a prewriting approach for learners. Mahnam (2012) found out that learners applying map concept achieved higher marks more than the students who did not use map concept.

Fahim & Hiedari and Pishghadam & Ghanizadeh (2006) related an explicit influence of map concept on the learners' understanding. Additionally, in their studies about the influence of map concept on writing skills, it was discovered that the successful application of map concept results in the enhancement of students' writing. This is approved when the findings of their studies showed that there is a real development in the students' performance after well applying the map concept strategy.

Among the different mapping strategies existing, mind mapping or map concept have been identified as efficient visual thinking tools for storing, processing, organizing, and presenting information graphically that may help learners to facilitate the process of meaningful learning (Cuthell and Preston, 2008). Map concept has also been defined differently from various viewpoints; (Ruiz-Primo, 2004), for example, define map concept as artifacts for organizing and representing knowledge.

Recently, map concept has been used as a tool for learning and teaching. It is a tool that makes ideas visual and it allows prior experience and understanding to be taken into consideration when building new concepts into the perceptual framework. By using map concept, learners use their prior knowledge to understand the new concepts and makes a link between unknown and known information that leads to deeper understanding (Novak, 2010).

Furthermore, Marriott, and Torres (2008) inspected the use of map concept in developing students' writing skills. This method leads to betterment in writing. These studies suggested that map concept use is a valuable learning strategy for ESL/EFL, and Schwendimann (2015) maintains that information is getting more complicated. So, Learners need commanding tools to bond complicated ideas such as map concept.

Rao (2007) investigated the influence of brainstorming on developing writing skill. The findings of this study revealed that students who have been trained in brainstorming strategy outperformed the other group of students who did not receive any instruction. Also, the attitudinal part of the survey indicated that students who used brainstorming had a positive idea about the effectiveness of the brainstorming strategy. So, it is of paramount importance to invent activities before asking students to compose an essay. There has been great body of research on the influence of map concept in education in the first language. However, there has been a limited number of researches in the second language area (Vakilifard & Armand, 2006).

Lately, map concept has been expended as an instrument for learning and teaching and it is a strategy that constructs graphic thoughts. It also permits earlier practice and perception to be taken into consideration when constructing new concepts into the perceptual outline. By using such a strategy, learners use their prior information to understand the new concepts. It makes a connection between unknown and known information that steers to profounder understanding (Novak, 2010).

This research could be considered a preliminary investigation on which follow-up work could be based. In a comparative future study, it would be interesting to assess whether students' performance improves after training and applying the strategy of map concept when doing their writing tasks.

For the researcher, map concept is the ability to create ideas and sub-ideas and to have the ability to connect logically them by using suitable connectors.

2.4 Map Concept Theory:

Map concept relies significantly on; Piaget's cognitive theory, Ausubel's assimilation theory, Braner's constructivists theory and the theory of meaningful learning. (Novak & Cañas, 2008)

Cognitive theory is basically about "using thinking to learn" considering the brain as the basic network of information. (Novak & Hanesian's (1986). Accordingly, mapping as motioned previously is a mental process and requires deep thinking. So, the brain here is the center of producing and drawing such concept maps. It's difficult to build up ideas and sub ideas and concentrate on resolving associations among these ideas without deep thinking and cognitive structures.

As for Assimilation theory, we notice that there is a very strong relationship between this theory and the strategy of map concept in the sense that this theory, as proposed by Ausubel, considers learning simply as taking in new information and connecting it with the previous ones in a logical way. (Novak & Cañas, 2008). This is exactly what map concept

strategy heavily relies on, it helps the students to link between what they already had and their new ideas connecting them by circles or arrows.

Ausubel's view (2002) of the meaningful learning states that students should have the ability to relate their new acquired knowledge to what they know. In the same way, when students use map concept, they are basically taught to generate new ideas and sub-ideas and relate them to each other meaningfully So that, they can produce a branched network of ideas.

Constructivist theory of learning, states that learning is a process of constructing ideas rather than acquiring it depending significantly on our own previous experience as cited by Ausuble, Novak, Hanesians 1986. This is the main point which the strategy of map concept depends on. Students are actually constructing and summarizing their knowledge and using suitable linking words to connect them ordering these thoughts in a way that enable them to write a well-formed meaningful piece of writing.

In conclusion, map concept is heavily stemmed from these great theories. It’s a strategy which has such a great impact on many fields of education, especially in writing. The idea of mapping is not new. However, it needs to be seriously activated and successfully taught and applied in public schools.

2.5 Review of Related literature:

Map concept has been applied as a pre-writing strategy. However, there has been limited number of researches in this field. Lin (2003) studied the influence of computer-based map concept as a pre-writing strategy for

middle school students. In this study, the researcher compared the computer based map concept as a pre-writing strategy with paper-and-pencil map concept.

According to the findings of mentioned study above, computer-based map concept was influential in enhancing idea generation and the total quality of the students' pre-writing map concept in preparation for a persuasive writing task. In comparison with computer-based map concept, the students who constructed the paper and-pencil map concept scored better in persuasive writing than the students who generated computer-based map concept.

Alhomaidan, A. M. (2015). Stated that map concept play a key role at the teaching and learning process of different disciplines, and due to the importance of concepts many researches such as Ausubel (2000), Gowin (1984), Skinner (1968), Piaget (1982) and Gagne, (1975) believed that concepts and the message clarity of them are considered to be the essence of any discipline.

Another study was also conducted to examine the influence of using map concept on developing the learning outcome of college-level students studying at the College of Technology at Arrass. In order to achieve this objective two groups (experimental and control) were randomly selected by the researcher; the experimental group has been asked to apply map concept when writing, while the control group students were not given instructions to do so. Both groups were tested before and after the study.

The posttests results showed that the experimental group students scored higher marks compared to their counterparts in the control group.

Pishgadam and Ghanizadeh (2006) investigated the impact of map concept as a pre-writing activity on EFL learners' writing ability. The findings of this study revealed that the students in the experimental group outperformed the students in the control group in terms of quantity and quality of generating, organizing, and associating ideas. Also, the results of the study indicated that map concept can be useful for effective as well as cognitive instructional objectives.

Another study done by Talebinezhad and Mousapor Negari (2001) on the influence of explicit teaching of map concept as a learning strategy in expository writing on EFL learners' self-regulation found that learners gained higher self-regulation in writing tasks as a result of the explicit instruction of the map concept strategy.

Additionally, Cho and Lee (2010) study aimed to investigate the effectiveness of the use of collaborative map concept strategy in Iranian writing classes. They mentioned that the collaborative map concept strategy was used to engage Iranian students in communicative and acculturative interaction. Findings of the study showed that map concept was very useful on improving Iranian students' writing skill in general, and on improving the organization, language level, and vocabulary in writing in particular.

Kondrat & Greene, (2002) presented a qualitative study of five groups of college students asking students to construct map concept in an educational

technology class. Analyses addressed how the maps changed during the semester, how the course concepts were applied in a final project, and whether or not the students reported that the map concept activity facilitated their learning. Participants easily learned to use Inspiration for developing map concept.

The findings of this study suggested that map concept affects students' learning and that when it's applied in collaboration or within a group facilitated the learning process rather than when it's applied individually. However, collaboration did not come easily or successfully to two of the five groups. The final projects of students who were in problematic groups were less sophisticated than those developed by students who did work collaboratively on their map concept. An important implication is that students need to be provided with more assistance in successful collaboration in order for the map concept strategy to be more effective.

Vocabulary is very essential for using the strategy of map concept. Without having some vocabulary, a student can't draw any map concept. This significantly indicates that there is a very strong connection between them. Jafari, N. & Zarei, G. R. (2015). Therefore, Learning English these days is a widespread activity and obviously vocabulary plays an important role in facilitating this process. An extensive vocabulary background helps to build a basis for writing learning process, which definitely leads to with greater academic achievement later in life (Cunningham and Stanovich, 1997 cited in (Zeller, 2011). Generally speaking, vocabulary can be taught in different ways, each with its own merits and demerits (Nemati, 2009).

The learners' vocabulary achievement has received more attention recently (Nunan, as cited in Meara and Fitzpatrick, 2000). From the researcher point of view as he experienced teaching this strategy, it is important for researchers to investigate ways to improve direct instruction of foreign language vocabulary; therefore, how to teach vocabulary and use it in an effective way have become the main concerns of learners as well as teachers (Tamjid and Moghadam, 2012). These ways must help both groups in increasing the speed of learning and consequently longer permanence in the memory. When EFL learners start to read a text, what comes to their minds is how to learn and recall the new vocabulary meanings (Yu Ling, as cited in Heidari et al, 2012).

Accordingly, there must be vocabulary learning strategies, for example *Crossword Puzzle Games* or *Armoured Penquin* that allow the learners to do a fun activity and the their brain will commit the words to memory, such vocabulary strategies promote this process of learning. Vocabulary learning strategies (VLS) are distinguished from language learning strategies; one can claim that they are a subclass of language learning strategies (Dóczi, 2011). A multiplicity of different vocabulary teaching procedures has been designed and studied in the literature of ELT (Palmer et al., 2001; Read, 2000). Among such procedures is mapping strategy which is based on making associations between different nodes of the brain (Davies, 2010).

Mapping strategies are among such learning strategies and they are not specifically related to the field of vocabulary learning; they are used in other fields, too. The foundation of these strategies is on "Meaningful

Learning". Meaningful learning occurs when humans actively integrate thinking, feeling, and acting to construct meaning and knowledge (Novak, 1998 cited in Khodaday and Ghanizadeh, 2011). Among many different strategies that have been used in the field of language learning, Mapping Strategies is one of those meaningful- based learning strategies.

Negari, G. M. (2011) was basically to investigate the influence of map concept strategy on EFL learners' writing performance. To this end, sixty Iranian students at the intermediate level of language proficiency participated in the study. Their language proficiency was determined by Michigan Test of English Language Proficiency. The results of the Analysis of Covariance revealed that the instruction of map concept strategy had a positive influence on EFL learners' writing achievements. The findings have some pedagogical implications for teaching language skills and designing strategy-based syllabus leading to successful language performance.

In the same way, Yen et al (2013) Carried out a study aiming to examine the influence of digital map concept via LMS on English majors (N = 38) writing skills in Taiwan. Students were professionally trained to apply map concept strategy via university learning management system (LMS), idea webbing, spider mapping, and network tree making to read and analyze the dramatic texts and to present their analysis on PPT slides. Thus, analytical reading input (digital map concept) led to better EFL writing output. Students were pre-tested and assessed, and they were post-tested using in-class PPT presentations. Results demonstrated that analytical reading with

digital map concept strategies taught by the researcher solved EFL students' PPT slide writing problems and improve their performance and the attainment of the task shared via LMS. The research offered a different perspective on teaching EFL writing with a specific focus on analytical reading to PPT slide writing and also implied the important consequence on analytical reading to analytical writing for future research.

Flanagan, S. M., & Bouck, E. C. (2015) Study used counter balanced group design, 19 secondary students; some of them used paper and others used computer-based map concept to write compare and contrast essays. Students' written expression was significantly supported by map concept, regardless of the method. Essays were more cohesive, coherent, included relevant ideas and structure, and had a higher quality. Although no statistical differences existed on essay scores between each method, students expressed an overwhelming preference for computer-based map concept.

Parisa Arabloo (2015) was a study to investigate the comparative influence of individually created and collaboratively created map concept on EFL learners' essay writing. To fulfill the purpose of this study, 60 male and female learners of a total number of 90 intermediate learners studying at Kishe Mehr Language School in Tehran were chosen randomly. The 60 learners thus were divided into two groups and each of the groups were taught writing through one of the two forms of map concept, namely, individually created and collaboratively created. At the end of the study, the participants in both groups were given a writing posttest. The design of

this study was quasi-experimental, ANCOVA was used which led to the rejection of the null hypothesis. Thus, individually created map concept proved to be more influential than collaboratively created map concept on intermediate EFL learners' essay writing. The finding of this study has implications for EFL teachers, teacher, educators, and material developers. Within a constructivist framework, learning takes place as learners progressively differentiate concepts into more complex understandings and also connect abstract understanding with concepts acquired from experience.

New knowledge is constructed when learners establish connections among knowledge learned, previous experiences, and the context in which they find themselves (Bransford, 2000; Daley, 2002; Jonassen, 1994). Chang, Sung, and Chen (2001) propose that map concept, a form of visualization, is a powerful learning strategy consistent with constructivist learning theory in that it is a strategy that helps learners visualize interrelationships among concepts (Duffy, Lowyer, & Jonassen, 1991).

Moreover, Rao (2007) investigated the influence of brainstorming on developing writing skill. The findings of this study revealed that students who have been trained in brainstorming strategy outperformed the other group of students who did not receive any instruction. Also, the attitudinal part of the survey indicated that students who used brainstorming had a positive idea about the influential of the brainstorming technique. So, it is a highly important to invent activities before asking students to compose an essay.

In fact, there has been great body of research on the influence of map concept in education in the first language, for example Concept Maps as Cognitive Visualizations of Writing assignments by Jorge Villalon. However, as the researcher noticed there has been a limited number of researches in the second language area (Vakilifard & Armand, 2006).

Ojima (2006) conducted a case study of three Japanese ESL writers in Japan examining the influence of map concept as pre-task planning. The results of the study indicated that map concept as a pre-task planning task was influential on improving ESL learners composition skills, but in ways unique to individual experience, motivation, and task conditions.

Pishgadam and Ghanizadeh (2006) examined the influence of map concept as a pre-writing activity on EFL learners' writing capacity. The results of the study revealed that the students in the experimental group outperformed the students in the control group in terms of quantity and quality of generating, organizing, and associating ideas. Also, the results of this study indicated that map concept is a very influential for improving the writing skills for the on EFL learners.

Brown (2003) related exam marks with learners who produced map concept on paper. A contrast of student understanding of concepts displayed that those learners who collaboratively- produced map concept on paper surpassed learners who independently produced map concept on paper in high school.

Jafari & Zarei (2015) conducted a Study on information from three months experimental work, explores how mapping strategies influence the learning

dictionaries in EFL male learners. (62) Male intermediate EFL learners were chosen. The findings showed that the students were arbitrarily allocated to two experimental groups with (31) members in each. The findings confirmed that male learners as well as females in the mind mapping group gained considerably more than those in the map concept group in relations of advancing their vocabulary accomplishment.

Additional study prepared by Talebinezhad and Mousapor Negari (2001) on the influence of teaching map concept as an educational strategy in writing on EFL learners, discovered that learners achieved developed self-directive in writing assignment as the consequence of the teaching of the map concept approach.

Cho and Lee (2010) study, aimed at examining the use of cooperative map concept strategy in Iranian writing classes. The map concept strategy was exercised to involve Iranian students in interaction. Results showed that map concept was helpful in improving Iranian students' writing skill in overall, and in refining the design, language use, and expressions in writing in specific. The findings of the study would be of considerable significance in the design of EFL courses in general and writing courses in particular. Map concept knowledge, if proved to be effective on improving the learners' language related skills, can be applied in EFL classes as a powerful and effective means to increase the learners' self-efficacy and expository writing accuracy.

2.6 Summary

In this chapter, the researcher talked in details about writing skills and what other scholars think about it. Then, he related the strategy of map concept with other theories. Then, a number of related studies were presented to see what other research papers found and realized after applying this strategy.

Map concept meets the goals of the educational system by engaging students, developing their critical thinking skills, and making students aware of their interests and learning preferences. The strategy allows for flexibility and hands-on learning which enable students to become closely involved in the learning teaching process and increase their motivation when writing.

Because map concept focuses more on the process than the product, it is easy for the students to see their accomplishments and develop self-efficacy because their end product is not being compared to the other students. Application of this strategy requires time and effort on the part of the teacher, but the benefits trump the costs. Teachers are able to address the students' learning preferences as well as differentiate instruction to meet students' needs. It is appropriate for all students of different levels. Finally, Map concept focuses on the students' learning and engagement, which is the current goal of the educational system. When well-planned and executed, this teaching strategy results in a variety of great academic achievements. Just as we've seen in the previous chapter, there were a lot of research papers which examined the impact of applying the strategy of map concept on developing different levels of the students' writing skills.

Most of them acknowledge the great effect that this strategy might have upon the students when taught and applied successfully.

From the previous related studies, the present one is unique in the sense that, unlike others, who conducted their studies on the college students or secondary school students, this study has been conducted on the students of a High Basic School (intermediate students) specifically on the eighth graders to see if the strategy of map concept affects this level of students or only the higher levels at schools or colleges. Additionally, this study is to observe any improvement on the students' writing skills in terms of language level, cohesion and message clarity as opposed to many others whose concerns were basically on other rubrics such as the vocabulary enrichment, inspiration, motivation to work within a group work or punctuation.

Chapter Three

Methodology and Procedures

3.1. Introduction

3.2. Methodology

3.3. Questions of the Study

3.4. Hypotheses of the Study

3.5. Population of the Study

3.6. Sample of the Study

3.7. Instruments of the Study

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3.9. Reliability of the English Language Writing Test

3.10. Validity of the Interview

3.11. Procedure of the Study

3.12. Variables of the Study

3.13. Statistical Analysis

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3.15. Summary

Chapter Three

Methodology and Procedures

3.1. Introduction:

This chapter was devoted to specify the steps and the methodology taken in carrying out the research endeavor. The researcher presented the population and t he sample of the study, as well as the practical procedures used to build and describe the study tools. It also illustrates the types of statistical tests used in this study. Furthermore; it includes a description of the reliability and validity of the study instrument.

3.2. Methodology:

Quasi experimental study used to achieve the main purpose of the study as well as to answer the research questions. The study used a quasi-experimental design. The data analysis of the present study consisted of both descriptive and inferential statistics. Descriptive statistics was used to calculate the mean, standard deviation, and standard error of measurement of all tests used. To estimate the inter-rater reliability, Cronbach Alpha was used. The inferential statistics, which was used to test the null hypothesis of the study, was an independent samples t-test for comparing the means of the experimental and the control group at the posttest level.

The study was divided into two groups: as the following:

1. Experimental group: students who were taught to apply map concept when writing.

2. Control group: students who study writing according to the traditional method.

- The quasi experimental design was as the following:
  - EG: O_2 X O1 O_2
  - CG: O_2 O1 O_2
  - Experimental group: EG
  - Control group: CG
  - Writing test: O_1
    - Treatment: X

3.3 Questions of the Study:

This study tried to answer the following question:

- What is the influence of map concept on improving school students' writing performance?

  The above mentioned question underlies the following questions:

  1. Are there any statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills (language level, cohesion, and message clarity) in the pre-test between the control and experimental groups?
  2. Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post-test of the control group?

3. Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post-test of the experimental group?
4. Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the post-test of the control and experimental group?

3.4 Hypotheses of the Study:

The main question of this study underlies the following null hypotheses:

1. There are no statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills (language level, cohesion, and message clarity) in the pre-test between the control and experimental groups?
2. There are no statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post-test of the control group?
3. There are no statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post- test of the experimental group?
4. There are no statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the post-test of the control and experimental group?

3.5 Sample of the Study:

The population of the study consisted of (60) students who were chosen randomly. The study was set at *Betonya* pubic school. Eighth grade students represent the population of the study. As for the sample, the researcher distributed the writing test to (30) students who were enrolled in English lessons that were taught with map concept (the experimental group), and (30) students who were taught writing by the traditional method. This gives enough data for the purposes of my study. So, this study was conducted on (60) eighth grade students.

3.6 Instruments of the Study:

The influence of map concept on students' performance on writing skills were investigated through the writing test which was developed by the researcher based on literature and related studies. (*See Appendix A*)

3.7 Writing Posttest

In order to compare the impact of the two treatments, the writing posttest was administered to the participants in the two groups. The writing posttest was selected from the writing selection. The students performed the writing posttest in 45 minutes. The general mark scheme for writing provided by Cambridge was used as the rating scale to rate the writing section for homogenizing the participants as well as the writing posttest.

3.8 Writing Rating Scale

The English writing test was distributed amongst students.

The English writing test was evaluated according to three domains.

- The first domain explored the influence of map concept on language level in writing. (3) points.
- The second domain explored the influence of map concept on cohesion in writing. (3) points.
- The third domain explored the influence of map concept on message clarity in writing. (4) points.

3.9 Validity of the English Writing Test:

To ensure that the content of the English writing test is valid, it was given to a jury in the field of TEFL at An-Najah National University, The Arab American University, Birziet University and the Directorate of Education in Ramallah district.

The jury suggested some modifications in the vocabulary such as the repetition of the phrasal verb "live in" and was replaced with "enjoy using" . They also proofread the manuscript for mistakes in the mechanics of writing. Thus, no modifications were made.(*See appendix (B*)

3.10 Reliability of the English Writing Test:

To find out the reliability degree of the writing test, the reliability coefficient (Cronbach alpha) was calculated as an indicator of homogeneity to the level of the instrument as a whole.

Table (1) below shows that the ranges of reliability were between (0.72-0.79), and that the total score was (0.85) which is considered to be Suitable for the purpose of this study.

Table (1): Alpha Formula of Instrument Reliability

Domains	**Points**	**Reliability coefficient**
language level	3	0.72
Cohesion	3	0.78
Message clarity	4	0.79
Total score	10	0.85

Table (1) shows that all the reliability coefficients are high, and suitable for scientific purposes.

3.11 Procedures of the study:

The researcher used the following procedure during the application of this study:

First, after establishing the validity and reliability of the instrument by the experts in the field of TEFL who approved the utility of the instrument for carrying out the study, the researcher studied and adopted the observations and suggestions proposed, and made the modifications.

Second, permission was taken from the Faculty of Graduate Studies to the Ministry of Education which gave the permission to get the needed information and to distribute the English language writing test among the students.

Third, the researcher distributed the copies of the instrument to the students. In order to obtain more valid and credible results, students were given the freedom to complete the English language writing test.

At the beginning of the study, the already piloted sample was administered to 30 intermediate EFL male learners were assigned randomly from

different levels to test the study test validity of the tool being used. The writing test was subsequently administered to make sure that the learners were not familiar with the test.

In the treatment process, both experimental groups underwent 16 lessons of 105 min held three sessions a week. The main lesson was taught to both groups with one group receiving map concept and the other with traditional teaching methods.

During these lessons, English writing was taught in both experimental groups alongside the other parts of language such as grammar, speaking, listening, reading, and writing. The process of teaching in each group is described as follows.

3.12 Treatment in the Map Concept Group

The experimental group assigned to the map concept strategy instruction had (30) participants. The first session was allocated entirely to introducing map concept to learners with some practical examples. The participants were given handouts which contained the characteristics of a map concept, some examples of well and poorly constructed map concept plus introduction to this kind of mapping.

After giving the handouts to every learner, they were given five minutes to have a look at the content. Then the researcher began to speak about map concept according to the handouts and tried to draw the example maps on the board. The researcher drew a map concept on the board by asking the students some questions about their opinions on a birthday party which was

the first selected topic intended to be something attracting the learners. The questions included many different aspects of holding a birthday party which naturally raised many different ideas and comments. Different ideas or "concepts" were welcomed by the teacher/researcher as the nature of this strategy is learners' freedom in delineating and connecting the concepts in a way that their minds can recall it better in the future. For example, one of the questions was about how they held their birthday parties and many of the learners answered by "inviting their close friends to their housee". So, the researcher used two words here "invite" and "close friend" for making a node while the arrow was titled by "inviting" and the node by "close friends."

Next, the teacher drew a map by asking students' help and guidance. He encouraged the learners to provide the answers and by doing so, he made the learners interested in drawing this kind of map. Each learner was free in delineating his own map and they were not asked to copy exactly what was on the board but for drawing the map by the teacher, they had been motivated to take part and help him. The teacher tried to make all of them interested and involved in the intended process. It was indeed necessary to motivate the learners to take part in this process as this collaboration is one of the basic rules in implementing the map concept strategy.

The teacher/researcher followed Davies (2010) model but before that he reminded the learners that each map is a kind of a personal track and they must feel free in how they show or relate the concepts. Copying the exact

map from the board was not compulsory but the learners were encouraged to select some parts when they wished to do so.

1. He devised a “parking lot” of concepts and ideas that were related to the concept of birthday and the questions to be answered.
2. He then put the concepts in a hierarchical order of importance in the provisional map concept.
3. Next, he linked lines between the hierarchical concepts from top to bottom. Arrows could be used in different directions.
4. He then devised suitable cross-links for key concepts in the map.
5. Finally, he added some examples to the terminal points of a map representing the concepts. These were not enclosed in boxes or circles to delineate them as instances of a concept. These examples included some other words that were not related to the main topic (in this case, a birthday party).

3.13 Variables of the Study:

The study contained the following variables:

3.13.1 Independent Variable:

- The use of map concept in teaching writing skills.

3.13.2 Dependent Variable:

- The scores of students' writing (the degree of improvement noticed after applying the map concept.

3.14 Statistical Analysis:

The Statistical package for social science (SPSS) version 20 was used for data analysis. Various statistical tests and procedures were used including (means, frequencies, standard deviation, cross-tabulation, t-test for independent samples). P-value of less than or equal to 0.05 was used to test the significance in testing the study hypotheses. Various statistical tests and procedures were used including the means, frequencies, percentages, and standard deviations to estimate the students' responses on the test and total score.

3.15 Ethical Issues & Data Collection Procedures:

As this study is conducted on human subjects, permission to conduct this study was obtained from the Faculty of Graduate Studies at An-Najah University in order to assure that the ethical issues are taken into consideration. In addition, students were informed about the purpose of the study before responding to the English language writing test , and were told that their participation was voluntary, and any information obtained would be confidential and would be used for scientific research purposes only.

3.16 Summary:

In this chapter, the researcher introduced the population of the study, the sample of the study, the research design and the procedures which were used in confirming or rejecting the hypotheses of the study. Additionally, validity and reliability procedures as well as the statistical analysis used in this study were also described.

After that, the researcher demonstrated the variables of the study and various statistical tests which were used to estimate the students' response and improvement. Besides, to make sure that the ethical issues were taken seriously into account, the researcher told the students that their participation is not a must and that any information about their scores will be secret and used only for the purpose of this study only.

Chapter Four
Results

4.1 Introduction:

4.2 Results Related to the First Question:

4.3 Results Related to the Second Question:

4.4 Results Related to the Third Question:

4.5 Results Related to the Fourth Question:

4.6 Results Related to the Fifth Question

4.7 Summary

Chapter Four

Results

4.1. Introduction:

This chapter presents the results of the study which are divided into two major parts. The first part is concerned with the results related to the main question of the study. The second part consisted of the results related to the sub-questions and the hypothesis of the study.

This chapter also presents the statistical data that were analyzed by using the (Statistical Package for Social Sciences) SPSS version 20. The data were collected from the instrument of the study which is represented by the writing test. Additionally, findings and conclusions were drawn according to the outcomes of data analysis.

4.2. Results Related to the First Question:

What is the influence of applying map concept on improving students' writing skills (language level, cohesion, and message clarity)?

Table (2): Eta square test of the influence of map concept on improving EFL students' performance in writing test.

Domain	Df	t	Eta Squared	Sig.	Influence size	Cohen d for influence
Language level	59	-4.333-	0.245	0.000	0.49	1.11
cohesion	59	-3.730-	0.193	0.000	0.439	-0.974
Message clarity	59	-5.247-	0.322	0.000	0.56	-1.37
total score	59	-4.763-	0.281	0.000	0.53	-1.25

In order to test the influence of the map concept intervention for writing skill, an independent samples t-test was conducted. This test was found to be statistically significant, t (58) = 4.7, p < 0.00; d = 1.56. These results indicate that individuals in the experimental group (M = 6.8) experienced higher sessions of writing skills following map concept treatment but they were not taught to use map concept in the pre -test (M = 3.9).

The value of Eta square ranging from (0.2- 0.3) This indicates that the treatment had an average on students' writing skills. The influence size is determined according to the (***d*** Cohen value). The value of ***d*** is larger than (0.8) which indicates that the high impact of map concept on improving students' writing is high.

4.3 Results Related to the Second Question:

Are there statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving student writing skills (language level, cohesion, and message clarity concept) between the pre- test in the control and experimental groups?

To answer the this question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' performance according to the students' scores in the writing test as table (2) below shows.

Table (3): Independent T-test for the differences at (α ≤ 0.05) in the influence of applying map concept on improving students' writing skills (language level, cohesion, and message clarity concept) between the pre-test in the control and experimental groups.

Pre –test	group	N	Mean	Std. Deviation	t	Sig.
language level	control	30	1.4500	0.91303	0.761	0.450
	experimental	30	1.2667	0.95352		
Cohesion	control	30	1.3500	1.07599	0.127	0.900
	experimental	30	1.3167	0.96027		
Message clarity	control	30	1.6667	1.18419	0.912	0.365
	experimental	30	1.4000	1.07799		
Total	control	30	4.4667	2.99981	0.632	0.530
	experimental	30	3.9833	2.91986		

Table (3) shows that there are no statistical significant differences at the level (α ≤ 0.05) in the influence of map concept on improving students' performance in writing in the first, second, third and total score domains (language level, cohesion, message clarity, and total score). Then the null hypothesis in these domains is valid. These results indicate that students in the experimental group (M = 3.9, SD = 2.9) experienced lower writing skills before treatment than did individuals in the control group (M = 4.4, SD = 2.9).

This result of importance shows us that both groups, the control and the experimental, were equal in their writing skills prior to the conduct of the treatment with map concept treatment.

4.4 Results Related to the Third Question:

Are there statistical differences at (α ≤ 0.05) in the influence of applying map concept on improving students' writing skills between the pre- test and post- test of the control group?

To answer this question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' writing skills (language level, cohesion, and message clarity) in the post- test in the control groups).

Table (4): Independent T-test for the different differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post-test of the control group.

control group:	test	N	Mean	Std. Deviation	t	Sig.
language level	pre	30	1.4500	0.91303	-.750-	0.457
	post	30	1.6167	0.80605		
Cohesion	pre	30	1.3500	1.07599	-1.092-	0.279
	post	30	1.6500	1.05168		
Message clarity	pre	30	1.6667	1.18419	-1.344-	0.184
	post	30	2.0667	1.11983		
Total	pre	30	4.4667	2.99981	-1.147-	0.256
	post	30	5.3333	2.85371		

Table (4) shows that there are no statistical significant differences at the level ($\alpha = 0.05$) in the influence of map concept on improving students' performance in writing in the first, second, third and total score domains (language level, cohesion, message clarity, and total score). Then the null hypothesis in these domains is valid.

This test was constructed to be not statistically significant, $t(58) = 1.14$, $p < 0.2$; $d = 1.56$. These results indicate that individuals in the control group ($M = 5.3$, $SD = 2.8$) experienced higher writing skills following traditional treatment than did in the pretest ($M = 4.4$, $SD = 2.9$). This means that although the tradition teaching method of writing had improved students'

writing in the posttest, still the improvement was not significant or effective. This improvement perhaps occurred as a result of the experience that students gained through the previous exam.

4.5 Results Related to the Fourth Question:

Are there statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post-test of the experimental group?

To answer this question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' writing skills (language level, cohesion, and message clarity) in the post-test in the experimental groups?

Table (5): Independent T-test for the different differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre-test and post-test of the experimental group.

Experimental Group	test	N	Mean	t	Sig.
language level	pre	30	1.2667	-4.333-	0.000
	post	30	2.1667		
Cohesion	pre	30	1.3167	-3.730-	0.000
	post	30	2.1333		
Message clarity	pre	30	1.4000	-5.247-	0.000
	post	30	2.5833		
Total score	pre	30	3.9833	-4.763-	0.000
	post	30	6.8833		

Table (5) shows that there are statistical significant differences at the level ($\alpha = 0.05$) in the influence of map concept on improving students' performance in writing in the first, second, third and total score domains

(language level, cohesion, message clarity, and total score). Then the null hypothesis in these domains is not valid.

4.6 Results Related to the Fifth Question:

Are there any statistical differences at ($\alpha \leq 0.05$) in the influence of Applying map concept on improving student writing skills between the post- test of the control and experimental group?

To answer this question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' writing skills (language level, cohesion, and message clarity) in the post-test in the experimental and control groups.

Table (6): Independent T-test for the differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the post-test of the control and experimental group.

	group	N	Mean	Std. Deviation	T	Sig.
language level	control	30	1.62	0.81	-2.961-	0.00
	experimental	30	2.17	0.62	-2.961-	0.01
Cohesion	control	30	1.65	1.05	-2.079-	0.04
	experimental	30	2.13	0.72	-2.079-	0.04
Message clarity	control	30	2.07	1.12	-2.225-	0.03
	experimental	30	2.58	0.60	-2.225-	0.03
Total score	control	30	5.33	2.85	-2.590-	0.01
	experimental	30	6.88	1.61	-2.590-	0.01

Table (6) shows that there are statistical significant differences at the level ($\alpha = 0.05$) in the influence of map concept on improving students' performance in writing in the first, second, third and total score domains

(language level, cohesion, message clarity, and total score). Then the null hypothesis in these domains is not valid.

4.7. Summary:

This chapter presented the results and findings of the statistical analysis of this study. The results were shown in tables followed by comments on each one. The results dealt with the descriptive analysis. Arithmetic means, percentages, standard deviations, T- Test, were used to identify the effect the use of map concept on the students' writing performance.

Chapter five

Discussion of the Results, Conclusion, and Recommendations

5.1 Introduction:

5.2 Discussion of the Results of the First Question:

5.3 Discussion of Results Related to the Second Question:

5.4 Discussion of Results Related to the Third Question:

5.5 Discussion of Results Related to the Fourth Question:

5.6 Discussion of Results Related to the Fifth Question:

5.7 Conclusion:

5.8 Recommendations:

Chapter five

Discussion of the Results, Conclusion, and Recommendations

5.1. Introduction:

This chapter is divided into three parts. The first part discusses the results of the study questions and hypothesis respectively in the light of the study variables. The second part presents the conclusions. Finally, the third part provides the recommendations that are drawn in the light of the study results.

5.2 Discussion of the Results of the First Question:

What is the influence of applying map concept on improving students' writing skills (language level, cohesion, and message clarity)?

The value of Eta square indicates that the map concept treatment in the experimental group was high on students' writing skills. The influence size is determined according to the (value). The value of ***d*** Cohen is larger than (0.8) which indicates high impact of map concept on improving students' writing.

This means that map concept as a teaching strategy has significantly improved learners' writing skills. These results support the previous findings mentioned in the literature review which suggest that map concept has a positive impact, and using them could improve learners abilities in writing such as Hsu, and Chang(2009) , Novak, and Cañas(2008), Cicognani (2008, They also agreed with the results mentioned by Mahnam and Nejadansari (2012) Fahim & Hiedari(2006, Pishghadam & Ghanizadeh

(2006) which suggest that map concept improve the students' writing abilities when learning a second language.

The results of the present study were in line with those of many other researchers such as Talebinezhad & Mousapor Negari (2001); Chan (2002), Lin ,Strickland, Ray, & Denner (2004), Vakilifard & Armand (2006), Ojima (2006), Pishgadam & Ghanizadeh (2006), Chen (2007), Rao (2007), Lee & Cho (2010). The present study demonstrated that the experimental group who received mapping strategy instruction outperformed the control group who followed traditional approach, which is in line with the findings of the study done by Chen (2007) confirming that using map concept strategy not only leads to the improvement of language proficiency, but also engages the dynamic internal changes in the learning process.

This was in consistent with some of the previous findings such as researches conducted by Lee and Cho (2010) on the influence of collaborative map concept strategy in Korean writing classes, Ojima (2006) case study on three Japanese ESL writers in Japan regarding the influence of map concept as pre-task planning, and Lin et al. (2004) research on the influence of computer-based map concept as a pre-writing strategy for middle school students. The results of these studies revealed that map concept strategy was influential on improving learners' writing ability.

Moreover, the findings of the present study are in favor of the results of the research done by Rao (2007) on the influence of brainstorming in developing writing skill. Rao (2007) proposed that brainstorming

stimulates students' thinking and enables them to create ideas and organize raw materials in a logical order. In the present study, map concept strategy served as a brainstorming tool. Brainstorming activates learners' prior knowledge, and facilitates the use of this knowledge.

The researcher explains this result in that in the experimental group, leaners were more confidant and interested in learning vocabulary through map concept strategies which were not classic type of word lists. The learners showed their interests by participating in all phases of drawing and the satisfaction that they had for vocabulary learning times; not only the researcher saw this enthusiasm but also the learners themselves expressed it explicitly that they liked map drawing.

5.3. Discussion of Results Related to the Second Question:

Are there any statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills (language level, cohesion, and message clarity) in the pre-test in the control and experimental groups?

To answer this question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' performance in writing skills.

Results showed that there are no statistical significant differences at the level ($\alpha = 0.05$) in the influence of map concept on improving students' performance in writing in language level, cohesion, message clarity, and total score. Then the null hypothesis in these domains is valid. These

results indicate that students in the experimental group (M = 3.9, SD = 2.9) experienced lower scores in writing skills in the pretest before the treatment than did individuals in the control group (M = 4.4, SD = 2.9).

This result of importance showed us that both groups the control and the experimental were equal in their writing skills prior to the conduct of the treatment with map concept treatment.

5.4. Discussion of Results Related to the Third Question:

Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving student writing skills between the pre-test and post-test of the control group?

To answer the question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' writing skills (language level, cohesion, and message clarity) in the post-test in the control groups?

Results showed that there are no statistical significant differences at the level ($\alpha = 0.05$) in the influence of map concept on improving students' performance in writing in language level, cohesion, message clarity, and total score. Then the null hypothesis in these domains is valid.

This test results were constructed to be not statistically significant, $t(58) \leq 1.14$, $p < 0.2$; $d = 1.56$. These results indicate that individuals in the control group (M = 5.3, SD = 2.8) experienced higher writing skills scores following traditional treatment than did individuals in the pretest (M = 4.4, SD = 2.9) though this improvement was not statistically significant.

This result was in agreement with previous studies such as AL Sharawneh (2012) who stated that traditional methods of teaching English language writing skills proved to be influential. It's not sufficient to teach learners English grammar and vocabulary; they ought to learn how to organize their thoughts before they tend to write, asserts that teaching English grammar only has an adverse influence on learners because it usually leaves some instructions and practice in actual composition, even a harmful influence on the development of writing. Indeed, the strongest deduction attained by Hillocks (1986) was that traditional grammar instruction was the most unproductive method of improving writing.

These unproductive traditional methods of teaching writing skills are supported by many studies such as a study conducted by Khalil (2002 that discovered that most of the mistakes made by the non-native speakers of the Arab learners are in writing especially in sentence formation, usage and mechanics of writing.

5.5. Discussion of Results Related to the Fourth Question:

Are there any statistical differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving students' writing skills between the pre- test and post-test of the experimental group?

To answer this question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' writing skills (language level, cohesion, and message clarity) in the post- test in the experimental groups?

Results showed that there are statistical significant differences at the level ($\alpha = 0.05$) in the influence of map concept on improving students' performance in writing in language level, cohesion, message clarity, and total score. Then the null hypothesis in these domains is not valid.

These results indicated that individuals in the experimental group (M = 6.8) experienced higher episodes of writing skills following map concept treatment than did individuals in the pretest (M = 3.9).

This was in agreement with Alhomaidan (2015). Study that revealed that Concepts play a key role at the teaching and learning processes of different disciplines, and due to the importance of concepts many researches such as Ausubel [2000], which believed that concepts and the message clarity of them are considered to be the essence of any discipline This study aims to investigate the influence of using concepts mapping on developing the learning outcome of college-level students studying at the College of Technology at Arrass. In order to achieve this objective two groups (experimental and control) were randomly assigned by the researcher; the experimental group has been asked to employ concepts mapping in their learning, while the control group members were not given instructions to do so. Both groups were tested before and after the study. The posttests results showed that the experimental group members scored higher grades compared to counterparts in the control group.

This result was also in agreement with Pishgadam and Ghanizadeh (2006), Parisa Arabloo(2015) study which revealed that the learners in the

experimental group outperformed the students in the control group in terms of quantity and quality of generating, organizing, and associating ideas. Also, the results of the study indicated that map concept could be influence for affective as well as cognitive instructional objectives. This improvement could be explained in that New knowledge is constructed when learners establish connections among knowledge learned, previous experiences, and the context in which they find themselves (Bransford, 2000; Daley, 2002; Jonassen, 1994). Chang, Sung, and Chen (2001) propose that map concept , a form of visualization, is a powerful learning strategy consistent with constructivist learning theory in that it is a study strategy that helps learners visualize interrelationships among concepts (Duffy, Lowyer, & Jonassen, 1991).

The results of the present study showed that map concept knowledge has positive influence on learners' writing which is in harmony with what was found by Negari (2001); Chan (2002), Lin ,Strickland, Ray, & Denner (2004), Vakilifard & Armand (2006), Ojima (2006), Pishgadam & Ghanizadeh (2006), Chen (2007), Rao (2007), Lee & Cho (2010).

5.6. Discussion of Results Related to the Fifth Question:

Are there any statistical significant differences at ($\alpha \leq 0.05$) in the influence of applying map concept on improving student writing skills between the post- test of the control and experimental group?

Independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' writing skills

(language level, cohesion, and message clarity) in the post-test in the experimental and control groups?

Results showed that there are statistical significant differences at the level ($\alpha = 0.05$) in the influence of map concept on improving students' performance in writing in language level, cohesion, message clarity, and total score. Then the null hypothesis in these domains is not valid.

These results indicated that learners in the experimental group experienced higher scores in the test which implies improvement in writing skills following map concept treatment than did individuals in the post test for the control group ($M = 5.3$).

As can be seen from the study results the pre-test scores revealed that most students had weak scores in English writing test. The Posttest reveals that students in the experimental group, have improved which proves that map concept have a positive influence on their writing skills, and by comparing their results with their colleagues in the control group.

The previous results were in agreement with Pishgadam & Ghanizadeh (2006) whose study revealed that learners who received map concept teaching method of instruction surpassed the other learners in terms of amount and quality of generating, organizing, and associating ideas.

They were also in agreement with Barnhardt (1997), that when the learners had a suitable idea of how to go about a writing task, they were more confident about the task. This made a most concrete indication of the quality of both the learning process and conceptual understanding.

However, one additional explanation would be that the building of map concept might have assisted students to build more complicated mental constructions in regard to information which was important for writing.

This was in harmony with some of the previous results such as studies conducted by Lee and Cho (2010), Ojima (2006) and Lin et al. (2004) on the influence of map concept as a pre-writing strategy for middle school students. The results of these studies revealed that map concept strategy was influential on improving learners' writing ability.

Moreover, the findings of the present study were in favor of the results of the research done by Rao (2007) on the influence of brainstorming in developing writing skill which proposed that brainstorming excites learner's thinking and allows them to generate ideas and organize raw materials in a logical order. In the present study, map concept strategy served as a brainstorming instrument. Brainstorming activates learners' prior knowledge, and facilitates the use of this knowledge.

5.7 Conclusion:

The current study examined the influence of map concept on learners' writing skills. The results of the study discovered that the learners in group which was taught with map concept enhanced their writing skills significantly more than the traditional teaching method group. In other words, the learners in the experimental group confirmed significant development from writing pretest to posttest.

There is no definite study upon which to ground a selection of one teacher method over the other; rather, strategy of map concept seems to be efficient depending upon the classroom conditions. It possibly was resolved that several of the studies are in support of the map concept.

Finally, as the findings of the current study suggested, map concept were more fruitful in progressing learners' writing in English. In regard to the fact that English writing is an individual assignment, it can be concluded that generating map concept is also an assignment that requires focus and thinking and linking the diverse issues and individual experiences in mind. As a result, when a learner reflects by him/her without any interruption from other leaners, he/she can focus and write more cohesively and coherently.

One subject matter which is related to mapping strategies is the learners' collaboration in the course of illustrating a map. It aids the learners to see their points of view as important components of map drawing; therefore, this uniqueness of each map gives more incentive and interest to participants. To this conclusion, map concept could be highlighted in teacher preparation work-shops as an efficient method thereby facilitating writing achievements.

The map concept strategy can be used also in evaluating the learners ' writing skills improvement. This kind of evaluating is giving more signs to learners and also aid their learning of how applying these maps. This is more important than writing feedbacks and correction. Consequently, it is

recommended to assess learners' writing skills by asking them to draw a map concept which had been beforehand shown.

The researcher observed that using the map concept in the process of teaching writing skills can enhance learner' interest and contribution in the learning process. This is possibly the case as map concept eliminates the tension of verbal modalities in the process of writing learning together with giving more independence to use individual and individual icons.

The learners were also appreciating their freedom in not using joining vocabularies as they were interested to use more colors and shapes to draw any map. They could make it personal as each word or phrase could recall something different from each learner to another.

Furthermore, since vocabulary learning is always a controversy for both teachers and learners in how to get command on more words and retain them for a longer time; the necessity is felt to provide learners with more essential strategies in the field of vocabulary learning.

Consequently, teaching with map concept could be an element of the teaching curriculum to encourage learners themselves in the act of writing skills learning.

This research was carried out among intermediate learners; the same experiment could be implemented among other age groups to see if the latter is a factor in comparing the impact of the two modes of mapping strategies on vocabulary achievement.

These modes of mapping strategies were used for all learners while people with kinesthetic minds can learn new materials better by these techniques. It is recommended to carry out this research among learners with that ability to see whether these two strategies are significantly different in learning new words or not.

5.8 Recommendations.

Based on the findings of the study, the researcher recommended the following:

First: For the Students:

Students are advised to:

Students had better use map concept as pre-step in writing because it helps them organize their ideas and thoughts and integrate new concepts with the old ones.

Second: For the Teachers:

Teachers are advised to:

1. Try as much as you can to integrate the low achievers students by giving them simple topics that fit their competence.
2. Before starting to apply map concept strategy, it's necessary to enrich the students' vocabulary since map concept will not be that effective if the students don't have some basic vocabulary at least. Otherwise, map concept will not be that effective

3. Use map concept methods in their teaching, since it enhances students' cognitive and social skills as well as motivation for the material and their scores in exams.
4. Be aware of the individual differences among learners while choosing and applying map concept methods and techniques.
5. In elementary schools, students in eighth graders might face difficulties to draw their own map individually, so teachers had better apply it collaboratively.

Third: For the Ministry of Education:

1. Its hoped that the ministry of education will increase the writing tasks in the curriculums and upgrade them, and it’s also hoped that they will activate the strategy of map concept when doing writing tasks.
2. Due to the important role that EFL teacher plays in the success of map concept, the researcher recommends that EFL supervisors organize training programs for teachers in the use of map concept methods.

Fourth: Recommendations for Further Studies:

Researchers are recommended to**:**

1. Conduct similar studies for other academic levels and in other areas and environments.
2. Conduct studies on the influence of map concept on students' reading comprehension skills and writing skills as well.

3. Conduct studies on how map concept affects weak learners.
4. Conduct studies on the obstacles of using map concept in class rooms.

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Appendix A

Writing test and activity

Grade 8

English for Palestine

Writing a paragraph consists of different parts:

1- Topic sentence which introduces the main idea.

2 - Supporting details: the body of the paragraph.

3- Conclusion: (closing sentence) restates the main idea.

Sample: Look at the following example of a paragraph about "Why Canada is such a popular place to live in."

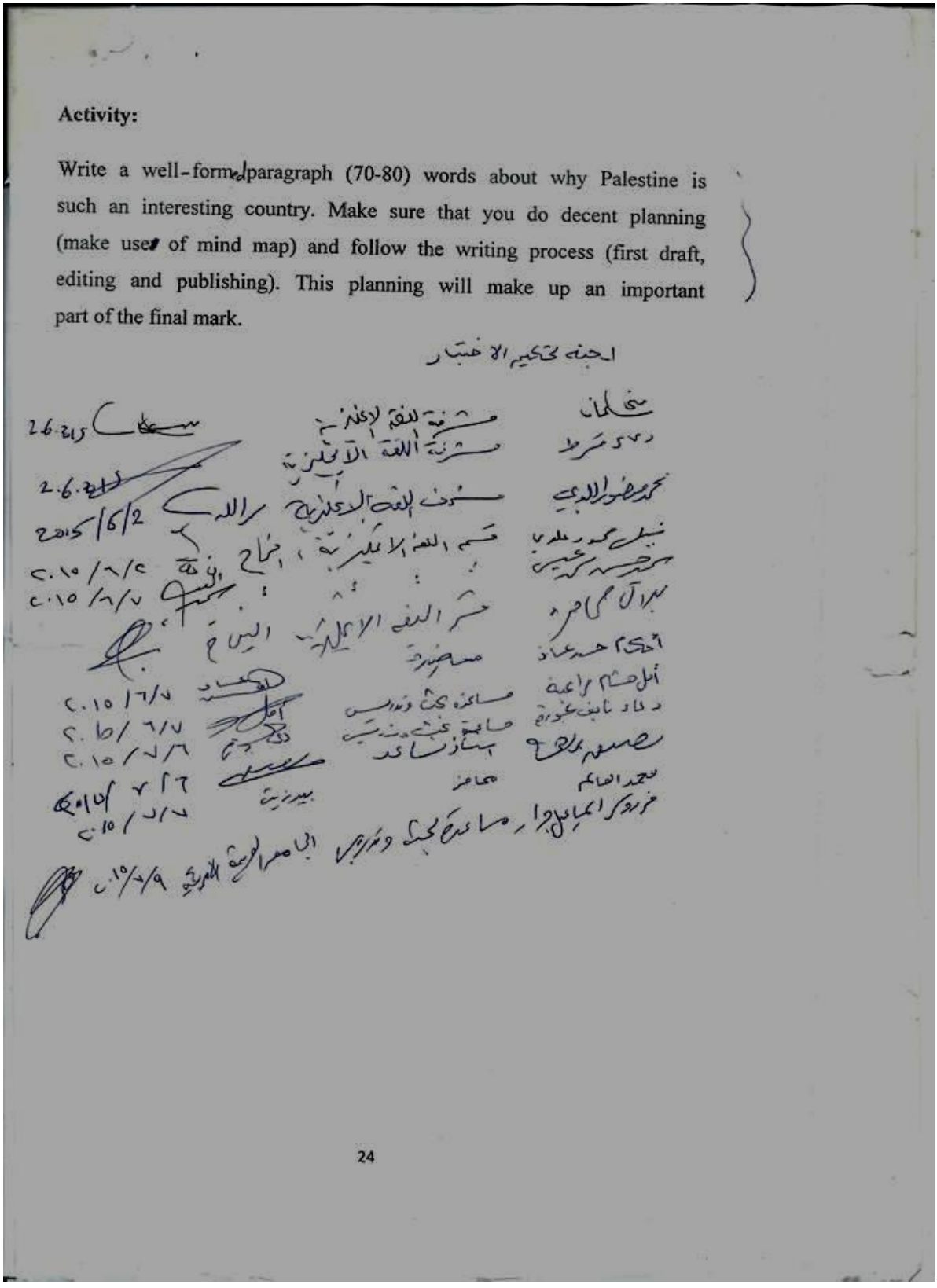
There are three reasons why Canada is one of the best countries in the world. First, Canada has an excellent healthcare system. All Canadians have access to medical services at a reasonable price. Second, Canada has a high standard of education; students are taught by well-trained teachers and are encouraged to continue studying at a university. Finally, Canadian cities are clean and efficiently managed. They have many parks and many spaces for people enjoy using. As a result, Canada is a desirable place to live in.

Activity:

Write a well form paragraph (70-80) words about why Palestine is such a beautiful place to live in. Make sure that you do decent planning (make use of mind map) and follow the writing process (first draft, editing and publishing). This planning will make up an important part of the final mark.

Appendix B

The validation committee (original copy)



Activity:

Write a well-formed paragraph (70-80) words about why Palestine is such an interesting country. Make sure that you do decent planning (make use of mind map) and follow the writing process (first draft, editing and publishing). This planning will make up an important part of the final mark.

لجنة تحكيم الاختبار

سلمان	مشرفة اللغة الانجليزية	2.6.2015
د. [illegible]	مشرفة اللغة الانجليزية	2.6.2015
محمد منصور اللدي	مشرف اللغة الانجليزية	2015/6/2
نبيل محمود علوي	قسم اللغة الانجليزية، افراح	٢٠١٥/٦/٢
[illegible]		٢٠١٥/٦/٧
[illegible]	قسم اللغة الانجليزية، النجاح	
أحكام حسن عباد	محاضرة	
أمل هشام راغب	مساعدة بحث وتدريس	٢٠١٥/٦/٧
دعاء نايف عبورة	مساعدة بحث وتدريس	٢٠١٥/٦/٧
[illegible]	استاذ مساعد	٢٠١٥/٧/٦
محمد العالم	محاضر	٢٠١٥/٧/٦
فروكر اسماعيل جرار	مساعدة بحث وتدريس	٢٠١٥/٧/٧
	الجامعة العربية الأمريكية	٢٠١٥/٧/٩

Appendix C

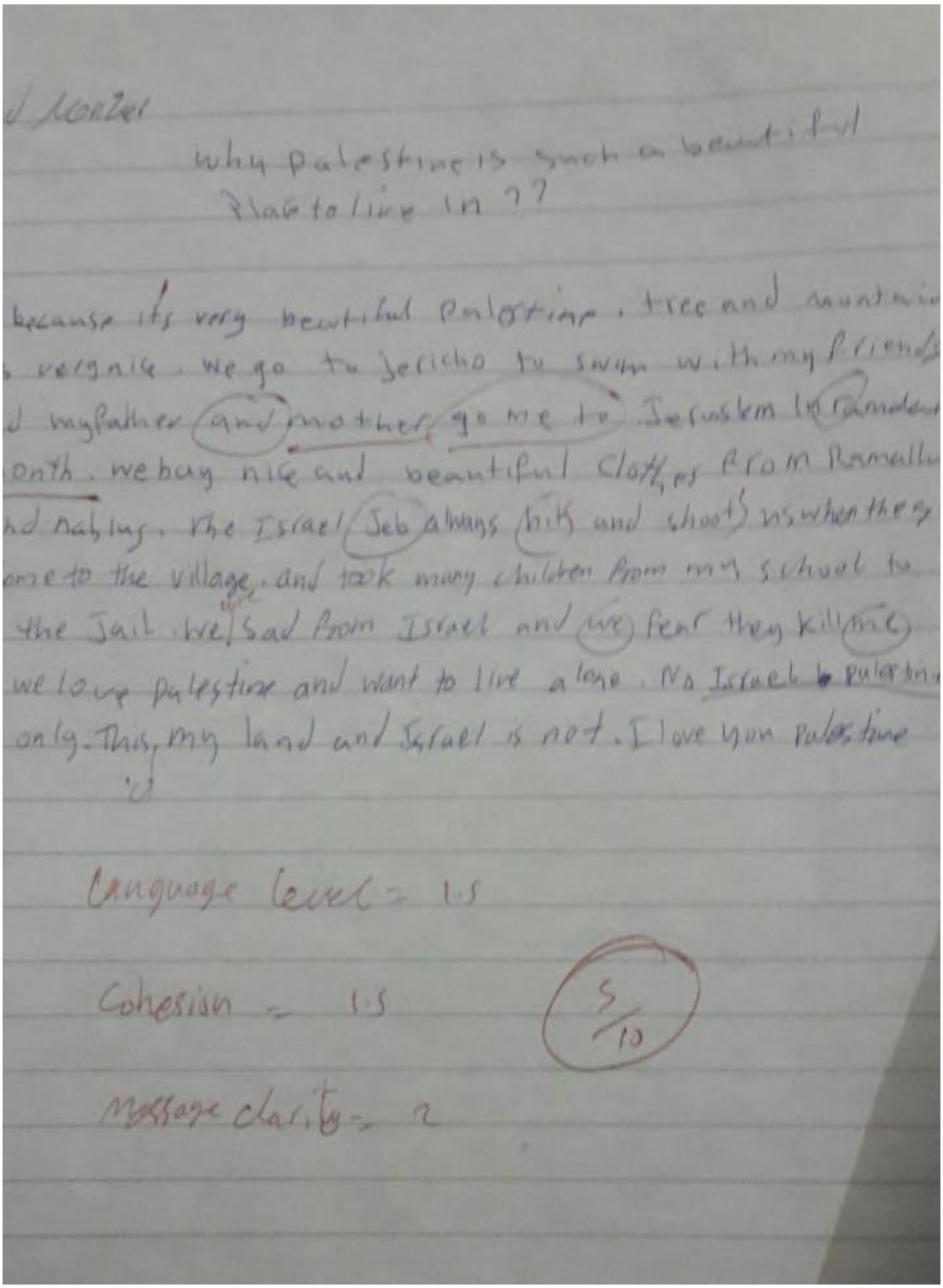
Names and ranks

The Validation Committee for the English language writing test

Fardous Ismail Jarar, TA at UCL, The Arab American University.
DR. Nabeel Alawi, English Department, An-Najah National University.
DR. Bilal Maharmeh, lecturer, An-Najah National University
Duaa Qurt, English Advisor, Ramallah District.
Duaa Naif Aboura, TA at UCL, The Arab American University
DR. Sameer Hassan Eisa, English Department, An-Najah National University.
Ahkam Hassan Assaf, lecturer, The Arab American University.
Mohammad Al-Alem, lecturer, Birzeit University.
Amal Marabaa, TA, at UCL, Arab American University.
Dr. Mosadaq Barahmeh, lecturer, Arab American University.
Mona Suleiman, English Advisor, Ramallah district.
Mohammad Mansour, English advisor, Ramallah district.

Appendix D

Sample of a student's piece of writing



d Monzel

why palestine is such a beautiful
Place to live in ??

because it's very beautiful palestine. tree and montain
s very nice. we go to jericho to swim with my friends
d my father and mother go me to Jerusalem in ramadan
onth. we buy nice and beautiful clothes from Ramallu
nd nablus. the Israel Jeb always hits and shoots us when they
ome to the village. and took many children from my school to
the Jail. we sad from Israel and we fear they kill me
we love palestine and want to live alone. No Israel palestine
only. This, my land and Israel is not. I love you palestine
'd

Language level = 1.5

Cohesion = 1.5

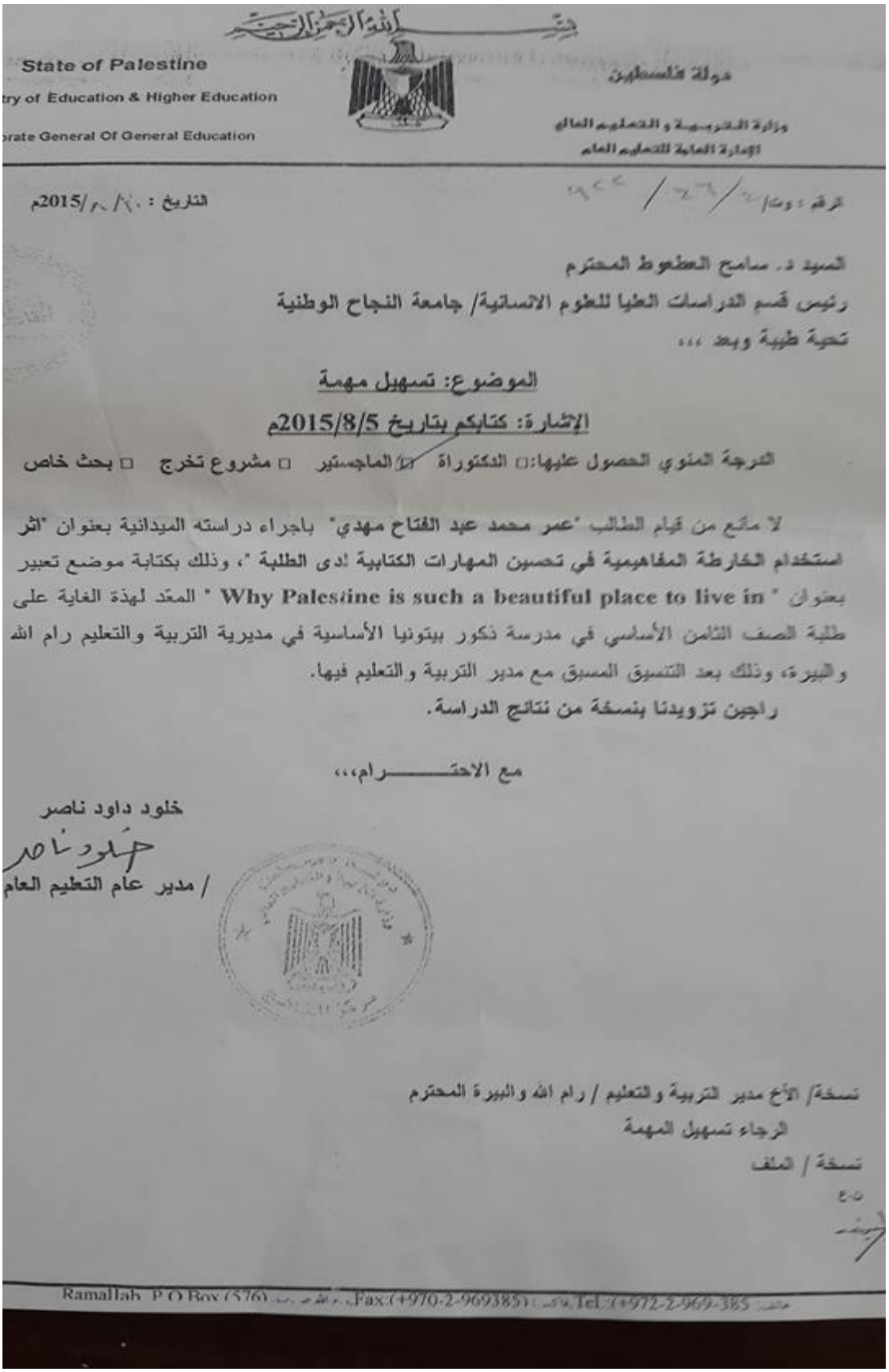
5/10

Message clarity = 2

Appendix E

Sample of a student's map concept drawing

Appendix F: permission from the Ministry of Education



بسم الله الرحمن الرحيم

State of Palestine
...try of Education & Higher Education
...orate General Of General Education

دولة فلسطين
وزارة التربية و التعليم العالي
الإدارة العامة للتعليم العام

الرقم : وت/ ٢/ ٢٦/ ٩٢٢

التاريخ : ٢٠/ ٨/ 2015م

السيد د. سامح العطعوط المحترم
رئيس قسم الدراسات العليا للعلوم الانسانية/ جامعة النجاح الوطنية
تحية طيبة وبعد ،،،

الموضوع: تسهيل مهمة

الإشارة: كتابكم بتاريخ 2015/8/5م

الدرجة المنوي الحصول عليها: □ الدكتوراة ☑ الماجستير □ مشروع تخرج □ بحث خاص

لا مانع من قيام الطالب "عمر محمد عبد الفتاح مهدي" باجراء دراسته الميدانية بعنوان "اثر استخدام الخارطة المفاهيمية في تحسين المهارات الكتابية لدى الطلبة "، وذلك بكتابة موضع تعبير بعنوان " Why Palestine is such a beautiful place to live in " المعّد لهذة الغاية على طلبة الصف الثامن الأساسي في مدرسة ذكور بيتونيا الأساسية في مديرية التربية والتعليم رام الله والبيرة، وذلك بعد التنسيق المسبق مع مدير التربية والتعليم فيها.

راجين تزويدنا بنسخة من نتائج الدراسة.

مع الاحتـــــــرام،،،

خلود داود ناصر
خلود ناصر
/ مدير عام التعليم العام

نسخة/ الأخ مدير التربية والتعليم / رام الله والبيرة المحترم
الرجاء تسهيل المهمة
نسخة / الملف
ع.ن

Ramallah P.O Box (576) ... Fax:(+970-2-969385) ... Tel:(+972-2-969-385)

جامعة النجاح الوطنية
كلية الدراسات العليا

أثر استخدام استراتيجية خارطة المفاهيم في تحسين المهارات الكتابية لدى الطلبة في منطقة رام الله

إعداد
عمر محمد عبد الفتاح مهدي

بإشراف
د. أحمد عوض

قدمت هذه الأطروحة استكمالاً لمتطلبات الحصول على درجة الماجستير في برنـــامج اســـاليب تدريس اللغة الانجليزية، بكلية الدراسات العليا في جامعة النجاح الوطنية، نابلس – فلسطين.
2015

أثر استخدام استراتيجية خارطة المفاهيم في تحسين المهارات الكتابية لدى الطلبة في منطقة رام الله

إعداد

عمر محمد عبد الفتاح مهدي

بإشراف

د. أحمد عوض

الملخص

تهدف هذه الدراسة لمناقشة أثر استخدام خارطة المفاهيم في تحسين المهارات الكتابية لدى الطلبة. ولتحقيق هذا الغرض قام البحث باستخدام اختبار كتابي طبقت على 60 طالب من الصف الثامن موزعين على مجموعتين؛ ضابطة وتجريبية.

تحتوي كل مجموعة على 30 طالب من مدرسة بيتونيا في رام الله. قدم الباحث الاختبار القبلي لجميع الطلبة بغية اتمام المعلومات اللازمة لتحقيق غرض الدراسة كما وقام الباحث بتطبيق استراتيجية خارطة المفاهيم على طلبة المجموعة التجريبية لقياس أثر هذه الاستراتيجية. ومن ضمن النتائج المتعلقة بالاختبار، فقد لوحظ وجود أثر ايجابي في استخدام خارطة المفاهيم في تحسين مهارات الكتابة لدى طلبة المدارس.

في ضوء هذه النتيجة اوصى الباحث بتطبيق خارطة المفاهيم في تدريس الطلبة للمهارات الكتابية. اضافة الى ذلك، سيتم ارسال توصيات تخص كل من: المعلمين لتطبيق هذه الاستراتيجية في تدريس مهارات الكتابة، لوزارة التربية والتعليم وادارة المناهج بقصد اثراء برامج تدريبية ومنهجية بمضامين تتعلق بخارطة المفاهيم وأثرها في التعليم.