



**The Impact of Using Mapping as a Game in Teaching Reading
Comprehension on 11th Grade Students' Achievement and
Attitudes**

أثر استخدام الخرائط كلعبة في تعليم فهم المقروء على تحصيل طلبة الصف الحادي عشر
واتجاهاتهم نحوها

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2018

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This Thesis was submitted in partial fulfillment of the
requirements for the Master's Degree in Education from the
Faculty of Graduate Studies at Birzeit University

Palestine

2018

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Acknowledgment

I would like to thank all professors, principals, teachers, students , family and friends who deeply supported me to conduct this research and write this thesis. The completion of this work would not have been possible without their great encouragement, support, help and guidance.

My great gratitude and thanks are dedicated foremost to Dr.Anwar Abdul Razeq for his guidance, encouragement, support and trust. Dr. Anwar gave me the freedom to search, write and work. At the same time, his constant and precious feedback was a main source for developing this work. He used to be available whenever I need his advice and guidance. I would like to thank the committee members: Dr.Mousa Khaldi and Dr.Jehad Shwaikh,who contributed with their time and efforts to read and give valuable comments and feedback to improve this work. A special thanks to Dr.Abdallah Bsharat who gave us a free course on SPSS which helped me a lot in analyzing the results of this study. A special thanks to all professors who encouraged me all the time.

I am also thankful for the principal of Ramallah Secondary Girls' School Mrs. Taghrid Elias for her great support and efforts, the teacher who implemented the study and corrected the exam papers with me Mrs. Nuha Khalil ,the teacher who facilitated the process of implementing this study Mrs. Eman Gazawi and the students who participated in the study. Whatever I say , I cannot describe their great support and cooperation.

To my best friends, my dad and my mom, for their constant support, love, patience and encouragement. To my brothers and all supporters ,I dedicate this thesis to my fabulous country Palestine.

Abstract

This study investigated the effectiveness of using mapping as a game in teaching reading comprehension on students' achievement and attitudes. The study followed a quantitative methodology with a quasi experimental design, where the control and experimental groups were deliberately selected. The study was implemented at a public school (Ramallah Secondary Girls' School) in Ramallah, Palestine. 72 Students were the participants from 11th grade. 36 students were the experimental group and 36 students were the control group. The control group was taught by using the traditional way in teaching reading comprehension while the experimental group was taught by using mapping as a game. The two main research questions were: 1. What is the impact of using mapping as a game in teaching reading comprehension on 11th Graders' achievement? 2. What are the students' attitudes towards using mapping as a game in learning reading comprehension? The data was collected by a pre and posttest, attitudes' questionnaire; it was supported by the researcher's observations. The collected data was used to answer the two research questions. The first question was answered by collecting the data of the pre and posttest. The data of the pre and posttest was analyzed by using the Independent Sample T- Test. The result of the first question revealed that using mapping as a game in teaching reading comprehension positively affected students' achievement, and their reading ability was developed. The second question was answered by collecting data of the attitudes' questionnaire. The results of the questionnaire were analyzed qualitatively. The results demonstrated that the experimental group had highly positive attitudes towards using mapping as a game in learning reading comprehension. The study concluded that using mapping as a game, a method was invented by the researcher, in teaching reading comprehension positively affected students' achievement and attitudes. Recommendations and implications of the study were discussed.

الملخص

هدفت هذه الدراسة إلى معرفة مدى فعالية استخدام الخرائط كلعبة في تعليم فهم المقروء على تحصيل الطلبة واتجاهاتهم نحوها. بنيت هذه الدراسة على منهجية التصميم شبه تجريبي، حيث تم اختيار المجموعة الضابطة والتجريبية بشكل متعمد من مدرسة بنات رام الله الثانوية الحكومية. كان عدد المشاركين في الدراسة اثنين وسبعين طالبة من الصف الحادي عشر، حيث تم تقسيمهم إلى مجموعتين متكافئتين، الأولى ضابطة والثانية تجريبية. درست المجموعة الضابطة قطع الاستيعاب بالطريقة التقليدية بينما درست المجموعة التجريبية من خلال استخدام الخرائط كلعبة. حاولت الدراسة الإجابة عن السؤالين التاليين:

(1) ما هو أثر استخدام الخرائط كلعبة في تعليم فهم المقروء على تحصيل طلبة الصف الحادي عشر؟

(2) ما هي اتجاهات الطلبة نحو استخدام الخرائط كلعبة في تعلم فهم المقروء؟

تم جمع البيانات من خلال الامتحان القبلي والبعدي، وإستبانة لقياس توجهات الطلبة نحوها، بالإضافة إلى تدعيم هذه البيانات بالملاحظة الصفية للباحث. تم استخدام البيانات التي تم تجميعها للإجابة عن السؤالين الباحثين، حيث تمت الإجابة على السؤال الأول من خلال نتائج الامتحان القبلي والبعدي التي تم تحليلها من خلال استخدام الاختبار الإحصائي: إختبار العينات المستقلة. كما أظهرت نتيجة السؤال البحثي الأول أن استخدام الخرائط كلعبة في تعليم فهم المقروء أثر بشكل إيجابي على تحصيل الطلبة وتطوير قدرتهم في القراءة. كما تم إجابة السؤال الثاني من خلال تجميع البيانات عبر إستبانة لقياس اتجاهات الطلبة، حيث تم تحليل نتائج الإستبانة إحصائياً. وأظهرت نتائج الإستبانة أن المجموعة التجريبية كان لها توجهات إيجابية نحو الطريقة المستخدمة (المبتكرة من قبل الباحث)، وبناء على نتائج الدراسة تم الخروج ببعض التوصيات التربوية.

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Chapter One

Introduction

Introduction

Reading is a complex activity which contains several essential aspects, such as perceiving and comprehending easily with realization the meaning conveyed by the writer (Gray and Redmen, 2000). Miller (2002) stated that reading comprehension is the ability to grasp or finding the meaning of written texts. It is the purpose of reading and the basic pillar of all learning.

Generally in Palestine, teaching reading comprehension in the Palestinian Schools is characterized by translation, memorization, lack of communication and boring atmosphere. The students use poor reading habits and largely depend on translation into their mother tongue, in addition to some teachers' direct explanation of reading a text. Besides, the students are not learned or even instructed by using useful strategies, which can be used or applied depending on the context (Jom'a, 2013).

Of course, reading is an important skill in learning any language; thus, it plays a major role in learning any language since it is a receptive skill. It also constructs one's ideas, thoughts and competence; reading is a receptive skill that plays a pivotal role in learning. It is the route of learning, of course not only learning languages but also learning in other fields (Grabe & Stoller, 2002). Hence, it is hopeful to find suitable ways and strategies to teach reading comprehension in a communicative and enjoyable way. It is preferable for teachers to be aware of some new techniques and strategies to attract students' attention. Teele (2004) emphasized that the purpose of all readers is to grasp what they read while reading. Teele demonstrates that good readers are highly engaged with texts, and they realize the system they follow to understand what they read. This will direct us to think about what can be done while learning reading comprehension to improve students' performance and attract their attention.

The absence of an effective way that matches all students' levels in teaching reading comprehension, encouraged me to invent a method by using mapping as a game in teaching reading comprehension. The method is based on converting the map into a game. Of course, Many studies showed the effectiveness of using mapping in recalling words and information, and in the process of memorization. However, there are no previous studies investigated the effect of using mapping as a game in teaching reading comprehension.

A study by Toi (2009) demonstrated that recalling words by using mapping will be more effective than the traditional ways of memorizing. Astuti (2012) stated that mapping is a vital technique which enables learners to easily comprehend what is written in the reading passage; that is, it eases the process of taking notes, fosters learner's creativity and problem solving. Therefore, the reader can clearly grasp and understand what the writer tries to convey. In other words, the learner can find detailed information, major and minor information by focusing on the diagram written on the text; thus, learning by using mapping assists students a lot in learning and remembering things easily. Mapping can attract visual learner's attention while learning, attracting them to pay more attention and to be active while learning. Furthermore, mapping offers to teachers the necessary tools that assist learners to reach great achievement while learning reading comprehension. The structure of mapping eases the process of improving learners' reading comprehension abilities to comprehend and grasp the gist of the reading passage since it stimulates their creativity and thinking skills. Moreover, the structure of mapping facilitates simplifying larger texts into smaller units. It also eases achieving communication while learning since it strengthens students' comprehension of the text itself (Gorijian, 2008).

Using mapping as a game is beneficial since implementing games in teaching plays a vital role in fostering the process of interaction and competition among students leading to good results in learning. Atake (2003) found that students encounter difficulties and challenges while thinking and using target vocabulary expression However, it is easy for them to communicate and understand in games since they are compelled to compete and interact with each other.

Facing obstacles in teaching reading comprehension, teachers are required to pave the way for the students to learn by letting them engaged and being active in learning. Hence, to overcome the obstacles that students face in learning reading comprehension , I focus in this study on investigating the impact of learning reading comprehension through the implementation of using mapping as a game in teaching reading comprehension on the 11th grade studying English for Palestine textbooks. The study aims to measure the impact of using mapping as a game in learning reading comprehension on students' attitudes.To contextualize the study, 11th graders in Ramallah Secondary Girls' School in Palestine will be the sample, working on using mapping as a game in learning reading comprehension ,where heterogeneous groups will be the engine of the class work. Learners' attitudes towards using mapping will be explored through a questionnaire. The classroom interactions will be described, as well, to provide clear understanding of the teaching aid and learning process and interactions in the groups over the study period.

Statement of the Problem

Generally in Palestine ,teaching reading comprehension in the Palestinian Schools is characterized by translation, memorization, lack of communication and boring atmosphere. The students use poor reading habits and largely depend on translation into their mother tongue, in addition to some teachers' direct explanation of reading a text. Besides, these students are not learned or even instructed by using useful strategies which can be used or applied depending on the context (Jom'a,2013). The absence of an effective way that matches all students' levels and taking into consideration the individual differences in learning reading comprehension motivated me ,since I was a teacher,to invent a method by using mapping as a game in learning reading comprehension in 2014. The method was being developed through three years (2014-2017).The final form of the map is shown in appendix D.That is, I used to draw the map in front of the students on the board in 2014;I used to ask them questions orally ,and they were supposed to answer the questions and copy the map. I realized that I need to improve it in order not to waste students' time and my time in copying shapes. Then, I started to prepare a worksheet that has the map. Besides, I prepared a softcopy of the map shown in front of the students by using LCD in 2015. Those two steps improved the method; however, I was looking for

developing it. There were no numbers drawn on the map and written questions attached to the map in 2014/2015. Later, in 2016 and 2017, instead of only asking the questions orally, I attached the questions to the map, and the number of every question is drawn on the map beside its answer as shown in appendix D. Those steps highly and positively affected students' performance. They also reduced wasting time on copying and drawing. In fact, this study aims to investigate the impact of learning reading comprehension by using mapping as a game. A study by Toi (2009) demonstrated that recalling words by using mapping will be more effective than the traditional ways of memorizing.

The game is characterized by giving the first letter/s of the word, letting the student to think and guess the answer. If the student doesn't know the answer, additional letter/s is/are given as scaffolding. The importance of playing is emphasized by Piaget since it has a vital role in improving the process of creativity, problem solving, and communication which can easily be achieved while learning by games (Slavin, 2006). That is, the teacher scaffolds the students with the answer without giving it. The levels of the activities offered in scaffolding instruction are more higher than the level of what one can do by oneself (Olson & Pratt, 2000). The one who has more capabilities offers the scaffolds so that one can achieve (with help) the purpose of the activity that he or she could otherwise not accomplish (Bransford, Brown, & Cocking, 2000).

According to McKenzie (2000), scaffolding has various advantages. First, it offers real guidance and reduces learners' perplexity and confusion. Second, it illustrates the educational aims; that is, learners know what they do, and what they are supposed to do. Third, it promotes learners' concentration; of course, it helps students to stay more on the task. Fourth, it explicates expectations and connects assessment with feedback. Fifth, it guides learners to useful sources; hence, learners will not feel lost, frustrated and confused. Last, it minimizes learners' uncertainty and disappointment by expecting the hardships previously; thus, it fosters deep learning by the presence of artifacts that facilitate understanding. Larkin (2007) indicated that effective and powerful scaffolding has several guidelines. First, giving learners their role to start with no or few assistance to realize what they know and what they lack. Second, assisting learners to achieve success easily by overcoming obstacles and challenges they might face. Third, assisting learners to be like other learners in their level; some learners need to work harder to exert more

efforts to be like others. Fourth, selecting the time to stop; "less is more" is the law when learners show they can achieve any mission alone. Last, assisting learners to be independent and depend on themselves.

The study also aims to measure the impact of using mapping as a game in learning reading comprehension on students' attitudes towards using it. The researcher hopes this study will provide teachers, students, supervisors and policy makers with the evidence of the positive impact of using mapping as a game in learning reading comprehension.

Research Questions

The research questions that guided this study were the following :

1. What is the impact of using mapping as a game in teaching reading comprehension on 11th Graders' achievement?
2. What are the students' attitudes towards using mapping as a game in learning reading comprehension?

Limitations of the Study

A number of limitations should be reported regarding the current study. First, the study was conducted in one Palestinian Public School, with limited number of students. Second, male students did not participate in the study; that is, the participants were only females. Third, the study period was too short; it was conducted in two months. The students did not receive a prior training on using mapping as a game in learning reading comprehension since it was shown for the first time. The teacher trained the students on three texts.

The Purpose of the Study

The current study aims to achieve the following goals . First, it aims to discover if there is a difference in the achievement of the learners who learn reading comprehension by using mapping as a game and those who learn reading comprehension by the traditional way. Second, it aims to investigate the impact of using mapping as a game in learning reading comprehension on students' attitudes.

Significance of the Study

The significance of the current study is drawn by its concentration on using mapping as a game in learning reading comprehension. Many previous studies were conducted to discover the impact of using mapping and other graphic organizers in writing and vocabulary. Few studies were implemented to discover the effect of using mapping in learning reading comprehension. Those studies were focusing on studying learning reading comprehension by following known ways and strategies. Hence, it is hopeful to find suitable ways and strategies to teach reading comprehension in a communicative and enjoyable way. It is preferable for teachers to be aware of some new techniques and strategies to attract students' attention while learning reading comprehension. Actually, to the best of the researcher knowledge, there are no previous studies have sought to teach reading comprehension by using mapping as a game. Indeed, the researcher believes these facts deeply justifies conducting the current study.

Moreover, the study is important since it attempts to study whether or not using mapping as a game in learning reading comprehension would be a useful technique in creating active and effective students in learning reading comprehension in the Palestinian public schools. The school was chosen for the following reasons. First of all, the school locates in the centre of Ramallah city; thus, it is easy for the researcher to be there at any time. Besides, the school has a teacher who attended a training session for me two years ago about the use mapping as a game in teaching reading comprehension; hence, it will be easy for me as a researcher to implement this study at this school. Also, the students of the school are from different backgrounds; that is, some of them are from the city, others are from refugee camps and others are from near villages. In addition, the principal of this school highly supports educational activities. Furthermore, the school has smart boards and all the technology equipment needed in teaching; thus, the presence of these facilitators will not waste the time of the students and teacher on copying the questions, texts and shapes; hence, the focus will be on the process of learning and activating the students.

The population of the study, eleventh grade students, was deliberately chosen for various reasons. First, the students of this age are supposed to have basic skills and knowledge which enable them to speak, read passages easily and evaluate the effectiveness of the strategy implemented to improve their skills and abilities, and have some such awareness of the improvement in their performance after using the previous strategy. Second, the subjects of the texts in 11th grade book are various and different ; thus, it can be useful to conduct this study on this grade. Hence, the current study is an improvement attempt to develop the status quo of teaching reading comprehension in the Palestinian public schools.

Definitions of Terms

Reading: is a receptive skill that plays a pivotal role in learning. It is the route of learning, of course not only learning languages but also learning in other fields (Grabe&Stoller, 2002). Millord(2001) indicated that reading is a visual and mental process to elicit meaning from a text by grasping and processing data, and connecting it to the current experience.

Students' Achievement in reading is their scores which are assigned according to learners' test results in the pre and post test.

Reading Comprehension :is the process of eliciting and building meaning through communication with written language; it is based on three basic components: the purpose of reading, the reader and the text (Snow,2002). Moreover, Miller(2002) stated that reading comprehension is the ability to grasp or find the meaning of written texts. It is the purpose of reading and the basic pillar of the content of learning.

Reading Process

Millord(2001) indicated that reading is a visual and mental process to elicit meaning from a text by grasping and processing data, and connecting it to the current experience.

Scaffolding

Scaffolding assists learners to independently achieve and complete tasks ,which are beyond their level and competence. The teacher reduces the support and scaffolding gradually when the learners' skills improve (Chang, Sung &Chen, 2002).Bruner(1983) illustrated that scaffolding is the process of managing the learning environment to make child's entry manageable and easy, and then gradually reducing the amount of support will enable the learner to be skilled and successful.

Graphic Organizers

A graphic organizer is a demonstration that shows a connection guided by a thinking skill verb. The diagram itself is connected with a number of boxes linked with arrows. Every single box represents an event followed by another box which represents another event (Hibbard&Wagner,2003). Griffin and Tulbert(1995) defined graphic organizers as visual demonstrations of data and knowledge that portray connections between different concepts, ideas and thoughts.

Mapping

The process of converting graphic organizers and visual representations into a map, which will be converted later into a game.

The Traditional Way in Learning Reading Comprehension

Learning reading comprehension by reading the passage, translating words and answering the questions written on this passage.

Chapter Two

Theoretical Framework

This chapter presents different theories that cover the use of mapping in learning reading comprehension. It concentrates on constructivism as a pivotal theory and on scaffolding as a strategy related to this theory. Of course, it elaborates scaffolding as a term, its uses and application on learning reading comprehension. Hence, it also presents relevant concepts related to scaffolding such as The Zone of Proximal Development(ZPD).Last, it represents mapping as graphic organizers and the role of graphic organizers in facilitating teaching and learning in general, and learning reading comprehension in particular .

Constructivism

Constructivism is the combination of several theories in one from. Constructivists find learning as the process of building up the meaning by letting learners create their understanding from their experiences (Merriam and Caffarella, 1999). Others found that the term itself is derived from Piaget's constructivist views 1967, and Bruner's illustration of discovery learning.Perkins(1992) found that constructivism has several roots in psychology and philosophy.

Mvududu and Thiel- Burgess (2012) found that constructivism describes how learning and thinking occur. It shows the methods in which learners can make sense of the knowledge they receive and how the content can be delivered efficiently. In constructivism as an educational theory, teachers should take into consideration helping students in applying the knowledge they have into practice. Kanselaar(2002) indicated that constructivism has two basic standards of perspectives :

- a) Cognitive perspective : it is based on Piaget's work which includes two theories. First, ages and stages which demonstrate that children cannot understand at different age, and theory of development which illustrates how children improve their cognitive abilities,
- b) Socio-cultural perspective: it is based on Vygotsky's work; Vygotsky(1988) believed that learning precedes development while Piaget believes the opposite.

That is, Vygotsky finds that child's mind is inherently social in nature and speech transfer from social context to the interegocentric; hence, since speech development precedes thought development, Vygotsky states that thoughts improve and develop from the society to the individual not the opposite.

Constructivist View of Learning

Hoover(1969) stated two different principles of the several perspectives about constructivism which can be operationalized. First, learners build their new knowledge using their current understanding. That is, learners' previous knowledge affects their new one. Second, learning is not a passive process ;that is, learners participate and negotiate their understanding with what they experience and learn from the new knowledge they receive in order to construct new experience and understanding. Hence, learners should be active to learn effectively.

Towmey Fosnot(1989) showed that constructivism definition depends on four principles. First, learning is based on what learners already have. Second, new ideas and thoughts appear when learners change and adapt their previous thoughts and knowledge. Third, learning entails inventing ideas and thoughts rather than collecting different ideas and facts. Fourth, meaningful learning happens while adapting old ideas and coming to new conclusion about new ideas which contradict the previous ideas. Parwat(1992) indicated that the most effective interpretation of constructivist theory that it shows a real change in the focus of teaching and stimulates students to put their own efforts to grasp the content of the educational material. In addition, Gray(1997) found that constructivist teaching is based on learning that is achieved while active learners construct their understanding and knowledge ; this kind of teaching stimulates learners to be active critical thinkers and independent learners. Hoover(1996)found that constructivism has basic implication for teaching. First, teaching can not be viewed as the process of sending knowledge from competent to incompetent or known to unknown. Teachers' role is not conveying message through a speech ,but their role is to guide their students while constructing knowledge. Second, constructivist teachers should take into consideration the prior knowledge ,which their students have, and connect it with the new experience they will have. Third, constructivist teachers should

facilitate the process of engaging their students in learning. Fourth, students should be given sufficient time to construct their knowledge effectively by reflecting their experience and connecting their current knowledge.

Moreover, Moshman(1982) indicated that constructivism has three types: exogenous, endogenous and dialectical constructivism. First, exogenous constructivism which indicates that learners construct and rebuild their mental representation that demonstrates the organization of the world . That is, learners' network of information is associated with the external realities which learners face and experience. Second, Endogenous constructivism which is based on the individual constructivism of knowledge which is also derived from Piagetian theory,that is, it focuses on the relation between learner and meaning,the use of individual and socially oriented activities. Third and last, social or dialectic constructivism which emphasizes on social exchanges on learners' cognitive development ,and the role of history and culture on learning. Tam (2000) claimed that constructivist learning environments have the following characteristics. First, information is shared between students and teacher .Second, the authority is divided between students and teacher; everyone of them will play a specific role. Third, teachers play the role of the guide or facilitator. Fourth, the learning process is achieved by dividing students into small numbers of heterogeneous groups. In addition, Honebein(1996) indicated that there are 7 pedagogical goals of constructivist learning environment. First, supplying experience which enables learners how they will learn. Second, offering experience in and evaluation for different perspectives. Third, enabling learning in real environment(authentic tasks). Fourth, motivating autonomy and ownership which enable learners' voice to be outstanding, shifting the process of learning to be student-centered. Fifth, enabling learning in social environment(cooperation and collaboration). Sixth, easing the use of different tools of representation : texts, pictures and audio illustration. Last, stimulating understanding and awareness of knowledge construction such as reflection.

Besides, Honebein(1996) stated that constructivism has many advantages. First, learners will learn and enjoy more since they are entirely engaged in the process of learning. Second, education is highly promoted when the activities focus on thinking and understanding rather than memorizing .Third, constructivism provides students with the

ownership which facilitates the process of learner's autonomy; it stimulates asking questions, exploration and designing assessment. Fourth, learners are entirely engaged and involved in learning since constructivism offers authentic and real activities. Fifth and last, constructivism enhances communication and social skills by establishing classroom environment that focuses on exchanging ideas, cooperation and collaboration. Furthermore, Brooks and Brooks(1993) found that constructivist teachers should have the following traits:

- 1) Activate and accept learners initiative and ownership.
- 2) Use a number of different visual aural traits such as notes, pictures, diagrams
- 3) and interactive materials which stimulate learners' interaction.
- 4) Ask learners about their understanding and knowledge before sharing his/ her knowledge.
- 5) Help students to be engaged in dialogue with the teacher and with others.
- 6) Ease learners' inquiry by asking open ended and challenging questions.
- 7) Involve students in real tasks and encourage discussion.
- 8) Give learners sufficient time to construct their understanding
- 9) Evaluate and assess learners' understanding through implementing open-structured tasks.

Moreover, Wilson and Cole(1991) found the following concepts are pivotal to the constructivist instructional design. First, learning is fostered in real, authentic and active environment. Second, learning is enabled in social contexts and environment . Third, errors are used to reflect feedback to learners in order to improve and construct their knowledge in an appropriate way . Fourth, supply for learner control is attached. Last, authentic versus academic contexts are used for constructing knowledge. Indeed, one of effective strategies related to constructivism is scaffolding.

Scaffolding

The term scaffolding is elaborated in which help or support is given by the more skillful and knowledgeable one to less knowledgeable one in an educational context (Wood and Wood, 1996). Scaffolding is based on offering support for developing one's abilities by using visuals, graphics , simple languages, collaborative learning and

teacher's assistance (Ovando, Collier & Combs, 2003). Scaffolding can direct learning and increase one's concentration on a specific task by reducing cognitive load (Hmelo-Silver, 2006). Of course, since scaffolding enhances one's concentration, reducing obstacles and problems which learners might encounter, it makes the task easy, simple and accessible; hence, it leads to great results (Quintana et al., 2004). That is, scaffolding is theoretically based on providing learners with help and support through a number of strategies and skills until they can independently learn (Rosenshine & Meister, 1992).

In fact, scaffolding term originates from construction field, which stands and refers to a platform used while constructing buildings that enables one to stand or sit on during working, especially when the height is above the level of the ground or the level where one can reach (Meriam Webster Dict., 2014). Scaffolding assists learners to independently achieve and complete tasks, which are beyond their level and competence. The teacher reduces the support and scaffolding gradually when the learners' skills improve (Chang, Sung & Chen, 2002).

The amount or quality of intervention differentiates scaffolding from teaching. In scaffolding, intervention is necessary for learners to extend their proximal development. ZPD refers to the gap in which one can do things with help or assistance, and what one can do alone or independently (Vygotsky, 1986). Scaffolding which aims to direct learners in their ZPD, was designed to assist learners to independently accomplish the same mission in different and new contexts (Hammond, Gibbons, 2005). The ZPD was introduced to be the distance between what learners can independently do without assistance or what they can do with support. This was used to explain the nature of teaching and learning in which teachers should support their students to be independent and self-regulated learners (Vygotsky, 1978). In scaffolding the teacher just tries to assist learners in tasks where they can't work alone; that is, scaffolding is like a connection to help learners in order to add what they do not know on what they know. If scaffolding is implemented correctly, it will perform as an enabler; that is, it will improve learner's skills and abilities (Benson, 1997). Bruner (1983) illustrated that scaffolding is the process of managing the learning environment to make child's entry manageable and easy, and then gradually reducing the amount of support will enable the learner to be skilled and successful. Instructional scaffolding is the strategy in

which help and support are given in order to ease the process of learning and collaboration between the competent and the beginner to help in coping with and passing the situation (Palinscar, 1986). Instructional scaffolding is supposed to be used by teachers in classroom in order to help their student to work independently. Scaffolding consists of different activities that aim to direct learners to maximize their learning as scaffolding used to help workers in constructing buildings to let them successfully achieve specific tasks (Huggins and Edwards, 2011). Instructional scaffolding can be divided into 3 educational scales. First, offering assistance to support specific activities to improve. Second, the real focus on specific activities and tasks in the class. Third, the help offered during the interaction (Gibbons, 2003 and Van Lier, 1996).

Instructional scaffolding has many benefits. First, it offers supportive educational environment, where teachers are more caring and helpful to enable learner's learning. Second, the learning environment is flexible and open, where students can ask questions, negotiate, participate, give feedback to their teacher and support their peers. That is, the teacher plays his/her role as a guide and facilitator. Third and last, instructional scaffolding directs learning to be student-centered learning. Of course, it offers opportunities for the learners to work independently as the ownership of the learning process. Gibbons (2002) claimed that scaffolding has different levels: initial, well-planned and deliberate which can be increased or decreased depending on the teacher's observation and the feedback received from the learners. Of course, scaffolding offers help and assistance as a connection tool between what learners know and do, and what they try to know and do (Gillies and Boyle, 2005).

Scaffolds are defined as activities and tasks that have many advantages. First, they encourage learner's interest to a specific task. Second, they make the task easier to access and work on. Third, scaffolds offer some guidelines to the learner in order to achieve the educational goals successfully. Fourth, they decrease the problems and obstacles, which learners might face, that sometimes lead to frustration. Last, they state the guidelines and expectations of activities to be followed (Bransford, Brown and Cocking, 2000). According to McKenzie (2000), scaffolding has various advantages. First, it offers real guidance and reduces learner's perplexity and confusion. Second, it illustrates the educational aims; that is, learners know what they do, and what they are supposed

to do. Third, it promotes learners' concentration; of course, it helps students to stay more on the task. Fourth, it explicates expectations and connects assessment with feedback. Fifth, it guides learners to useful sources; hence, learners will not feel lost, frustrated and confused. Last, it minimizes learners' uncertainty and disappointment by expecting the hardships previously; thus, it fosters deep learning. Diaz-Rico and Weed (2002) indicated that scaffolding has three types as being powerful and effective for language learners. First, using simple language; the teacher can use simple language by using clear and short sentences, reducing the use of idioms, metaphors and complex sentences. Second, using visuals; that is, the teacher can use pictures, photos, graphs, charts and graphic organizers to make the idea clear and simple, and ease the process of understanding the content easily. Third, asking for completion; the teacher can demonstrate a number of options to the learner and help them to fill it in, complete and match specific information.

Actually, scaffolding has different types according to many educators. Well (1993) classified scaffolding into micro and macro scaffolding. The macro level focuses on huge issues in order to make them simple in a specific sequence to foster the process of understanding such as program goals. However, the micro level focuses when the learner works with the teacher. Of course, the macro level includes the micro level and both of them compel the instructor to be knowledgeable in offering them for learners. Sanguanpuak (2005) found that scaffolding has two main levels. First, macro level which is achieved by dividing larger tasks into smaller ones. Secondly, micro level which is achieved by offering help, supports, hints, feedback, instances and elaboration to help learners to learn. In addition, scaffolding is classified into three types in reading comprehension context (Glark and Graves, 2005). First, moment to moment scaffolding; this compels the teacher to offer suitable support for every learner by taking into consideration every learner's response and asking questions; hence, knowledge and motivation can be transferred to enrich the educational and learning practices in the classroom. Second, instructional framework that increases content learning; this type focuses on educational framework to enrich the process of learning which direct and develop learning reading comprehension abilities. Third, instructional procedures for teaching reading comprehension. This type focuses on educational activities for teaching

reading comprehension to assist learners to be independent learners and readers (Clark & Graves, 2005). Hill and Hannifin (2011) classified categories into four types. First, conceptual scaffolding which can be outlines, maps and instances to be strengthen students in learning and choosing the appropriate options in learning. Second, metacognitive scaffolds which can assist learners to concentrate on the aim in order to evaluate what s/he knows and what to do later. Third, procedural scaffolding which can be charts, graphic representations and site navigation maps to assist learners in estimating resources and minimizing cognitive load during learning. Fourth, strategic scaffolds which can contain suggestions to assist students in learning. Well (1999) found that educational scaffolding has three main features. First, the importance of dialogue nature which helps in constructing knowledge and understanding. Second, the importance of activity type which enables understanding and knowing. Third, the presence of artifacts that facilitate knowing and understanding.

Larkin (2007) indicated that effective and powerful scaffolding has several guidelines. First, giving learners their role to start with no or few assistance to realize what they know and what the lack. Second, assisting learners to achieve success easily by overcoming obstacles and challenges they might face. Third, assisting learners to be like other learners in their level; some learners need to work harder to exert more efforts to be like others. Fourth, selecting the time to stop; "less is more" is the law when learners show they can achieve any mission alone. Last, assisting learners to be independent and depend on themselves. Teachers should observe their students and determine when they need or don't need assistance, and where they can complete the task alone. In addition, Puntambekar and Kolodner (2003) claimed that scaffolding has four features. First, intersubjectivity; this requires the more knowledgeable person to define and redefine the tasks for the students in order to foster the process of learner's ownership. Second, ongoing diagnose; teachers should be aware of what their students knew, know and what they are supposed to know. Third, dialogic and interactive; dialogue between the teacher and learners is very important to receive feedback for the learner in order to develop their abilities and weakness. Fourth, fading ; the teacher should fade the support provided to the learner. According to Vygoteskian terms, this happens when the student reaches internalization. Without fading, the internalization

process will not be achieved; hence, the learners will be dependent ; of course, they will not be independent learners.

Silver(2011) indicated that scaffolding instruction has four steps. First, estimating the student's current experience and knowledge. Second, connecting content with what students know and understand. Third, dividing tasks into small parts. Fourth and last, using verbal and visual aids to help learners. Walqui(2006) indicated that scaffolding has six main types. First, modeling where the teacher can resort to use body language, gestures, verbal explanation and demonstration to the material. Second, bridging where learners stimulate their previous knowledge; this assists to create a personal connection between the subject and students. Third, contextualizing which can be provided in many ways. Fourth, schema building that can be shown as clusters of meaning, that are linked and associated with each other. Fifth, representations and demonstration the content can be a useful way to stimulate learners to acquire the new language. Last, improving metacognition that is based on learners' awareness of their own competence and their ability to grasp, manage and monitor their understanding and thinking process to determine when it is sufficient.

The scaffolds are seen as activities that have many benefits. First, they stimulate the learner's interests to the learning context. Second, they make the task easy, simple and achievable. Third, they offer guidance to assist the learner to focus in order to achieve the purpose. Fourth, they represent the differences between the desired work and learner's work. Fifth, they minimize hardships, risks and obstacles. Last, they explicate the expectations of the task to be performed (National Research Council, 2004).

Actually, scaffolding has positive effects on reading comprehension achievement and skills. For instance, Safdi and Rabbah(2012) indicated that scaffolding is powerful in improving reading comprehension achievement and developing skills, associated with critical thinking and finding the main ideas. Besides, scaffolding offers positive effects on learners in reading comprehension achievement represented by scores improvement over the time (Poorachamdi,2009). Scaffolding Reading Experience is an important approach which is regarded as a comprehensive reading program that

assists learners to grasp what they read, enjoy reading and learn from what they read. SRE has two phases. First, planning which should take into consideration the reading text and the reading objective. Second, implementing phase which contains pre-reading activities, reading activities and post-reading activities (Tierney&Readence,2000). Archer (2008)claimed that scaffolding reading comprehension has three phases. First, before reading which includes presenting the meaning of pivotal and unknown words, activate learners' previous knowledge, preview the text and help learners in pronouncing difficult words. Second, during reading which includes focus on reading procedures that offer beneficial reading practice, ask suitable questions, offer suitable reading strategies and use graphic organizers to foster and increase comprehension, and simplify the text content. Third, after reading which includes activating learner's discussion, offer vocabulary practice, let students answer written questions and let them summarize what they have read. Of course, scaffolding is dominated by the zone of proximal development(ZPD).

The Zone of Proximal Development(ZPD)

The Zone of proximal development, according to Vygotsky, is the distance between the real development and potential development level under the one's support and direction of more knowledgeable peers (Murray & Arroyo, 2002). Vygotsky (1978)indicated that the ZPD is the current or real level of learners improvement and the potential level achieved through offering support or assistance tools and the more skillful peer support. That is, the real level is what the learner can do by him/herself. However,the potential level is where a learner can achieve by receiving help and support under direction or collaboration of the more knowledgeable peer/s. The zone of proximal development(ZPD) shows the functions that have not completed but are in the process of completion. The ZPD is an effective place of sensitivity to learning the attitudes and skills of a specific culture in which the child develop by working on solving problems and cooperation with the more competent peers(Rogoff,1990).Cole(2011) claimed that within the ZPD cognition and culture make each other. The ZPD is very important for instruction and learning since it shows the level of the work to be processed with the learner.

Vygotsky(1978) stated that the powerful and meaningful learning is based on social interaction among different learners with different knowledge, attitudes and skills. That is, it involves assisting the learner to move into the next level of understanding. Vygotsky indicates that language is one of the important tools that assist learners in their ZPD, which is very important to socio-cultural theory. Daniels(2001) indicates that scaffolding is used by researchers and educators to demonstrate the role of the capable learner in helping the less capable learner in learning and improvement.

Lev Semenvich Vygotsky developed the concept zone of proximal development during the late 1920s and improved gradually until his death in 1934. Vygotsky defines the ZPD as" the distance between the actual development level as determined by independent problem solving under adult guidance or in collaboration with more capable peer". Vygotsky focuses on the idea that individuals largely benefit and learn when they work with each other during joint collaboration and cooperation (Rogoff ,1990).

The basic purpose from Vygotskian point of view is to help learners to stay in their ZPD by providing them with the enjoyable, interesting and meaningful learning, and problem solving to the activities that are more difficult than what learners can do by themselves. That is, the learner will be able to do some tasks alone ; hence, their ZPD will be enlarged and improved (Roosevelt,2008).

The term of ZPD was introduced by Vygotsky to criticize the traditional testing (psychometric-based testing) in the Russian schools. The traditional testing system demonstrates learners' existing knowledge than learners' expected knowledge for development in future(Vygotsky, 1962). The zone of actual development(ZAD) does not demonstrate development; it shows what developed or mastered. However, the level of ZPD shows the expected for emerging behavior(Vygotsky, 1978).The learners' zone of proximal development is evaluated by cooperation and participation with a learner because it offers a chance for imitation and development(Vygotsky, 1998b)

Reading Process

In fact, reading is a receptive skill that plays a pivotal role in learning. It is the route of learning, of course, not only learning languages but also learning in other fields and things (Grabe & Stoller, 2002). Millard (2001) indicated that reading is a visual and mental process to elicit meaning from a text by grasping and processing data, and connecting it to the current experience. However, Gray and Redmen (2000) defined reading as a complex activity which contains several essential aspects, such as perceiving and comprehending easily with realization the meaning conveyed by the writer.

Actually, Mayer (2003) stated that reading comprehension is a technique for developing learners' success in eliciting meaningful knowledge from the written text. Besides, Snow (2002) indicated that reading comprehension is the process of eliciting and building meaning through communication with written language; it is based on three basic components: the purpose of reading, the reader and the text. Moreover, Miller (2002) stated that reading comprehension is the ability to grasp or finding the meaning of written texts. It is the purpose of reading and the basic pillar of all content learning.

Reading comprehension is very important since it guides to understand the content of written texts. For instance, Gu (2003) indicated that reading helps learners to be experienced to the target language and find important linguistic input to achieve proficiency. In addition, reading is very important since it enriches other language skills. Moreover, reading offers different information and data to the reader. Besides, it gradually helps learners to grasp texts such as documents, bills and contracts. Kaddoumi (1995) suggested that reading is very essential to professional achievement, educational studies and personal improvement. Also, Mikulecky (1986) showed that reading assists learners to think in the new language, and construct meaningful and useful set of vocabulary that is used in other skills.

Over the last years, a number of strategies of the second language reading instruction has appeared. Alder (2001) indicated that teaching reading comprehension has several strategies: semantic and graphic organizers, forming questions, answering questions, monitoring comprehension, finding story structure, metacognition and

summarizing. Duke and Pearson (2002) found that reading comprehension can be taught by several strategies: predicting, stating the purposes of reading, monitoring, explaining and fixing, previewing, creating inferences, activating previous knowledge and self-questioning. In addition, Trabasso and Bouchard (2002) indicated reading comprehension can be taught by the following nine strategies: graphic organizers, answering questions, forming questions, assisting practice, mnemonic, mental imagery, comprehension monitoring, text structure realization and summarization.

Reutzel and Cooter (2012) indicated that highly effective reading teachers have seven characteristics. First, they know how learners learn oral language and how learners learn to read. Second, they are effective classroom managers. Third, they start instructing reading by evaluating what learners know and do. Fourth, they teach the basic parts of reading using evidence based instruction activities. Fifth, they activate reading and writing application all the day. Last, they communicate with parents, teachers and community members to guarantee learners' learning. Reutzel and Cooter (2012) also stated that effective reading instruction has five pillars. First, teachers' knowledge; that is, knowing the important strategies and skills of reading, and how they should be taught orderly. Second, classroom assessment; that is, deciding which should be implemented before, during and after has taken place; in other words, the teacher should be aware of the skills which learners have and need; hence, the teacher can work on a specific area and develop learners abilities and skills. Third, effective instruction; of course, teachers should be aware of different methods, strategies and skills, and use different tools to achieve useful and effective learning for every learner easily. Fourth, differentiating instruction for different learners' need. Successful teachers can reach different learners minds with various tools and methods. Last, achieve family and community communication; families should know what their children know, do and lack in order to work with their children to improve their abilities outside the classroom.

Actually, reading instruction has five essential components. First, phonemic awareness; English language has forty one phonemes which are the smallest units creating the spoken language. Second, phonics; the connection between phonemes and graphemes. Third, vocabulary development; it refers to understanding and knowledge of stored data about the pronunciation and meaning for words which are important for

communication. Vocabulary development is a basic pillar in reading comprehension since readers can't grasp the content of what they are reading without understanding the words in the text. Fourth, reading fluency; it is the ability to read quickly and accurately. Fluent readers understand words and connect them to ease the process of comprehension. Teaching reading fluency depends on two instructional approaches. The first one is guided -repeated oral reading which motivates learners to read aloud. The second one is independent silent readers which stimulates learners to read silently with little support from teachers. Fifth and last, reading comprehension strategies; of course, knowing these strategies eases the process of reading comprehension (Antunez, 2002).

In fact, reading comprehension has different levels. First, literal level; Whitten(2004) indicates that the literal level is based on the surface understanding for words and items; that is, there is no need to search for deep and hidden meaning. Second, inferential level; that is, this involves reading between the lines to grasp what is indicated or hidden(Hub Pages, 2012). Whitten (2004) indicated that this level deals with what is meant or indicated by creating inferences, connecting the previous knowledge with the current one and creating logical connections between the words and sentences in the text. Third, evaluative level; this level involves the two previous levels to take judgment based on elaboration, combining, connecting and interpreting information and links, drawing conclusions and analyzing critically to find the meaning which the writer is trying to convey(Hub Pages ,2012). Fourth, creative level; this level refers to the readers to use his/her imagination in drawing ideas and understanding the text. This level requires a number of skills. First of all, from meaningful questions about the text. Moreover, connect the reading text with one's experience, perspectives and evaluation. In addition, elicit and combine data from various sources (Yossuke, 2011).

Summary

The theoretical framework underpinning the use of mapping was elaborated and illustrated. The theories related to the development of mapping ,such as constructivism, were shown. In addition, the strategies related to the theories that covered the use of mapping, such as scaffolding and graphic organizers , were explicated. Extra clarification regarding the relation among mapping , scaffolding, graphic organizers was

demonstrated. Moreover, a study that demonstrated the pedagogical advantages for using mapping in learning and teaching, was provided. Last, background information that covered the process of reading was mentioned. Reading strategies, skills, types and stages were illustrated.

Chapter Three

Literature Review

The current chapter presents different studies on using mapping as graphic organizers, the effect of mapping on reading comprehension ability, the impact of using mapping on students' achievement, the effect of mapping on the writing skill, and the effect of mapping on studying, teaching and learning.

Mapping as Graphic Organizers

A graphic organizer is a demonstration that shows a connection guided by a thinking skill verb. The diagram itself is connected with a number of boxes linked with arrows. Every single box represents an event followed by another box which represents another event (Hibbard, K.M. & Wagner, E.A., 2003). Griffin and Tulbert (1995) defined graphic organizers as visual demonstrations of data and knowledge that portray connections between different concepts, ideas and thoughts. On the other hand, a graphic organizer is a visual tool to offer students with meaningful connections by associating their current knowledge with upcoming data (Kim, Vaughn, Wanzek, & Wei, 2004). Besides, graphic organizers are visual facilitators to assist readers in arranging and classifying their ideas and thoughts in reading (Manoli & Papadopoulou, 2012). Thus, graphic organizers portray connections between different contents to assist learners to grasp and comprehend what they read (Douglas, Ayers and Langone, 2011). However, Darch and Carnine (1986) defined graphic organizers as visual demonstrations which use different shapes, lines and arrows with different organization in order to clarify data and relationships between different ideas and concepts.

In fact, graphic organizers give teachers the basic tools to assist learners to get high grades and improve their reading comprehension skills. The structure of graphic organizers eases the process of improving learners' problem solving and critical thinking skills. Thus, it develops their abilities in understanding and comprehending a specific text since their system classifies the larger parts into smaller ones. It also offers new language that eases the process of achieving communication in the classroom and deepening learners' understanding of the content (Marzano, Pickering and Pollock,

2011). Besides, Merkley and Jefferies(2000) indicated that there are five steps to use graphic organizers effectively. First, the teacher should verbalize the information that connects different ideas and concepts visually, that is, turning the written text into a demonstration. Second, the teacher should offer chances for learners' participation to let them be entirely engaged and active. Third, the teacher should connect the previous knowledge with the current knowledge and upcoming one. Fourth, the teacher should indicate and refer to the upcoming texts and lessons. Last, the teacher should assist students in decoding and processing the information they receive to make sense of what they read.

Using graphic organizers in teaching reading comprehension eases the process of students' understanding and creates meaningful connections between different ideas and concepts through the visual aids they represent. Hence, learning reading comprehension through visual illustration is more useful than learning by using another reading strategies(Rawson and Kintech, 2005). Visual learning, such as using graphic organizer, is the most useful way in learning reading comprehension since it assists learners in arranging and classifying the content in order to comprehend the ideas and concepts easily(Slavin, 2011). When students are encouraged to create relations in the text they read, their reading skills will be improved. Thus, the text will be clear and easy for learners to grasp and comprehend(Keene and Zimmerman,1997). Graphic organizers explicate the relations and connection in a specific text; hence, they facilitate the process of comprehending the text or the passage easily (Jiang& Grabe,2007).Ellis(2004) stated that graphic organizers are effective tools to estimate and assess learners' understanding ; thus, implementing and using them lead to great and positive results in learning and academic achievement.

Mautone and Mayer(2007) indicated that graphic organizers help learners in arranging, creating and discovering relationships among different concepts and ideas; therefore, data and knowledge are presented clearly and simply. According to DiCecco and Gleason(2002), graphic organizers increased learners' creativity and performance, and they develop teacher instruction. In addition, graphic organizers have positive effects on learning, teaching and language acquisition. It can shift the learning process from teachers to be student-centered learning. They improve learners' cognitive and

metacognitive skills, and they also increase the possibility of promoting learners' autonomy in learning (Boulineau et al., 2004). Graphic organizers are essential in developing learners' comprehension, language acquisition and recalling information. Graphic organizers could improve learners' performance; thus, it's advisable to use them in classroom (Boulineau et al, 2004 & Gajria et al, 2007). Designing graphic organizers helps teachers to observe and analyze learners' interaction; consequently, they will be able to improve and develop it easily since they receive feedback (Helfgoft, 2007). Graphic organizers are effective and useful tools in learning which assist readers to comprehend easily written texts and simplify the complex ideas; they also develop critical thinking skills (Fisher, 2001). Furthermore, graphic organizers assist learners to focus on the vital and important ideas since their demonstration shed lights on the basic concepts ; therefore, the basic and major ideas will be easily memorized and understood (Bromely, Irwin-DeVitis, and Modlo, 1995).

Graphic organizers such as story maps, mind maps and network tree could improve reading comprehension skills since they simplify the reading passage making learners able to participate easily and effectively in contrast to the traditional ways of teaching reading comprehension which consist of questions and answers (Dimino et al. 1990). Graphic organizers develop learners' understanding and help them to be active participants in order to play their roles effectively (Mayers and Savage, 2005). Ausubel (1963) indicated that using graphic organizers has great and positive effects on learning; thus, they make learning easy, clear and meaningful. That is , learners will be able to connect their current knowledge with the upcoming information. Dexter and Hughes (2011) found that graphic organizers make the process of learning enjoyable, effective and interactive , especially for the students with special needs. Besides, educational activities which include the use of graphic design can entirely develop learners' performance and achievement (Scrugges et al. 2008a). Moreover , graphic organizers encourage students to activate learners by improving their memorization, recalling and understanding skills. They help them in summarizing, connecting and discovering relations between different concepts and ideas (Collavan and Kottler, 2007).

Graphic organizers assist learners to arrange and organize their notes , ideas and thoughts; thus, they are useful guide to be used in future; they also help learners to

summarize texts and they are effective tools that guide writing (Tisleston, 2004) . Ermis(2008) shows that using graphic organizers in learning reading comprehension helps students a lot since they minimize the challenges and obstacles which learners might encounter while learning. The software of graphic organizers eases and simplifies any text since it connects the different ideas together.

Maps were improved through years and they were used in several studies for many purposes. Mapping was initiated by the British psychologist Tony Buzan in the late 60's in an attempt to assist students to take notes effectively. According to Buzan, a map is an associative network of images and words which *"harnesses the full range of cortical skills: word, image, number, logic, rhythm, colour and spatial awareness in a single, uniquely powerful technique"* (Buzan&Buzan, 1996). Meanwhile, Jonassen, Besissner and Yacci (1993) described maps as a visual arrangement of ideas, concepts and their connection that are interrelated to show the knowledge content that ones can save in their minds. However, Panatda and Loahawiriyano(2010) indicated that mapping is an effective teaching tool that can be used to demonstrate learner's comprehension and understanding by using symbols, colors, words which will be connected hierarchically or following tree branch format.

Of course, Svantesson (2004) pointed out that maps have three kinds. First, Hyfork; this type can be designed by putting the main topic in the center, then adding lines. Later, new lines can be created and the words can be written below the lines . Second, Thorn fish shape. Third and last, clustering; the main idea put in the center of the shape; in addition, branched can be added later. Every branch carries a word which represents a specific idea. While Deshatty and Mokashi(2013) found that mapping is a diagram that concentrates on the main ideas, keywords and topics which are interrelated with words and phrases to view the connection between them. On the other hand, Rebeca (2014) stated that mapping is an educational strategy which requires making diagrams for visual demonstrations of topic and ideas. The shape itself concentrates on the main idea which is located in the center, the main idea should be connected with sub ideas later to represent specific ideas and convey a message for the reader .Others indicated that mapping has positive effects on learning reading comprehension. For instance, applying mapping in learning reading comprehension skills increases students' understanding and memory of comprehension passages (Wong-AngGekMoi and Ong Lee Lian, 2007). Others found mapping brings fun and creativity in

learning , for example , Goodnough and Woods (2002)found out that students perceived mapping as a funny, interesting and motivating approach to learning.

The Effect of Mapping on Reading Comprehension Ability

In fact , it was found that mapping positively affects reading comprehension ability. For instance, Bekti(2009) implemented a study on a group of vocational students and found that mapping strategy is an effective and powerful technique which develops students' reading comprehension ability . Moreover, Astimaty(2011) found that mapping is a perfect technique and tool in teaching and learning reading comprehension since it eases the process of comprehending the written texts leading to creativity and productivity in learning ; that is, students will be more creative and active by drawing symbols and pictures.

Besides, Astuti (2012) stated that mapping is a vital technique which enables learners to comprehend easily what is written in the reading passage ; that is, it eases the process of taking notes, fosters learner's creativity and problem solving. Therefore, the reader can clearly grasp and understand what the writer tries to convey. In other words, the learner can find detailed information , major and minor information by focusing on the diagram written on the text; thus , learning by using mapping assists students a lot in learning and remembering things easily. Furthermore, Brown (2001) stated that mapping is an effective technique in teaching reading comprehension where students' skills in reading can be highly improved.

Stine (1997) stressed that using mapping in teaching reading comprehension has many benefits which enhance the process of comprehending a text easily. First, mapping simplifies the content of a text by drawing a specific diagram. Second, it stimulates the right brain by directing verbal and analytical ability. Third, it enables the learner to write the main ideas and connect them using and depending on his/her own way. Fourth, it helps students to comfortably remember the basic and important connections because they are depicted by a specific and clear shape. Fifth, it improves the ability of recalling information from the reading passage. Last but not least, it assists the reader to discover new things and connection between ideas and texts.

Mapping has created a positive effect on deep learning by fostering learner's comprehension reading comprehension ability (Martoon& Booth, 1997). Besides, Siriphanic

and Laohawiriyano(2010), in a study that was investigating the effect of using mapping to improve reading comprehension ability , indicated that mapping has a positive role in teaching and learning. Mapping has a number of benefits. First, it simplifies complex concepts and ideas. Hence , it facilitates the process of understanding a text . Second, it can add meaningful connections with the text by attaching symbols , shapes and pictures. The results of the study showed that English reading comprehension post test mean score of the students who participated in the study was higher than the pre-test mean score at 0.05 level of significance . The study revealed that using mapping in teaching reading comprehension activated students highly to be satisfied with their reading ability. It also demonstrated that the students expressed their deep enjoyment while working in groups and using mapping in learning reading comprehension. The students also liked to use mapping in learning all subjects. Moreover, the students expressed their profound excitement while learning reading comprehension by using mapping.

Actually, mapping offers learners with helpful demonstration; therefore, students can improve a clear and meaningful understanding for the text they are reading (Fiktorious, 2013).Sabbah (2015)asserted that applying mapping in teaching reading comprehension is beneficial because it improves learners' abilities by connecting ideas and concepts with each other . Moreover, it affects their achievement positively leading to greater results. When mapping is equipped with ITC tools , it has deep and profound effects on learning. Padang&Gurning(2014)indicated that applying mapping while teaching reading comprehension lessons assists to discover connections between the main and minor ideas ; hence, it motivates learners to categorize and simplifies them to develop their understanding. Stephen and Hermus(2007) emphasized in their study that mapping assists visual learners to understand reading texts clearly and easily since it visualizes the main ideas and connects them with each other. That is, when mapping depicts the reading text by a diagram, it attracts learners' attention and highly motivates them. Buzan (2010) stressed that mapping strategy is an effective recalling and thinking technique which can be used to take notes, summarizes reading texts, planning, organizing and fostering creative thinking; therefore, this strategy helps learners to grasp easily any reading text ,even complex ones. Since the strategy eases the process of writing the main topic in front of the

learner ; hence, it will be easier for the learner to respond to teacher's questions depending on and using their previous knowledge.

Mapping structure offers to teachers the necessary tools that assist learners to reach great achievement while learning reading comprehension. The structure of mapping eases the process of improving learners' reading comprehension abilities to comprehend and grasp the gist of the reading passage since it stimulates their creativity and thinking skills. Moreover, the structure of mapping facilitates simplifying larger texts into smaller units . It also eases achieving communication while learning since it strengthens students' comprehension of the text itself (Gorijian , 2008)

Jiang(2007) in a study about using mapping in learning reading comprehension, which lasted for 16 weeks on Chinese EFL students, found by the analysis of students' responses through a survey ,that learners had positive attitudes towards using mapping in learning reading comprehension. They expressed their deep enjoyment and excitement while learning reading comprehension by using mappping. Brinkmann(2003) found that mapping increased learners' academic achievement and develops their reading comprehension understanding.

The Impact of Using Mapping on Students' Achievement

Harkirat , Makarimi& Anderson (2011) stated that the achievement of the students who learned and taught reading comprehension using constructive learning techniques such as mapping was higher than the students who learned by the traditional ways. Buzan (2003) found that applying mapping, in teaching enhanced learners' achievement in science. Besides, Orhan(2007) demonstrated that applying mapping in teaching science has fabulous and positive effects ,and outcomes on learning academic achievement and attitudes towards science. That is, mapping offers a system which encourages thinking, observation and involvement which are necessary in teaching in general; of course,the students were highly motivated and engaged while learning by using mapping.

Horton et al. (1993) found that mapping strategy enhanced learners' achievement scores when it was used in learning and instruction. Nesbit&Adescope (2006)indicated that mapping also fostered knowledge retention which helps learners to recall and remember

the information they learn easily and successfully. Steyn De Boer(1998) implemented an action research project to investigate the effect of using mapping in learning on students' achievement . The number of learners who participated in this study was 35. The study aimed at discovering the effect of using mapping as a study strategy for science and math students at the University of Pretoria in Africa. Most of the students found that students' achievement and grades were highly increased after using mapping in learning. Furthermore, Abi-El Mona and Adb-El-Khalick (2008) investigated the impact of applying mapping in learning on 8th graders' science achievement. Sixty two students were the participants. The researcher divided the groups into two groups : experimental and control groups. The experimental group had higher scores than the control group; therefore, the researcher concluded that using mapping affected students positively and increased their achievement as well as their understanding. In addition, Padang&Gurning(2014) conducted a study to investigate the impact of using mapping in constructing written texts. The sample was thirty students. It concluded that using mapping in teaching writing could significantly increase students' achievement and helped the teachers to prepare their lessons in an organized way. It also could positively affect students' satisfaction ,motivation , performance and enjoyment as well as it could improve their scores. The study also pointed out that the students were entirely engaged and involved in learning while using this strategy. Furthermore, Saed&Al-Omari(2014) conducted a study to investigate the influence of using mapping in developing writing achievement. Ninety one female EFL students participated in the study in Jordan at Sands National Academy during the first semester of the academic year 2013/2014. The participants who used mapping in learning writing were able to summarize, plan, organize and produce texts easily which affected their achievement and performance positively. That is, the students could express themselves easily as well as they performed amazingly.

The Effect of Mapping on the Writing Skill

Actually, it was also found in many studies that mapping affected positively writing ability. For example, Afriani (2012) studied learning of key words to write a descriptive text by applying mapping strategy in writing. Afriani discovered that mapping improves students' creativity; that is , the keywords aid students to discover new words. The structure of mapping attracts learners to freely express themselves. In descriptive writing,

mapping assists students to think about the noun of the object and then about the adjective from the noun; hence, it eases the process of descriptive writing. Kele(2012)found that mapping was a powerful technique in learning and developing learner's creativity in writing; of course, the strategy itself does not aid only teachers to link the subjects with each other ,but it stimulates students to play active and effective roles while learning descriptive writing.

In addition, Al-Jarf(2009)indicated that mapping eases the process of creating effective writing teaching since it develops writing skills and students abilities. Of course, it aids learners in thinking, brain storming, generating new ideas and connecting topics with each other. Al- Jarf also emphasized that mapping is an effective tool in teaching writing because it assists students in generating and summarizing ideas, developing recalling and remembering, sharing ideas and thoughts, and students engagement and involvement. Hence, it makes the topics and ideas more vivid and tangible. The study also found that mapping improved students' performance in writing. The students could be more faster, successful and effective in finding , generating and connecting in their paragraphs ; that is, the study found that mapping strategy affected students' attitudes towards writing positively.

Since mapping motivates deeper understanding of ideas and topics, it can be effective in planning learners' writing(Swan,2011). Furthermore, Hollnad, Holland and Davis (2003;2004) conducted a study to discover the impact of mapping strategy on university students' performance and planning. Seventy nine students from the School of Computing and Information Technology(SCIT) and 30 students from the School of Arts and Designs (SAD) participated in the study; they were trained on mapping software. To check the effect of mapping, students were asked to respond to a questionnaire at the beginning and end of the semester. The results indicated that mapping is a powerful and effective technique , and most students showed that this strategy had a positive effect on developing their writing skills and abilities. Besides, Michael Geleb(1998) found that mapping strategy eases and promotes the cohesion of thoughts, ideas and topics. The structure itself attracts students' attention to participate in discussions and be active in learning. Of course, because mapping aids students in brain storming, generating ideas , connecting ideas with each other and summarizing ideas, it ;thus, it improves students' abilities in essay writing.

Moreover, Hedge (1998) indicated that mapping is a useful prewriting and note-taking strategy which can be used to direct students towards effective and powerful writing; it also can be used as a solid background and director in writing assignments. Also, Hayes (1992) found that mapping helps students to arrange thoughts effectively into an organized pattern; in addition, mapping minimizes the degree of difficulty that students encounter when they start writing since it reduces students' tension by showing elaborations and attracting them to focus on the task; that is, they can be entirely and actively engaged.

Besides, mapping is seen as a beneficial and useful pre-writing tool which enables learners to plan, prepare, explore, brain storm and connect, summarize ,rearrange ideas and topics. Of course, when topics and ideas are organized, the written texts will have strong and deep meaning; mapping can be a great writing strategy since it has pictures, symbols and images, keywords that can attract different kinds of learners: spatial, kinesthetic and especially visual learners (Gardner, 1985, 1999).

According to Novak(1993)mapping is based on and supported by the theory of human constructivism. Novak indicates that mapping aids learners in hooking the previous knowledge by using demonstrations such as visual and numeric effects which can attract learner's attention. The learners are entirely engaged from brain storming until the final draft of the text. Thus, hooking ideas, which mapping software offers, makes this strategy useful, beneficial and productive in teaching writing.

Scarcella& Oxford (1992) found that mapping plays a pivotal role in developing writing skills in general and prewriting skills in particular. This strategy enables students to think, plan, generate, gather, arrange, connect and write their ideas; thus, their performance in learning will be developed. Moreover, Leyden(2014) showed that using mapping in teaching languages skills, especially writing, is beneficial and useful. Mapping can be used as a pre- writing activity which can improve students' learning abilities and increase their performance level. That is, the use of pictures, arrows , symbols and lines in an organized way eases making writing interesting, enjoyable and useful since it matches different learning styles; of course, the structure of this strategy facilitates the process of

generating ideas, connecting them with each other, creating a positive influence on student's mind.

Mapping is a useful strategy in teaching writing since its demonstrations provide learners with the required tools to generate, connect and write ideas(Deshatty&Mokashi, 2013). In addition, Mapping is characterized by writing the main topic in the center and the related ideas will be connected with the main idea. Thus , this technique can demonstrate different topics and ideas in writing, and it can be used for different types of writing such as argumentative, narrative , descriptive and persuasive writing(Riswanto&Prandika, 2012). Besides, Naqbi (2011)conducted an action research about using mapping to develop writing skills in UAE Schools. The sample was a group of 11th Grade female learners who learn English as a foreign language. Naqbi collected data using interviews, observations and sample of work performed by students. The study concluded that mapping is a powerful tool in improving students' cognitive skills; that is, it improves recalling and remembering abilities, and it eases hooking previous knowledge; hence, students will be able to generate ideas easily and successfully. The study found that mapping had a positive influence on students' writing abilities and information retrieval skills; the researcher also indicates that this strategy is a useful tool which helps students in planning writing and motivates their deep understanding of different topics and ideas. Buzan(2006)indicated that mapping structure helps students in writing short notes which relate to the main topic and facilitates linking them with each other.

The Effect of Mapping on Studying, Teaching and Learning

Buzan(2010)found that mapping helps students to be creative and assists them largely while taking notes and summarizing books, lectures, conversations and different texts. Hence, mapping is necessary for explaining, summarizing, writing, reading texts and connecting different topics together by providing meaningful demonstrations. In addition, Buzan (1989)indicated that mapping improves learning since it develops creativity , productivity, planning and recalling. Applying mapping in learning makes it enjoyable and fun.Gahr(2003)discovered that mapping enriches classroom activities since it provides visual aids and demonstrations ; thus, it attracts students to work letting the teacher to observe the students while they are learning in contrast to the traditional ways of learning

,which compel teachers to work and make the students observers for what their teachers are doing .

Moreover, mapping can be used to improve learners' memory;they are beneficial in classifying, categorizing and organizing different kinds of information; hence, they increase the information retrieval and retention (Buzan,2000).Furthermore, mapping lets students to be creative and participate effectively by delivering their opinions using the visual aid represented in the map. In addition,mapping has several advantages that have a crucial role in learning. First of all, it improves learners' concentration on a specific subject. Besides, it assists students to discover and explore connections between different ideas and topics. Also, it can ease the process of achieving communication in teaching and learning. Furthermore, it aids connecting and linking ideas together; they also increase learner's concentration on a specific task.Mapping also helps students in revising information, texts and exams. It simplifies complex systems and material since it divides topics and ideas in an arranged way (Buzan,2010). Furthermore, Hey et al.(2008)found that mapping aids learning in acquiring knowledge and deep learning. Buzan(1993)pointed out that mapping motivates the left and right hemisphere of the brain, helping learners to reach difficult ideas easily and successfully. Stephen and Hermus (2007)found that mapping is an effective technique which teachers can resort to in order to make their teaching interesting, enjoyable and useful by connecting ideas together.Wandresee (1987)found that mapping is a useful assessment tool that can show what learners have by knowing their knowledge and assess what they know and what they do not know.

Farrand, Feazana and Hennessy (2002)stated that mapping also helps students in studying and motivates them to learn things clearly since everything is illustrated by the software which mapping provides . That is, it can be a powerful studying tool especially when it applied to written texts .Goodnough and Woods(2002)conducted a qualitative, interpretive case study on two-sixth grade and two-fifth grade classes. The study concluded that students perceived mapping in learning as a funny and enjoyable tool; it motivates them to participate, share ideas, experience and express themselves successfully in different contexts.

Besides, mapping is a vital, useful and enjoyable technique that helps learners to structure their understanding of concepts and attracts the students to be productive. Since mapping is related to graphic organizers, it can aid learning by offering brain storming, recording data, assessment, problem solving, critical thinking, note taking, summarizing and proving the connections between different topics and ideas(Mona& Adbkhalick,2008). Also, mapping assists learners to discover the relations between the major and minor topics, and ideas (Keles,2011).

In addition, mapping enables learners to construct useful links which illustrate the presented information (Evrekli et al ,2009). Mapping can improve learning and teaching to be more productive, active and tangible. Mapping activates brain storming and enables learners to freely express about themselves without limits or restrictions; thus, it promotes critical thinking and sharing ideas(Martin Davies, 2011). Chin(2010) indicates that mapping has several positive effects on teaching and learning since it can be used successfully in training development, collecting , organizing ideas, brain storming and problem solving. Pekonenen(1997) found that mapping affects students' achievement in learning mathematics positively. Besides, Brinkmann(2003)stated that mapping is a useful and active technique in teaching mathematics since it has many advantages. First of all, it enhances learners' creativity. Moreover, it can be helpful in categorizing information in an organized way. In addition, it can introduce new concepts and ideas easily and attractively. Besides, it develops learners' creativity.

Furthermore, mapping aided accounting courses students in learning. It could hook their prior knowledge and connect it with their current and accounting knowledge, making the process of learning interesting and enjoyable by adding pictures, colors and links (Chei-Chang Choi,2008). Also, mapping assists students to learn effectively since it attracts their attention by its visual representation; it also lowers extrinsic cognitive pressure and load on students' memory, leading to create effective learning (Nesbit &Adesope,2006) . Beside, mapping is a powerful learning technique which aids learners to connect the material in a classified and arranged way (Budd,2004). Actually, applying mapping allows teachers to use a variety of teaching methods to the lesson objectives ; thus, it compels teachers to take into consideration the individual differences between students, leading to great results in learning (Nesbit& Adesope,2006).

In fact, mapping helps students to participate and engage in learning; that is, the software of mapping assists students to interact with the textbook, other students, the teacher and learning environment. When interaction happens, great results in learning will be achieved and students' learning will be reinforced by a social agent (Salmon & Perkin, 1998). Of course, mapping has a lot of educational benefits. First, it is an effective brainstorming tool which eases the process of sharing ideas and fosters the process of expressing oneself. Second, it sheds lights on the main topic and connects it with minor topics and ideas. Third, it makes learning interesting and enjoyable since everything is illustrated and connected with other things. Fourth, mapping technique helps teachers and learners to manage time and enhance learners' productivity. Last, mapping can be used to implement different EFL classroom activities and it matches different learning styles, especially visual learners (Murely, 2007).

Actually, Al-Jarf (2011) found that mapping can be used to improve learning practices and demonstrate vivid connections between different topics. It can help in managing thoughts, guiding teaching and learning, organizing pedagogical content, and activating the left and right hemisphere of the brain, leading to great results in studying, problem solving, critical thinking, recalling skills, memory enhancing and visual instruction. Besides, Irvine (1995) stated that using mapping in learning has several benefits. First, it aids students to explore the relationships and connect between the material itself, and major and minor ideas. Second, it gives the student the ability to link and connect different topics and ideas together. Third and last, it assists learners to interact with the texts and the surrounding effects leading to great results in memorizing, and deep and meaningful understanding.

In addition, mapping is a useful technique for teaching and learning languages which assists teachers to introduce new topics, and connect different words and ideas in one subject (Fiktorious, 2013). Mapping is a useful teaching and learning tool since it facilitates the process of communication. Moreover, it is useful by introducing new ideas, and it can ease students' involvement and engagement (Goldberg, 2004). Besides, mapping has a great and positive effect on supporting learning differentiation and clarifying lessons easily (Budd, 2004; King, 2015). Mapping improves learner's creativity and increases their deep understanding of the subject they want to learn (Zampetakis, Tsironis & Moustakis, 2007). Furthermore, mapping assists the brain to create associations and make connections

between different ideas, subjects and concepts, helping the learner to recall and remember them in the future (Gomez and King, 2014). Of course, Buzan found that mapping strategy is a good method that assists students in creating different connections which can improve and develop one's competence to receive, process and produce information while learning (Buzan, 1993). In addition, mapping frees students thoughts and ideas; it hooks their previous knowledge, and improves their current knowledge and understanding (Long & Carlson, 2011).

Mapping is a powerful technique that assists learners to encounter and face learning difficulties; the software of mapping, which provides connection, images and keywords, encourages students to think instead of memorizing (McGriff, 2007). Gardner (1985 & 1999) found that mapping structure helps students a lot in learning and teaching; it does not only help teachers to teach effectively, but it helps the students to analyze, observe, think and connect different things together. Mapping also can tap the eight types of intelligences which Gardner identifies since mapping works as learners' brain function; it provides keywords, pictures and connections that ease the process of learning and makes it easy, interesting and effective.

Moreover, mapping and outlining are useful educational tools that are used to develop learning. The structure of these tools allows learners to receive, process and produce information; hence, they ease the process of creating meaningful and effective learning (Ausubel, 1969; Novak, 1981). The structure of mapping fosters learning by aiding it using the graphic organizers which stimulate the whole brain to work effectively (Margulies, 1991). Of course, mapping has deep effects on learning since it permits individuals to add pictures, make connections and organize information in different ways and positions (Ausubel, 1969). Mapping has great effects on students since it makes the process of learning enjoyable; it enhances brain storming and problem solving. Applying mapping helps students to develop their competence and performance (Peterson & Synder, 1998). Also, using mapping can develop learner's ideas since it has an effective visual design that helps students to easily connect different ideas together and it encourages learners to be active learners (Padang & Guring, 2014)

Jones et al (2012) found in a study investigated the effect of mapping activities on students' motivation that the students who used mapping were more active and interested in learning; they entertained a lot while learning. The study included 40 undergraduate students who took an educational psychology course at U.S university. The study also revealed that mapping is active, powerful and beneficial learning tool which eases the process of learner's involvement and engagement. Barambe(2012)found that mapping offers beneficial focus for learners to arrange their ideas in order to demonstrate information easily and effectively by using visual representations. Besides, Liu, Ma& Bo (2014)indicated that mapping is a useful educational method which depicts the relationships between different ideas and concepts. This useful technique shows the relationships among different topics; thus, it is important in enhancing learner's understanding. Yunus and Chien (2016)showed that mapping is an efficient tool in teaching learning since it has deep and positive effects on learners. Also, Malekzadeh and Bayat (2015)found that mapping supports learners by organizing their thoughts in a meaningful and structured way which aids them in demonstrating and discussing information in front of their audience. It also helps students in simplifying and elaborating learning, making everything clear and simple, especially for visual learners. In addition, Pashie(2009)found that mapping is an effective technique and tool which guides and directs learners while learning; thus, learners will be active and will not be confused or reluctant to participate.

Also, mapping is a useful educational tool that connects learners prior knowledge with the current and upcoming knowledge, making the process of learning enjoyable, interesting and meaningful (Zaho, 2009).Furthermore, mapping is a beneficial and pedagogical technique which helps learners to arrange and organize their knowledge , and minimize wasting time during learning (Grant,Rubash&Neelly,2005).Besides, mapping plays a positive role in the educational practices. First, it fosters and enhances active learning. Second, it improves communication among students. Third, it eases receiving and giving feedback. Last, it takes into consideration learners' differences and diverse ways of thinking (Chickering and Gamson, 1999). Besides, using mapping in nursing education showed that mapping was a useful strategy which improved learners' ability in memorization and recalling; it also fostered learner's engagement and involvement in learning (Spencer,Anderson and Ellis,2013). In addition, Jewels and Albon(2012)found that

mapping is one of the best instructional techniques to instruct Arab learners since it has various benefits. First, it provides a useful summary of the lesson for EFL students. Second, it eases the process of memorizing, recalling and remembering. Third, it fosters students' motivation and encouragement. Last, it improves their educational engagement.

Furthermore, mapping has different pedagogical advantages. First, it helps in revealing prior knowledge and fostering problem solving. Second, it stimulates the right and left hemisphere of the brain. Third, it reduces the amount of time used in learning, studying and memorization. Last, it enhances students' concentration on a specific topic or subject (Everkli and Balim 2010). The structure of mapping eases focusing on and emphasizing the more basic and important ideas. It activates the right and left hemisphere of the brain, encouraging learners to concentrate and think creatively (Somers et al, 2014). Moreover, mapping is an effective learning tool which can enhance learners' curiosity and encourage them to be active while implementing different learning activities (Grabe, 2009).

Besides, mapping permits learners to create a comparison and contrast between different ideas, concepts and subjects; hence, it helps students to reach deep understanding (Strangman et al. ,2003). Also, Hofland (2007) found that mapping is a useful technique which offers L2 learners with deep and powerful retention, concentration and memorization of the new words in the target language. In addition, Miao (2007) found that using mapping in learning is very useful and interesting since it helps learners to be motivated, and it assists them in using and applying new words, ideas, concepts and topics successfully and efficiently. Furthermore, Kotcherlakota, Zimmerman & Berger (2013) found that mapping assists students in simplifying and organizing the knowledge they receive, and it helps them in writing research, especially writing literature review and theoretical framework. Furthermore, Hanewald (2012) indicated that the open ended structure of mapping helps students in improving life-long learning skills, leading to great learning development. Mapping has an important role in teaching and learning, and it can be used in many ways for different purposes. For example, Boyson (2009) found that using mapping in teaching and learning has many benefits. First, it can be used as note-making facilitator which improves the teacher's competence and performance. Second, it can be used to illustrate and show information to learners while teaching. Third, mapping can be used as a note-making design for learners. Last but not least, according to teachers' perspectives,

Mapping can be used while planning, resulting in increasing understanding of the objectives and the content which fosters the process of recalling the subject matter.

Summary

Indeed, according to the previous studies and according to the literature discussed in this chapter, mapping was used for different purposes, and it has many important benefits that positively affect learning and teaching. First of all, using mapping improves recalling, generating and visualizing ideas. In addition, it improves long-term memory. Furthermore, it can be an effective tool in promoting active learning, fostering motivation, introducing new concepts, presenting new information and memorizing factual information. Besides, it enhances critical thinking and co-operation, and they increase learners' understanding and memorization for reading comprehension passages. Moreover, mapping has positive effects on learning reading comprehension and writing skills; that is, it was shown that applying mapping in learning reading comprehension could improve learners' reading comprehension abilities and positively affect their achievement in different skills, abilities and fields. Also, mapping was shown as a useful strategy in learning, teaching and studying; of course, it motivates and encourages students to be active, letting them to benefit from the interesting learning atmosphere which provides and eases the process of achieving communication in learning (Afriani, 2012; Kete, 2012; Beki, 2009; Astimaty, 2011; Buzan, 2003; Orhan, 2007; Gahr, 2003; Hermus, 2007; Kele, 2011; Chin, 2010 & Brinkmann, 2003).

However, there are no previous studies investigate the effectiveness of using mapping as a game in learning reading comprehension. Thus, the current study aims to investigate and explore the effect of using mapping as a game in learning reading comprehension. The study also seeks to provide evidences to support the impact of using mapping in learning reading comprehension. It also intends to demonstrate real implications and recommendations in order to encourage teachers and policy makers to support using mapping as a game in teaching reading comprehension.

Chapter Four

Research Methodology

The current study investigated the impact of using mapping as a game in teaching reading comprehension. The study aimed to teach reading comprehension through applying the invented method, by the researcher, which aims to use mapping as a game. The game is characterized by giving the first letter/s of the answer, letting the student to think and guess the answer. If the student doesn't know the answer, additional letter/s is/ are given as scaffolding. That is, the teacher scaffolds the students with the answer without giving it. From the literature reviewed previously, it is obvious that mapping can be applied to school-level students. This chapter demonstrates the research design, and procedures for collecting and analyzing data, depending on the stated research questions mentioned previously. The qualitative data was collected by the researcher's observation to provide quotations only. However, the quantitative data was collected by a perception questionnaire and a pre and post- test.

Location of the Study

The study aimed to explore the impact of using mapping in learning reading comprehension. Particularly, using mapping as a game in teaching reading comprehension was used in English language classes at a public school in Ramallah and Al-Bireh District in the West Bank. The school is Ramallah Secondary Girls School. The sample school is a large-sized secondary school. 11th grade students are the target population of the study. The number of 11th Grade students in Ramallah Secondary Girls School is 170. The study participants included 72 eleventh grade students. 36 of them worked as the experimental group and the other 36 worked as the control group. Data collection was conducted for the second semester of the scholastic year 2017-2018. It was implemented from January 20th, 2018- March 20th, 2018. The school was chosen for the following reasons. First of all, the school locates in the centre of Ramallah city; thus, it is easy for the researcher to be there at any time. Moreover, the school has a teacher who attended a training session for me two years ago about the use mapping as a game in teaching reading comprehension; hence, it will be easy for me as a researcher to implement this study at this school. Besides, the students of the school are from different backgrounds; that is, some of them are from the city, others are from refugee

camps and others are from near villages. In addition, the principal of this school highly supports educational activities. Furthermore and the most important reason, the school has smart boards and all the technology equipment needed in teaching; thus, the presence of these facilitators will not waste the time of the students and their teacher on copying the questions, texts and shapes; hence, the focus will be on the process of learning and activating the students. The population of the study, eleventh grade students, was deliberately chosen for various reasons. First, the students of this age are supposed to have the basic skills and knowledge which enable them to speak, read passages easily and evaluate the effectiveness of the strategy implemented to improve their skills and abilities, and have some such awareness of the improvement in their performance after using the previous strategy. Second, the subjects of the texts in 11th grade book are various and different; thus, it can be useful to conduct this study on this grade. Hence, the current study is an improvement attempt to develop the status quo of teaching reading comprehension in the Palestinian public schools.

Research Design

The basic aim of the study was to test the impact of mapping on eleventh grade students' reading ability. It also aimed at showing the reading skills that students improved after learning reading by using mapping, and their attitudes towards learning by using mapping. The current study employed quasi-experimental research. That is, it contained a control and experimental groups, deliberately selected by the researcher taking into consideration the following criteria. First, the teacher who was trained previously taught the experimental group how to use mapping as a game during teaching reading comprehension. Another class was chosen to be taught using the traditional way of teaching reading comprehension; that is, I chose the class whose students number was equal to the other class. That is, it was 36 students. Besides, the other two 11th Grade classes in the school were busy with other educational projects; therefore, it was better to choose a group that was not working on other educational projects. The study depended on different research methods to efficiently answer the research questions. Qualitatively, students' interactions were closely observed by the researcher along the period of teaching. The researcher wrote all details, needed information and attitudes observed along teaching period. The observations were used to provide quotations to support the results of the study. Quantitatively, pre and post

test was conducted to find out the impact of mapping on student's achievement. The test was designed to discover the impact of using mapping as game in learning reading comprehension between the experimental and control groups. The test itself was conducted for the two groups before and after the intervention period .

To compare between the achievement of the experimental and control groups along the study period , a pre and post test was conducted. In addition, a questionnaire was used to demonstrate students' attitudes towards using mapping as a game in learning reading comprehension.

Procedures and Training

Retraining the teacher who taught the experimental group took one session. Training the experimental group of students ,by their teacher, on using mapping as a game in learning reading comprehension took two classes before real teaching. The goal was to familiarize the teacher and the students to deal easily with this strategy and method. That is , the teacher received training by the researcher on three reading texts. Later, the teacher trained the students on those three texts later.The researcher introduced the steps to work effectively and efficiently with this method. Palinscar and Klenk(1991)found that teaching by using a specific tool to a specific group of learners is highly achieved when they informed when and how to use it successfully. Using mapping as a game training involved a presentation of some samples which will be illustrated later.At first, the researcher introduced the general idea of mapping used in learning reading comprehension. In addition , the second practice focused on how one can answer the questions written on the converted mapping using the first letter of the word written on the map. The Students were trained by their teacher to learn reading comprehension by the following steps. First, the students should read the questions given on the text. Second, they are supposed to read the map . Third, they are supposed to the read the given passage, trying to fill the map by receiving scaffolding from the map itself. If the student does not know the answer, the teacher gives the students more letters until she knows the answer; of course, the teacher should not give the answer . Last, the students participate by giving the answer by themselves when the teacher asks the given questions. The process of teaching reading comprehension by using mapping as a game will be clearly elaborated in the training guidelines page 48.

The Reading Tasks (Texts)

The reading mapping samples used in the study were designed on the texts taken from the English 11th Grade textbooks (English for Palestine). The mapping samples were designed on the texts taken from the first three units of the second semester material (Units Seven, Eight and Nine). The training samples were taken from the first semester material Reading Plus Book (Unit Two). I chose these samples since they are simple for training the students and retraining the teacher. The ten topics were:

- 1) Unit 2
 - a) Adventure and extreme sports
 - b) Skateboarding : an international adventure sport
 - c) An adventure too far !
- 2) Unit 7
 - A) The food on your table " Slow Food"
 - b) Genetically modified world.
- 3) Unit 8
 - A) Amazing animals
 - B) Alan Finn
- 4) Unit 9
 - a) Global tales
 - b) Highly intelligent stories
 - c) Ali Baba and the 40 Thieves

Specifically, the samples of unit two were used in the training while the samples of units seven, eight and nine were used during the process of teaching ; that is, the pre and post test was built on these samples and texts (Units Seven, Eight and Nine). The experimental group was taught using the samples of mapping while the control group was taught on the same topics without using the samples of mapping. These samples were collected in a booklet.

Preparing the Booklet of Mapping Slides

To ease the process of implementing this study, I (the researcher) converted the texts into maps and the maps into games, adding the required questions on those passages. That is, all the questions needed for the teacher to teach reading comprehension using this method were available in the booklet(see appendix D). The booklet contained the original texts which were available in the book. The booklet also contained ten mapping samples designed on these texts . The mapping samples were numbered. Every map had different parts ; every part was numbered to answer the question which carried its number. Number one stood for question whose number was 1 . Number two stood for question whose number was two. Number three stood for question whose number was three as the following figures represent.

Read the following text silently and answer the questions that follow
<p>Ali Baba and the 40 Thieves*</p>
<p>Ali Baba was a poor woodcutter. One day, while he was working in the forest, he saw 40 thieves arrive in front of a cave. He hid behind a tree and watched what they were doing. He heard the leader of the thieves shout 'Open Sesame!' and was amazed to see the door of the cave open. The men went inside, and then some time later came out again. The leader said 'Close Sesame,' and the cave entrance closed. Ali Baba realised that this was where the thieves kept their stolen treasure. After the thieves had left, he used the same words to open the cave and was excited to find that it was full of gold, money and other valuable things. He took some gold coins home and showed them to his brother Kasim, and told him all about the wonderful cave. Kasim decided to go and get some of the treasure too. He managed to get into the cave but forgot the words to get out again. When the thieves came back, they found Kasim and killed him.</p> <p>When Ali found his brother's body in the cave, he took it home with the help of a clever girl called Morgana. When the thieves returned and found the body was gone, they realised that someone else knew the secret words. They found where Ali Baba lived and the leader visited him, pretending to be a seller of oil. He had jars with him, but instead of oil, they contained the other thieves, hiding inside.</p> <p>Luckily, Morgana knew who the oil seller really was. She poured boiling oil into the jars, killing the thieves, then later killed the leader too while she was dancing for him. In return for her help, Ali Baba said she could marry his son. He told his son the secret words, and later the son passed the secret to his children. So Ali Baba, his children and his grandchildren were rich for the rest of their lives.</p>

Figure 1: Reading Text

The text talks about _____

- 1) Who was Ali Baba ?
- 2) Who did Ali Baba See ?
- 3) What did the leader say to open the door ?
- 4) What did Ali use when the thieves left ?
- 5) What did Ali find ?
- 6) What did Ali tell his brother(Kasim) about ?
- 7) What did Kasim forget ?
- 8) Who did the thieves kill ?
- 9) How did Morgana help Ali Baba ?
- 10) Who could Morgana marry?
- 11) What happened to Ali's family ?

Figure 2: Questions on the Reading Text

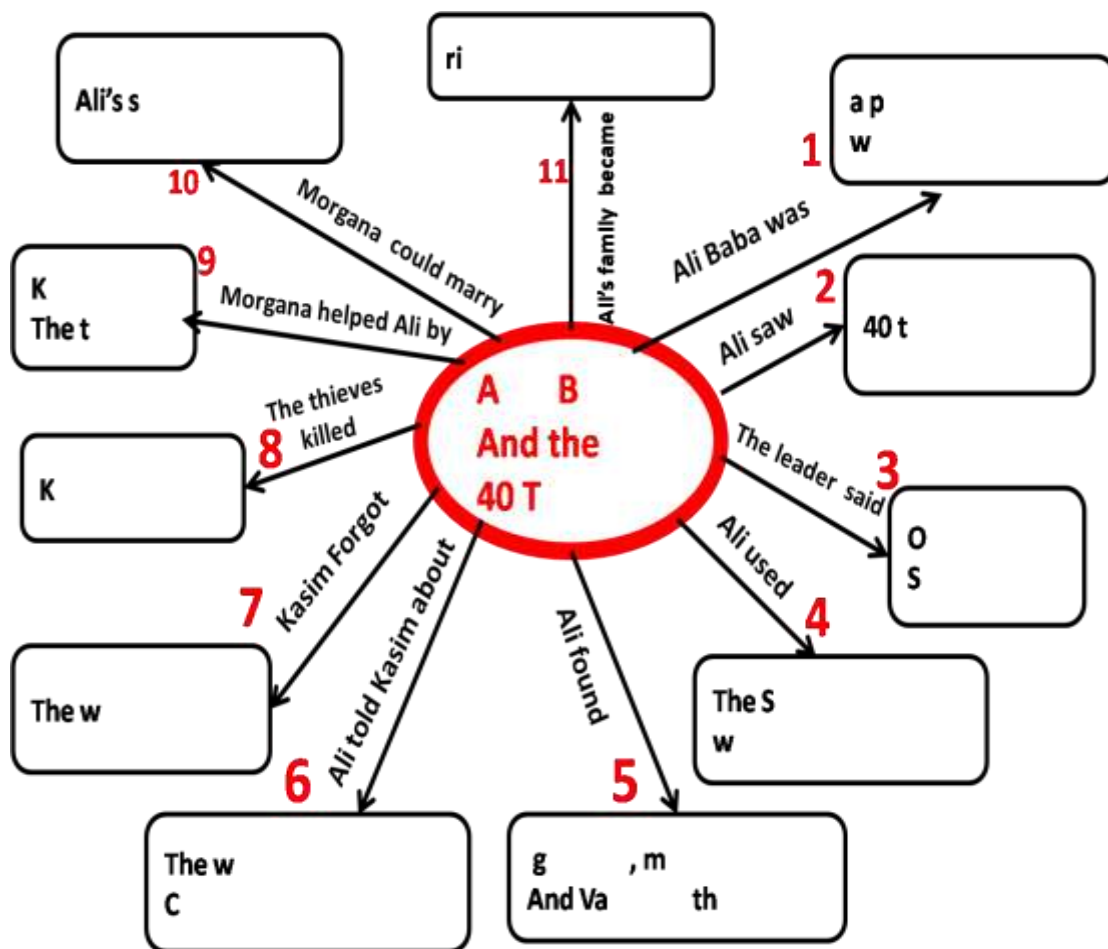


Figure 3: Using Mapping as a Game in Learning the Reading Text

I prepared 37 booklets; a booklet for the teacher and 36 booklets for the experimental group. The teacher was given a soft copy of this booklet in order to present the slides in front of her students while teaching ; thus ,she did not waste time to draw the shapes and write the questions on the board. The students also did not need to copy what she drew or wrote; hence, it saved time. The reason why I chose to prepare a booklet for the teacher and the students was to overcome the problems and hardships the students might face when they were given a paper every class , and they could lose or forget these papers after the class. When I gave them the papers as a booklet, it was not easy to lose or forget it . They could keep it with them during the study period.

Training Guidelines

To ensure the effectiveness of teaching the experimental group on using mapping as a game, I (the researcher) retrained the teacher on using this method in teaching reading comprehension for one session (two hours). The training provided the teacher with a number of guidelines that aimed to improve and guide her practices in teaching reading comprehension using this method. The guidelines are the following:

- 1) The teacher should be sure that every student has the booklet of the mapping samples , which was prepared previously by the researcher and given to the teacher .
- 2) The teacher should be sure that the slides of this lesson, as a soft copy, which were prepared previously by the researcher and given to the teacher, are presented in front of the students, instead of wasting the teacher's and students' time by drawing the map and writing the questions on the board .
- 3) The teacher distributes the students into groups. Every group has 6 students who are supposed to do different tasks(every two answer specific questions).
- 4) The teacher asks the students about the title of the lesson and asks them to describe it.
- 5) The teacher reads the questions for the students. Of course, the answer should be taken from the passage (the questions ask about the major and minor ideas of the text , definitions ,and synonyms and opposites from the text)

- 6) The teacher distributes the tasks to the students for the first time, the students should distribute the given tasks to themselves by themselves later. The tasks are : answering the given questions ,summarizing the given passage and presenting the reading comprehension text using the map presented in front of them .
- 7) The teacher shows students that every question has an answer from the text, and the first letter/s of this answer is written on the given mapping shape given. The number of the question matches the number written on the mapping shape. For example, question number one has an answer on the mapping shape where number 1 is written. The first letter/s of the answer will be written beside the number . The answer is written in the text. The number of the question 2 will be written on the map 2. The first letter/s of answering the question number 2 will be written beside number 2.
- 8) The teacher asks the students to read the passage silently, the questions and the map, and write the answer of every question on the given place on the map.
- 9) After giving the students sufficient time to answer the given questions, and completing the map, definitions and other words ,the teacher asks the students to answer the first question.
- 10) The teacher listens to the answer of the first question and writes it in front of them, on the map which is presented on the board.
- 11) If the students do not know the answer, additional letter/s can be given to help them till they know the answer ; that is , the teacher should not give the answer to any student as it is ; of course, the teacher's role is to help them find the answer if they do not know the answer .
- 12) The teacher repeats this process for all the given questions, and the teacher should be sure that she listens to the answers from new students ; that is, the purpose is to let all students who could not or cannot participate by scaffolding them.
- 13) When the teacher receives all the answers, the map will be completed. Thus , the teacher asks the students who work in groups to summarize the lesson by using the completed given map .

- 14) The teacher asks every group to choose a student to present the lesson using the given map, which will be shown with answers on the board, in front of her colleagues.
- 15) The teacher asks the students if they have any questions regarding the lesson.

Instruments of the Study

The instruments of the study are the following:

1)Pretest/ Post Comprehension Test : the pre and post tests(see appendix A) were designed to check the differences in students' achievement and improvement in reading comprehension ability before and after implementing the study. They were designed according to the goals of the target units. The students were given 90 minutes to answer the questions of the exam . It is divided into three parts. The total mark is 60. The first part's share is 20. The second part's share is 20 and the third part's share is the same. Every part has a variety of questions. Since this study focuses on three units (7,8,9) as mentioned previously , I (the researcher) tried to design a test that covers all of the units. For instance, the first part aims to check students' achievement in unit seven .However, the second part aims to check students' achievement in unit eight as well as the third part aims to check students' achievement in unit nine.

Moreover, the three parts of the pre and post test have the same form of questions; every part consists of 6 questions. The third part has a difference in the question number two . That is, the first part has a passage about "Genetically modified world". The second part has a passage about "Amazing Animals". The third part has a passage about " Ali Baba and the 40 thieves". The first question, which is written in the three parts , has 6wh-questions. The second question in part one and two asks student to replace the underlined parts of the sentences with words or phrases from the text. However, the second question in part three asks students to complete the sentences using words from the passage. The third question in part one asks students about what two pronouns in the passage refer to. The forth question in part one asks students if the sentences written are true / false according the given text . The fifth question in part one asks students to find the opposite of three words from the passage. The sixth question in part one asks students to write the synonym of three words from the passage.

Marks distribution in all parts(part1, part2, part3) is the same; for example, the first question is given six points, the second question is given four points, the third question is given two points, the fourth question is given two points, the fifth question is given three points, and the sixth question is given three points . Therefore, the total mark of every part is twenty.

2)Students' Questionnaire: after implementing this study, the experimental group was asked through a close ended questionnaire(see appendix B) that aimed to demonstrate students' attitudes and perceptions of using mapping as a game in learning reading comprehension. The close ended items are suitable to explore students' attitudes easily about this method of learning since the form of close responded questions can overcome the problem of fluency which students might encounter while expressing their attitudes. The questionnaire was designed by the researcher depending on reflection papers, which the researcher collected two years ago from students who were asked about their attitudes towards using mapping as a game in learning reading comprehension. Some items were taken from related literature review. The questionnaire was edited by a number of referees according to its validity to effectively explore students' attitudes , language use and learning context. The items of the questionnaire were edited by the referees to ensure the effectiveness of these items in order to clearly show students' reaction towards learning reading comprehension by using mapping as a game.

In fact, the attitude section played a pivotal role in showing student's attitudes towards the process of learning involvement. That is, Summers (1977,P.153) asserted that "Attitude research will add an important dimension to the study of effective functioningsimilar pattern will evolve in education and the study of reading attitudes, in particular, could play a significant role in such research".

3)Teacher's Journal : the researcher's observation (see appendix E) for the students' interaction and reaction towards this method of teaching was observed in seven classes. The observations were used as a secondary instrument to provide quotations. Those quotations were used to support the results of the study. Every single observation covered the process of teaching a reading passage from the passages aforementioned in the reading tasks(texts) .

That is, the teacher tried to write a full and clear description about the class interaction for the students and their teacher .

Instruments' Validity and Reliability

A)The pre/posttest : the validity of the pre and posttest was checked by testing the face and content validity. The content validity, which indicated that the exam measures what it aimed to test, was found by analyzing the content of the exam (Kilani&Al Sharafeen, 2011). Moreover, all the questions written in the exam tested student's comprehension of the reading passage. The test covers all the units have been discussed during the experimental period. The first part of the test has a reading passage form unit seven. The second part has a reading passage from unit eight. The third part has a reading passage from unit nine. All the questions should be answered from the given reading passage; that is, there are no irrelevant questions in the test.

The face validity, which is related to how the test looked valid, was assessed by giving the test to five English teachers who teach 11th Grade, two English language supervisors who work at Ramallah and AlBireh Directorate of Education, the central English language supervisor who works at ministry of education and the head of assessment and evaluation center of the curriculum center. They told me that the test is comprehensive and suitable for this grade, and some of them advised me to add and change some questions. For example, they advised me not to use "what" in most of the wh-questions. Therefore, I used "what, where, why how and who" to form the questions. In addition, some of them advised me to be sure that time will be sufficient for students. It was decided to give the students 60 minutes. Then, after the feedback I received, I decided to give them 90 minutes. Later, the test was given to the supervisor to check it. The supervisor improved the test by making some changes. Besides, I observed the process of taking the exam with the teacher, who observed the students, in the pre and post test .Moreover, to let students take the pre and post test seriously, I and the principal encouraged the students that all of them will be rewarded after implementing the study by giving them certificates of appreciation and participation.

Moreover, the reliability of the pre and post test means to what degree the evaluation tool produced stable results (Creswell, 2012). Reliability can be defined to what

extent the test is consistent; that is, if one gives the same exam to the same students or matched on two different occasion, the test gives similar or close results(Brown&Abeywickrama,2010).The Cronbach's Alpha of the pilot test was 0,89 which indicated the test was reliable and suitable for the study purposes.

In addition, the reliability of the pre and post test can be justified that all of the items in the test were objective items. That is, I prepared sample answers for the items of the test , and I discussed these answers with two English language teachers, who corrected the exams with me . The sample answers (see appendix C)have all the required details in grading these exams. Therefore, it reduces the rater's bias, which can affect the results, especially in open-ended questions. Then, we agreed on the final form of the sample answers and how they can grade these exams. The test should be graded for the first time, and the first mark should be written on the circle designed for this mark . Later, the test should be graded for the second time by another grader ,and the second mark should be written on the second circle designed for this mark. If there is a difference in the mark, the test should be graded another time. If they match each other, the final grade can be put in the third circle. Then, the results of the tests should be inserted on SPSS program; if the sum of every paper on SPSS Program matches the mark on the paper, it shows the mark is accurate. However, if the sum of any paper, which was given a number and a symbol on SPSS, does not match the mark on the paper, it shows the mark is in accurate; thus, the problem should be fixed.

B) Student's Questionnaire : to check the questionnaire validity, the initial draft was sent to the supervisor .The supervisor checked and edited it. The supervisor also removed some irrelevant items. Then ,it was sent to five university professors . A professor advised me to remove an item since another item conveys a close meaning . Some of them also advised me to add an open-ended question. Since the observations will be a secondary tool to support the questionnaire, there was no need for adding that open –ended question. Besides, a professor advised me to change the form of the questionnaire from 5 Likert scale to 4 Likert scale. After that, the items of the questionnaire were translated into Arabic. The first version was sent to the supervisor to check it. The supervisor improved it. Then ,it was sent to a committee member who advised me to simplify the language and helped me in simplifying the language. Then, it was sent to two English language teachers to check the translation and language. Some of them also advised me to simplify the language of some

items. Then, I edited some items according to the feedback I received. After that, the supervisor checked it to be piloted later.

The reliability of the questionnaire was shown by using Cronbach Alpha analysis .The questionnaire was piloted for the same number of the students of the experimental group who were 36 students.The reliability of the tool was tested by computing Cronbach Alpha after distributing the questionnaire to the experimental group. The Reliability was 0.86 which was statistically acceptable.

The Study Procedures

The first step of conducting this study was to receive approval from Ramallah Secondary Girls School principal and Directorate of Education in Ramallah and AlBireh District, taking into consideration using the students as the target of this study. The school principal assisted me by providing clear information about the 11th grade sections and students .That is, a group was the experimental and another group was the control group. Conducting the study and data collection were available by the following steps. First, choosing the experimental group which was taught by the teacher who received the training .The number of the students in the experimental group was 36 .Then, conducting the pre – test for the experimental group and control group .Second, the experimental group of students received a training by their teacher on using mapping as a game for three classes before teaching the real tasks. Third, the students of the experimental group were divided into a heterogeneous group of 6 students according to their results in the pre-test. Later, students in the group change their role to take a different role. The teacher's support was available through scaffolding and encouraging students' collaboration . By the end of the study, the students of the both groups were exposed to a post -test in order to discover the differences in their achievement. Moreover, a questionnaire was used to explore students' attitudes towards teaching reading comprehension by using mapping as a game. Last, the researcher's observation was an additional resource to explore students interactions in the class while learning reading comprehension by using mapping as a game.

The Researcher's Role in the Study

In fact , the researcher did not participate in teaching the experimental or even the control group. My main roles were a trainer for the teacher , a second grader for the pre and post test and an observer for the process of teaching and taking exams . That is, I prepared all the material needed to implement this study ; of course, this helped the teacher not to waste her time, I designed the mapping booklet for the materiel which students will learn. I collected the mapping slides and all the required questions on the given texts(the ten texts I mentioned before) in a booklet for the teacher and the students. That is, the purpose was to help the teacher and the students; hence, there was no need to waste their time on copying texts and drawing shapes . The focus will be only on the process of teaching by the teacher and the process of learning by the students.

On the other hand, the second role was to work as an observer for the process of teaching for two reasons .First, observing the classes helped me to be sure that the process of teaching was going well and the teacher effectively implemented the method of teaching.Second, observing the classes helped me to write a journal for the classes I observed, which was written in details to be analyzed later. In addition, my third role was as an observer for the process of taking the exams for the experimental and control groups to ensure that everything was going well. My fourth role was as a second grader for the pre and post test.

Data Analysis

The quasi experimental study aimed to answer the two following main questions :

1. What is the impact of using mapping as a game in teaching reading Comprehension on 11thGraders' achievement?
2. What are the students' attitudes towards using mapping as a game in learning reading comprehension?

To answer the first question, a pre and post test was conducted. The statistical Package for the Social Sciences Program (SPSS) was used to analyze the pre and post test means between the experimental and control groups. Before inserting the data on the statistical Package for the Social Sciences Program (SPSS), the answers

of the exams were coded into two numbers. 1 stands for the correct answer while 0 stands for the wrong answer.

To answer the second question, the questionnaire was used to explore students' attitudes towards using mapping as a game in learning reading comprehension. The questionnaire had 23 items. The Responses were measured through 4 Likert scale that started from (1) strongly disagree ,(2) disagree , (3) agree and ended with (4) strongly agree. Negative items were coded in a reversed way; that is, 1 stands for 4 and 2 stands for 3. The negative items in the questionnaire were 8,11 and 22. Likert scale was used to extract the responses from the questionnaire and then analyze them by the SPSS. The descriptive analysis was demonstrated by calculating the means, standard deviations and percentages of items. Using the four Likert scale, the following key was used to explicate the means.

Table (4-1)

Analysis Key of the Questionnaire

Mean	Degree
Less than 1.33	Too low
1.34-2	Low
2.1-2.7	Medium
2.8-3.4	High
3.5 and higher	Too High

Table (4-1) demonstrates how the means were described .It was built by a specialist in SPSS program. For example, means for the responses that were less than 1.33 were considered too low and represented negative responses on the item. However, the means ranged between 1.34 and 2 were considered low; the means ranged between 2.1 and 2.7 were considered medium. On the other hand, the means that ranged between 2.8 and 3.4 were high, and the means which were higher than 3.5 were considered too high, which represented positive responses on the item.

Summary

This chapter described all the procedures implemented to conduct this study. The research design was presented and explained. The instruments, the pre and post test, questionnaire, observations, used to conduct this study were mentioned and described. The process of retraining the teacher and training students was shown. The booklet used by the teacher and the students in the study was described, and the reasons for designing a booklet were given. The units, the texts and the sample of mapping used in teaching were shown. The process of teaching reading comprehension through using mapping as a game was illustrated by the given guidelines. The validity and reliability of those instruments were illustrated. The participants were seventy-two students from 11th grade .Thirty-six students were the experimental group and thirty-six students were the control group from Ramallah Secondary School for Girls. The reasons for choosing the 11th grade and the school were given. The time, location, sample and the population were shown. The process of coding, analyzing and interpreting the data was shown and illustrated.

Chapter Five

Results

The current study investigated the impact of using mapping as a game in learning reading comprehension. That is, using mapping as a game in learning reading comprehension was used in English language classes at a public school in Ramallah and Al-Bireh District in the West Bank in Palestine. The participants of the study were eleventh grade students. They were 72 female students who were divided into two groups: control and experimental. The design of the study is quasi experimental. The qualitative data, which was a secondary instrument, provided quotations to support the results of the study. However, the quantitative data was collected by a perception questionnaire and a pre and post- test. Moreover, the Statistical Package for the Social Sciences Program (SPSS) was used to provide answers for the two questions. In addition, the Independent Sample T-Test was used to answer the first question. The outcomes of the two questions will be discussed in chapter six.

The quasi experimental study aimed to answer the two following main questions, respectively:

1. What is the impact of using mapping as a game in teaching reading comprehension on 11th Graders' achievement?
2. What are the students' attitudes towards using mapping as a game in learning reading comprehension?

Effect of Using Mapping as a Game on Reading Achievement

To check the effect of using mapping as a game on students' achievement, a pre and posttest was used to compare between the control and experimental groups. The Independent Sample T -Test was used to compare between the means and standard deviations for the two groups before and after conducting the study.

Pre-Test Results

The results of the pre-test exam, for the experimental and control groups, are shown in Table 1 in Appendix(F).Table1 demonstrates the result of every student in the pretest for the experimental and control groups .The total score is 60. Every student was given a number and a symbol in the pretest. That is, the letter C was given for the control

group while the letter E was given for the experimental group. In addition, the same numbers were given to those students in the posttest. The Independent Sample T-Test was used to compare the means and standard deviation between the experimental and control groups , as shown in Table (5-1).

Table(5-1)

The Differences in Means and Standard Deviations for the Experimental and Control Groups

	Group	N	Mean	Std. Deviation	Std. Error Mean
Pretest	Experimental Group	36	27.08	9.348	1.558
	Control Group	36	27.72	10.113	1.685

As Table (5-1) shows, the means of the control and experimental groups were calculated after administering the pretest. The mean of the experimental group is 27.08 while the mean of the control group is 27.72. Obviously, the means are close to each other, however, to analyze the significance of the differences in the pretest for the control and experimental groups, the independent sample T-test was used as shown in Table(5-2).

Table (5-2)
The Independent Sample Test for the differences in Means in the Pretest
for the Experimental and Control Groups

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pretest	Equal variances assumed	1.028	.314	-.278-	70	.782	-.639-	2.295	-5.217-	3.939
	Equal variances not assumed			-.278-	69.572	.782	-.639-	2.295	-5.217-	3.939

Table (5-2) demonstrates that there was no significant difference between the results of the students in the experimental and control groups, according to their scores in the pretest. Table (5-2) shows that the significance (Sig) of the results is .782. This significance is larger than .05; hence, in statistics, it indicates that there is no significant difference in the results of the experimental and control groups (Cresswell, 2012). Indeed, this result has two implications. First, there is no significant difference in achievement between the two groups. Second, they nearly have the same level of knowledge.

Posttest Results

Table 2 in appendix (F) demonstrates the results of the students in the posttest for the experimental and control groups. The total score is 60. Every student was given a number and a symbol, as what was done in the pretest. That is, the same numbers were given to the students in both the pre and posttest. For

instance, C1 is the same as CA1. C1 is the mark of a student in the pretest while CA1 is the mark of the same student in the posttest. Moreover, C1 and CA1 are symbols given for the same student in the control group. Another example, E1 is the mark of a student in the pretest while EA1 is the same mark of the student in the posttest. E1 and EA1 are symbols given for the same student in the experimental group. According to Table 1, which demonstrates the results of the experimental and control groups in the pretest, the number of students who did not pass the pretest in the experimental group was 24 while the number of students who did not pass the pretest in the control group was 18. However, according to Table 2, which demonstrates the results of the experimental and control groups in the posttest, all the students of the experimental group passed the posttest and 10 students from the control group did not pass the test. Moreover, according to Table 2, the number of students who got 50 and above in the posttest was 21 in the experimental group while it was only 7 in the control group. All the students of the experimental group passed the posttest, and 21 students out of 36 from the experimental group got high scores (50 and above out of 60) in the posttest. The independent Samples T-Test was used to compare the means and standard deviation between the experimental and control groups, as shown in Table(5-3).

Table (5-3)
Group Statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
Posttest	Experimental Group	36	50.3056	8.19344	1.36557
	Control Group	36	38.0556	11.79817	1.96636

As Table(5-3) shows, the means of the control and experimental groups were calculated after administering the posttest. The mean of the experimental group is 50.30 while the mean of the control group is 38.05. Obviously, there is a large gap

between the means of the experimental and control groups, however, to analyze the significance of the differences in the posttest for the control and experimental groups, the Independent Sample T-Test was used as shown in Table(5-4).

Table(5-4)

**The Independent Sample Test for the differences in Means in the Posttest
for the Experimental and Control Groups**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- taile d)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Posttest	Equal variances assumed	9.373	.003	5.117	70	.000	12.25000	2.39403	7.47526	17.02474
	Equal variances not assumed			5.117	62.389	.000	12.25000	2.39403	7.46500	17.03500

Table(5-4)demonstrates that there was a significant difference between the results of the students in the experimental and control groups, according to their scores in the posttest.Table(5-4)shows that the significance (Sig) of the results is .00.This significance is smaller than .05; hence, in statistics, it indicates that there is a significant difference in the results between the experimental and control groups (Cresswell,2012).Indeed, this Table shows a great difference in the achievement between the experimental and control groups in the posttest. That is, the difference is in favor of the experimental group since the mean of the experimental group is 50.30 while the mean of the control group is 38.05.

The differences of the pre and posttest results between the control and experimental groups are clearly shown in the following Figure:

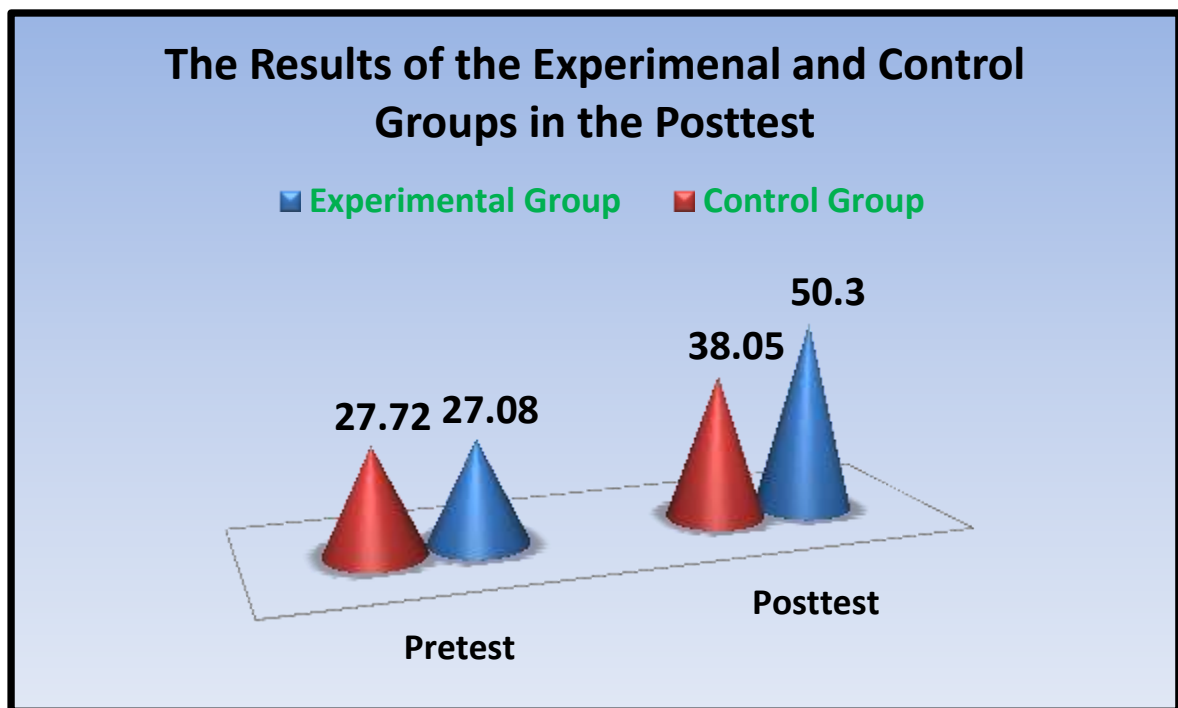


Figure 4: The Average of the Results in the Pre and Posttest between the Experimental and Control Groups

This Figure demonstrates the differences between the two groups in the pre and posttest. The two groups were nearly equal to each other in the pretest while there was a significant difference between the results of the two groups in the posttest. The average of the control group in the pretest was 27.7 while the average of experimental group was 27 which indicated they were nearly equal to each other. In addition, as shown in this figure, the average of the control group in the posttest was 38.05 while the average of the experimental group was 50.3 which indicated a clear difference in achievement. That is, the improvement of the experimental group was largely higher than the improvement of the control group. Hence, this data indicates that using mapping as a game in learning reading comprehension is better than using the traditional way in learning reading comprehension according to the results demonstrated in Figure 4.

Students' Attitudes towards Using Mapping as a Game in Learning Reading Comprehension

To answer the second question of this study, a close ended questionnaire was used to explore students' attitudes towards using mapping as a game in learning reading comprehension. The questionnaire had 23 items. The responses were measured through 4 Likert scale that started from (1)strongly disagree,(2)disagree ,(3)agree and ended with(4)strongly agree. Negative items were coded in a reversed way; that is, 1 stands for 4 and 2 stands for 3.The negative items in the questionnaire were 8,11 and 22. Likert scale was used to extract the responses from the questionnaire and then analyze them by the SPSS. The descriptive analysis was demonstrated by calculating the means, standard deviations and percentages of items. As mentioned in the data analysis the following analysis key was used to interpret means.

Table(5-5)

Analysis Key of the Questionnaire

Mean	Degree
Less than 1.33	Too low
1.34-2	Low
2.1-2.7	Medium
2.8-3.4	High
3.5 and higher	Too High

Table(5-5)demonstrates how the means were described. For example, means for the responses that were less than 1.33 were considered too low and represented negative responses on the item. However, the means ranged between 1.34 and 2 were considered low; the means ranged between 2.1 and 2.7 were considered medium. On the other hand, the means that ranged between 2.8 and 3.4 were high, and the means which were higher than 3.5 were considered too high, which represented positive responses on the item. The following Table(5-6)shows the results of the questionnaire.

Table(5-6)

Descriptive Analysis of Students' Attitudes towards Using Mapping as a Game in Learning Reading Comprehension

N	Item	Mean	Std. Deviation	Percentage	Degree
1	Using mapping as a game in learning reading comprehension can be applied to other new reading contexts.	3.50	.507	87.5%	Too High
2	This method was very helpful in helping me understanding the reading passage.	3.58	.500	89.5%	Too high
3	In general this method improved my reading skills .	3.33	.586	83.25%	High
4	This method encouraged me to participate in the class discussions.	3.56	.504	89%	Too high
5	Learning through this method encouraged me to communicate in English.	3.44	.558	86%	High
6	Learning through this method encouraged me to ask for clarifications.	3.25	.554	81.25%	High
7	This method made me more enthusiastic in the reading class.	3.44	.558	86%	High
8	Using this method in learning reading comprehension was boring.	*1.36	.487	*34%	*low
9	Using this method in learning reading made it more enjoyable.	3.42	.500	85.5%	High
10	I like my teacher to continue using this mapping method in	3.67	.478	91.75%	Too high

	all reading classes for the rest of the year.				
11	Using this method did not develop my reading ability .	*1.36	.487	*34%	*low
12	Using this method as a game activated my vocabulary .	3.50	.507	87.5%	Too high
13	I hope other teachers use this method in teaching reading.	3.58	.604	89.5%	Too high
14	Using this method helped me not feeling nervous about reading.	3.39	.599	84.75%	High
15	Using this method helped me feel confident in my ability to answer the questions.	3.58	.500	89.5%	Too high
16	Using this method in learning reading comprehension helped me to summarize the lesson easily.	3.69	.525	92.25%	Too high
17	Using this method in learning reading comprehension encouraged me to present the lesson in front of my colleagues .	3.47	.506	86.75%	High
18	Using this method in reading comprehension helped me to find the main ideas in the reading text	3.53	.506	88.25%	Too high
19	Using this method helped me to connect the main and major ideas in the text to other similar experiences .	3.33	.632	83.25%	High
20	Using this method in learning reading comprehension made me like reading.	3.33	.478	83.25%	High

21	Using this method in learning reading comprehension helped me learn different words and expressions.	3.58	.500	89.5%	Too high
22	I did not like reading because of this method in learning reading comprehension.	*1.22	.422	*30.5%	*Too low
23	Using this method in learning reading comprehension is better than other methods through which I was taught reading comprehension.	3.86	.351	96.5%	Too high
	Average	3.52	.51	88%	Too high

As demonstrated in Table(5-6) and Figure 5, the students responded to 23 items to elicit their attitudes towards using mapping as a game in learning reading comprehension. The means of these items ranged between(*1.22-3.86).The results of the 23 items were divided into three groups. That is, the first group was for the items which were interpreted too high. On the other hand, the second group was for the items which were interpreted high. However, the third group was for the negative items which were interpreted too low and low. It is obvious that the highest mean(M=3.86) was item23"Using this method in learning reading comprehension is better than other methods through which I was taught reading comprehension". This mean was interpreted too high according to the analysis key of the questionnaire. This illustrated that the students found this method different and better than the traditional methods in learning reading comprehension. However, the lowest mean (M=*1.22) was for the negative item22"I did not like reading because of this method in learning reading comprehension".

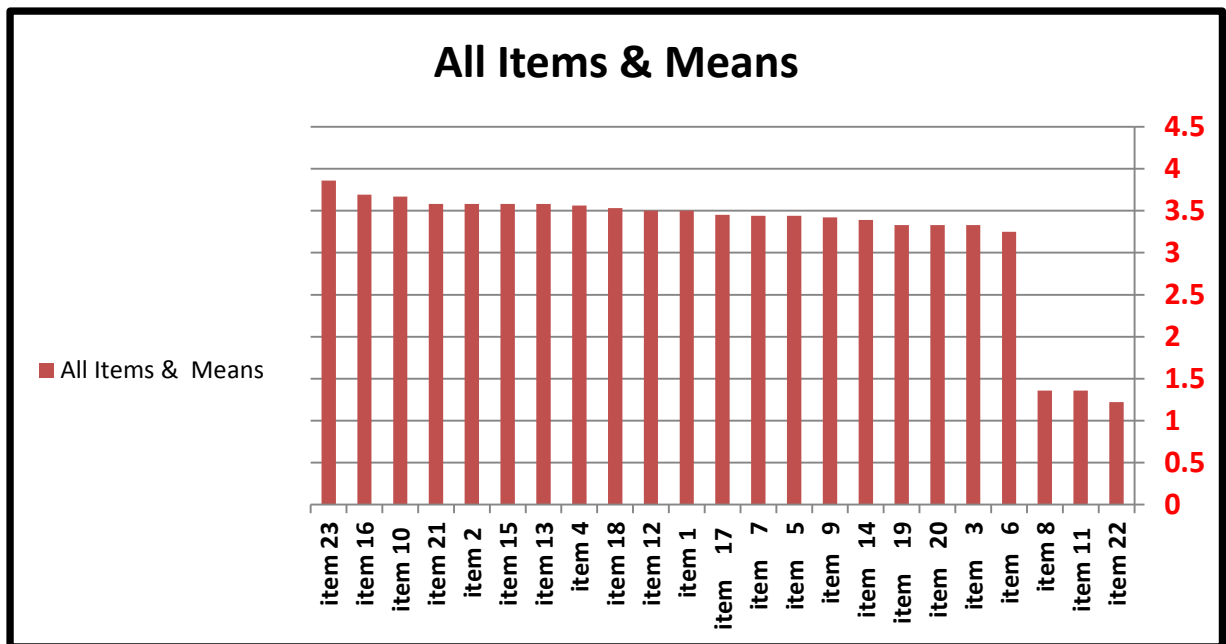


Figure5:All Items of the Questionnaire and Their Means

Their responses for the positive items varied between high and too high, and the responses for the negative items were too low and low according to the key analysis of the questionnaire. The following items were interpreted as too high which indicated highly positive attitudes towards using mapping as a game in learning reading comprehension. Figure 6 elaborates the variance in means of too high items, which they were defined too high according to the analysis key of the questionnaire. The number of these items which were interpreted too high was 11 out of 23. The means of this group ranged between (3.50-3.86).

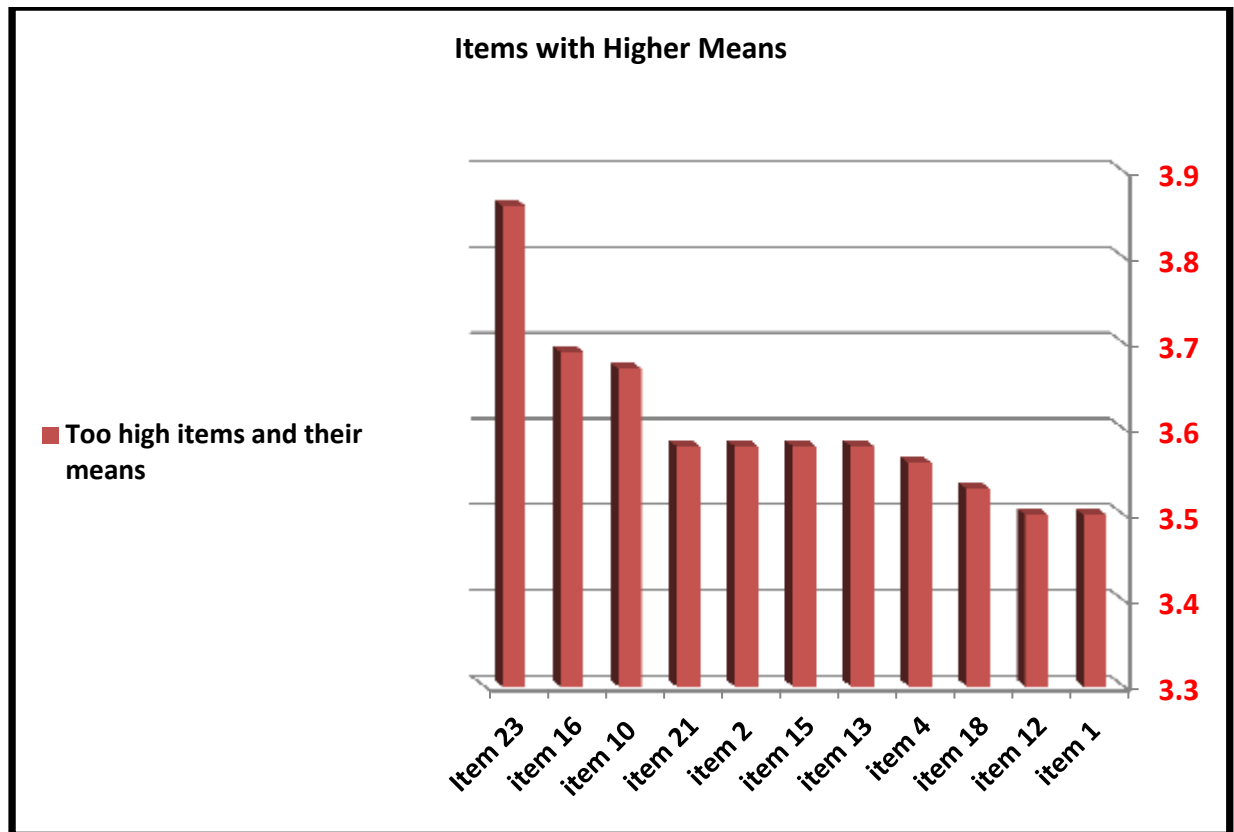


Figure6:Too High Items of the Questionnaire and Their Means

On the other hand, the means of the following items, as illustrated in Figure 7, were interpreted high which indicated positive attitudes towards using mapping as a game in learning reading comprehension. The number of these items is 9 out of 23. The means of these items ranged between (3.25-3.45). The highest item was item 17 (Mean=3.45) "Using this method in learning reading comprehension encouraged me to present the lesson in front of my colleagues". Item 7 (Mean=3.44) "This method made me more enthusiastic in the reading class", item 5 (Mean=3.44) "Learning through this method encouraged me to communicate in English", item 9 (Mean=3.42) "Using this method in learning reading made it more enjoyable", item 14 (Mean=3.39) "Using this method helped me not feeling nervous about reading", item 19 (Mean=3.33) "Using this method helped me to connect the main and major ideas in the text to other similar experiences", item 20 (Mean=3.33) "Using this method in learning reading comprehension made me like reading", item 3 (Mean=3.33) "In general this method improved my reading skills". The lowest

mean in this group was item6(Mean=3.25)"Learning through this method encouraged me to ask for clarifications".

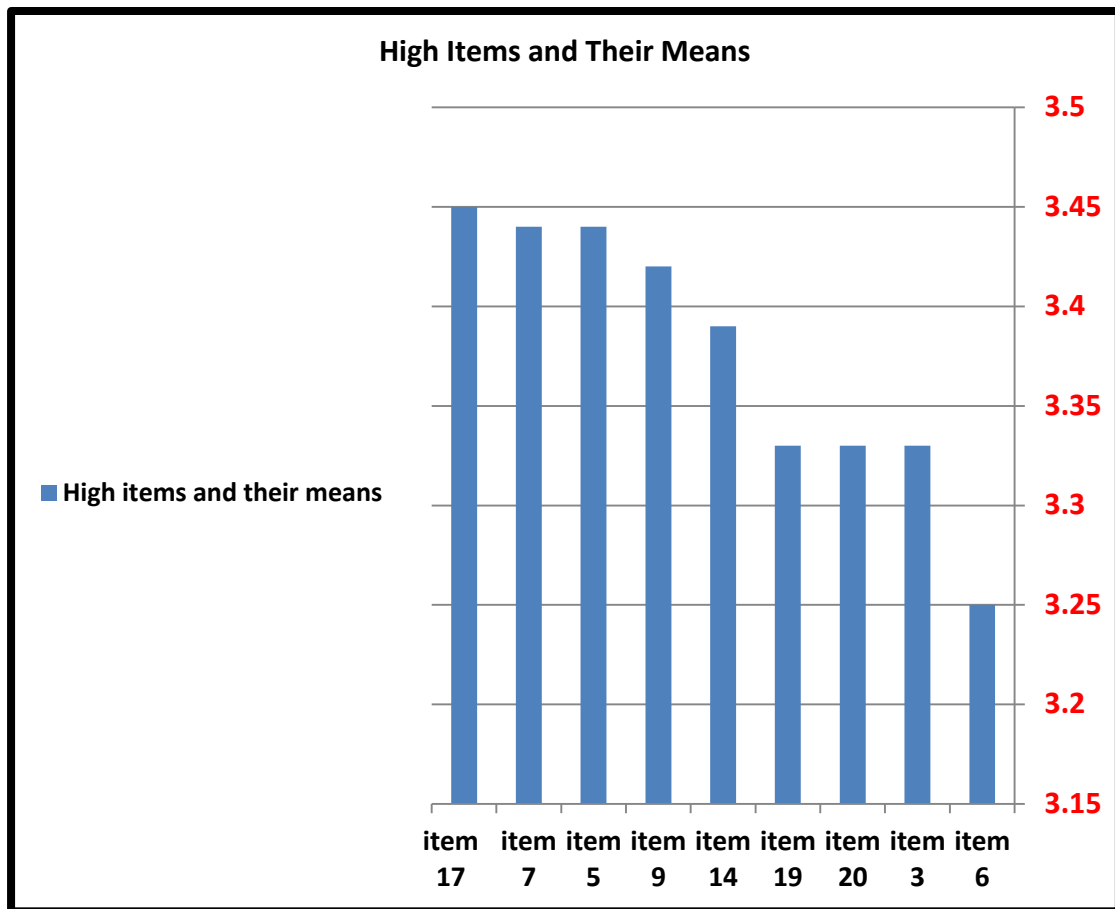


Figure 7: High Items of the Questionnaire and Their Means

However, the three lowest means were for the negative items in the questionnaire, which were interpreted too low, were 3 items. Their means ranged between (*1.22-*1.36). That is, item22 (M=*1.22)"I did not like reading because of this method in learning reading comprehension", item11(M=*1.36)"Using the method did not develop my reading ability" and item8(M=*1.36)"Using this method in learning reading comprehension was boring". Figure 8 demonstrates low and too low items.

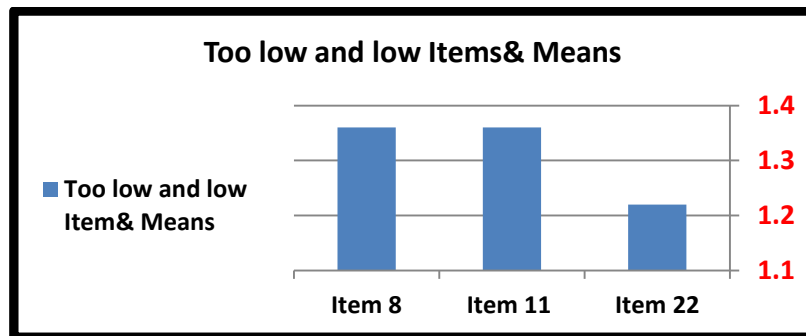


Figure8:Too Low and Low Items& Their Means

Benefits of Using Mapping as a Game in Teaching Reading Comprehension

Understanding the Text and Developing Reading Ability

According to the results of the pre and post test, it was shown there was no significant difference in the achievement of the pre test between the experimental and control groups. However, it was shown there was a significant difference in the posttest between the control and experimental groups, in favor of the experimental group. This result was supported by some quotations. For example, a student who was not active said: "*This method developed my English language*". Besides, another student, who was a low achiever student, commented: "*This method helped me to understand the passage and speak English easily*". In addition, an average student added: "*I felt it developed my English language*". Another low achiever student told me: "*This method made it easy to learn reading comprehension*". A student, who used to complain while learning, said: "*Learning English became easy*". Indeed, it was shown that mapping as a game improved their understanding and reading ability.

Knowing the Major and Minor Ideas & Summarizing the Lesson

For example, a low achiever student said: "*Learning through this method helped me know the main ideas, and I can remember all the lessons I studied*". Another student, who did not use to write a sentence in the English classes, added: "*This method helped me to summarize the lesson easily without any difficulties*". Moreover, a student, who was depressed from learning English language, commented: "*It helped me to summarize the lesson easily; I could remember all the reading lessons because it was a useful game*". Besides, a student, who did not use to understand reading passages, said: "*It*

helped me to understand the passage and summarize the lesson". Furthermore, an average student said:"It helped me to summarize the lesson easily; I could remember all the reading lessons because it was a useful game". Indeed, it was shown that using mapping as a game in learning reading comprehension helped the students to find the main and minor ideas, connect them with similar experiences and summarize the lesson easily.

Preferring the Method and Recommending Using It

For example, a low achiever student, who used to be depressed in learning reading comprehension, said:

"Thank you for this method in learning ; this method made our lesson funnier, better and very exiting; this method made it easy to learn reading comprehension; we would like to use this method every class , and I would like my teacher to use it for the rest of the year".

Moreover, a high achiever student commented:"*I like other teachers to use this method in teaching because it is very useful and interesting"* .Besides, a low achiever student, who did not use to participate in English classes, added:"*This method was new, it was better than the way I used to learn ;I liked it, thank you"*. An average student added :"*This method was amazing, I hope other teachers use in different subjects, I liked it"*. Another low achiever student stated:"*I liked it, I felt it developed my English language"*. Another passive student, who did not use to participate in English classes, told me:"*I could remember all the reading lessons because it was a useful game; I liked it ,and I hope other teachers use it"*. In addition, an average student said :"*I liked it so much"*. Another one, who did not use to understand the reading passage and summarize the lesson, repeated:"*It helped me to understand the passage and summarize the lesson, I liked it so much"*. Another one, who used to be bored in English classes, said :"*This game is challenging ,I like learning reading comprehension by this game since it makes things easier and meaningful"*. Indeed, it was shown using mapping as a game in learning reading comprehension attracted the student to like and prefer it than other methods .They

were also convinced it was the best way to learn reading comprehension for the rest of the year, and they recommend using it for other teachers.

Activating Vocabulary & Learning New Words and Expressions

For instance, a low achiever student said: "*This method activated my vocabulary, and I learnt many new words. Thank you*". Furthermore, a student, who did not use to participate a lot in English classes, added: "*It helped me to learn new words and vocabulary; it also helped me to participate in the class; I liked it, thank you*". An average student commented: "*I learned many new words and expressions*". To conclude, it was shown that mapping as a game in learning reading comprehension helped the students to learn new words and expressions. It also activated their vocabulary.

Arousing Interest, Enjoyment and Enthusiasm

For instance, a low achiever student said: "*Thank you for this method in learning; this method made our lesson funnier, better and very exiting*". Another student, who used to feel bored in learning reading comprehension, added: "*It made the class more interesting and enjoyable*". Another student, who used to be naughty and hyper active in English classes, explicated: "*It made the English reading classes more interesting*". Moreover, a low achiever student said: "*This method made me more enthusiastic in the reading class*". An average student stated: "*This method was amazing*". Also, another one commented: "*This method made learning more enjoyable*". Furthermore, a student, who did not use to be active in the English classes, commented: "*English Language became more enjoying, the game made our lesson competitive and interesting*". Indeed, it was shown that mapping as a game in learning reading comprehension created an interesting learning atmosphere. It also increased students' enthusiasm, and they were enjoying while learning.

Fostering Confidence and Encouragement

For example, a student, who used to be reluctant and afraid in answering questions, said: "*This method helped me to answer quickly and confidently*". Another one, who used to be afraid and reluctant in answering the questions and presenting the lesson, commented: "*This method encouraged me to present the lesson in front of my*

colleagues confidently." Another one, who did not use to understand the lesson and speak English in reading comprehension classes, added: *"It helped me a lot in understanding the lesson and encouraged me to speak English"*. A student, who used to be bored and reluctant in answering questions, commented: *"This method made me more enthusiastic in the reading class and helped me to feel confident."* Another one, who used to be hesitant while answering questions, commented: *"It helped me to feel confident in answering the questions"*. A student, who did not use to present the lesson on front of her colleagues, stated : *"It encouraged me to stand in front of my colleagues to talk about the lesson"*. Besides, as student, who used to feel reluctant in presenting the lesson, expressed: *"I liked it so much, and it encouraged me to present the lesson easily"*. Indeed, it was shown that using mapping as a game in learning reading comprehension increased their confidence, and it encouraged the students by communicating in English, answering questions, asking for clarifications and presenting the lesson in front of their colleagues.

Summary

The current chapter has presented the results of data analysis. The pre and posttest and students' questionnaire were used as quantitative sources of the study. On the other hand, the researcher's observations were used as a secondary instrument by providing some quotations. The Independent Sample T- Test was used to compare the means of the experimental and control groups in order to demonstrate students' achievement. In fact, there was no significant difference between the means and standard deviations in the pretest between the experimental and control groups. The means and standard deviations were compared between the two groups in the posttest. However, there was a significant difference between the two groups in favor of the experimental group. The significant difference in means and standard deviation between the groups in the posttest revealed the effectiveness of using mapping as a game in teaching reading comprehension on students' achievement. Moreover, the results of the questionnaire were analyzed to demonstrate students' attitudes towards using mapping as a game in learning reading comprehension. The means, standard deviation and percentages of the questionnaire

illustrated that the students had highly positive attitudes towards using mapping as game in learning reading comprehension.

In addition, the researcher's observations were used to provide quotations. The results of the observation added that students' reading comprehension ability was improved, and they had positive attitudes towards using mapping as a game in learning reading comprehension. To conclude, the results of the pre and posttest, students' questionnaire and researcher's observation revealed that using mapping as a game in teaching reading comprehension had positively affected students' achievement and attitudes.

Chapter Six

Discussion and Recommendations

The current study investigated the impact of using mapping as a game in teaching learning reading comprehension on students' achievement. In addition, it investigated the impact of using mapping as a game in learning reading comprehension on students' attitudes. The students who participated in the study were the eleventh grade students who have been studying English language for almost eleven years. Previous studies like Joma' (2009) reported that the Palestinian students are taught reading comprehension in a boring atmosphere; it lacks communication and depends on memorization. Besides, according to my experience as a teacher who worked at private and public schools, I found that most Palestinian students find learning reading comprehension tough, complex and boring, and they resort to memorize the answers of the questions. Their main aim is to memorize the answers although they do not think about the language or the meaning of these words. When they are exposed to an external passage, they can not understand it or answer the questions written on. Moreover, according to my experience as a teacher who attended many reading comprehension classes for many teachers, I found that the methods which many teachers use are poor. They write the vocabulary on the board, and then they read the passage loudly and ask their students to read. They choose the students who can read and participate; at the same time, some teachers during reading try to translate the text into Arabic. They focus on the best three to five students in their academic performance to participate and they neglect the role of other students. They neglect other students since they find it hard to activate them. In other words, teaching reading comprehension in the Palestinian context is miserable since it does not activate all the students properly and does not achieve communication in English appropriately. However, the participants reported that they liked learning reading comprehension through using mapping as a game. They also advised their teacher to use it for the rest of the year. Furthermore, they recommended other teachers to use it in teaching.

5.1 Impact of Using Mapping as a Game on Reading Achievement

The first question that guided this study was seeking to find out the impact of using mapping as a game in teaching comprehension on students' achievement. To know the impact of using mapping as a game on reading achievement, a pre and posttest was administered for the control and experimental groups. The results of the pretest indicated the two groups had nearly the same level of knowledge. However, the results of the posttest indicated that there was a significant difference between the experimental and control groups. That is, it showed that the experimental group, who was taught through using mapping as a game in teaching reading comprehension, outperformed in the posttest. This significant difference in achievement between the two groups reflects the effectiveness of using mapping as a game in learning reading comprehension. In other words, the group who was taught by using mapping as a game in learning reading comprehension performed better than the group who did not use mapping as a game in learning reading comprehension. That is, the improvement of the experimental group was largely higher than the improvement of the control group. Hence, this data indicates that using mapping as a game in teaching reading comprehension is better than using the traditional way in teaching reading comprehension.

The results of the current study came in line with other studies. For instance, Gorijian(2008) stated that mapping structure offers to teachers the necessary tools that assist learners to reach great achievement while learning reading comprehension. The structure of mapping eases the process of improving learners' reading comprehension abilities to comprehend and grasp the gist of the reading passage since it stimulates their creativity and thinking skills. Moreover, the structure of mapping facilitates simplifying larger texts into smaller units. It also eases achieving communication while learning since it strengthens students' comprehension of the text. In addition, Horton et al. (1993) found that mapping strategy enhanced learners' achievement scores when it was used in learning and instruction. Steyn De Boer (1998) implemented an action research project to investigate the effect of using mapping in learning on students' achievement and concluded that mapping positively affected students' achievement. Buzan (2003) found that applying mapping in teaching enhanced learner' achievement in science.

There are many reasons and explanations for getting these results. First of all , the way in which students were taught reading comprehension attracted their attention since it was introduced as a challenging game; that is, they were introduced to a new, helpful and encouraging way in learning. When the students find something new and helpful, they try to discover more and more about. Moreover, the way the students were taught helped them to be exposed to some new words and phrases. It activated their vocabulary and helped them to learn new words since it was shown as a puzzle . When they found these words shown in a simple way, they could memorize them easily. Understanding and knowing the use of these phrases and words helped them to understand the sentences and be aware of the major and minor ideas; hence ,they could understand the text easily. This is supported with what a low achiever student, commented:"*This method helped me to understand the passage and speak English easily*". These findings confirm Wong-AngGekMoi and Ong Lee Lian(2007) conclusion that mapping in learning reading comprehension skills increases students' understanding and memory of comprehension passages .In addition, the students were challenged to participate .They were confident to answer since the game matched all of their levels and individual differences . Of course, low and high achievers were able to play their roles in learning and all of them were active . Besides, the students were not able to communicate in English ; however, it gave them the basic base to answer the questions written on the paragraphs ;hence, they were able to answer and use these answers to discuss and communicate with each other . They were able to communicate in English since it gave them the trust and confidence to speak. When it lowered their anxiety and fear, the process of learning was easy and enjoyable. Thus, it increased their motivation and enthusiasm. This helped them to summarize the lesson easily and present the lesson in front of their colleagues.

These advantages positively affected the students' reading ability; that is , it developed their competence and it improved their performance. Of course, it developed their competence by enriching their language with new words and phrases which they used while they were performing in English classes. The students knew the main and major ideas of the passage; hence, they understood the passage very well and they could answer the questions properly. These findings confirm Brinkmann

(2003) conclusion that mapping increased learners' academic achievement and developed their reading comprehension understanding. The classroom communication improved and activated their language. The constant use of English language in learning reading comprehension increased students' confidence to deal with English language without fear. When fear disappeared, they could play their roles easily. When they were asked to present the lesson, they were trying to understand it properly since they could not present the lesson without understanding it. These activities enhanced students' autonomy and they were encouraged to be independent learners; they depended on themselves to find the answers. Depending on themselves in learning by receiving scaffolding, when it is necessary, improved their skills to be active learners. Therefore, they could accomplish any task they were given. When they answered all the written questions on the reading text correctly and confidently, their grades were positively affected. These results also confirm Sabbah (2015) conclusion that applying mapping in teaching reading comprehension is beneficial because it affects their achievement positively leading to greater results. This is also supported with a student, who was suffering from learning English language, said: "*This method developed my English language*".

In contrast to the highly positive effects of using mapping as a game on the experimental group, the improvement of the control group was not significant like the experimental group. There are many reasons and explanations can be given. First of all, not all students were active in the class through the traditional way of learning. A few students were active, and the majority were listening to other's participation. Some of them were reading without understating the whole passage while others were copying the questions and answers; that is, they were wasting their time on copying the answers rather than thinking and practicing using English language. Second, some students' were frightened to speak and deal with English language in the class since the traditional way lacks scaffolding; a question is given by the teacher and the answer is given by a student who knows the answer or the teacher. Of course, the traditional way does not provide opportunities for all students, low and high achievers, to participate. If the student does not know the answer, the teacher directly gives it. In other words, the focus is mostly on high achievers. There was no role of thinking and

extracting answers. Therefore, if the questions' level is higher than the student's level, the student feels depressed. However, if the questions' level is lower than the students' level, the student feels bored. Therefore, when the students learn through the traditional way, either they feel bored or depressed since it lacks scaffolding. Furthermore, the students depended on their teacher to answer the questions and their role was copying the answers. Thus, they did not use to be independent learners. The lack of autonomy in the class reflected negatively on their achievement in their exams since they used to receive the answers as they are; they did not use to think in English or even participate as they should. Besides, the traditional way did not assist them to discover the main and major ideas in the text; they were dealing with an abstract text without even classifying or analyzing it. They did not understand it properly, thus, they did not perform like the experimental group. In other words, the grades of the control group was lower than the grades of the experimental group in the post test although their previous level was nearly the same.

Although the intervention period was short, the results between two groups were different. For example, according to Table 1 in Appendix (F), the number of students who did not pass the pretest in the experimental group was 24 while the number of students who did not pass the pretest in the control group was 18. However, according to Table 2 in Appendix (F), all the students of the experimental group passed the posttest and 10 students from the control group did not pass the test. This showed the great effect of using this method in learning reading comprehension on student's achievement. Of course, this indicated that using that way could provide the students with the tools to improve their language and achieve good results. When they overcame fear, obstacles and difficulties in learning, they performed positively and they could understand the passage easily. Therefore, they could answer the questions in the exam correctly and get high grades. These findings confirm Harkirat, Makarimi & Anderson (2011) conclusion which found that the achievement of the students who learned and taught reading comprehension using constructive learning techniques like mapping was higher than the students who learned through the traditional way.

Since mapping is based on constructivism, this reminds us of the constructivism theory which asserts the new knowledge is built from the previous one. The structure of the game also reminds us of scaffolding which is theoretically based on providing learners with help and support through a number of strategies and skills until they can independently learn (Rosenshine & Meister, 1992). The use of scaffolding encouraged the students to play their roles and to be active. The positive effects of using scaffolding came in line with many studies. For instance, Safdi and Rabbah (2012) indicated that scaffolding is powerful in improving reading comprehension achievement and developing skills, associated with critical thinking and finding the main ideas. Besides, Poorachamdi (2009) found that scaffolding had positive effects on learners in reading comprehension achievement.

The use of constructivism encouraged the students to build their knowledge gradually and play their roles effectively. Parwat (1992) indicated that the most effective interpretation of constructivist theory is that it shows a real change in the focus of teaching and stimulates students to put their own efforts to grasp the content of the educational material. In addition, Gray (1997) found that constructivist teaching is based on learning that is achieved while active learners construct their understanding and knowledge; this kind of teaching stimulates learners to be active critical thinkers and independent learners. Indeed, the use of constructivism and scaffolding improved the process of teaching; it created a challenging learning atmosphere which helped the students to be active and independent learners.

5.2 Students' Attitudes towards Using Mapping as a Game in Learning Reading Comprehension

The second question that guided this study was seeking to find out the impact of using mapping as a game in learning comprehension on students' attitudes. To know the impact on students' attitudes, a questionnaire was distributed to the experimental group. The questionnaire had 23 items. The overall mean for all the questionnaire items was (3.52), which indicated highly positive attitudes towards using mapping as a game in learning reading comprehension. The overall percentage of the questionnaire items was 88%; it was considered too high. These results demonstrated highly positive attitudes

towards using mapping as a game in learning reading comprehension. These results supported the results of the students' achievement in the exam. In other words, the highly positive attitudes for the students towards using mapping as a game affected their achievement positively. That is, since the students liked the method and enjoyed it while learning, they were encouraged to learn through. It is obvious that the highest mean ($M=3.86$) 96.5% was item 23 "Using this method in learning reading comprehension is better than other methods through which I was taught reading comprehension". However, the lowest mean ($M=1.22$) was for the negative item 22 "I did not like reading because of this method in learning reading comprehension". Item 22 shows that the students highly liked this method in learning reading comprehension, which supports item 23. That is, since the students found this method better than the other methods in learning reading comprehension, they were attracted to it and liked it. They liked it since it positively affected their feelings and mind. It affected their feelings by offering an enjoyable atmosphere, and it could overcome fear problems. It also affected their mind by changing their perspectives about learning reading comprehension. It also improved their reading abilities and skills; therefore, the students felt they could play major roles in the process of learning. In other words, it shifted the process of learning to be student-centered. Hence, the students liked and preferred it than other ways of learning reading comprehension.

The results of the items are in line with the following studies. First, Peterson and Synder (1998) found that mapping has great effects on students since it makes the process of learning enjoyable; it enhances brain storming and problem solving. Applying mapping helps students to develop their competence and performance. Second, Stephen and Hermus (2007) found that mapping is an effective technique which teachers can resort to in order to make their teaching interesting, enjoyable and useful by connecting ideas together. Third, Afriani (2012) discovered that mapping improves students' creativity; that is, the keywords aid students to discover new words. The structure of mapping attracts learners to freely express themselves.

In addition, the students found this method better than other methods for different possible reasons. First of all, it was introduced as a challenging and attractive game rather than a traditional way of learning; that is, games have great effects on

students since they attract them to participate easily .Of course, learning by games creates an interesting and enjoying atmosphere , which assists learners to play their roles easily. When students are attracted to a new way, they concentrate on the major and minor things carefully. Since it is based on scaffolding, it gives the students the freedom and the trust to work because the first letter of the answer is shown. Quintana et al. (2005) found that scaffolding enhances one's concentration, reducing obstacles and problems which learners might encounter ,thus, it makes the task easy, simple and accessible; hence, it leads to great results and positively affects achievement. Moreover, Benson (1997) indicated that if scaffolding is implemented correctly, it will perform as an enabler; that is, it will improve learner's skills and abilities.

When they try to answer and think, their skills and abilities are gradually developed. In other words, when students depend on themselves while learning, they overcome learning fears and difficulties. Trying to play their roles, fosters learners' autonomy and confidence. Thus, learners feel they have a major role in learning and they are not neglected. The process of communication in English will help learners to practice using the language and they will feel positive about themselves later. Thus, the students preferred this method than other traditional methods in learning in which learners are passive.

Furthermore, the three highest means of the questionnaire were item23 (M= 3.86)96.5%, item 16(M=3.69)92.25%"Using this method in learning reading comprehension helped me to summarize the lesson easily "and item 10 (M= 3.67)91.75%" I like my teacher to continue using this mapping method in all reading classes for the rest of the year". Of course, these items support each other; that is, item 23 shows that the students felt and found this method in learning reading comprehension was better than other methods; hence, it helped them to understand the lesson .It could help them to summarize the lesson easily which is supported by item 16. Therefore, they liked and recommended their teacher to use mapping method in learning reading comprehension method in all reading classes for the rest of the year which is supported by item 10.

The three lowest means were for the negative items in the questionnaire were item 22(M=1.22) ,item 11(M=1.36)"Using the method did not develop my reading ability" and item 8 (M=1.36)"Using this method in learning reading comprehension was boring". The means of these items illustrated that the students were interested in learning reading comprehension and did not find it boring (item 8). Hence, they liked learning reading comprehension because of this method (item22). Therefore, the students felt that method developed their reading ability (item 11).The three lowest means for the negative items 8,11,22 support the three highest means for the items 23,16 and 10.That is, the students did not find this method in learning boring ;in other words, they found it interesting(item8). Then, they liked learning reading comprehension because of using this method (item 22). Therefore, this developed their reading ability (item 11), and they could summarize the lesson easily(item 16) .Hence, they found it better than other methods through which they were taught reading comprehension (item23). Thus, they declared that they liked the teacher to continue using the mapping method in all reading classes for the rest of the year (item10). The current result confirms Zaho(2003) conclusion that mapping is a useful educational tool that connects learners prior knowledge with the current and upcoming knowledge, making the process of learning enjoyable, interesting and meaningful. They also confirm what a low achiever student, who used to be depressed in learning reading comprehension, said:

"Thank you for this method in learning ; this method made our lesson funnier, better and very exiting; this method made it easy to learn reading comprehension; we would like to use this method every class , and I would like my teacher to use it for the rest of the year".

Besides, the students found it better than other traditional methods in learning reading comprehension. The students found that using it in learning reading comprehension helped them learn different new words and expressions. Of course, the students also found it very helpful in understanding the reading passage. Thus, it helped them to feel confident in answering the questions.It also encouraged them to participate in the class discussions. The students found using this method in reading comprehension helped them to find the main ideas in the reading text. In addition, the students found using this method as a game

activated their vocabulary. Besides, using it in learning reading comprehension encouraged them to present the lesson in front of their colleagues. Hence, it also made them more enthusiastic in the reading class. Learning through this method encouraged them to communicate in English. Also, using it in learning reading made it more enjoyable. Using this method helped them to connect the main and major ideas in the text to other similar experiences. Therefore, it helped the students to summarize the lesson. Besides, using the method in learning reading comprehension made them like reading. In general, this method improved their reading skills. Last, learning through this method encouraged them to ask for clarifications. They found that using mapping as a game in learning reading comprehension can be applied to another reading contexts. Thus, as mentioned previously, they liked their teacher to continue using it for the rest of the year. Therefore, the students hoped other teachers to use it in teaching reading.

It was concluded that using mapping as a game could enrich class discussion, improve students' participation, communication and presentation. For instance, a student, who did not use to speak English language in the class, said: "*This method helped me to speak English easily*". This means that it could enhance students' confidence and direct them while speaking. It also motivated their vocabulary and helped them connect different words and phrases together. When the student said: "easily", it meant that she did not face any difficulties or hardships while speaking. Thus, it reduced and minimized difficulties while speaking. In addition, another student, who did not use to speak more than a sentence, added: "*This method encouraged me to present the lesson in front of my colleagues confidently*". This shows that the English background of the student was poor; however, she was encouraged to speak. It indicates that the structure of the game offered all the facilitators for any student to be encouraged to talk. Although speaking in front of others required a lot of efforts and confidence, it made it easy for the student to stand and talk confidently despite her poor English.

Also, another student, who used to be reluctant in answering the lesson questions, commented: "*This method helped me to know the answers of all the given questions*". This shows that the student was not confident to answer the questions, however, her knowledge and confidence were improved. Thus, she was able to answer all the given questions. When the student was able to answer all the questions on a paragraph, it indicated that she had deep

understanding of the passage ,and she had the trust to write them confidently. When the student understood the passage, it indicated she was aware of the main and major ideas of the text. It also meant she knew the majority of words and phrases written on the passage. The student also could guess the meaning of ambiguous words since she understood the general ideas of the text. Moreover, a student, who used to be confused while learning reading comprehension, said :"*It helped me a lot in understanding the lesson and encouraged me to speak English*". It showed the great development which was evolved over the process of learning. The student was confused and the reading text used to be vague for her. However, mapping as a game could change her feelings and attitude since she could understand the lesson, and she was encouraged to participate. The structure of mapping simplified the abstract text and made it easier to understand. Since the structure of the game offered the first the letter of the answer, it created a challenging and competitive atmosphere; that is, the students were enthusiastic to give their answers and speak English . Indeed, it was illustrated how using mapping as a game in learning reading comprehension encouraged students to speak and communicate and how it encouraged them to present the lesson in front of their colleagues.

From the results of the questionnaire , the following conclusions and explanations can be found. First, students had highly positive attitudes which showed that the students liked reading comprehension by using mapping as a game; they found it interesting; thus, it made reading more enjoyable since it helped them not to feel nervous in the class; they were encouraged and enthusiastic to participate and communicate in English ,therefore, they found this method better than other ways in teaching .Thus, they recommended their teacher to use it for the rest of the year(items9,14,23,10). This confirms what a low achiever student said"*I like other teachers to use this method in teaching because it is very useful and interesting*".Second, it helped the students in communication and discussions, and it improved their confidence and understanding ;that is, it helped the students to understand the reading passage .Therefore ,it helped the students to feel confident in their abilities to answer the questions. Hence, it encouraged them to participate in class discussions and communicate in English. Also, it encouraged them to present the lesson in front of their colleagues and to ask for clarifications when they are needed(items5,2,15,4,17).

This confirms what a student, who did not use to speak more than a sentence, said :*"This method encouraged me to present the lesson in front of my colleagues confidently"*. Although the student lacked knowledge and confidence, its structure attracted her to concentrate, understand, form sentences and participate. When the student felt confident, she was encouraged to participate. This also confirms Afriani (2012) conclusion that the structure of mapping attracts learners to freely express themselves. Third, it activated students' vocabulary and helped them to learn new words and expression. Fourth, it developed students reading ability and skills, hence, they found mapping as a game in learning reading comprehension can be applied to another reading contexts (items12,21,1,3,11). These results confirm Gorijian(2008) conclusion that the structure of mapping eases the process of improving learners' reading comprehension abilities to comprehend and grasp the gist of the reading passage since it stimulated their creativity and thinking skills .Finally, it helped the students to find the main ideas in the reading text ; it also helped the students to connect the main and major ideas in the text to other similar experiences; thus ,it assisted the students to summarize the lesson easily (items18,19,16). These results confirm Buzan (2010) conclusion that mapping is an effective recalling and thinking technique which can be used to summarize reading texts.

Of course, the students found this method very useful in learning reading comprehension; it developed their reading ability, and they recommended other teachers to use it. They recommended other teachers to use it because they are convinced it will help other students to learn easily. They are also sure that the students will like it (item 11,13) .The overall mean for all the questionnaire items was (3.52), which indicated highly positive attitudes towards using mapping as a game in learning reading comprehension. The overall percentage of the questionnaire items was 88% ;it was considered too high. These results demonstrated highly positive attitudes towards using mapping as a game in learning reading comprehension. They found it different since it could attract their feelings and thoughts; that is, they found it very useful and amazing in contrast to the traditional ways of teaching. Since they were playing, guessing words, competing with each other, joining sentences, summarizing the texts, communicating and discussing ideas in English, it created an inspiring and amazing learning atmosphere. That enjoying and useful atmosphere could influence their attitudes positively. These results supported students'

achievement in the exam. Of course, the high positive attitudes towards using mapping as a game stem from the students' high preferences of using this game. Their positive attitudes encouraged them to improve their reading ability ,which affected their achievement positively.

Referring to the effectiveness of using mapping as a game in learning reading comprehension which was proved by the results of the current study, several implications and suggestions can be provided. This comes to encourage and assist English language teachers, supervisors, policy makers to encourage using it in teaching reading comprehension since it has many benefits. Anyone who is interested in using this method in teaching reading effectively can benefit from the teacher's guidelines, written in the research methodology chapter by the researcher, and the researcher's observations. That is, the teacher's guidelines provide some theoretical procedures and steps to implement this method .On the other hand; the researcher's observations demonstrate a practical illustration that can guide teachers to use this method wisely and successfully. Moreover, the mapping samples which are attached in Appendix (D) also can be used as a reference for the teachers who teach 11th grade and anyone who is interested in using it in teaching reading comprehension. In addition, these samples can be a real guide for anyone who is interested in designing mapping as a game for reading comprehension texts for different grades.

According to the positive results of the current study ,the researcher highly encourages and supports using mapping as a game in teaching reading comprehension. First, it improves students' reading comprehensions skills and abilities. That is, understanding the reading text improves students' competence and performance. Second, using it encourages students to participate in the class discussions and to be confident in answering the written questions. In other words, it shifts the process of learning to be student- centered; it avoids the policy of the traditional way in teaching which highly depends on lecturing students .Third, using it improves students' communication skills , and they were encouraged to present the lesson in front of their colleagues, neglecting fear and lack of confidence problems ; improving these skills come in line with the 21st century needs which concentrate on communication and students' autonomy. Fourth, using it helps students to find the basic ideas and minor ideas in the reading text and connect them with

their experience. Hence, it plays a major role in fostering students' exploration for the reading text, language and their experience. Fifth, it also helps students to summarize the reading text easily; that is, using it simplifies complex texts by arranging the main and minor ideas. Sixth, using it creates an interesting and enjoying learning atmosphere, which attracts students to participate, interact, negotiate, communicate, answer and learn by having fun since it converts mapping into a game. Seventh, it is preferred by all students regardless of their level, low and high achievers preferred it, which shows that it can overcome the problem of students' differences. Eighth, using it increases students' enthusiasm and eagerness, and it enhances their confidence; hence, they can play active roles in the classroom activities. In other words, it can be used in learning reading comprehension to overcome the problem of fear and lack of confidence which some students suffer from. Last, using ITC equipment to present the samples of mapping does not waste students' and teachers' time in copying words and drawing shapes; the focus will be only on the process of learning. Hence, the expected benefits are high.

Indeed, the researcher highly believes in the benefits and importance of using mapping as a game in learning reading comprehension. The researcher hopes it will be used as a reference for teaching reading comprehension. It will guide and enlighten teachers' practices while teaching reading comprehension. The researcher is sure that using it in teaching will positively affect students' achievement and attitudes in learning reading comprehension; it will improve the process of teaching English language in the Palestinian schools, and believes that using it will improve the status quo of teaching reading comprehension in the Palestinian schools.

Recommendations

Due to the effectiveness of using the mapping as a game in teaching reading comprehension, which was proved by the results of this study, the researcher hopes this study will provide a new and effective method in teaching reading comprehension for the whole world. The results of this study will support the theory and practice of teaching reading comprehension; of course, there are many recommendations which can guide the future research.

These recommendations are the following:

- 1-Future research should include a larger sample that takes into consideration gender; that is, the study should contain males and females participants to discover if gender has significant effects on students' achievement or attitudes.
- 2- Future research should include a larger sample that takes into consideration the type of school ;that is, the sample should consist of public, private and UNRWA schools .
- 3-Future research can be conducted to investigate the effectiveness of using this method in learning speaking on students' attitudes and achievement .
- 4- Future research can be conducted to investigate the effectiveness of using this method in learning listening on students' attitudes and achievement .
- 5- Future research can be conducted within a longer period ; that is, it can be conducted within a scholastic year to discover more about the positive effects of using this method in learning.
- 6-Future research can be conducted to investigate the effectiveness of using this method in learning writing on students' attitude and achievement.

Summary

The current study investigated the effectiveness of using mapping as a game in teaching reading comprehension; it investigated the impact of using mapping as a game in teaching reading comprehension on student's achievement and attitudes. The theoretical framework of the present study was based on constructivism and scaffolding. It concentrates on constructivism as a pivotal theory and on scaffolding as a strategy related to this theory. Of course, it elaborates scaffolding as a term, its uses and application on learning reading comprehension. Many studies were collected , classified and explicated to find a relation between them and the current study. The data was collected by a pre and

posttest, attitudes' questionnaire, and it was supported by the researcher's observations. Quasi experimental was the design of the study where the control and experimental groups were deliberately selected.

The collected data was used to answer the two research questions. The first question was answered by collecting the data of the pre and posttest. The data of the pre and posttest was analyzed by using the Independent Sample T- Test .The result of the first question revealed that using mapping as a game in teaching reading comprehension positively affected students' achievement, and their reading ability was developed. Of course, this indicated that using that way could provide the students with the tools to improve their language and achieve good results. When they overcame fear, obstacles and difficulties in learning, they performed positively and they could understand the passage easily. Therefore, they could answer the questions of the exam correctly and get high grades. The second question was answered by collecting data of the attitudes' questionnaire. The results of the questionnaire were analyzed by SPSS program. The results demonstrated that the experimental group had highly positive attitudes towards using mapping as a game in learning reading comprehension. They found it different since it could attract their feelings and thoughts; that is, they found it very useful and amazing in contrast to the traditional way of teaching. Since they were playing ,guessing words, competing with each other, joining sentences, summarizing the texts ,communicating ,discussing ideas and presenting the lesson in English, it created an inspiring and amazing learning atmosphere. That enjoying and useful atmosphere could influence their attitudes positively.

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Appendices

Appendix A

Pre and Posttest



Reading Comprehension Test

11th Grade

Scientific Stream

Sections: A,B

Scholastic Year

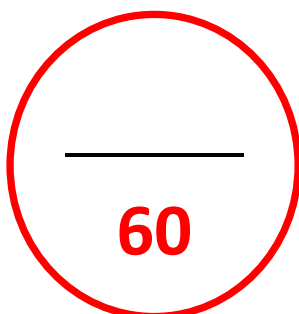
2017/2018

Time: 90minutes

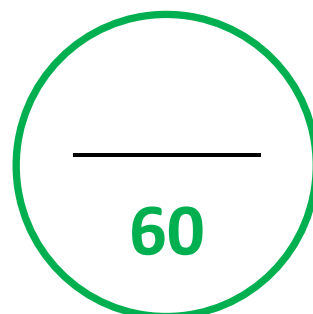
Name: _____

Date: _____

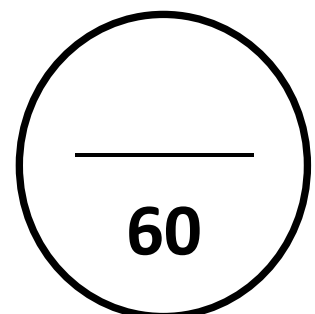
Interater 1



Interater 2



Final Mark



Read the following texts carefully then answer the questions that follow.

Part1(20pts)

When scientists found that they could change (or modify) things by taking out or adding genes, many new things became possible, including genetically modified (GM) foods and other crops. We can now artificially create plants **that** produce more food than natural ones, crops that can resist attacks by pests, rice that can grow in salty water, plants that work like medicines, and many other amazing things.

To some people, this makes the future look very exciting. In 20 years' time, they say, we will all be eating GM food and the global problem of starvation will be solved. GM crops could have a disastrous effect on agriculture and the environment in general. They might, for example, kill natural plants and take over from them. Also, people say that we do not know enough about the effects of GM food on the human body. More generally, some people see GM crops as just one part of the growing use of technology in agriculture and the increasing power of a few huge globalised 'agri-businesses'. For example, farmers in a poor country may buy GM seeds from one of these companies because **they** seem cheaper and produce better crops. What they don't realise is that they won't be able to save the seeds from their crop for the next year. Instead, they will have to buy more seeds from the company. So, while some see the industrialization of farming as the solution to many global problems, others believe that 'factory farming' has already gone too far, and that we need to return to a more natural way of feeding people.

A) Answer the following questions.(6pts)

1)What can GM crops resist?

2)Where can rice grow?

3)Where could GM crops have a disastrous effect on?

4)What might GM crops kill ?

5)What will GM food solve?

6)Give the text a title.

B) Replace the underlined parts of the sentences below with words or phrases from the text. (4pts)

1) We need to fight back against what some large companies are doing to the environment.

2) In some countries, there is a problem of people not having enough food.

3) I bought a packet of small things from the fruit a plant to see if I could grow vegetables in my garden. _____

4) Farmers lose a lot of money because of insects and other animals that harm crops.

C) What does each of the underlined words refer to? (2pts)

1) that (line 3): _____

2) they (line 13): _____

D) Decide if each of the following sentences is True or False. (2pts)

1) GM food has both advantages and disadvantages. ()

2) Farmers in a poor country may buy GM seeds from one of a globalized agri-business companies because they seem cheaper and produce better crops. ()

E) Find from the passage the opposite of the following words. (3pts)

1) problem: _____ 2) artificial: _____ 3) local: _____

F) Find from the passage the synonym of the following words. (3pts)

1) require: _____ 2) several: _____ 3) method: _____

Part 2**(20pts)**

There are thousands of amazing animals in the world, so choosing just five is quite random. But you're sure to find something interesting in our list, either a new fact about a common animal or one that you never knew existed. Scientists have named about 1,367,555 different species, not including insects, so it's not surprising that most people have never heard of some of them.

1. Mudskipper

Being fish, mudskippers use gills to breathe underwater, but their gills can hold water, which enables them to live on land too. They can even 'walk', using their front fins like legs. All this makes them especially interesting to biologists.

2. Leaf-cutter Ant

All ants are very interesting, especially the ways they live and work together. But leaf-cutter ants are particularly clever. **They** build a complex network that allows cool air into their homes and takes warm air out, making an efficient air-conditioning system.

3. Opossum

These North American animals are quite famous for pretending to be dead when they are attacked, but they have another defence too. Their bodies produce a protein that protects them from the poison of snakes and other animals. Surprisingly, this defence also works against snakes from other continents, which opossums have no contact with.

4. Mimic Octopus

All octopuses are intelligent, and can change their colour and shape. But the Mimic Octopus takes this further: **it** can actually pretend to be other animals, according to what is attacking it. It has been seen making itself look like various fish, sea snakes and jellyfish, as well as at least ten other species.

5. Honey Bee

Although many people take them for granted, bees are some of the most amazing animals of all, as well as being useful (or even vital) for humans. They are the only insects in the world that make food that people can eat. Honey itself is an amazing food, containing everything necessary for life. More importantly, a third of all the plants we eat wouldn't exist without the help of bees.

A) Answer the following questions. (6pts)

1) Why do mudskippers use their gills?

2) Why does a leaf-cutter ant build a complex network?

3) What does opossum's protein do?

4) What can a mimic octopus change?

5)What makes the honey bees the most especial insects in the world?

6)Give the text a title.

B)Replace the underlined parts of the sentences below with words or phrases from the text. (4pts)

1)If you are bitten by this snake, it's very important to get medical help quickly.

2)The animal's colour makes it possible for it to hide in the forest . _____

3)They took him to hospital after he accidentally drank some liquid that can kill people.

4)This problem is not at all simple, so it will be hard to solve _____

C)What does each of the underlined words refer to?(2pts)

1)they(line11): _____

2)it(line20): _____

D)Decide if each of the following sentences is True or False.(2pts)

1-Opossums have different ways of defending themselves from attack.()

2-Sea snakes are the biggest danger to the mimic octopus.()

E)Find from the passage the synonym of the following words.(3pts)

1)popular: _____ 2)construct: _____ 3)different: _____

F)Find from the passage the opposite of the following words.(3pts)

1)alone: _____ 2)prevents: _____ 3)cold: _____

Part 3**(20pts)**

Ali Baba was a poor woodcutter. One day, while he was working in the forest, he saw 40 thieves arrive in front of a cave. He hid behind a tree and watched what they were doing. He heard the leader of the thieves shout 'Open Sesame!' and was amazed to see the door of the cave open. The men went inside, and then some time later came out again. The leader said 'Close Sesame,' and the cave entrance closed. Ali Baba realised that this was where the thieves kept their stolen treasure. After the thieves had left, he used the same words to open the cave and was excited to find that it was full of gold, money and other valuable things.

He took some gold coins home and showed them to his brother Kasim, and told him all about the wonderful cave. Kasim decided to go and get some of the treasure too. He managed to get into the cave but forgot the words to get out again. When the thieves came back, they found Kasim and killed him.

When Ali found his brother's body in the cave, he took it home with the help of a clever girl called Morgana. When the thieves returned and found the body was gone, they realised that someone else knew the secret words. They found where Ali Baba lived and the leader visited him, pretending to be a seller of oil. He had jars with him, but instead of oil, they contained the other thieves, hiding inside. Luckily, Morgana knew who the oil seller really was. She poured boiling oil into the jars, killing the thieves, then later killed the leader too while she was dancing for him. In return for her help, Ali Baba said she could marry his son. He told his son the secret words, and later the son passed the secret to his children. So Ali Baba, his children and his grandchildren were rich for the rest of their lives.

A) Answer the following questions. (6pts)

1) Who was Ali Baba?

2) Who did Ali Baba see while he was working in the forest ?

3) What did the leader say to open the door of the cave?

4) What did Ali find?

5) How did Morgana help Ali Baba?

6) Give the text a title.

B) Complete the following sentences with the suitable words and phrases from the text.(4pts)

- 1)The thieves killed _____.
- 2)Ali told his brother _____ about the wonderful cave.
- 3)Morgana could marry _____.
- 4)Ali's family became _____.

C)What does each of the underlined words refer to?(2pts)

- 1)he(line1):_____
- 2)him(line20):_____

D)Decide if each of the following sentences is True or False.(2pts)

- 1-Ali Baba was a carpenter.()
- 2-Ali's father married Morgana.()

E)Find from the passage the opposite of the following words.(3pts)

- 1)outside:_____
- 2)hid:_____
- 3)depart:_____

F)Find from the passage the synonym of the following words.(3pts)

- 1)expensive:_____
 - 2)assistance: _____
 - 3)astute:_____
-

Appendix B

**The Impact of Using Mapping as a Game in Teaching Reading Comprehension on
11th Grade Students' Achievement and Attitudes**

أثر استخدام الخرائط كلعبة في تعليم فهم المقروء على تحصيل طلبة الصف الحادي عشر واتجاهاتهم



Dear Student,

The attached questionnaire is on attitudes towards using mapping as a game in learning reading comprehension. The aim of this survey is to know your attitudes towards using this method in learning reading comprehension. The questionnaire takes 9-14 minutes to complete. The data collected will be used confidently and for research purposes only. Please neatly and carefully answer all questions by ticking the appropriate box with a check mark ✓ that completely describes your views / attitudes. Thank you very much for your cooperation.

Most Truly,

Saddam Kobari

The Researcher

عزيزتي الطالبة،

في ما يلي إستبانة لقياس الاتجاهات نحو استخدام الخرائط كلعبة في تعلم فهم المقروء . وبهدف هذا المسح إلى معرفة رأيك حول استخدام هذه الطريقة في تعلم قطع الاستيعاب أثناء حصص القراءة . يحتاج هذا الاستبيان من 9-14 دقيقة لملأه . المعلومات في هذه الإستبانة ستبقى سرية ولأغراض البحث فقط . الرجاء الإجابة بدقة وتمعن على جميع الأسئلة من خلال وضع إشارة ✓ في المربع الذي يصف بشكل كامل وجهة نظرك .

شكرا جزيلاً على تعاونك .

مع جزيل الشكر ،

صدام كوبري

الباحث

Attitudes Towards Using Mapping as a Game in Learning Reading Comprehension اتجاهات نحو استخدام الخرائط كلعبة في تعلم قطع الاستيعاب				
Item	Strongly Disagree 1 أعارض بشدة	Disagree 2 أعارض	Agree 3 أوافق	Strongly Agree 4 أوافق بشدة
1	Using mapping as a game in learning reading comprehension can be applied to other new reading contexts. استخدام الخرائط كلعبة في تعلم قطع الاستيعاب يمكن استخدامه في تعلم قطع استيعاب جديدة أخرى.			
2	This method was very helpful in helping me understanding the reading passage. كانت هذه الطريقة مفيدة جدا في مساعدتي في فهم قطعة الاستيعاب .			
3	In general this method improved my reading skills . طورت هذه الطريقة من مهاراتي في القراءة بشكل عام.			
4	This method encouraged me to participate in the class discussions. شجعتني هذه الطريقة في المشاركة في النقاشات الصفية بشكل أكثر فعالية.			
5	Learning through this method encouraged me to communicate in English. شجعني التعلم باستخدام هذه الطريقة على التواصل باللغة الإنجليزية في الحصص الصفية .			
6	Learning through this method encouraged me to ask for clarifications. زاد التعلم في هذه الطريقة حماسي لأسأل عن توضيحات حين لا أفهم المقروء.			
7	This method made me more enthusiastic in the reading class. جعلتني هذه الطريقة متحمس أكثر لحصة القراءة.			
8	Using this method in learning reading comprehension was boring. استخدام هذه الطريقة في تعلم قطع الاستيعاب كان مملا.			

9	Using this method in learning reading made it more enjoyable. أصبح تعلم قطع الاستيعاب بهذه الطريقة ممتعاً أكثر.				
10	I like me teacher to continue using this mapping method in all reading classes for the rest of the year. أحب أن نستمر باستخدام طريقة الخرائط في حصص القراءة لبقية هذا العام الدراسي.				
11	Using the method did not develop my reading ability . لم يطور استخدام هذه الطريقة مقدرتي في القراءة .				
12	Using this method as a game activated my vocabulary . استخدام هذه الطريقة كلعبة نشط من مفرداتي في هذه اللغة.				
13	I hope other teachers use this method in teaching reading. أمل أن يستخدم المعلمون الآخرون هذه الطريقة في تعليم القراءة.				
14	Using this method helped me not feeling nervous about reading. ساعدني استخدام هذه الطريقة على الإحساس بالراحة أثناء القراءة .				
15	Using this method helped me feel confident in my ability to answer the questions. زاد استخدام هذه الطريقة من شعوري بالثقة في مقدرتي في الإجابة على الأسئلة .				
16	Using this method in learning reading comprehension helped me to summarize the lesson easily. ساعدني استخدام هذه الطريقة في تعلم قطع الاستيعاب على أن أخلص ما أتعلمه بسهولة.				

17	<p>Using this method in learning reading comprehension encouraged me to present the lesson in front of my colleagues .</p> <p>شجعني استخدام هذه الطريقة في تعلم قطع الاستيعاب على المبادرة في أن أعرض الدرس أمام زميلاتي.</p>				
18	<p>Using this method in reading comprehension helped me to find the main ideas in the reading text.</p> <p>ساعدني استخدام هذه الطريقة في تعلم قطع الاستيعاب لاستنتاج الأفكار الرئيسية في نص القراءة .</p>				
19	<p>Using this method helped me to connect the main and major ideas in the text to other similar experiences .</p> <p>ساعدني استخدام هذه الطريقة على أن أربط الأفكار الرئيسية والفرعية في النص بمواقف تعليمية حياتية مشابهة.</p>				
20	<p>Using this method in learning reading comprehension made me like reading.</p> <p>جعلني استخدام هذه الطريقة في تعلم قطع الاستيعاب أحب القراءة .</p>				
21	<p>Using this method in learning reading comprehension helped me learn different words and expressions.</p> <p>ساعدني استخدام هذه الطريقة في تعلم قطع الاستيعاب على أن أتعلم كلمات ومصطلحات جديدة.</p>				
22	<p>I did not like reading because of this method in learning reading comprehension.</p> <p>لم أحب تعلم قطع الاستيعاب بسبب هذه الطريقة في التعلم .</p>				
23	<p>Using this method in learning reading comprehension is better than other methods through which I was taught reading comprehension.</p> <p>استخدام هذه الطريقة في تعلم قطع الاستيعاب أفضل من الطريقة العادية التي تعلمت فيها قطع الاستيعاب .</p>				

Appendix C

Key Answers

Part 1

A)

1-GM crops can resist attacks by pests.

2-Rice can grow in salty water.

3-GM crops could have a disastrous effect on agriculture and environment.

4-They might kill natural plants and take over them.

5-The problem of starvation.

6-Advantages and disadvantages of GM food.

B)

1-resist 2- starvation 3- seeds 4- pests

C)

1-Plants 2-GM seeds

D)

1-(T) 2-(T)

E)

1-solution 2-natural 3- global

F)

1-need 2- many 3-way

Part 2**A)**

1-Mudskippers use their gills to breathe under water.

2-They build a complex network that allows cool air into their homes and takes warm air out.

3-Protects them from the poison of snakes and other animals.

4-Colour and shape.

5-They are the only insects in the world that make food that people can eat.

6- The five amazing animals.

B)

1-Vital /necessary

2- enables

3-Posion

4- Complex

C)

1-Leaf-cutter ants

2-Mimic octopus

D)

1-T

2-F

E)

1-Common/famous

2- Build

3- Various

F)

1-together

2- allows

3-warm

Part 3**A)**

1-Ali Baba was a poor wood cutter.

2-Ali Baba saw 40 thieves in front of a cave.

3- Open Sesame.

4- Gold, money and other valuable things.

5-She poured boiling oil into the jars, killing the thieves, then later killed the later too while she was dancing for him.

6-Ali Baba and the 40 thieves.

B)

1- Kasim(his brother) 2-Kasim 3- Ali's son 4-Rich for the rest of their life.

C)

1- Ali Baba 2-Kasim(his brother)

D)

1-F 2- F

E)

1-Inside 2- showed 3- arrive

F)

1-Valuabe 2- help 3- clever

Appendix D

Read the following text silently and answer the questions that follow

Adventure and extreme sports

Adventure sports are all about excitement and skill in the outdoors. They usually do not involve teams and there are very few rules. Some of these adventure sports can be dangerous and an accident could result in serious injury or death. These are called extreme sports. Here are three extreme sports that are popular around the world.

Kitesurfing

This extreme water sport involves holding on to a large kite while standing on a board. With a good wind it is possible to skim across the sea at speeds of over 100 kilometres per hour! It is also possible to jump several metres in the air and stay up for 20 seconds.

Skydiving

Skydiving is the name for jumping from a plane and diving through the air before opening a parachute at the last moment to land safely on the ground. During the fall, skydivers enjoy the sensation of speed and the sight of the world rushing up to meet them.

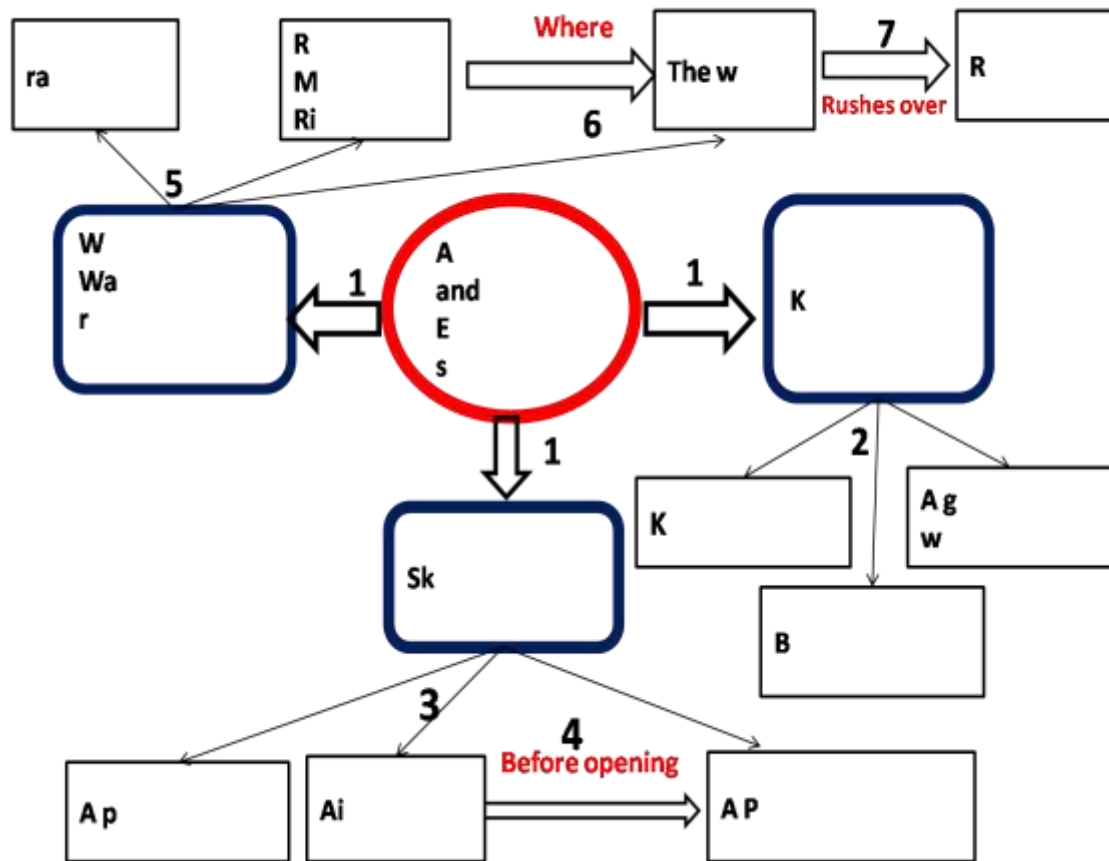
White-water rafting

This is done on small boats (called rafts) in rapidly-moving rivers. Where the water rushes over rocks it becomes white, which gives the sport its name. This is one adventure sport that is not done alone. Everyone in the raft must work together as a team.

The title of this lesson is _____

- 1) What are the extreme sports that are popular around the world ?
- 2) What does kite surfing need ?
- 3) What does skydiving need ?
- 4) When does jumping from a plane in skydiving happen ?
- 5) What does white water rafting need ?
- 6) What is the thing that rushes in rapidly moving rivers ?
- 7) Where does water rush ?

Taking Risks . Unit 2. Page 16



Read the following text silently and answer the questions that follow

Skateboarding: an international adventure sport

Skateboarding is perhaps the most popular of all adventure sports. There are at least 11 million skateboarders worldwide (some say it is as many as 20 million). The majority are aged under 18. It involves riding on a board with wheels doing tricks (jumping in the air, sliding down stairs, etc). The most important trick is the 'ollie' because it is the one all the others are built on. It is a jump in which the board sticks to the feet as the skateboarder flies through the air.

The most important requirement is a skateboard, but good trainers are also needed. There is a risk of accidents so safety equipment is required. A helmet should be worn because any blow to the head is dangerous. A fall at speed can cause injury so protection for the knees, elbows and wrists is needed.

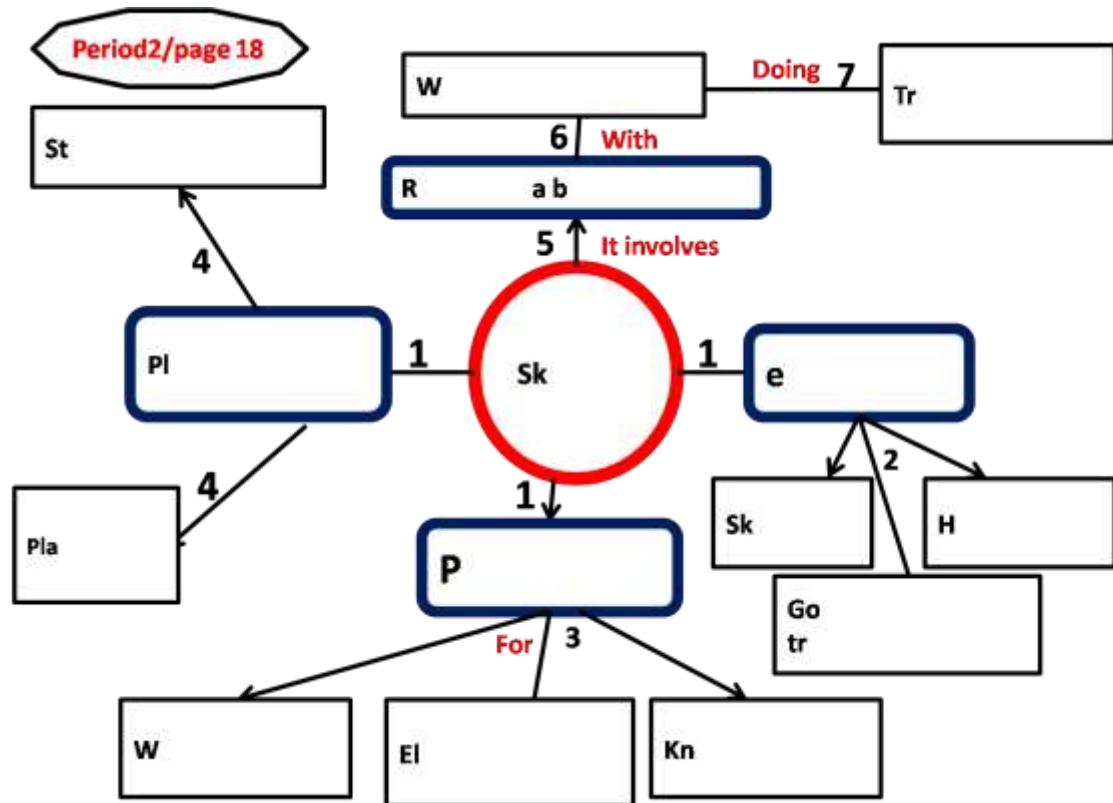
Skateboarding started in the USA in the 1950s and became well-known in the 1970s. It used to be done in the street and in playgrounds, but in 1976 the first skate park was built. Skate parks have steep slopes so the skateboarder can gain speed easily. They are the best place to start

because there are always other skaters to watch and learn from.

The first skate parks opened in Palestine in 2014. SkateJAM, an international sports organisation, has opened a park in Gaza and the British group SkatePAL has built one in Zababdeh. There are plans to open more skate parks in Ramallah and Nabi Saleh.

The lesson is about _____

- 1) What is needed in skateboarding ?
- 2) What is the equipment required in skateboarding ?
- 3) What are the things which need protection in skateboarding ?
- 4) What are the places that can be used for skateboarding ?
- 5) What does skateboarding involve ?
- 6) What should be with the board in skateboarding ?
- 7) What do skateboarders do ?



Read the following text silently and answer the questions that follow

Erin Langworthy, a 22-year-old Australian on holiday in Africa, got more of an adventure than she wanted when she did a bungee jump off the 111-metre-high Victoria Falls Bridge.

Bungee jumping is an extreme sport that involves jumping off high buildings or bridges while attached to a large elastic cord. The jumper dives almost to the bottom before the cord pulls them back up again ... only not for Erin!

'Before my turn, 104 others had jumped safely,' she said. 'All my friends had been down and come back so I wasn't too worried.'

The cord didn't last the 105th jump. It stopped her fall but then broke, letting her drop the final 40 metres into the Zambezi River below, which is the home to man-eating crocodiles!

The river is fast moving and her legs were still tied to the cord so it was difficult for her to swim.

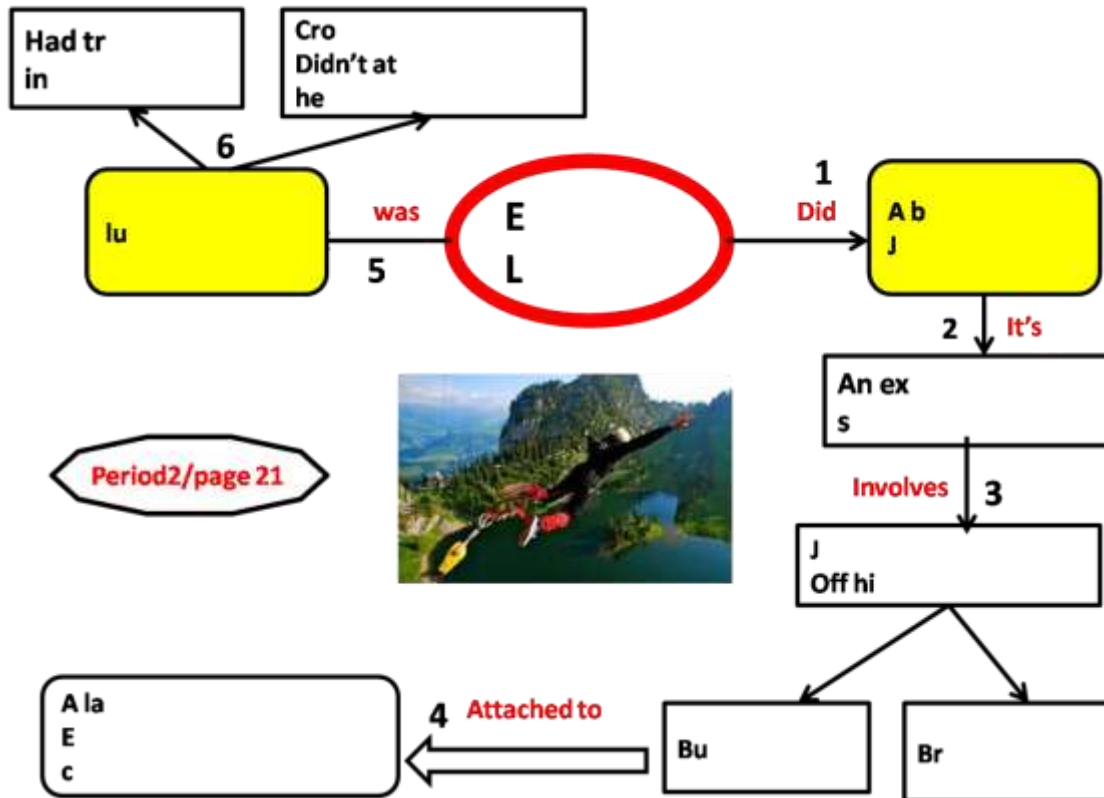
'It was quite scary because a couple of times the cord got caught on some rocks,' she explained. 'I had to swim down to pull the bungee cord free.'

Eventually she reached some rocks at the side and held on until she was rescued. She was in the water for 40 minutes. Later she was taken to hospital in South Africa where she had to spend a week but made a full recovery. And she has a great story to tell all her friends!

The hospital treatment cost \$50,000, but she was lucky because she had travel insurance which paid for the treatment. In fact, she now helps the Australian government encourage young tourists to buy travel insurance before they go abroad.

The lesson is about a person whose name is _____

- 1) What did Erin Langworthy do ?
- 2) What is a bungee jump ?
- 3) What does it involve ?
- 4) What is attached to the person in a bungee jump?
- 5) How was Erin ?
- 6) Why was Erin Lucky ?



Read the following text silently and answer the questions that follow

TEXT A

- Low fat
- Low sugar
- No chemical additives
- No artificial flavours or colours
- GM-free
- 100% natural

TEXT B




Slow food

We've all heard about fast food. Burgers and chips or pizza have become the standard meal for many young people around the world. Have you heard of slow food though? The Slow Food Movement started in Italy in the 1980s and now has about 100,000 members in more than 120 countries.

'It's called slow food because it was a reaction to the global spread of fast food, like burgers, which many people thought was bad for people's health and for the environment,' explains Bruno Rosario, owner of a 'slow food restaurant' in London. 'What we're trying to do is fight against the globalisation and standardisation of food, where people eat the same kind of food all over the world.' People like Bruno think it is important to use fresh food from the local area and cook it using traditional methods. 'It's getting more and more popular,' says Bruno. 'By next year our restaurant will have been in business for 20 years, so we must be doing something right.'

TEXT C

Understanding the 'traffic light' system of food labelling

-  These foods are high in salt, sugar and/or fat. Only eat a little, and not too often.
-  An OK choice, neither high nor low in unhealthy ingredients.
-  Good choice, eat as much as you like, as often as you can.

TEXT D

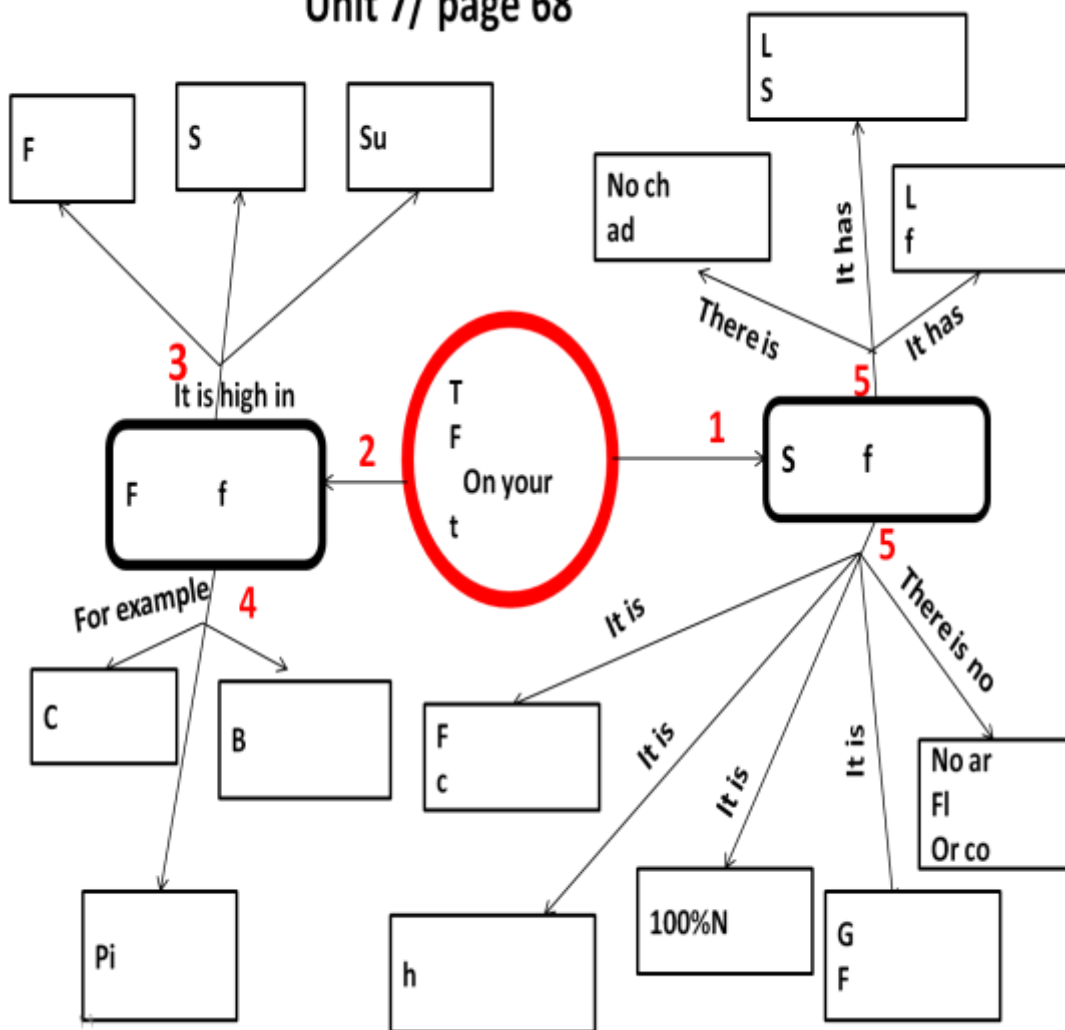
All our food is homemade and freshly-cooked, using locally-grown ingredients as far as possible.

68 Unit 7

The main title of this unit is _____

- 1) What is the kind of the food which these texts advise us to eat ?
- 2) What is the kind of the food which these texts advise us not to eat ?
- 3) What is the fast food high in ?
- 4) What are the examples of fast food ?
- 5) What are the advantages of slow food ?

Unit 7/ page 68



Read the following text silently and answer the questions that follow

Genetically modified world

Genes are like a set of instructions for making a living thing. Flower or elephant, fish or human: they are all what they are because of their genes. When scientists found that they could change (or modify)

- things by taking out or adding genes, many new things became possible, including genetically-modified (GM) foods and other crops.

We can now artificially create plants that produce more food than natural ones, crops that can resist

- attacks by pests, rice that can grow in salty water, plants that work like medicines, and many other amazing things. To some people, this makes the future look very exciting. In 20 years' time, they say, we will all be eating GM food and the global
- problem of starvation will be solved.

However, not everybody is so sure that this is a good thing. There are concerns that GM crops could have a disastrous effect on agriculture and the environment in general. They might, for example, kill

- natural plants and take over from them. Also, people say that we do not know enough about the effects of GM food on the human body.

More generally, some people see GM crops as just one part of the growing use of technology in

- agriculture and the increasing power of a few huge globalised 'agri-businesses'. For example, farmers in a poor country may buy GM seeds from one of these companies because they seem cheaper and produce better crops. What they don't realise is that
- they won't be able to save the seeds from their crop for the next year. Instead, they will have to buy more seeds from the company.

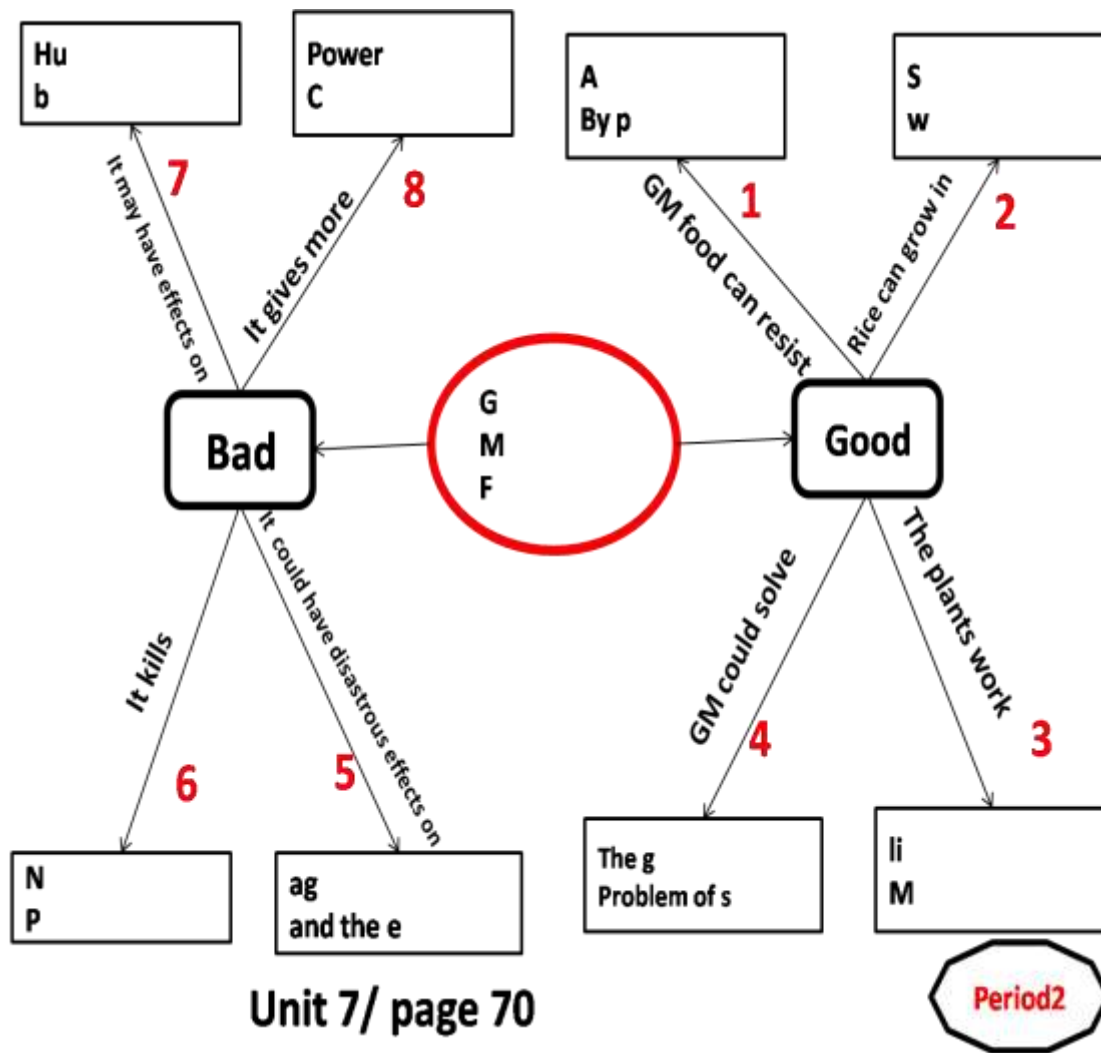
So, while some see the industrialisation of farming as the solution to many global problems, others

- believe that 'factory farming' has already gone too far, and that we need to return to a more natural way of feeding people.

70 Unit 7

The title of the text is _____

- 1) What can GM crops resist ?
- 2) Where can rice grow ?
- 3) How do the GM plants work ?
- 4) What will GM food solve ?
- 5) Where could GM food have a disastrous effect on ?
- 6) What might GM crops kill ?
- 7) Where may GM food have effects on ?
- 8) What does GM food give ?



Unit 7/ page 70

Read the following text silently and answer the questions that follow

There are thousands of amazing animals in the world, so choosing just five is quite random. But you're sure to find something interesting in our list, either a new fact about a common animal or one that you never knew existed. Scientists have named about 1,367,555 different species, not including insects, so it's not surprising that most people have never heard of some of them.

1. Mudskipper

Being fish, mudskippers use gills to breathe underwater, but their gills can hold water, which enables them to live on land too. They can even 'walk', using their front fins like legs. All this makes them especially interesting to biologists.

2. Leaf-cutter Ant

All ants are very interesting, especially the ways they live and work together. But leaf-cutter ants are particularly clever. They build a complex network that allows cool air into their homes and takes warm air out, making an efficient air-conditioning system.

3. Opossum

These North American animals are quite famous for pretending to be dead when they are attacked, but they have another defence too. Their bodies produce a protein that protects them from the poison of snakes and other animals. Surprisingly, this defence also works against snakes from other continents, which opossums have no contact with.

4. Mimic Octopus

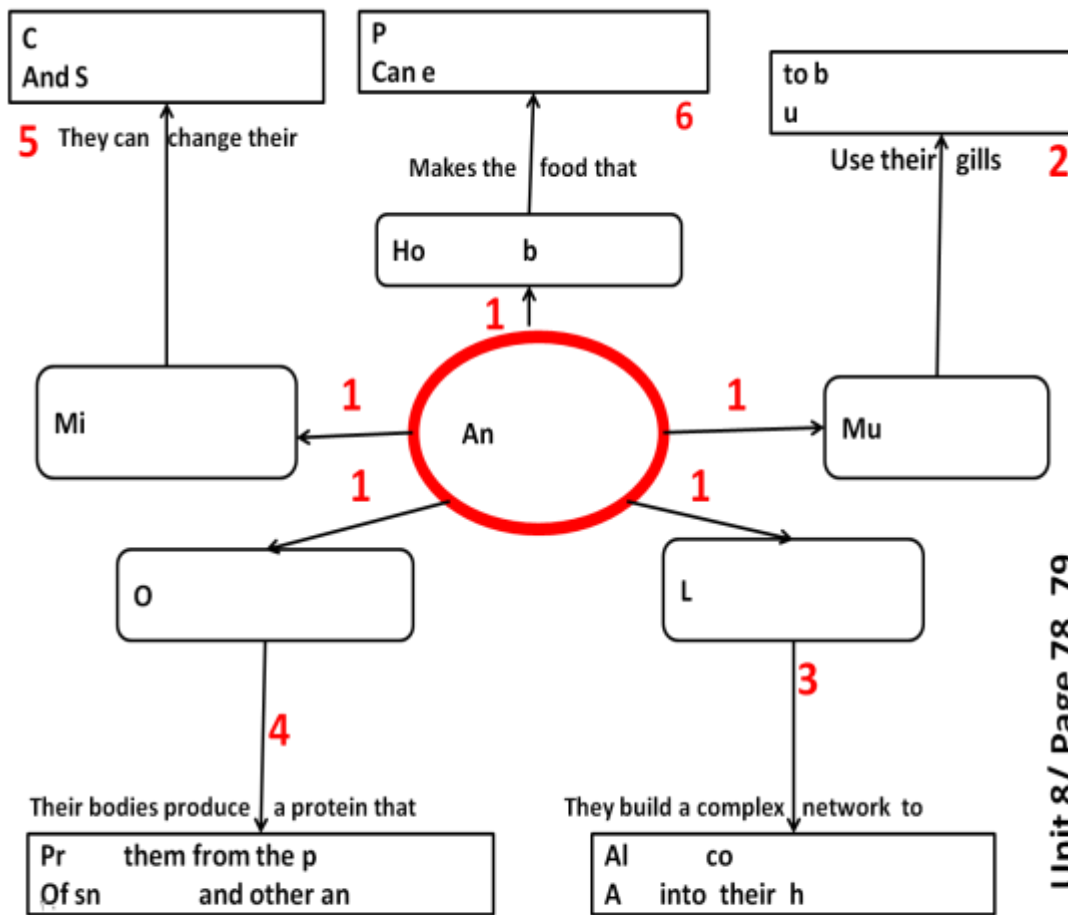
All octopuses are intelligent, and can change their colour and shape. But the Mimic Octopus takes this further: it can actually pretend to be other animals, according to what is attacking it. It has been seen making itself look like various fish, sea snakes and jellyfish, as well as at least ten other species.

5. Honey Bee

Although many people take them for granted, bees are some of the most amazing animals of all, as well as being useful (or even vital) for humans. They are the only insects in the world that make food that people can eat. Honey itself is an amazing food, containing everything necessary for life. More importantly, a third of all the plants we eat wouldn't exist without the help of bees.

The passage talks about _____

- 1) What are the animals which the text talks about ?
- 2) Why do mudskippers use their gills ?
- 3) Why does a leaf-cutter ant build a complex network ?
- 4) What does opossum's protein do ?
- 5) What can a mimic octopus change ?
- 6) What makes honey bees the especial insects in the world ?



Unit 8/ Page 78, 79

Read the following text silently and answer the questions that follow



Alan Finn

[Home](#) [Wildlife](#) [Links](#) [Alan's Blog](#) [Contact Alan](#)

Everyone likes pandas, don't they? And of course, that includes me. Recently, though, I've reached an opinion that might upset some people reading this blog.

We all know that giant pandas are an endangered species, facing many threats. They struggle to survive in areas of land that are getting smaller every year. But, quite honestly, they don't really help themselves, do they? They only eat one thing, a plant that doesn't have many nutrients, and they seem to find it very difficult to produce baby pandas.

Are they really worth it? Organisations like the World Wildlife Fund, which uses the panda on all its publicity, spend millions of pounds trying to preserve this one animal, while there are many other species (animals and plants) that are threatened with extinction. They aren't as pretty as pandas (in fact, some of them are definitely rather ugly), but they all play an important part in the complex network of life on earth.

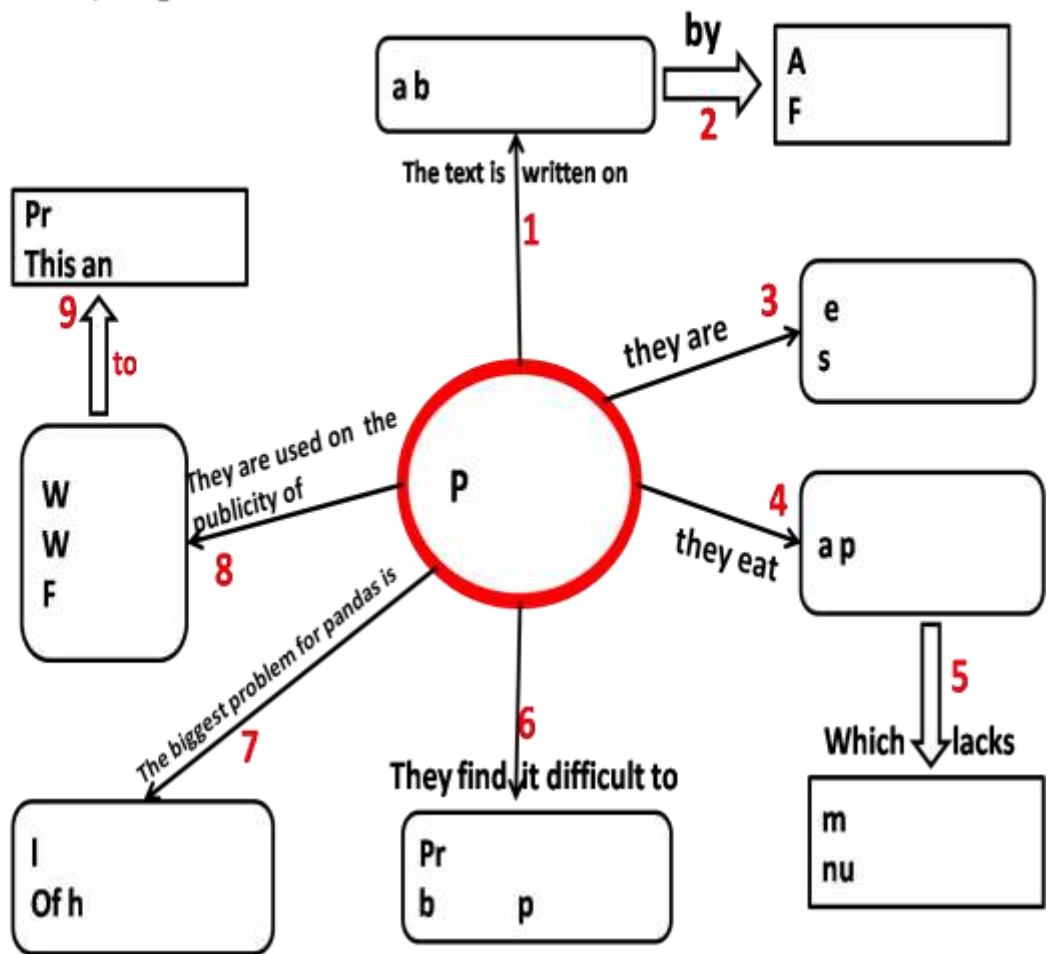
Extinction is part of the Earth's history. Obviously we can't preserve every species, so we need to make some hard economic choices. Maybe it's time to stop wasting all this money on one animal. The biggest problem for all endangered species, including pandas, is loss of habitat. Instead of saying 'Save the Whale (or Tiger or Panda)', we should be saying 'Save the Rainforest (or Desert or Rivers)'.

Posted April 19th, 10:35 a.m.

The text mainly talks about an animal whose name is _____

- 1) Where is the text written on ?
- 2) Who is the writer ?
- 3) What species do pandas belong to ?
- 4) What do pandas eat?
- 5) What does the plant which pandas eat lack ?
- 6) What do pandas find difficult to do ?
- 7) What is the biggest problem for all endangered species including panda?
- 8) What uses panda on its publicity ?
- 9) Why does the World Wildlife Fund use panda on its publicity ?

Unit 8/ Page 80



Read the following text silently and answer the questions that follow

Global tales

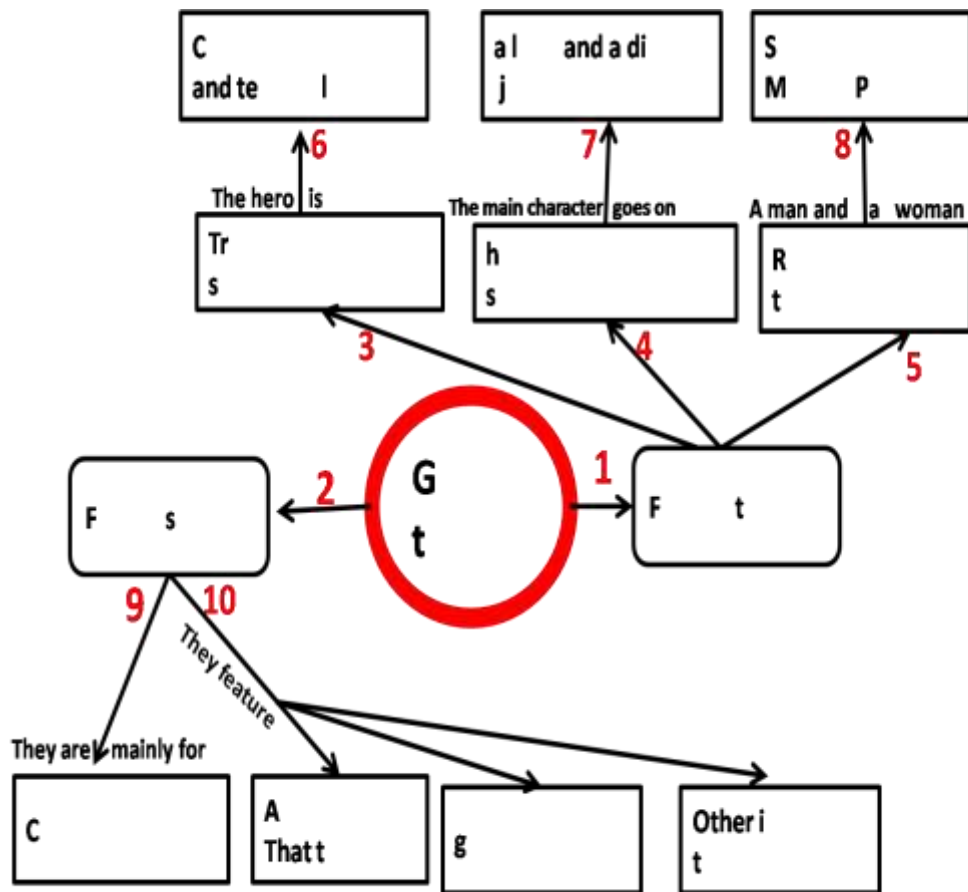
One definition of 'folk tales' is: stories that are traditional among a group of people. Like folk songs, they are passed down from generation to generation and it is impossible to say who first told or wrote them. 'Fairy stories' are similar, but they are mainly for children and often feature animals that talk, giants and other imaginary things.

- We can learn a lot about different countries from their folk tales, but the similarities between them are interesting too. Take, for example, the 'trickster' stories that are told in many parts of the world, including Africa, the Caribbean and Scandinavia, where they are very popular. In these, the hero gets what he wants by being clever and telling lies. Many societies have 'heroic' stories, where the main character goes on a long and difficult journey to find something important. There are also
- 'romantic' tales, love stories in which a man and a woman have to solve many problems before they can be together.

74

The title of this text is _____

- 1) What do we call the stories that are traditional among a group of people ?
- 2) What do we call the stories that contain animals that talk ?
- 3) What are the stories that are told in many parts of the world ?
- 4) What are the stories where the hero wants to find something important ?
- 5) What are the stories which have a man and a woman ?
- 6) How is the hero in the 'trickster' stories ?
- 7) Where does the main character in heroic stories go on ?
- 8) What have to a man and a woman do in romantic stories before being together ?
- 9) Who are the fairy stories mainly for ?
- 10) What do fairy stories feature ?



Read the following text silently and answer the questions that follow

Highly intelligent stories

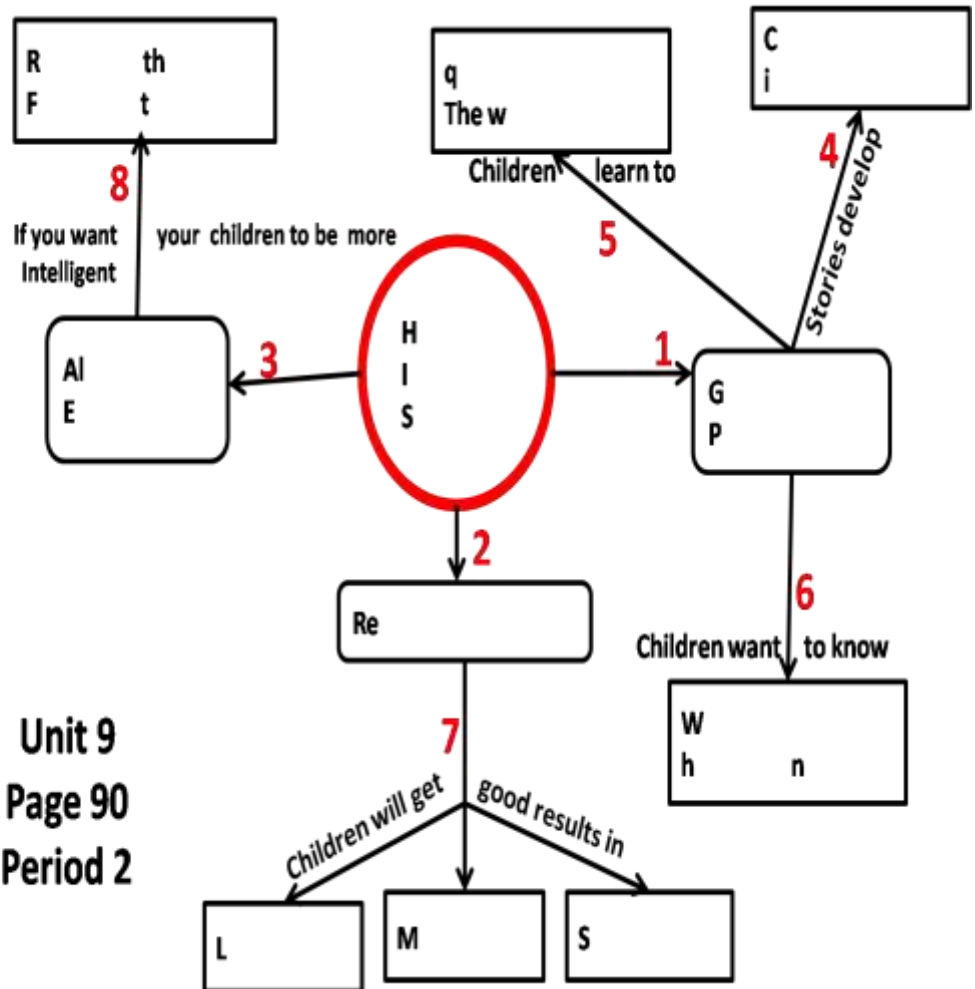
Some people worry that folk tales and fairy stories encourage children to believe things that can't happen in the real world. The highly praised children's writer Gillian Poulson couldn't disagree more. Stories, she says, help to develop a child's imagination. 'One of the main points of these stories,' she explains, 'is that they *don't happen in the real world*. *Once children have visited the other worlds stories describe, they are never quite the same. They learn to question the world they see around them, and perhaps to change it.*'

She's not alone in this opinion. The great scientist Albert Einstein once said: 'If you want your children to be intelligent, read them fairy tales. If you want them to be more intelligent, read them more fairy tales.' Research has shown that children who grow up hearing, and later reading, stories are much more likely to get good exam results, not just in language but also in maths and science. Gillian Poulson thinks the reason why children love fairy tales is quite simple. 'They just want to know what happens next. Folk tales or fairy stories are especially good for this because they don't normally have anything extra to get in the way. You don't need to know what the character is feeling or thinking, just what they do next. So you can start your story with something like "Once upon a time there was a poor old woman who lived in a forest with her son", and that's it. You don't need to say where the forest was or why they were poor. They don't even need to have names.

What did they do? That's the only important part.' Stories, then, are good for children. First by hearing them, and later by reading them independently, we learn that language is for sharing ideas and having fun. But Gillian has a warning for parents and teachers. 'Don't tell them that it's good for them, and certainly don't encourage them to read books that you think they should. There's no quicker way to make them not want to read.'

The title of the text is _____

- 1) Who is the children's writer the text talks about ?
- 2) What has shown that children who grow up hearing and reading stories are much more likely to get good exam results?
- 3) Who is the great scientist the text talks about ?
- 4) What do stories develop according to Gillian Paulson ?
- 5) What do children learn while reading stories according to Gillian Paulson ?
- 6) Why do children love fairy tales according to Gillian Paulson ?
- 7) What are the subjects which students will get good results in after reading stories ?
- 8) What should one do to make his/her children intelligent according to Albert Winston ?



Unit 9
Page 90
Period 2

Read the following text silently and answer the questions that follow

Ali Baba and the 40 Thieves*

Ali Baba was a poor woodcutter. One day, while he was working in the forest, he saw 40 thieves arrive in front of a cave. He hid behind a tree and watched what they were doing. He heard the leader of the thieves shout 'Open Sesame!' and was amazed to see the door of the cave open. The men went inside, and then some time later came out again. The leader said 'Close Sesame,' and the cave entrance closed. Ali Baba realised that this was where the thieves kept their stolen treasure. After the thieves had left, he used the same words to open the cave and was excited to find that it was full of gold, money and other valuable things.

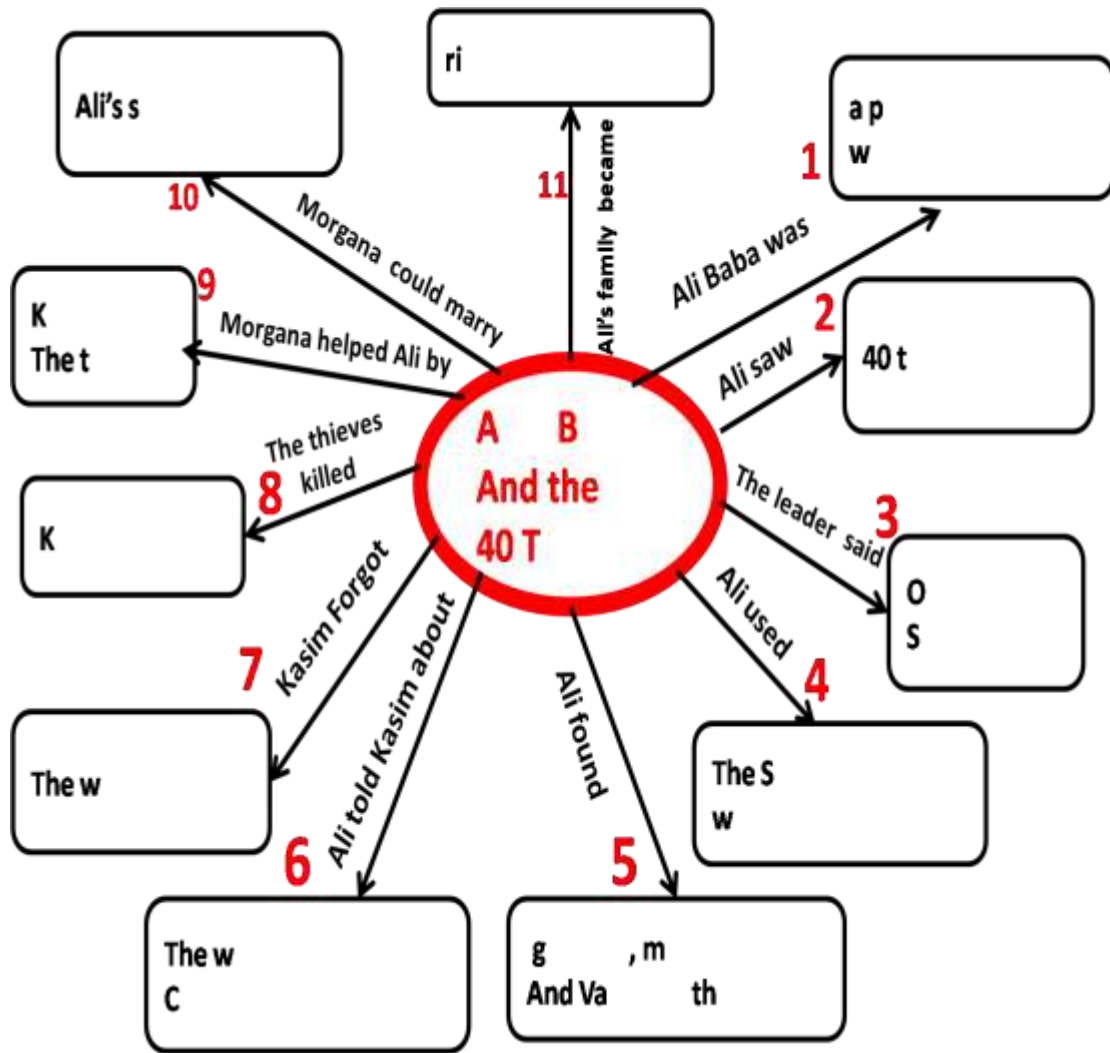
He took some gold coins home and showed them to his brother Kasim, and told him all about the wonderful cave. Kasim decided to go and get some of the treasure too. He managed to get into the cave but forgot the words to get out again. When the thieves came back, they found Kasim and killed him.

When Ali found his brother's body in the cave, he took it home with the help of a clever girl called Morgana. When the thieves returned and found the body was gone, they realised that someone else knew the secret words. They found where Ali Baba lived and the leader visited him, pretending to be a seller of oil. He had jars with him, but instead of oil, they contained the other thieves, hiding inside.

Luckily, Morgana knew who the oil seller really was. She poured boiling oil into the jars, killing the thieves, then later killed the leader too while she was dancing for him. In return for her help, Ali Baba said she could marry his son. He told his son the secret words, and later the son passed the secret to his children. So Ali Baba, his children and his grandchildren were rich for the rest of their lives.

The text talks about _____

- 1) Who was Ali Baba ?
- 2) Who did Ali Baba See ?
- 3) What did the leader say to open the door ?
- 4) What did Ali use when the thieves left ?
- 5) What did Ali find ?
- 6) What did Ali tell his brother(Kasim) about ?
- 7) What did Kasim forget ?
- 8) Who did the thieves kill ?
- 9) How did Morgana help Ali Baba ?
- 10) Who could Morgana marry?
- 11) What happened to Ali's family ?



Appendix E

The Food on Your Table

The teacher started the lesson with revising the previous lesson by brainstorming. Then, the teacher implemented guess the word game that introduced the lesson. The word , interview, introduced the first activity of this lesson . After that, the teacher gave the chance for two students to make an interview about fast and slow food. The interviewer, the first student, asked many questions such as which food do you prefer ? what are the differences between fast and slow food ? Of course, the interviewee answered confidently.

In addition, the teacher divided the students into groups; the group had six students. The teacher asked the students to open the booklet which had the previously designed map on the reading text. The teacher asked the students to read the text silently to answer the written questions by using and completing the map. The teacher told the groups to distribute the tasks to all students in the group in order to complete the tasks within a short time. That is, every member, or two members ,in the group had a specific a task to do (specific questions to answer related to the reading text).

In fact, the students were highly and actively engaged in silent reading ,and they were working to complete the map since every student in the group was given a specific task related to the map. The text had different questions and the number of the questions were drawn on the map. The students were very enthusiastic to answer the questions since the map offered the first letter/s of the answer. The students were delighted, active and enthusiastic while working; I heard a student said to her teacher:" This game is challenging ,I like learning reading comprehension by this game since it makes things easier and meaningful" .Then, the teacher ,after giving them sufficient time to work, started to take answers from the students. The students answered confidently and correctly. I noticed that all the 36 students raised their hands and wanted to participate. The teacher tried to take answers from all the six groups respectively. When she took and wrote all the answers of the questions , the map was completed since every question covered a part in the map. Later, the

teacher asked every group to nominate a student to present the lesson in front of their colleagues.

Six students presented the lesson by using the map confidently and correctly. The six students could attract other students' attention; those students compelled other students to pay close attention to what they were doing by the way they presented the lesson using the map. After that, the teacher asked every group about the major and minor ideas of the lesson according to the map; most students raised their hands to answer. The teacher was very delighted to see that most students knew how to answer; the students eagerly answered, and their answers were meaningful and expressive. Then, the teacher asked every group to summarize the lesson briefly. The students were working quickly and enjoyably to write the summary. Some groups read their summary which reflected their deep understanding and knowledge of the reading passage.

GM Food

The teacher divided the students as usual into groups. Every group had six students. The teacher started the lesson by revising the students with the previous lesson, and she asked them about the previous passage. All of the students could remember the previous passage ;the teacher randomly chose some students to talk about the main and major ideas of that passage. The students correctly and confidently answered . Then, the teacher implemented guess the word game; the words were "Genetically Modified Food". All students participated to guess those words. Then, the teacher asked the students to open the booklet by giving them the number of the page; she asked those students to predict the objectives of the passage according to the text and the map they had. Nearly three minutes later, most students raised their hands, and according to what I noticed, every student wanted to answer zealously. The teacher chose five students ,and they could guess the objectives of the lesson.

Then, the teacher asked the students to read the text silently in order to complete the map by answering the given questions .Every two students in the group were given specific questions to answer in order to manage time effectively . The students were highly active and cooperative with each other, and I noticed that they were very interested to complete the map. The teacher was checking the groups while they were working to ensure that everything was going well. After giving the students sufficient time to work, the teacher started to ask them questions to complete the map; that is, the first question was designed to complete the center of the map, the question asked students about the title of the lesson. It was noticed that all students raised their hands; they were answering the questions interestingly and confidently. All the groups participated zealously in answering the questions.

After that, the teacher asked the groups to nominate a student to present the lesson briefly in front of their colleagues by using the completed map. All of them were raising their hands to present the lesson , but the teacher told them that she needed only six new students who did not present any lesson previously .Six

students presented the lesson in front of their colleagues; they were happy and confident while they were presenting the lesson.

Later, the teacher asked the students to answer some definitions, synonyms and opposites of some words from the reading passage ;the teacher randomly selected some students . Those students answered accurately. Then, the teacher told every student to hide their booklet and summarize what they understood from the lesson according to the map they were given. I noticed that all students were encouraged while they were summarizing the lesson. The teacher chose only 3 students to show their summary since the time was not sufficient .The three students felt happy and enthusiastic to read their summary to the teacher and their colleagues. Their summary was coherent and cohesive , and it covered all the ideas of the reading comprehension lesson. The teacher concluded the class, and the students showed their satisfaction. Indeed, it was noticed that all students actively and confidently participated during the class.

Amazing Animals

The teacher divided the 36 students into groups as usual; the teacher also moved some students from one group to another. The teacher started the lesson by revising the students with the previous lesson. Then, the teacher asked the students to tell the major and minor ideas of the previous reading passage. Most students were raising their hands, the teacher chose two students to answer. The answers of those students were meaningful and correct. The teacher implemented a game with the students which aimed to give the chance for the students to choose a paper. The paper had information about an animal, and the student's mission was to guess the name of that animal. The students were very active while they were trying to answer.

The teacher asked the students to open the booklet. Then, she asked a student to read the questions shown on the board, these questions were written on the reading text to complete the map. After that, the teacher gave the students 10 minutes to read the text silently and answer the questions. Every two students in every group had specific work to do. I noticed that all students were working zealously and actively. They were highly engaged and they were working cooperatively to complete the map. I noticed that the atmosphere was challenging for the students since the map turned the lesson into a game.

The first step was to complete the map was taking the answer from a student and writing the title in the center. The teacher asked the students to answer the first question which was "What are the five animals which the text talks about?"; it was noticed that all students knew the answer. The teacher started to take answers from the students who showed their great eagerness to answer. She tried to take the answers from all the groups respectively to ensure that all groups participated while answering those questions. While she was doing that, a student did not know a name of an animal. Other students tried to answer, but the teacher told them that she needed that student to answer. Hence, the teacher gave that student an extra letter on the first letter of the word written on the map, the student tried thinking

and searching. Then, the student answered correctly. The student felt happy and delighted since she could answer correctly.

The second question was about why mudskippers use their gills . The teacher tried to take answers from another group. The teacher chose another group, and they answered correctly and accurately. The teacher wrote the answer on the board ;the map was being completed gradually. The students' answers were correct and they showed their understanding for the reading passage . After taking answers for the six questions written on the reading text and completing the map on the board, the teacher asked the groups to nominate a student in order to briefly present the lesson using the map in front of her colleagues.6 students presented the lesson nicely ,and they covered all the ideas discussed in the reading passage. The teacher was very satisfied with their excellent performance. Then, the teacher asked them to close their booklet in order to let students summarize the lesson briefly. The students were very interested in summarizing the lesson according to what I noticed while observing them. The teacher chose only two students to read their summary to their colleagues. The students were happy since the teacher chose them ,and their summary was clear, coherent and cohesive. That is, their summary demonstrated their deep understanding of the reading passage .

Pandas by Alan Finn

The teacher started the lesson with revising the previous lesson by brainstorming. Then, the teacher implemented guess the word game that introduced the lesson. The word, endangered species, introduced the first activity of that lesson. After that, the teacher asked every student to describe these words using her own words. Of course, most students raised their hands, but the teacher tried to scaffold and help the students who did not raise their hand. The teacher encouraged them to speak. Then, the teacher chose six students randomly to answer. They tried to describe these words that are related to the reading passage, their description was nice. Later, the teacher asked those students to look at the map and the text they have in order to expect the objectives of that lesson. Most students raised their hands to answer; the teacher chose five students to answer. They could answer confidently, and their answers were close to the objectives of the lesson.

In addition, the teacher divided the students into groups; the group had six students. The teacher asked the students to open the booklet which had the previously designed map on the reading text. The teacher asked the students to read the text silently to answer the written questions by using and completing the map. The teacher told the groups to distribute the tasks to all students in the group in order to complete the tasks in a short time. That is, every member, or two members, in the group had a specific task to do (specific questions to answer related to the reading text).

In fact, the students were highly and actively engaged in silent reading, and they were working to complete the map since every student in the group was given a specific task related to the map. I heard a student said " Learning English became easy ". The text had different questions and the number of the questions were drawn on the map. The students were very enthusiastic to answer the questions since the map offers the first letter/s of the answer. The students were highly active and cooperative with each other, and I noticed that they were very interested to complete the map. The teacher was checking the groups while they were working to ensure that everything was going well. After giving the students sufficient time to

work, the teacher started to ask them questions to complete the map; that is, the first question was designed to complete the center of the map, the question asked students about the title of the lesson. The first answer was pandas. The second question was about the writer of the text whose name was Allan Finn. The third question was about the species which pandas belong to. The fourth question was about the plant which pandas eat. It was noticed that all students raised their hands; they were answering the questions interestingly, confidently and correctly. I noticed that all the 36 students raised their hands and wanted to participate. The teacher tried to take answers from all the six groups respectively. When she took and wrote all the answers of the questions, the map was completed since every question covered a part in the map. Later, the teacher asked every group to nominate a student to present the lesson in front of their colleagues.

Six students presented the lesson by using the map confidently and correctly. The six students could attract other students' attention; those students compelled other students to pay close attention to what they were doing by the way they presented the lesson using the map. I noticed that the teacher was very delighted and optimistic when she saw her students could present the lesson in a good way.

After that, the teacher asked every group about the major and minor ideas of the lesson according to the map on the given text; most students raised their hands to answer. I noticed that the teacher was very delighted to see that most students knew how to answer; the students eagerly answered, and their answers were meaningful and expressive. Then, the teacher asked every group to summarize the lesson briefly. The students were working quickly and enjoyably to write the summary. Some groups read their summary which showed their deep understanding and knowledge of the reading passage.

Global Tales

The teacher started the lesson by revising the students with the previous passage which was about pandas. The teacher asked the students to remind her of the main ideas of that passage. It was noticed that all of them knew the main ideas of that passage. A student said " The passage was about pandas" . Then the teacher asked another question which was : " who wrote the text ?" I noticed that all the students raised their hands to answer. A student answered " Allan Finn ". Then the teacher asked them to describe pandas according to the text and using their own words. The students were active and they showed their deep and great enthusiasm to answer . Their answers were meaningful and correct. It was noticed that the students could remember all the details written in that passage. Later, the teacher implemented guess the word game. She started to take letters from the students to complete the word. The winner student was the student who could guess the word. The word was " stories" . Then the teacher turned on the projector to show the previously prepared slides about the lesson. The slides were the passage, questions and map. Then the teacher divided the students into groups .Every group had six students. Then, the teacher asked the students to open the booklet by giving them a number of the page; she asked those students to predict the objectives of the passage according to the text and the map they had. Nearly three minutes later, most students raised their hands, and according to what I noticed, every student wanted zealously to answer. The teacher chose five students ,and they could guess the objectives of the lesson.

Then, the teacher asked the students to read the text silently in order to complete the map by answering the given questions .Every two students in the group were given specific questions to answer in order to manage time effectively . The students were highly active and cooperative with each other, and I noticed that they were very interested to complete the map. The teacher was checking the groups while they were working to ensure that everything was going well. After giving the students sufficient time to work, the teacher started to ask them questions to complete the map; that is, the first question was designed to complete the center of the map, the question asked students about the title of the lesson. It

was noticed that all students raised their hands; they were answering the questions interestingly and confidently. All the groups participated zealously in answering the questions.

When she took and wrote all the answers of the questions, the map was completed since every question covered a part in the map. Later, the teacher asked every group to nominate a student to present the lesson in front of their colleagues. Six students presented the lesson by using the map confidently and correctly. The six students could attract other students' attention; those students compelled other students to pay close attention to what they were doing by the way they presented the lesson using the map. Then, the teacher showed a video related to the topic of the lesson. The video was about Jack and the giant killer. Then, the teacher asked students to find a relation between the video and the map. Some of them answered that the video was an example of an imaginary story which the text talks about.

After that, the teacher asked every group about the major and minor ideas of the lesson according to the map; most students raised their hands to answer. The teacher was very delighted to see that most students knew how to answer; the students eagerly answered, and their answers were meaningful and expressive. Then, the teacher asked every group to summarize the lesson briefly. The students were working quickly and enjoyably to write the summary. Some groups read their summary which reflected their deep understanding and knowledge of the reading passage.

Highly Intelligent Stories

The teacher started the lesson with revising the previous lesson by brainstorming . The previous passage was about global tales. Then, the teacher implemented guess the word game that introduced the lesson. The words, " stories, children, writers", introduced that lesson. After that, the teacher asked every student to describe those words by using her own words . Of course, most students raised their hands, but the teacher tried to scaffold and help the students who did not raise their hand. The teacher encouraged them to speak. Then, the teacher chose six students randomly to answer. They tried to describe those words that were related to the reading passage, their description was nice. Later, the teacher asked those students to look at the map and the text they had in order to expect the objectives of that lesson. Most students raised their hands to answer; the teacher chose 4 students to answer. They could answer confidently ,and their answers were close to the objectives of the lesson.

Then, the teacher divided the students into groups; the group had six students. The teacher asked the students to open the booklet which had the previously designed map on the reading text. The teacher asked the students to read the text silently to answer the written questions by using and completing the map. The teacher told the groups to distribute the tasks to all students in the group in order to complete the tasks within a short time. That is, every member, or two members ,in the group had a specific a task to do (specific questions to answer related to the reading text).

The first step was to complete the map was taking the answer from a student and writing the title in the center. The teacher asked the students to answer the first question which was " Who is the children's writer the text talks about ?" ; it was noticed that all students knew the answer. The teacher started to take answers from the students who showed their great eagerness to answer. She tried to take the answers from all the groups respectively to ensure that all groups participated while answering those questions .While she was doing that ,a student did not know the answer . Other students tried to answer, but the teacher told them that she needed

that student to answer. Hence, the teacher gave that student an extra letter on the first letter of the word written on the map, the student tried thinking and searching. Then, the student answered correctly. The student felt satisfied and delighted since she could answer correctly.

The teacher chose another group to answer the next question, and they answered correctly and accurately. The teacher wrote the answer on the board; the map was being completed gradually. The students' answers were correct and they showed their understanding for the reading passage. After taking answers for the 8 questions written on the reading text and completing the map on the board, the teacher asked the groups to nominate a student in order to briefly present the lesson using the map in front of her colleagues. 6 students presented the lesson nicely, and they covered all the ideas discussed in the reading passage. The teacher was very satisfied with their excellent performance.

Ali Baba and the 40 Thieves

The teacher divided the students as usual into groups. Every group had six students. The teacher started the lesson by revising the students with the previous lesson, and she asked them about the previous passage. All of the students could remember the previous passage which was about highly intelligent stories ;the teacher randomly chose some students to talk about the main and major ideas of that passage. The students correctly and confidently answered . Then, the teacher implemented guess the word game; the words were "open sesame, Ali Baba and valuable things" . All students participated to guess those words. Then, the teacher asked the students to open the booklet by giving them the number of the page; she asked those students to predict the objectives of the passage according to the text and the map they had. Nearly three minutes later, most students raised their hands, and according to what I noticed, every student wanted zealously to answer. The teacher chose three students ,and they could guess the objectives of the lesson.

The teacher asked the students to open the booklet. Then, she asked a student to read the questions shown on the board, those questions were written on the reading text to complete the map. After that, the teacher gave the students 10 minutes to read the text silently and answer the given questions. Every two students in every group had specific work to do. I noticed that all students were working zealously and actively. They were highly engaged and they were working cooperatively to complete the map. I noticed that the atmosphere was challenging for the students since the map turned the lesson into a game.

The first step was to complete the map was taking the answer from a student and writing the title in the center. The answer was Ali Baba. The teacher asked the students to answer the first question which was " Who was Ali Baba ?" ; it was noticed that all students knew the answer. The second question was about what Ali Baba saw in front of the cave. The third question was about what the leader said to open the door. The fourth question was about what Ali used to open the door. The teacher started to take answers from the students who showed their great

eagerness to answer. She tried to take the answers from all the groups respectively to ensure that all groups participated while answering those questions .

When she took and wrote all the answers of the questions , the map was completed since every question covered a part in the map. Later, the teacher asked every group to nominate a student to present the lesson in front of their colleagues. Six students presented the lesson by using the map confidently and correctly. The six students could attract other students' attention; those students compelled other students to pay close attention to what they were doing by the way they presented the lesson using the map . I noticed that the teacher was very delighted and optimistic when she saw her students could present the lesson in an attractive way. Then, the teacher showed the students a video about the Story of Ali Baba. The students were watching the video surprisingly.

After that, the teacher asked every group about the major and minor ideas of the lesson according to the map on the given text ; most students raised their hands to answer. I noticed that the teacher was very delighted to see that most students knew how to answer; the students eagerly answered, and their answers were meaningful and expressive. Then, the teacher asked every group to summarize the lesson briefly. The students were working quickly and enjoyably to write the summary. Some groups read their summary which showed their deep understanding and knowledge of the reading passage.

Then, I asked the students how mapping as a game helped them in learning reading comprehension . A student said " Thank you for this method in learning ; this method made our lesson funnier, better and very exiting; this method made it easy to learn reading comprehension; we would like to use this method every class , and I would like my teacher to use it for the rest of the year" .

Another student said " This method developed my English language" . Another student said " This method helped me to answer quickly and confidently" . Another student said " This method helped me to understand the passage and speak English easily" . Another student added " Learning through this method helped me know the main ideas ,and I can remember all the lessons I studied" . Another student added" I

like other teachers to use this method in teaching because it is very useful and interesting". Another student added " This method encouraged me to present the lesson in front of my colleagues confidently". Another student said " This method helped me to summarize the lesson easily without any difficulties" . Another one added " This method activated my vocabulary ,and I learnt many new words .Thank you ". Another one added " I liked this method in learning, this method helped me to know the answers of all the given questions . It made the class more interesting and enjoyable". Another one added" I liked this method in learning reading comprehension. It helped me a lot in understanding the lesson and encouraged me to speak English . It made the English reading classes more interesting" Another student said " This method made me more enthusiastic in the reading class and helped me to feel confident" . Another student commented " This method was new, it was better than the way I used to learn. It helped me to learn new words and vocabulary; it also helped to participate in the class; I liked it, thank you. "Another student said" This method was amazing, I hope other teachers use it in different subjects, I liked it" Another one added " This method made learning more enjoyable, it helped me to feel confident in answering the questions" Another one added" I liked it, I felt it developed my English language, it encouraged me to stand in front of my colleagues to talk about the lesson"

Another student said" It helped me to summarize the lesson easily , I could remember all the reading lessons because it was a useful game; I liked it ,and I hope other teachers use it." Another one added " English Language became more enjoying, this method helped me to participate in the class ; the game made our lesson competitive and interesting, I liked it so much" .Another one commented " This method developed my reading ability, I learned many new words and expressions. It helped me to understand the passage and summarize the lesson, I liked it so much, and it encouraged me to present the lesson easily " .

Appendix F

Table(1):The Pretest Results of the Experimental and Control Groups

Control Group	Total(60)	Experimental Group	Total(60)
C1	33	E1	32
C2	21	E2	19
C3	30	E3	37
C4	36	E4	19
C5	21	E5	7
C6	31	E6	11
C7	32	E7	44
C8	29	E8	18
C9	17	E9	33
C10	21	E10	19
C11	35	E11	28
C12	37	E12	33
C13	32	E13	26
C14	25	E14	43
C15	14	E15	19
C16	22	E16	43
C17	19	E17	27
C18	24	E18	27
C19	32	E19	33
C20	33	E20	24
C21	33	E21	25
C22	18	E22	27
C23	37	E23	21
C24	46	E24	21
C25	43	E25	28
C26	47	E26	24
C27	14	E27	28
C28	44	E28	27
C29	9	E29	16
C30	13	E30	43
C31	36	E31	44
C32	35	E32	19
C33	12	E33	33
C34	17	E34	35
C35	23	E35	17
C36	27	E36	25
Average	27.7222	Average	27.08333

Table(2):The Posttest Results of the Experimental and Control Groups

Control Group	Posttest Total Score (60)	Experimental Group	Posttest Total Score (60)
CA1	48	EA1	58
CA2	27	EA2	44
CA3	32	EA3	59
CA4	48	EA4	47
CA5	31	EA5	31
CA6	41	EA6	33
CA7	44	EA7	59
CA8	42	EA8	42
CA9	31	EA9	55
CA10	31	EA10	48
CA11	54	EA11	58
CA12	41	EA12	57
CA13	49	EA13	38
CA14	40	EA14	59
CA15	24	EA15	52
CA16	32	EA16	58
CA17	20	EA17	53
CA18	43	EA18	46
CA19	53	EA19	50
CA20	38	EA20	55
CA21	49	EA21	51
CA22	27	EA22	49
CA23	50	EA23	46
CA24	51	EA24	35
CA25	49	EA25	48
CA26	55	EA26	42
CA27	24	EA27	57
CA28	53	EA28	52
CA29	20	EA29	37
CA30	19	EA30	60
CA31	46	EA31	59
CA32	53	EA32	56
CA33	21	EA33	57
CA34	19	EA34	58
CA35	28	EA35	54
CA36	37	EA36	48
Average	38.05556	Average	50.30556