

# The Effectiveness of the Conceptual Maps Strategy in Improving Conversational Skills of the Upper Basic Stage Students in Jordan

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#### **Abstract**

This study aimed to investigate the effect of the conceptual maps on improving the conversational skills of the students in the upper basic stage in Jordan. Data was collected via from a test developed by researcher which consisted of (50) items. The sample of the study consisted of (72) students, (9<sup>th</sup> and 10<sup>th</sup>) grades, randomly selected from one of Aljamia District schools in Amman, distributed in two groups: experimental and control, then applied the same tribal test as a post-test for the same groups after teaching the experimental group students on how to use the concept of conceptual map. The results showed that there was a positive effect among the experimental group in the field of conversational skills, and there were statistically significant differences among the students who were suffering from speech anxiety while talking with their teacher or classmates.

Keywords: Conversational Skills, Traditional Education, Map concept, Upper Basic Stage Students.

#### 1.1 Introduction

Conversation skills is not a skill to be learned easily; it is a complicated process that needs a number of procedures to be performed (Oslan & Schanpp, 2003). It typically emphases on the central topic, logical supporting, facts, strong organization, a logical order, message clarity, unity, coherence, and smooth transitions. Dincer (2017) affirmed that conversation is a central method of communication within an organization. He also clarified that it's a significant way of communication. Harbi (2017) indicated that writing and conversation well unlocks the door to advancement in virtually any field of study a learner might select in the future. Nemati (2009) considered that conversation are a crucial job skill, which helps the learner understands how knowledge is recognized in any specified field. Furthermore, it raises the learners' capability to clarify complicated views to person who reads clearly. In brief, conversation is one of the most important skills that teachers must concentrate on as it leads to better thinking and communicating (Bransford, Brown & Cocking, 1999; Edwards & Fraser, 1983).

Traditional methods of teaching conversation skills proved to be ineffective. So, it's not sufficient to teach learners grammar and vocabulary; they have to learn how to organize their thoughts before they tend to talk, Ur (2006) asserted that teaching language grammar only has an adverse influence on learners, because it usually leaves some instructions and practice in actual composition, even a harmful influence on the development of conversation. Indeed, the strongest deduction attained by Harmer (1998) was that traditional grammar instruction was the most unproductive method of improving communication skills.

The unproductive traditional methods of teaching conversation skills seem to be ineffective and many studies proved that. For example, a study conducted by Fayyoumi (2012) who found that most of the mistakes made by the non-native speakers of the Arab learners are in conversation, due to such traditional methods, especially in sentence formation, usage and mechanics of conversation. A study conducted by, Gauci, Dantas, Williams, & Kemm, (2009), they indicated that non-native speakers of English face difficulties in punctuation. Based on this assumption, the researcher looked for methods to develop the learners' conversation skills. The researcher chose to investigate the influence of map concept as a teaching method on learners' conversation skills. Recently, map concept has been used as a tool for learning, teaching and evaluation (Novak, 2010; Novak & Cañas, 2006).

Concept maps are graphical tools for organizing and representing knowledge. They include concepts, usually enclosed in circles or boxes of some type (Beirute & Mayorga, 2004), and relationships between concepts indicated by a connecting line linking two concepts. Words on the line, referred to as linking words or linking phrases, specify the relationship between the two concepts (Alhomaidan, 2015). We define concept as a perceived regularity in events or objects, or records of events or objects, designated by a label (Kemer, Borders & Willse, 2014). The label for most concepts is a word, although sometimes we use symbols such as + or %, and sometimes more than one word is used. Propositions are statements about some object or event in the universe, either naturally occurring or constructed. Propositions contain two or more concepts connected using linking words or phrases to form a meaningful statement. Sometimes these are called semantic units, or units of meaning. Figure 1 shows an example of a concept map that describes the structure of concept maps and illustrates the above characteristics (Heinzefry & Novak, 1990).

Another characteristic of concept maps is that the concepts are represented in a hierarchical fashion with the



most inclusive, most general concepts at the top of the map and the more specific, less general concepts arranged hierarchically below (Novak, 1998). The hierarchical structure for a particular domain of knowledge also depends on the context in which that knowledge is being applied or considered. Therefore, it is best to construct concept maps with reference to some particular question we seek to answer, which we have called a focus question (Vakilifard & Armand, 2006). The concept map may pertain to some situation or event that we are trying to understand through the organization of knowledge in the form of a concept map, thus providing the context for the concept map (Yen, Lee & Chen, 2012).

Map concept encourages students to explore and think deeply. It has also been applied as an organizer and as an improvement instrument; and makes students more confident (Stoica, Morarum & Mironm, 2011). Mapping strategy puts the notion that learners also need to be taught something about brain mechanisms and knowledge organization (Novak & Canas, 2006; Novak, 2002). Mapping strategy which is among visual learning strategies enhances learning as imagination and association are the keys to high-level memory and creative thinking (Cañas & Novak, 2005; Cañas, et al 2001). There are different kinds of mapping strategies and consequently each type has its own impact and is used for a specific domain thus needing its own structure (Tracey, 2003). Map concept was initially studied by Novak in the 1970s, as an illustrative ways of conveying scientific notions to children. Since then, map concept have been applied in a various situations and environment (Yen & Yang, 2013). According to him, they are pictorial instruments applied for establishing and generating ideas. It can also be defined as a visual way representing knowledge in which concepts, relationships and propositions exist (Ur, 2006. p 461). Besides, it has revealed to be an important instrument in diverse learning fields (Talebinezhad & Negari, 2001).

Recently, map concept has been used as a tool for learning and teaching. It is a tool that makes ideas visual and it allows prior experience and understanding to be taken into consideration, when building new concepts into the perceptual framework. By using map concept, learners use their prior knowledge to understand the new concepts and makes a link between unknown and known information that leads to deeper understanding (Novak, 2010; O'Donnell, Dansereau & Hall, 2002).

Map concept is an instrument that makes ideas visual; and permits prior experience and understanding to be taken into consideration when building new concepts into the perceptual framework (Schwendimann, 2015). By using map concept, learners use their prior knowledge to understand the new concepts. It makes a link between unknown and known information that leads to deeper understanding (Novak, 2010). By choosing concepts and linking words carefully, learners can use map concept as a teaching strategy to grasp every levels of meaning, and outline their knowledge and help students brainstorm and generate new ideas allowing them to more clear information and thoughts, then they should link between these ideas and sub ideas together illustrating the relationship between them to strengthen learners' understanding and knowledge about the subject (Wu, et al 2012; Sturm & Rankin - Erickson, 2002).

#### 1.2 Statement of the Problem

Arab learners of ML or EL commit a lot of errors in their speech, especially in fluently, sentence formation, message and clarity (Fayyoumi, 2017). The researcher tried to suggest solutions to such problems and improve students' conversation ability by the use of the strategy of map concept as a pre step in conversation tasks. Any learner commits lots of mistakes when talking and facing difficulty to improve his ability and reduce the mistakes he almost always commits. The purpose behind the use of map concept can be expressed in its influence on the preparation process used in conversation, discovering appropriate words, expressions and organizing knowledge. Therefore, the study considers that learners who are not very good in conversation might benefit from map concept. This study tried to answer the following main question which states that, what is the influence of applying map concept on improving Students' conversation skills?

# 1.3 Objective of the study

This study aimed to achieve the following objective:

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

# 1.4 Questions of the study

The study tried to answer the following questions:

- What is the influence of applying map concept on improving student's conversational skills in terms of language level, cohesion, and message clarity?
- Are there any statistical significant differences at ( $\alpha \le 0.05$ ) in the influence of applying map concept on improving student's conversational skills between the pre-test of the experimental and control groups?
- Are there any statistical significant differences at ( $\alpha \le 0.05$ ) in the influence of applying map concept on



- improving student's conversational skills between the pre-test and post-test of the control group?
- Are there any statistical significant differences at ( $\alpha \le 0.05$ ) in the influence of applying map concept on improving student's conversational kills between the pre-test and post-test of the experimental group?
- Are there any statistical significant differences at  $(\alpha \le 0.05)$  in the influence of applying map concept on improving student's conversational skills between the post-test of the experimental and control groups?

### 1.5 Hypotheses of the study

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

- There are no statistical significant differences at ( $\alpha \le 0.05$ ) in the influence of applying map concept on improving student's conversational skills (language level, cohesion, and message clarity) in the pre-test between the control and experimental groups?
- There are no statistical significant differences at ( $\alpha \le 0.05$ ) in the influence of applying map concept on improving student's conversational skills between the pre- test and post-test of the control group?
- There are no statistical significant differences at ( $\alpha \le 0.05$ ) in the influence of applying map concept on improving student's conversational skills between the pre-test and post- test of the experimental group?
- There are no statistical significant differences at  $(\alpha \le 0.05)$  in the influence of applying map concept on improving student's conversational skills between the post-test of the control and experimental group?

### 1.6 Significance of the study

It's hoped that this research will be beneficial in improving student's conversation skills due to using the strategy of map concept successfully, as a pre-step in talking and motivating teachers to apply it when teaching conversation. The importance of this study stems from two main points: First, Students nowadays have many concerns rather than studying, and they are addicted to different kinds of technology and they like chatting with friends on social media. Hopefully, this could be a motivation for students to find a strategy by which students can talk much better and effectively, based on this; it would be significant to conduct such a research. Besides, students' academic performance in languages especially in conversation is not proficient as it should be because they do not have the passion to learn through traditional methods. It's important to investigate the influence of using map concept in increasing students enthusiasm and ability to learn the conversational skills effectively.

Moreover, it's hopped to be helpful since it could help teachers find other different methods to apply while teaching communication skills. Finally it's also hopped to be considered a preliminary investigation on which follow-up work could be based. It would be interesting to assess whether students conversation performance improves after training on self-efficacy, apprehension, and attitude related.

### 1.7 Limitations of the Study

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

- Locative Limitations: The study covers all the (9<sup>th</sup> and 10<sup>th</sup>) graders in school, Um Al Sumaq Al Shamali Secondary Mixed School.
- Temporal Limitations: This study was carried out during the second semester in the scholastic year 2016-2017.
- Human Limitations: The population of the study contains all students in the (9<sup>th</sup> and 10<sup>th</sup>) grade in the mentioned school which was (36) students in each group, and (72) students in total.
- Topical Limitations: The study examined the influence of using map concept on improving the (9<sup>th</sup> and 10<sup>th</sup>) graders conversational skills.

#### 1.8 Definitions of Terms

- Conversation: interactive, communication between two or more people, to develop conversational skills and etiquette is an important part of socialization, the development of conversational skills in a new language (Oslan & Schanpp, 2003 & Conklin, 1912). According to the study, it refers to the students who studied in the control and experimental groups in their tongues and in a sound language expressed their thoughts and feelings.
- Traditional Education: described the traditional education as it focuses on teaching, not learning. According to the study, it refers to any teaching method of conversation excluding map concept (Gauci et al, 2009; Berk & Winsler, 1995).
- Map concept: is a technique of forming ideas in a method which permits them to emerge plainly and rationally, infrequently mentioned to as clusters or concept webs, map concept comprise a dominant theme or topic and connected subdivisions showing how the ideas are connected (Sturm & Rankin-Erickson, 2002). According to the study, it refers to the students' abilities in drawing their own map to organize their knowledge, starting with a main idea and then to show how this idea can be broken down



- into sub ideas. The relations between these ideas have to be indicated by a connecting lines or arrows (Coffee et al, 2002).
- Upper Basic Stage: The 3<sup>rd</sup> level of primary education in Jordan, which includes students in grades: 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup>, for public and private schools in Jordan.

#### **Previous Studies**

#### 2.1 Conversational Skills

Harbi (2016) investigates study to determine the effectiveness of interactive software to acquire the skills of reading and speaking in EL for students in (6<sup>th</sup>) grade. The study applied to (60) primary stage male students. The tool was a test fulfilled in a primary school. The results showed that there are statistically significant differences at the level (0.05) in the mean of post-test marks of the reading skill for students in the favor experimental group attributed to the use of an interactive computer program, There are statistically significant differences at the level (0.05) in the mean of post-test marks of the speaking skill for the students in the favor of experimental group attributed to the use of an interactive computer program, and the effectiveness of an interactive computer program to acquire the speaking skill rated of (42.1%) more than the proportion (37.3%) to be effective in the acquisition of reading skills.

Elfeky & Masadeh (2016) aimed to examine the effect of Mobile Learning on the development of academic achievement and conversational skills. Participants consisted of (50) students, who were registered in a course, strategies of teaching and learning. As usual participant students were divided into experimental and control groups of (25) students in each. The soft copy of the course content was uploaded to the Blackboard System for students in the experimental group. Another hardcopy of the course content was delivered to students in the control group by hand in the first meeting. Data collection tools included an academic achievement test and conversational skills rating scale. Results showed that mobile learning had quite significant effect on both students' academic achievement and conversational skills.

Jabburi (2016) study aimed to investigate the effect of reciprocal teaching on the basic students' reading comprehension skills, and its role in enhancing their motivation and conversational skills. The participants of the study consisted of (65), 6<sup>th</sup> grade students. They were assigned randomly into two groups, experimental and control. The participants of the experimental group were taught English reading comprehension through reciprocal teaching strategy, while the control group studied through regular teaching. A reading comprehension test was used as a study instrument, a questionnaire was also used to measure the participants' motivation. The results showed that teaching reading comprehension using reciprocal teaching resulted in improving reading comprehension and conversation. And, reciprocal teaching enhanced the EFL students' motivation in their reading comprehension and conversation.

Uddin (2013) in her paper focuses on the improvement of Oral Communication Skills (OCSs) of Pakistan's Public school's Grade (6<sup>th</sup>). It further highlights self-developed strategies of students in improving accuracy and fluency Findings of Pre and post intervention phases of four participants revealed that children's (OCSs) had shown a marked improvement by giving opportunities to practice oral languages, providing conducive learning environment and using new teaching strategies. This study also claims that code switching, Peer and self-error correction, short pauses and speech fillers are inevitable to improve speaking skills in the process of second language learning. It shows new ways in order to improve students' speaking skills and has implications for second language learners and teachers.

Fayyoumi (2012) investigates the effect of communicative language activities on developing the oral communication skills of the basic 9th grade students in Jordan. The study sample consisted of (72) 9<sup>th</sup> grade. The study sample was divided into two groups; an experimental group consisting of (36) students who studied oral skills through language activities, and a control group consisting of (36) students who studied oral skills in the traditional method. The researcher prepared a variety of systematically organized language activities. Results of the study showed that there were statistically significant differences in favour of the experimental group with regards to improving their oral skills attributed to the efficacy of the communicative language activities in teaching oral skills. It recommended updating the teaching methods of oral communication skills.

# 2.2 Conceptual Maps

Agudelo & Salinas (2015), study about The use of learning itineraries based on conceptual maps is studied in order to propose a more flexible instructional design that strengthens the learning process focused on the student, generating non-linear processes, characterizing its elements, setting up relationships between them and shaping a general model with specifications for each educational level. this article studies learning itinerary design, implementation and assessment process, representing, through non-linear organized conceptual maps, sets of activities leading to the development of competencies that must be understood, mastered and demonstrated. Obtained results show the adequacy of a learning itinerary based on conceptual maps of the subjects' characteristics, solving real situations through the construction and creation of new schemes and knowledge



management methods while contributing to a reflection on curricular design.

Alhomaidan (2015) Conducted to examine the influence of using map concept on developing the learning outcome of college-level students studying at the College of Technology at Arrass. In order to achieve this objective two groups (experimental and control) were randomly selected by the researcher; the experimental group has been asked to apply map concept when conversation and writing, while the control group students were not given instructions to do so. Both groups were tested before and after the study. The posttests results showed that the experimental group students scored higher marks compared to their counterparts in the control group. Stated that map concept play a key role at the teaching and learning process of different disciplines, and due to the importance of concepts many researches such as, (Bransford, 2000; Piaget, 1982; Ausubel, Novak & Hanesian, 1978; Skinner, 1968; Gagne, 1975 & Ausubel, 1963) believed that concepts and the message clarity of them are considered to be the essence of any discipline.

Parisa Arabloo (2015) was a study to investigate the comparative influence of individually created and collaboratively created map concept on EFL learners. (60) Learners were chosen randomly, thus were divided into two groups, and each of the groups were taught conversation through map concept. The participants in both groups were given a post-test. The study concluded that teaching methods should be modernized, and the finding has implications for EFL teachers, educators, and material developers, within a constructivist framework, learning takes place as learners progressively differentiate concepts into more complex understandings

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

Rao (2007) investigated the influence of brainstorming on developing writing and conversation skills. The findings of this study revealed that students who have been trained in brainstorming strategy outperformed the other group of students who did not receive any instruction. Also, the attitudinal part of the survey indicated that students who used brainstorming had a positive idea about the effectiveness of the brainstorming strategy. So, it is of paramount importance to invent activities before asking students to compose an essay. There has been great body of research on the influence of map concept in education in the first language. However, there has been a limited number of researches in the second language area (Vakilifard & Armand, 2006; Goodyear et al, 2005).

# 2.3 Review of the Previous Studies

Researchers of the Previous Studies, have been collected for The importance of language communication activities, they gain students language and functional skills, whether communication skills in the field of conversation, listening, reading or writing, or in the field of social interaction skills, and confirm in the results of their studies on the effectiveness of these activities in the development of their personalities, The students are trained to apply what they have learned in life, and what these positions require from the arts of functional expression, and a source to sharpen the motivation of the student, and develop his linguistic wealth ,e.g. (Al-Harbi, 2016; Elfeky, 2016; Al-Jabburi, 2016; Uddin, 2013; Al-Fayyoumi, 2012). Researchers (Bransford, Brown & Cocking, 1999) highlighted the importance of linguistic activities in teaching through the relationships between linguistic and language communication activities, and that they are systemic, sensory and developmental relationships that contribute to the development of the individual's vocabulary and develop social behavior.

Map concept meets the goals of the educational system by engaging students, developing their critical thinking skills, and making students aware of their interests and learning preferences. The strategy allows for flexibility and hands-on learning which enable students to become closely involved in the learning teaching process and increase their motivation when conversation (Marriott & Torres, 2008). Because map concept focuses more on the process than the product, it is easy for the students to see their accomplishments and develop self-efficacy because their end product is not being compared to the other students. Application of this strategy requires time and effort on the part of the teacher, but the benefits trump the costs. Teachers are able to address the students learning preferences as well as differentiate instruction to meet student's needs (Edmondson, 2000). It is appropriate for all students of different levels. Map concept focuses on the students" learning and engagement, which is the current goal of the educational system. When well-planned and executed, this teaching strategy results in a variety of great academic achievements (Cicognani, 2000). Just as we've seen in the previous chapter, there were a lot of research papers which examined the impact of applying the strategy of map concept on developing different levels of the student's conversational skills. Most of them acknowledge the great effect that this strategy might have upon the students when taught and applied successfully, e.g. (Agudelo & Salinas, 2015; Alhomaidan, 2015; Parisa, 2015; Negari, 2011; Rao, 2007).

This research could be considered a preliminary investigation on which follow-up work could be based. In a



comparative future study, it would be interesting to assess whether students" performance improves after training and applying the strategy of map concept when doing their conversation tasks. For the researcher, map concept is the ability to create ideas and sub-ideas and to have the ability to connect logically them by using suitable connectors.

#### 3.1 Methodology

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

- Experimental group: A group of students who have been trained to use conceptual maps at conversation
- Control group: students who study conversation according to the traditional method.

# 3.2 Sample of the Study

The population of the study consisted of (72) students who were chosen randomly. The study was set at Um Al-Sumaq Al-Shamali Secondary Mixed School. 9<sup>th</sup> and 10<sup>th</sup> grades students. The researcher distributed the conversation test to (36) students, who were enrolled, that were taught with map concept (the experimental group), and (36) students who were taught conversation by the traditional method. This is gives enough data for the purposes of my study.

#### 3.3 Instruments of the Study

The influence of map concept on students' performance on conversational skills were investigated through the conversation test which was developed by the researcher based on literature and related studies.

#### 3.4 conversation Posttest

In order to compare the impact of the two treatments, the conversation posttest was administered to the participants in the two groups. The conversation posttest was selected from the conversation selection. The students performed the conversation posttest in 45 minutes.

### 3.5 conversation Rating Scale

Conversation test was distributed amongst students, it was evaluated according to three domains:

- The first domain explored the influence of map concept on language level in conversation, (2) points.
- The second domain explored the influence of map concept on cohesion in conversation. (3), points.
- The third domain explored the influence of map concept on message clarity in conversation, (4) points.

#### 3.6 Validity of the English conversation Test

To ensure that the content of the conversation test is valid, it was given to a jury, consisting of (9) arbitrators from: Faculty of Educational Sciences at the University of Jordan, Faculty of Educational Sciences and Arts University, and the Department of Curriculum and Teaching at the Ministry of Education, the jury suggested some modifications in the vocabulary such as the repetition of the phrasal verb "live in" and was replaced with "enjoy using". They also proofread the manuscript for mistakes in the mechanics of conversation.

# 3.7 Reliability of the English Conversation Test:

To find out the reliability degree of the conversation test, the reliability coefficient (Cronbach alpha) was calculated as an indicator of homogeneity to the level of the instrument as a whole, table (1) below shows that the ranges of reliability were between (0.79-0.87), and that the total score was (0.83) which is considered to be Suitable for the purpose of this study.

Table 1: Alpha Formula of Instrument Reliability

Domains	Points	Reliability coefficient
language level	3	0.79
Cohesion	3	0.82
Message clarity	4	0.87
Total score	10	0.83

It shows, that all the reliability coefficients are suitable for scientific purposes.



# 3.8 Procedures of the study

# The researcher used the following procedures during the application of this study:

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

Second, permission was taken from the Ministry of Education, which gave the permission to get the needed information about schools, and to distribute conversation test among the students.

Third, the researcher distributed the copies of the instrument to the students. In order to obtain more valid and credible results, students were given the freedom to complete the conversation test. At the beginning of the study, the already piloted sample was administered to (37) learners were assigned randomly from different levels to test the study test validity of the tool being used. The conversation test was subsequently administered to make sure that the learners were not familiar with the test.

In the treatment process, both experimental groups underwent (21) lessons of (100) min held four sessions a week. The main lesson was taught to both groups with one group receiving map concept, and the other with traditional teaching methods. During these lessons, conversation group was taught in both experimental groups, alongside the other parts of language such as grammar, speaking, listening, reading, and conversation. The process of teaching in each group is described as follows.

# 3.9 Treatment in the Map Concept Group

The experimental group assigned to the map concept strategy instruction had (36) participants. The first session was allocated entirely to introducing map concept to learners with some practical examples. The participants were given handouts which contained the characteristics of a map concept, some examples of well and poorly constructed map concept plus introduction to this kind of mapping.

After giving the handouts to every learner, they were given five minutes to have a look at the content. Then the researcher began to speak about map concept according to the handouts and tried to draw the example maps on the board. The researcher drew a map concept on the board by asking the students some questions about their opinions on a birthday party which was the first selected topic intended to be something attracting the learners. The questions included many different aspects of holding a birthday party which naturally raised many different ideas and comments. Different ideas or "concepts" were welcomed by the teacher/researcher as the nature of this strategy is learners" freedom in delineating and connecting the concepts in a way that their minds can recall it better in the future. For example, one of the questions was about how they held their birthday parties and many of the learners answered by "inviting their close friends to their houses". So, the researcher used two words here "invite" and "close friend" for making a node while the arrow was titled by inviting, and the node by close friends.

Next, the teacher drew a map by asking students" help and guidance. He encouraged the learners to provide the answers and by doing so, he made the learners interested in drawing this kind of map. Each learner was free in delineating his own map and they were not asked to copy exactly what was on the board but for drawing the map by the teacher, they had been motivated to take part and help him. The teacher tried to make all of them interested and involved in the intended process. It was indeed necessary to motivate the learners to take part in this process as this collaboration is one of the basic rules in implementing the map concept strategy. The teacher/researcher followed Davies (2010) model but before that he reminded the learners that each map is a kind of a personal track and they must feel free in how they show or relate the concepts. Copying the exact map from the board was not compulsory but the learners were encouraged to select some parts when they wished to do so.

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

### 3.10 Variables of the Study

The study contained the following variables: firstly, Independent Variable: The use of map concept in teaching conversational skills, secondly, Dependent Variable: The scores of students' conversation (the degree of improvement noticed after applying the map concept).

# 3.11 Statistical Analysis

The Statistical package for social science (SPSS). Various statistical tests and procedures were used including,



means, frequencies, standard deviation, cross-tabulation, t-test for independent samples. P-value of less than or equal to (0.05) was used to test the significance in testing the study hypotheses. Various statistical tests and procedures were used including the means, frequencies, percentages, and standard deviations to estimate the student's responses on the test and total score.

### 3.12 Ethical Issues and Data Collection Procedures

As this study is conducted on human subjects, permission to conduct this study was obtained from the Ministry of Education - Jordan, in order to assure that the ethical issues are taken into consideration. In addition, students were informed about the purpose of the study before responding to the test, and were told that their participation was voluntary, and any information obtained would be confidential and would be used for scientific research purposes.

### Results

#### 4.1. Results Related to the First Question

- What is the influence of applying map concept on improving student's conversational skills in terms of language level, cohesion, and message clarity?

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

Domain	df	t	Eta Squared	Sig.	Influence size	Cohesion for influence
Language level	69	-4.46-	0.26	0.000	0.51	1.22
cohesion	69	-3.95-	0.32	0.000	0.45	-0.98
Message clarity	69	-5.54-	0.36	0.000	0.63	-1.42
total score	69	-4.65-	0.31	0.000	0.53	-1.21

In order to test the influence of the map concept intervention for conversational skills, an independent samples t-test was conducted. This test was found to be statistically significant, t (61) = 4.65, p < 0.00; d = 1.21. These results indicate that individuals in the experimental group (M = 6.7) experienced higher sessions of conversational skills following map concept treatment, but they were not taught to use map concept in the pretest (M = 3.7). The value of Eta square ranging from (0.2-0.3) this indicates that the treatment had an average on students' conversation skills. The influence size is determined according to the (d Cohen value). The value of d is larger than (0.8) which indicates that the high impact of map concept on improving students, conversation is high.

# 4.2 Results Related to the Second Question

Are there any statistical significant differences at  $(\alpha \le 0.05)$  in the influence of applying map concept on improving student's conversational skills between the pre-test of the experimental and control groups?

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

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

Pre test	group	N	Mean	Std. Deviation	t	Sig.
Languaga laval	control	36	2.47	1.92	0.76	0.50
Language level	experimental	36	1.28	0.96		
cohesion	control	36	1.41	1.10	0.23	0.91
	experimental	36	1.31	0.96		
Message clarity	control	36	2.68	1.18	0.90	0.41
	experimental	36	1.42	1.07		
total	control	36	4.47	2.98	0.64	0.530
iotai	experimental	36	4.32	2.88		

Table 3, shows that there are no statistical significant differences at the level ( $\alpha \le 0.05$ ) in the influence of map concept on improving students' performance in conversation in the first, second, third and total score domains (language level, cohesion, message clarity, and total score). Then the null hypothesis in these domains is valid. These results indicate that students in the experimental group (M = 4.32, SD = 2.88) experienced lower conversational skills before treatment than did individuals in the control group (M = 4.47, SD = 2.98). This result of importance shows us that both groups, the control and the experimental, were equal in their conversational skills prior to the conduct of the treatment with map concept treatment.



# 4.3 Results Related to the Third Question

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

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

Table 4: Independent T-test for the different differences at  $(\alpha \le 0.05)$  in the influence of applying map concept

on improving students' conversation skills between the pre-test and post-test of the control group.

Control group	test	N	Mean	Std. Deviation	t	Sig.	•
I amanaga lanal	Pre	36	1.46	0.96	75-	0.45	
Language level	post	36	1.65	0.82			
cohesion	Pre	36	1.37	1.11	-1.09-	0.27	
	post	36	1.69	1.14			
M 1	Pre	36	1.67	1.18	-1.34-	0.18	
Message clarity	post	36	2.14	1.11			
4.4.1	Pre	36	4.46	2.96	-1.15-	0.25	
total	post	36	5.33	2.82			

Table 4, shows that there are no statistical significant differences at the level ( $\alpha$  = 0.05) in the influence of map concept on improving students' performance in conversation in the first, second, third and total score domains (language level, cohesion, message clarity, and total score). Then the null hypothesis in these domains is valid. This test was constructed to be not statistically significant, t (58) = 1.14, p < 0.2; d = 1.56. These results indicate that individuals in the control group (M = 5.3, SD = 2.8) experienced higher conversational skills following traditional treatment than did in the pretest (M = 4.4, SD = 2.9). This means that although the tradition teaching method of conversation had improved students' conversation in the posttest, still the improvement was not significant or effective. This improvement perhaps occurred as a result of the experience that students gained through the previous exam.

### 4.4 Results Related to the Fourth Question:

Are there any statistical significant differences at (α ≤ 0.05) in the influence of applying map concept on improving student's conversational kills between the pre-test and post-test of the experimental group?
 Table 5: Independent T-test for the different differences at (α ≤ 0.05) in the influence of applying map concept

on improving students' conversational skills between the pre-test and post-test of the experimental group.

Experimental Group	test	N	Mean	t	Sig.
Languagalanal	Pre	36	1.28	-4.33-	0.00
Language level	post	36	2.23		
cohesion	Pre	36	1.34	-3.73-	0.00
Conesion	post	36	2.21		
Magaaga alaritu	Pre	36	1.42	-5.24-	0.00
Message clarity	post	36	2.63		
total score	Pre	36	3.96	-4.76-	0.00
total score	post	36	6.62		

Table 5, shows that there are statistical significant differences at the level ( $\alpha = 0.05$ ) in the influence of map concept on improving students' performance in conversation in the first, second, third and total score domains (language level, cohesion, message clarity, and total score). Then the null hypothesis in these domains is not valid.

# 4.5 Results Related to the Fifth Question:

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

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



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

	group	N	Mean	Std. Deviation	T	Sig.
I amana an Inna!	control	36	1.65	0.82	-2.96-	0.00
Language level	experimental	36	2.22	0.64	-2.96-	0.01
cohesion	control	36	1.68	1.08	-2.07-	0.04
	experimental	36	2.20	0.74	-2.07-	0.04
Message clarity	control	36	2.19	1.16	-2.22-	0.03
	experimental	36	2.64	0.62	-2.22-	0.03
40401 00000	control	36	5.38	2.87	-2.59-	0.01
total score	experimental	36	6.90	1.61	-2.59-	0.01

Table 6, shows that there are statistical significant differences at the level ( $\alpha = 0.05$ ) in the influence of map concept on improving students' performance in conversation in the first, second, third and total score domains (language level, cohesion, message clarity, and total score). Then the null hypothesis in these domains is not valid.

# Discussion of the Results, Conclusion, and Recommendations

# 5.1 Discussion of the Results of the First Question:

What is the influence of applying map concept on improving student's conversational skills in terms of language level, cohesion, and message clarity?

The value of Eta square indicates that the map concept treatment in the experimental group was high on students' conversational skills. The influence size is determined according to the (value). The value of d Cohesion is larger than (0.8) which indicates high impact of map concept on improving student's conversation. This means that map concept as a teaching strategy has significantly improved learners conversation skills. These results support the previous findings mentioned in the literature review which suggest that map concept has a positive impact, and using them could improve learners abilities in conversation such as, (Hsu & Chang, 2009; Novak & Cañas, 2006; Cicognani, 2000), They also agreed with the results mentioned by (Fahim & Hiedari, 2006; which suggest that map concept improve the students' conversation abilities when learning a second language.

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

This was in consistent with some of the previous findings such as researches conducted by Lee and Cho (2010) on the influence of collaborative map concept strategy in Korean writing and conversation classes, Ojima (2006) case study on three Japanese ESL writers in Japan regarding the influence of map concept as pre-task planning, and Lin et al. (2004) research on the influence of computer-based map concept as a pre- conversation strategy for middle school students. The results of these studies revealed that map concept strategy was influential on improving learner's conversation ability. Moreover, the findings of the present study are in favor of the results of the research done by Rao (2007) on the influence of brainstorming in developing conversation skill. Rao (2007) proposed that brainstorming stimulates students" thinking and enables them to create ideas and organize raw materials in a logical order. In the present study, map concept strategy served as a brainstorming tool. Brainstorming activates learners" prior knowledge, and facilitates the use of this knowledge.

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

# 5.2 Discussion of Results Related to the Second Question

Are there any statistical significant differences at  $(\alpha \le 0.05)$  in the influence of applying map concept on improving student's conversational skills between the pre-test of the experimental and control groups?

To answer this question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' performance in conversation skills. Results showed that there are no statistical significant differences at the level ( $\alpha = 0.05$ ) in the influence of map concept on improving



students' performance in conversation in language level, cohesion, message clarity, and total score. Then the null hypothesis in these domains is valid. These results indicate that students in the experimental group (M = 3.9, SD = 2.9) experienced lower scores in conversational skills in the pretest before the treatment than did individuals in the control group (M = 4.4, SD = 2.9). This result of importance showed us that both groups the control and the experimental were equal in their conversation skills prior to the conduct of the treatment with map concept treatment.

### 5.3 Discussion of Results Related to the Third Question

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

To answer the question, independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' conversational skills (language level, cohesion, and message clarity) in the post-test in the control groups, Results showed that there are no statistical significant differences at the level ( $\alpha=0.05$ ) in the influence of map concept on improving students' performance in conversation in language level, cohesion, message clarity, and total score. Then the null hypothesis in these domains is valid. This test results were constructed to be not statistically significant, t (58)  $\leq 1.14$ , p < 0.2; d = 1.56. These results indicate that individuals in the control group (M = 5.3, SD = 2.8) experienced higher conversation skills scores following traditional treatment than did individuals in the pretest (M = 4.4, SD = 2.9) though this improvement was not statistically significant. This result was in agreement with previous studies such as AL Sharawneh (2012) who stated that traditional methods of teaching English language conversational skills proved to be influential. It's not sufficient to teach learners English grammar and vocabulary; they ought to learn how to organize their thoughts before they tend to write, asserts that teaching English grammar only has an adverse influence on learners because it usually leaves some instructions and practice in actual composition, even a harmful influence on the development of conversation skills. Indeed, the strongest deduction attained by Hillocks (1986) was that traditional grammar instruction was the most unproductive method of improving writing and conversation.

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

# 5.4 Discussion of Results Related to the Fourth Question

Are there any statistical significant differences at  $(\alpha \le 0.05)$  in the influence of applying map concept on improving student's conversational kills between the pre-test and post-test of the experimental group?

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

Results showed that there are statistical significant differences at the level ( $\alpha$  = 0.05) in the influence of map concept on improving students' performance in conversation in language level, cohesion, message clarity, and total score. Then the null hypothesis in these domains is not valid. These results indicated that individuals in the experimental group (M = 6.8) experienced higher episodes of conversational skills following map concept treatment than did individuals in the pretest (M = 3.9). This was in agreement with Alhomaidan (2015). Study that revealed that Concepts play a key role at the teaching and learning processes of different disciplines, and due to the importance of concepts many researches such as Ausubel [2000], which believed that concepts and the message clarity of them are considered to be the essence of any discipline This study aims to investigate the influence of using concepts mapping on developing the learning outcome of college-level students studying. In order to achieve this objective two groups (experimental and control) were randomly assigned by the researcher; the experimental group has been asked to employ concepts mapping in their learning, while the control group members were not given instructions to do so. Both groups were tested before and after the study. The posttests results showed that the experimental group members scored higher grades compared to counterparts in the control group.

This result was also in agreement with Pishgadam and Ghanizadeh (2006), Parisa Arabloo (2015) study which revealed that the learners in the experimental group outperformed the students in the control group in terms of quantity and quality of generating, organizing, and associating ideas. Also, the results of the study indicated that map concept could be influence for affective as well as cognitive instructional objectives. This improvement could be explained in that New knowledge is constructed when learners establish connections among knowledge learned, previous experiences, and the context in which they find themselves (Bransford, 2000; Daley, 2002; Jonassen, 1994). Chang, Sung, and Chen (2001) propose that map concept, a form of visualization, is a powerful learning strategy consistent with constructivist learning theory in that it is a study strategy that helps learners visualize interrelationships among concepts (Duffy, Lowyer, & Jonassen, 1991).

The results of the present study showed that map concept knowledge has positive influence on learners



conversation which is in harmony with what was found by Negari (2001); Chan (2002), Lin ,Strickland, Ray, & Denner (2004), Vakilifard & Armand (2006), Ojima (2006), Pishgadam & Ghanizadeh (2006), Chen (2007), Rao (2007), Lee & Cho (2010).

# 5.5 Discussion of Results Related to the Fifth Question

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

Independent T-Test was computed to find out the significant differences in the influence of map concept on improving students' conversational skills (language level, cohesion, and message clarity) in the post-test in the experimental and control groups, Results showed that there are statistical significant differences at the level ( $\alpha = 0.05$ ) in the influence of map concept on improving students' performance in conversation in language level, cohesion, message clarity, and total score. Then the null hypothesis in these domains is not valid.

These results indicated that learners in the experimental group experienced higher scores in the test which implies improvement in conversational skills following map concept treatment than did individuals in the post test for the control group (M = 5.3). As can be seen from the study results the pre-test scores revealed that most students had weak scores in conversation test. The Posttest reveals that students in the experimental group, have improved which proves that map concept have a positive influence on their conversational skills, and by comparing their results with their colleagues in the control group. The previous results were in agreement with (Heidari, Karimi, & Imani, 2012; Duffy, Lowyck & Jonassen, 1991) whose study revealed that learners who received map concept teaching method of instruction surpassed the other learners in terms of amount and quality of generating, organizing, and associating ideas. They were also in agreement with Bandura (1997) that when the learners had a suitable idea of how to go about a conversation task, they were more confident about the task. This made a most concrete indication of the quality of both the learning process and conceptual understanding.

However, one additional explanation would be that the building of map concept might have assisted students to build more complicated mental constructions in regard to information which was important for conversation. This was in harmony with some of the previous results such as studies conducted by (Oslan & Schanpp, 2003; Wang, Lee & Chu, 2010) on the influence of map concept as a pre-conversation strategy for middle school students. The results of these studies revealed that map concept strategy was influential on improving learner's conversation ability. Moreover, the findings of the present study were in favor of the results of the research done by Rao (2007) on the influence of brainstorming in developing conversational skill which proposed that brainstorming excites learner's thinking and allows them to generate ideas and organize raw materials in a logical order. In the present study, map concept strategy served as a brainstorming instrument. Brainstorming activates learners" prior knowledge, and facilitates the use of this knowledge.

### 5.6 Conclusion

The current study examined the influence of map concept on learner's conversational skills. The results of the study discovered that the learners in group which was taught with map concept enhanced their conversation skills significantly more than the traditional teaching method group. In other words, the learners in the experimental group confirmed significant development from conversation pretest to posttest. There is no definite study upon which to ground a selection of one teacher method over the other; rather, strategy of map concept seems to be efficient depending upon the classroom conditions. It possibly was resolved that several of the studies are in support of the map concept.

Finally, as the findings of the current study suggested, map concept were more fruitful in progressing learners. In regard to the fact that conversation is an individual assignment, it can be concluded that generating map concept is also an assignment that requires focus and thinking and linking the diverse issues and individual experiences in mind. As a result, when a learner reflects by him/her without any interruption from other leaners, he/she can focus and talk more cohesively and coherently. One subject matter which is related to mapping strategies is the learners' collaboration in the course of illustrating a map. It aids the learners to see their points of view as important components of map drawing; therefore, this uniqueness of each map gives more incentive and interest to participants. To this conclusion, map concept could be highlighted in teacher preparation work-shops as an efficient method thereby facilitating conversation achievements.

The map concept strategy can be used also in evaluating the learner's conversational skills improvement. This kind of evaluating is giving more signs to learners and also aid their learning of how applying these maps. This is more important than conversation feedbacks and correction. Consequently, it is recommended to assess learner's conversational skills by asking them to draw a map concept which had been beforehand shown.

The researcher observed that using the map concept in the process of teaching conversational skills can enhance learner' interest and contribution in the learning process. This is possibly the case as map concept eliminates the tension of verbal modalities in the process of conversation learning together with giving more independence to use individual and individual icons. The learners were also appreciating their freedom in not



using joining vocabularies as they were interested to use more colors and shapes to draw any map. They could make it personal as each word or phrase could recall something different from each learner to another. Furthermore, since vocabulary learning is always a controversy for both teachers and learners in how to get command on more words and retain them for a longer time; the necessity is felt to provide learners with more essential strategies in the field of vocabulary learning. Consequently, teaching with map concept could be an element of the teaching curriculum to encourage learners themselves in the act of skills learning.

This research was carried out among upper basic stage learners; the same experiment could be implemented among other age groups to see if the latter is a factor in comparing the impact of the two modes of mapping strategies on vocabulary achievement. These modes of mapping strategies were used for all learners while people with kinesthetic minds can learn new materials better by these techniques. It is recommended to carry out this research among learners with that ability to see whether these two strategies are significantly different in learning new words or not.

### 5.7 Recommendations

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

#### **First: For the Students**

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

# **Second: For the Teachers**

- Try as much as you can to integrate the low achievers students by giving them simple topics that fit their competence.
- Before starting to apply map concept strategy, it's necessary to enrich the students" vocabulary since
  map concept will not be that effective if the students don't have some basic vocabulary at least.
  Otherwise, map concept will not be that effective
- Use map concept methods in their teaching, since it enhances students' cognitive and social skills as well as motivation for the material and their scores in exams.
- Be aware of the individual differences among learners while choosing and applying map concept methods and techniques.
- In elementary schools, students in upper basic stage graders might face difficulties to draw their own map individually, so teachers had better apply it collaboratively.

# Third: For the Ministry of Education:

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

# Fourth: Recommendations for Further Studies

Researchers are recommended to:

- Conduct similar studies for other academic levels and in other areas and environments.
- Employ modern and enjoyable teaching strategies that contribute to the achievement of curriculum objectives.
- Conduct studies on the influence of map concept on students' reading comprehension skills and conversational skills as well.
- Conduct studies on how map concept affects weak learners.
- Conduct studies on the obstacles of using map concept in class rooms.

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