

The Effectiveness of a Training Program Based on Active Learning Strategies and its Relationship to Reading Comprehension in both Critical and Creative Levels

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Abstract

This study aimed to reveal the effectiveness of a training program based on active learning strategies and its relationship to comprehension reading on critical and creative levels among first intermediate students, and to determine whether the effectiveness of the program vary according to gender and the interaction between the way of teaching and gender. To achieve the objectives of the study a test was prepared to measure students' ability to reading comprehension on critical and creative levels, its validity and reliability were verified. a training program based on active learning strategies was prepared, it included cooperative learning and brainstorming strategies, its validity and reliability were also verified. The training program has been introduced during (25) training sessions in addition to a preliminary and other closing sessions each of which lasts 45 minutes. The study sample consisted of 120 students from the first-grade intermediate students in the city of Al-Kharj, aged (14-15 years), a school for males and another for females were chosen randomly. Two sections were selected randomly from each school , then one of the two sections was chosen in each school randomly to be the experimental group and the other control. Each group consisted of 20 students. The results of the analysis revealed that mean of the students of the experimental group in reading comprehension the critical level is higher than the arithmetic mean for the students of the control group at the same level and that the arithmetic mean of the students of the experimental group in reading comprehension at creative level is higher than arithmetic mean for students of the control group at the same level. The results of multiple two-way analysis of variance showed that the average scores of male students at the experimental group in reading comprehension at the critical and creative levels is higher than the control group at the same level. and it is clear from the results of contrast multi-bilateral analysis the lack of statistically significant differences at the level of significance ($\alpha \leq 0.05$) attributed to gender variable and the interaction between the way of teaching and gender, not in the level of reading comprehension at critical level, nor in reading comprehension at the creative level. The researcher recommends further studies and research aims to design programs based on international educational programs; for the development of reading comprehension skills at critical and creative levels, and the use of this program in the development of the skills of reading comprehension at critical and creative levels.

Keywords: Training Program, Active Learning Strategies, Reading Comprehension

Introduction

The role of learning based on the modern concept of active learning is highlighted in the last quarter of the last century, but that it significantly increased at the beginning of this century as modern and contemporary trends with a significant impact on the teaching and learning process within and beyond the classroom. Therefore the classroom is a learning environment that includes cognitive levels and teaching strategies and social environments. And a dialogue takes place between students and teachers in their interaction with each other. Social cognitive theory has brought teachers to the need for the development of teaching thinking and increase awareness of the learner and teach problem-solving and games role-playing and the ability to ask questions and not to neglect the social aspect. And active learning happens when you give students the opportunity to take a more effective relationship with learning material and encourage them to generate knowledge rather than just receive, and in active learning environment teachers facilitates student learning, rather than imposed on them. And Almaghrome & Awadh (2010) confirms that there is a difference in the role of the learner in the learning educational process, after it had been expected from him to introduce individual responses segmented and observable and measurable as an indication of the implications of learning, he must be active in receiving information and organizing it , employing the mental and cognitive strategies he possess for processing capabilities, coordinating, classifying, coding, absorbing, and analyzing knowledge into meaningful patterns. Scheyvens, Griffin, Jocoy, Liu., & Bradford, (2008) pointed that when we encourage students to participate in activities, which lead them to the discussion, and ask questions, we do not work to achieve the retention of better information relating the learning course, but also help in the development of skills and thinking abilities among them. The reader finds in active learning several definitions; most important what was mentioned by Taraban, Box, Myers, Pollard, & Bowen (2007) in defining active learning as a way to teach the students in a way that

allow them to participate actively in the activities that take place inside the classroom, so that share take them to beyond the role of normal student who shall take notes to the role that takes the lead in various activities with his colleagues during the educational learning process in the classroom, and Myers & Jones (1993) defines active learning as a learning environment that allows students to talk, good listening, reading and writing, and deep meditation, through the use of multiple techniques and methods, such as problem-solving, and small groups, simulations and case studies, and role playing, and other activities that require students apply what they have learned in the real world. Mathews. lisakey (2006) defines active learning as the way through which the student is engaged in classroom activities rather than be an individual receives information from others. While Paulson & Faust (2006) sees that the active learning is any activity performed by the learner in the classroom, not the passive listening to what the teacher is saying in the lecture, to include rather positive listening, which helps them to understand what they hear, and write the main ideas contained in poses of words, or opinions, or explanations, comment or to comment on them. (Ayasrah and Ashour, 2016; Badawi, 2010). And dealing with the groups' exercises and activities, in a way to apply what they learn in different life situations, or solve various everyday problems. Active learning has strategies and the modalities which have characteristics of effective classroom activities that emphasize exploration, and development of skills, and to raise the motivation of the learner and provide immediate feedback by the teacher and activate the higher mental skills of the learner. (Bonwell, 1995). Among the features of active learning it is considered a way for the expression of learners' tendencies, and learn what is difficult to learn in the classroom, providing a authentic situations to enhance learning and give students aspects of professional, psychological and social experiences; such as cooperation and responsibility, creativity, self-control and communication between teacher and student, and the students themselves, where the students reach meaningful knowledge, in addition to that learning takes place without the help of the authority, and works to strengthen students' confidence in themselves and makes them more active in the classroom, it also enhances teamwork skills and higher-levels thinking (ALmaghzone & Awadh, 2010).

Active learning strategies

Badawi (2010) defined it as the procedures and the steps followed by the learner, and planned in advance, and requiring him thinking, reading, writing, listening, speaking and debate. Thus, the active learning strategies based on the learner's activity and the pros during the educational process and learner interact with educational material in a positive planned and targeted way. and make learner pay mental and manual effort to build knowledge in his mind. Many scientists have been interested in the classification of active learning strategies (Mathews lisakey, 2006; ALmaghzone & Awadh, 2010) including collaborative learning, in which students are divided into groups of between (4-5) are working together to achieve learning objectives and the relationship is correlation between achieving individual objectives and others' objectives, and everyone works to reach the upper limit of learning, and the teacher's role here is determined by defining the goal of the lesson, and define the role of each student and then submit the job and explain and then monitor the work of the groups as a prelude to provide any assistance requested the role-playing strategy is a form of perception dramatic helps the realization value system is an attempt to create between members of the group social relations, where he faces two position or a problem with what they are trying to display through their representation in front of the students and the presentation of views associated with it, the discussion between the teacher and students ends in order to reach a solution (Scheyvens, Griffin, Jocoy, Liu & Bradford, 2008).

Reading comprehension at critical level

When a person reads a subject may he may feel uncomfortable or harmony with what he reads; which calls for the so-called critical reading that require critical thinking processes, which include interactions between the ideas of the reader and the ideas of the author; to get out with additional explanations about the subject. Researchers bring many definitions for critical reading, Kok (2011) defined it as "reading aims to evaluate the text", while Dewi, & Ewi (2013) defined critical reading as an evaluation process of the reading text.

Based on the foregoing, it is noted that the above definitions have addressed most of the sub-critical reading skills, such as evaluation and sentencing, and generate conclusions, grading and comparison, and access to abstracts. And attention to critical reading skills is essential for students; because it provides them with what enables them to effectively deal with information from various sources, in order to understand this information and use it to solve problems they face. Choo, Eng, & Ahmad, 2011) stated that critical reading enable learners to build a clear ideology which helps them to critique what they read; it also enables them to read meanings that is put by biased people between the lines and not just the meanings and ideas that throws up the lines. Most researchers agreed on the critical reading skills (Chang, Anna, & Millett, Sonia, 2013; and Saed, 2013).

Reading comprehension at creative level

Creative reading has ranked within the top levels of reading comprehension, it is a skill that helps the reader to reach the creative thinking (Chang, Anna, & Millett, Sonia, 2013). Creative reading is seen as practice reading

skills with the perception of stimuli motivating to think about the imaginary; and include creative reading on the practice of selective thinking; which means interaction with literacy texts and draw useful of them and the neglect the others, which is similar to the critical reading in terms of the high level of understanding and thinking, and the interaction of the reader with the text, and the search for meanings in it, and how to benefit from them. Creative reading and can be described as a kind of problem-solving through the use of reading materials (Naseri, Maghsoudi, & Madani, 2014).

Creative reading skills differ from critical reading skills in that it is more specific; while critical reading skills have many divisions; it is divided by other divisions. Turns out those specific creative reading skills among most researchers (Chang & Anna, 2012); (Naseri, Maghsoudi, & Madani, 2014), and these skills are original: It means the ability to produce unfamiliar original ideas, and not contained in the written text. And fluency: it means the ability to produce a greater number of creative ideas from reading the text. And Flexibility which means the ability to change the state of mind, and the diversity of ideas put forward; to cope with various new situations and problems. In addition to the expansion: it means the ability to add details of primary forms; to become deeper or fuller or interesting reader with a creative tends to take responsibility for his understanding of what he reads, and receives information without bias, and flexible in his thinking, and do not use familiar methods to solve problems, and has a high self-confidence, an inquisitive and curious. (Chang, Anna, & Millett, Sonia, 2013)

The problem of the study and questions

This study aimed to design an educational program based on active learning and the disclosure of its impact on reading comprehension at critical and creative levels among intermediate students; because of the weakness experienced by students in the skills of these two levels, and for the effectiveness of educational programs in their development. Given that active learning is one of the key processes that should be the focus of the teacher and seeks to develop and support, to enable students to meet the challenges and the problems surrounding it and develop their ability to adapt to the rapid changes, and although there are many programs that are offered to students in the Arab and foreign environments in general and Saudi Arabia in particular, but there is no sufficient scientific studies dealing with a training program based on active learning in the development of reading comprehension at critical and creative levels in an integrated and holistic way. Thus, the present study attempts to answer the following questions:

The first question: "Is there a statistically significant difference between the mean performance of the first intermediate students to test reading comprehension at critical and creative levels attributable to (training program / normal way)?"

The second question: "Is there a statistically significant difference between the mean performance of the first intermediate students in reading comprehension test at critical and creative levels attributable to gender (male / female)?"

The third question: Is there a statistically significant difference between the average performance of the first intermediate students in reading comprehension test at critical and creative levels due to the interaction between the way of education and gender?"

The importance of study:

The importance of the study is in the field of learning, where the awareness with strategies that will help students in the development of reading comprehension can be developed among teachers, the importance is represented in encouraging them to use certain strategies, make it easier for them to organize the necessary information to learn. When the learner uses one of the active learning strategies, it helps the individual on the easy detection of weak links and assembled items. Based on the foregoing, it is necessary for the educator to be aware of the importance of active learning strategies to be used, but the learner who knows a lot about active learning can be more used to it. The current study is gaining its importance through its reliance on a program to develop the skills of reading comprehension at critical and creative levels. And compatibility with the orientations of educators, which calls for the educational content that would be suitable for the development of reading skills at upper levels. It also sheds light on the importance of reading comprehension at critical and creative levels in reading development in general at the time where there is a lack of studies that tackle such an approach. And encourage other researchers to design programs based on international educational programs; to develop reading skills at different levels. Furthermore, highlighting the use of new strategies in teaching, and in particular active learning strategy. And recognize the importance of active learning and various dimensions which made him an interactive process enjoyable for both the teacher and the learner. In addition it provides a practical procedural guide explains how to recruit some active learning strategies in teaching.

Operational definitions

Active learning: are the principles and procedures and processes required so that learning happens to an individual, a manifold, and are determined based on the nature of the educational situation and the goal of it, and the characteristics and level of learners. The current study is determined of cooperative learning strategy and brainstorming.

Reading comprehension at critical level: one of comprehension reading levels, which includes a set of skills that require upper levels thinking, such as: the distinction between fact and opinion, and to identify the similarities and differences, and logical reasoning (inference and conclusion), and the calendar reading. And develop the skills measured this level, the result obtained by the students in the first part of the "test reading comprehension", it is special with critical reading.

Reading comprehension at creative level: one level of reading comprehension, which includes a set of skills that require upper levels of thinking, such as: originality of ideas, generated versatility and flexibility to deal with, and the ability to expand and fattening it. The development the skills of this level is measured by the result obtained by the students in the second part of "reading comprehension test", it is specialized with creative reading.

The limits of the study:

The current study was limited to a sample of the first intermediate students in the city of Al-Kharj for the year 2015-2016 and it was limited to testing reading comprehension at critical and creative levels. The current study also was limited to the training program prepared by the researcher with cooperative learning strategy and brainstorming.

Previous Studies

Many studies were conducted on active learning. It tried to use some of the educational programs based on active learning. Mukherjee & Page (2007) had tried to detect the effect of active learning in the development of critical thinking. Ahmed (2012) revealed the effectiveness of the use of active learning strategies in teaching Statistics. Asha and Abu Awad Al-Shalabi (2012) investigated the effect of active learning in the development of self-efficacy and achievement. Taha (2013) defined synthesis strategy based on active learning in modifying misconceptions and develop motivation for achievement and academic achievement, while Akwa and Aremeimah and Alajabua (2016) investigated the effect of active learning in the teaching of medical devices course.

In a single study used survey method Aljaafrah (2015) which tried to determine the level of teachers applying for active learning strategies. most of the previous studies used quasi-experimental method based on pre/posttest to two groups (Ahmed, 2012; Asha and Abu Awad Al-Shalabi, 2012; Akwa and Aremeimah and Alajabua, 2016; Mukherjee & Page, 2007; Taha 0.2013). The study of Aldjaafarh (2015) used the survey method which was based on knowledge of the degree of teachers applying strategies of active learning, and these studies have been applied to a variety of samples in terms of age, including school students (Akwa and Aremeimah and Alajabua, 2016; Mukherjee & Page, 2007; Taha, 2013). Studies did not stop at the school students, but surpassed the stage of university education (Ahmad, 2012; Asha and Abu Awad Al-Shalabi, 2012) while the study Aldjaafarh was applied on male and female teachers.

Many researchers tackle the reading comprehension at critical level trying to find solutions that generally help readers, and students in particular, to acquire the skills of this level, and to achieve this goal, some of the studies explored the impact of some of the educational programs prepared by researchers, such as the study of Abdullah (2007), which tried to trace the effect of enrichment program in the development of critical reading skills, and the study of Al Hazaymeh (2005), which is meant to build a program based on self-learning and testing its impact on the development of critical reading skills, and another set of studies employed a variety of strategies for the development of critical reading skills. Al halaseh (2004) investigated the effect of reading strategy in reading comprehension and critical thinking, Abdul Hamid (2001) investigated the effect of cooperative learning strategy in the development of critical reading skills and gain creative behavior and survival of the impact of learning. Al Saed (2013) aimed to determine the effectiveness of the use of interactive education strategy in the development of reading comprehension skills. and Sunaniah (2016) investigated the effectiveness of interactive learning in the development of reading comprehension. Ayasrah and Ashour (2016) detected the effect of temporary reading and repeated reading in improving reading comprehension. On the other hand, a series of studies focused on identifying the critical reading level, the study of the relationship between critical reading and a variety of variables, such as the study of the Harbi (2004), which aimed to assess the level of critical reading, With regard to the findings of the semi-experimental studies, these studies have revealed the existence of a statistically significant difference in the performance of experimental groups compared with the control, or the presence of a statistically significant difference in the performance of students in the post-test compared to pretest (Zubaidi, 2007; Abdullah, 2007; Al Hazaymeh , 2005; Dewi, & Ewi, 2013 .; Al halaseh, 2004; Abdul

Hamid, 2001; Saed, 2013; Macdonald, 2003; Althausser & Darnall, 2001; Ayasreh and Ashour, 2016 ; Cherney, 1990; and Sunaniah, 2016) the results indicated that the growing understanding of the experimental group students of similar events by reading texts, but the evolution of accommodating members of the experimental group in general compared with control. Regarding the variable gender, Al Abdullah (2007 study has indicated to having the effect of gender in the critical reading skills, in favor of females; while al-Zubaidi (2007) study showed no impact of the gender. Studies concerning the reading comprehension and creative level and the development of relatively few skills came when compared to those related to reading comprehension at critical level. Some of it tried to use educational programs in the development of creative reading skills, such as Hayek (2005) study which aimed at building educational program based on multimedia and measure its impact in the development of creative reading skills, Chang & Anna (2012) study which investigated the effect of educational program based on multimedia software in the development of creative reading skills. Rababah (2007) investigated the effect of "thinking out loud" and "thinking style" in the development of the skills of reading comprehension strategy at critical and creative levels; while Awn (2007) measured the effect of self-table strategy in the development of critical and creative reading skills. Naseri, Maghsoudi, & Madani (2014) also tried to find out the impact of a proposed strategy in the development of some innovative reading skills. While Diabat (2001) investigated the effect of cooperative learning strategy in the development of creative reading skills, (Barrett (2001) investigated the effect of using technology and creative reading activities to increase recreational reading, Most of the previous studies used quasi-experimental-based on pretest/posttest to two groups (Rababah, 2007; Awn, 2007; Hayek, 2005, Naseri, Maghsoudi, & Madani, 2014; Allbouda, 2003; and Diabat, 2001).

Methodology and procedures

The study sample: The study sample consisted of 120 students from the first intermediate students from schools at Kharj city, A school for males and another for females were chosen randomly, two sections from each school were selected randomly too, after that one of the two sections in each school were chosen randomly to be the experimental group and the other control. Each group consisted of 30 students.

The study tool: to achieve the objectives of the current study, the researcher used the reading comprehension test in its critical and creative level. The reading comprehension test in its critical and creative levels was built on seven texts on extremism, after identifying the skills of reading comprehension in its critical and creative levels, and then he displayed a list of the skills of reading comprehension in its critical and creative levels with behavioral indicators function on it, a group of arbitrators from specialists in the Arabic language curricula and methods of teaching, and English in Saudi universities to determine the appropriate skills, and behavioral indicators function on them. Texts of the test were manipulated with deletion, addition and modification. To commensurate with the level of students, and fits the skills and its behavioral indicators.

Test validity: the test in the initial image was displayed to a number of arbitrators from specialists of university professors. The arbitrators were asked to express an opinion on the extent of the readability of test scripts and its appropriateness to the targeted age group, as well as the appropriateness of the questions to the targeted skills and its behavioral indicators, and the extent of the strength of the language, and clarity of instructions.

Reliability of the test: to calculate the reliability of the test, it has been applied on a prospective sample of (30) students. And then the test was reapplied again on the same sample, Pearson correlation coefficient was calculated for the test; it reached (0.88) to test reading comprehension at critical level, and was (0.90) to test reading comprehension at the creative level. After that reading comprehension test was reapplied.

The study material: training program

The program was based on the basis of theoretical knowledge in accordance with the theory of social cognitive.... Myers & Jones, 1993); Paulson & Faust, 2006), which looked at active learning as a way to learn the students in a way allowed them to participate actively in the activities that take place inside the classroom, Also, active learning provides an educational environment to allow students to talk, good listening, reading and writing, and deep meditation, through the use of multiple techniques and methods, such as problem-solving, and small groups, simulations, case studies, and role playing, and other activities that require students apply what they have learned in the real world. And active learning strategies and methods have characteristics, including the effectiveness of classroom activities that emphasize exploration, and development of skills, and to raise the motivation of the learner and provide immediate feedback by the teacher and activate the higher mental skills of the learner (Bonwell, 1995). some previous studies also were mentioned, which focused on active learning and training programs, including a study of (Akwa and Aremeimah and Alajabua, 2016; Mukherjee & Page, 2007 ; Taha, 2013).

The purpose of the training program was the development of reading comprehension skills at critical and creative levels among the first intermediate students in Al Kharj schools in Saudi Arabia. The training program

consisted of 25 classes. The program was fully taught over five weeks in a row, and at a rate of one class per day. Since the current program is based on texts concerning extremism.

The Program Validity

To verify the validity of the program content; the researcher introduced the program in its initial image on the panel of judges consisted of ten arbitrators specialists in educational psychology and Arabic language; asking them to express an opinion about the objectives of the program and its components, and the number of sessions and content, and its suitability for first intermediate students, and the time period necessary each session of language and drafting. The judges made a number of opinions related to the increase of the number of sessions (25) hearing, and change some of the words that do not belong to the culture of Saudi society, the opinion of the arbitrators was to increase the number of sessions and change those items.

The study procedures

A pretest that measures reading comprehension at critical and creative levels of the students in the experimental group and control group was applied, to ensure the equality of experimental and control groups before applying the training program. After creating the right atmosphere for the application, the researcher applied the training program in (25) session by five weekly sessions, in addition to two sessions: the first preliminary and the other final, and the session length (45) minutes. After creating the right atmosphere for the application, then the researcher apply a post test on the experimental and control groups, which measures reading comprehension at critical and creative levels.

Study Design

The researcher adopted in the implementation of this study on the quasi-experimental approach, and this design includes two groups experimental and control for both males and females, subject to a pre-test, then the experimental group subjected to a training program, and the two groups subjected to a post test.

Results of the Study

Regarding the questions of the study, necessary statistical analyzes were carried out to answer every question as the following:

First, the results relating to the first question: "Is there a statistically significant difference, between the average performance of the first intermediate students in reading comprehension test at the critical and creative levels attributable to (training program / normal way)?"

To answer this question, Two-Way ANOVA was used to examine the effect of the way of teaching (training program / normal way), gender (male / female), and the interaction between the way and Gender (educational program / male, educational program / female, Normal / male, Normal / female). It is shown in Table 1 arithmetic means and standard deviations for the scores of students in reading comprehension at the critical and creative levels on the post-test.

Table 1: means and standard deviations for the posttest score for each of the two levels of reading comprehension (the critic, and creative) according to group and gender

Group	Understanding the text	Gender				Total	
		Male		Female		Mean	Standard deviation
		Mean	Standard deviation	Mean	Standard deviation		
Experimental	Critical	15.39	1.85	15.44	1.43	15.40	1.70
	Creative	14.79	1.97	14.00	2.32	14.39	2.13
Control	Critical	10.40	3.59	9.93	1.63	10.17	2.80
	Creative	7.80	1.63	7.89	1.50	7.84	1.55
Total	Critical	12.81	3.92	12.64	3.45	12.73	3.68
	Creative	11.17	3.90	11.38	4.07	11.27	3.99

Results in Table 1 indicated that the arithmetic mean of the experimental group students in reading comprehension at critical level (15.42) with a standard deviation of (1.70), while the arithmetic mean for students of the control group at the same level (10.17) with a standard deviation of (2.80). It also shows that the arithmetic mean of the experimental group students in reading comprehension at creative level reached (14.39)

and standard deviation of (2.13), while the arithmetic mean for students of the control group at the same level (7.84) with a standard deviation of (1.55). It is clear from the arithmetic means and standard deviations presented in table 2 according to group and gender and the presence of morphological differences, and to make sure of the significance of these differences, multi-bilateral variation analysis was used, as shown in Table 2

Table 2: Results of analysis of variance (Two-Way MANOVA) of the study sample performance on the posttest according to group, gender, and the interaction between them

Source of variance	Lax value	F value	Df	Sig	Dependent Variable	Sum of squares	Df	Mean of squares	F value	Sig
Group	0.20	215.108	2	0.000	Critical	778.803	1	778.803	147.78	*0.000
					Creative	1400.635	1	1400.635	399.45	*0.000
Gender	0.99	0.314	2	0.731	Critical	1.243	1	1.243	0.236	0.628
					Creative	0.665	1	0.665	0.190	0.664
Interaction	0.99	0.182	2	0.834	Critical	1.929	1	1.929	0.366	0.546
					Creative	0.104	1	0.104	0.030	0.84

Table 2 indicates the presence of a statistically significant difference between the averages of the experimental and control groups at the significance level ($\alpha \leq 0.05$), due to the method of education for the experimental group, and this difference was statistically significant in both: reading comprehension at critical level and reading comprehension at creative level.

Second, the results relating to the second question, "Is there a statistically significant difference between the mean performance of the first intermediate students to test reading comprehension in the critical and creative levels attributable to gender (male / female)? To answer this question, Two-Way analysis of variance was used, It appears from table 1 that the average student scores in reading comprehension at critical level reached (12.81) with a standard deviation of (3.92), while the mean of female scores at the same level reached (12.64) with a standard deviation of (3.45). While the mean of student scores in reading comprehension at the creative level reached (11.17) with a standard deviation of (3.90), the mean of students' scores in reading at creative level reached (11.38) with a standard deviation of (4.07). It is clear from the results presented in table 2 the lack of a statistically significant difference at the significance level ($\alpha \leq 0.05$), due to the gender variable, not in reading comprehension at critical level, nor in reading comprehension and creative level.

Third, the results relating to the third question, "Is there a statistically significant difference between the mean performance of the first intermediate students to test reading comprehension at critical and creative levels due to the interaction between the way of teaching and gender? To answer this question, Multiple analysis of variance, the results presented in table 2 showed that the mean of male experimental group's scores in reading comprehension at critical level reached (15.39) with a standard deviation of (1.85), while the mean of male control group at the same level (10.40) with a standard deviation of (3.59). as the mean of female experimental group scores in the level of reading comprehension at critical level (15.44) with a standard deviation of (1.43), while the mean of female control group's scores amounted at the same level (9.93) with a standard deviation of (1.63). It also shows that the average male control group scores in reading comprehension at creative level (14.79) with a standard deviation of (1.97), while the average male control group's scores at the same level (7.80) with a standard deviation of (1.63). the average of female experimental group scores in reading comprehension at creative level (14.00) with a standard deviation of (2.32), while the average of female control group's scores at the same level (7.89) with a standard deviation of (1.50). it is clear from the results of the multiple two-way analyses of variance in table 2 a the lack of statistically significant differences at the level of significance ($\alpha \leq 0.05$), due to the interaction between the way of teaching and gender, not in the level of reading comprehension at critical level, nor in reading comprehension at creative level.

Discussion of the Results

The results of this question showed the presence of a statistically significant difference between the average performance of the experimental group students and students in the control group in the reading comprehension posttest at the critical and creative levels; attributed to the training program, in favor of the experimental group that was taught using the training program.

The findings of the study relating this question consisted with what came in the theoretical literature from the need to focus on the skills of reading comprehension at critical and creative levels, and providing educational content, strategies and programs appropriate to develop them (Choo, Eng, & Ahmad, 2011).) Scheyvens, Griffin, Jocoy, Liu., & Bradford., 2008).

The results of the question also agreed with the results of a series of studies (Zubaidi, 2007; Abdullah, 2007; Al Hazaymeh, 2005; Harb, 2004; Qataunh, 2004; Abdul Hamid, 2001 ; Althausser & Darnall, 2001; Maning, 1997; Cherney , 1990) indicated in its results to the effectiveness of teaching strategies and educational programs and models of education in improving the level of critical reading among students -under experiment-. And the results also agreed with the results of other studies (Rababah, 2007; Awn, 2007; Hayek, 2005; Chang & Anna, 2012; Naseri, Maghsoudi, & Madani, 2014; Salah and Mahboob, 2003; Allbouda, 2003; Diabat, 2001; Oqaili,

1999; and barrett, 2001), which pointed to the effectiveness of the strategies and educational programs in the development of creative thinking skills, and improve the low level of students in the creative reading skills.

The results of the present study showed a lack of a statistically significant impact on reading comprehension at the critical and creative levels attributed to gender. Perhaps the reason for this is due to equal, similar schools that were born similarity in the teaching-learning environment conditions; thus helped to create equal opportunities to interact with the data platform. The pilot study group (male and female) have benefited from the training program with convergent degree, since the content or teaching-learning procedures were not biased to one gender without the other. The result of this question agreed with the results of many studies (Zubaidi, 2007; and Hayek, 2005) which pointed to the lack of impact of the gender in the skills of reading comprehension at critical and creative levels. The results showed, that there were no statistically significant differences between the mean reading comprehension of interactive groups, and there isn't significant differences not only in the reading comprehension at critical level, nor in reading comprehension at creative level.

This result demonstrates the effectiveness of the training program to develop the skills of reading comprehension at critical and creative levels among students regardless of their gender; the program is not biased in its procedures and its training and its contents to the gender. This result can be interpreted that students of different genders have benefited from learning through training program, the clarity of educational learning measures contributed to neutralize gender; students' interaction positively with the program procedures, regardless of their gender, and the result of this question agreed with what came in the research and studies of the effectiveness of strategies, programs and models in the development of reading comprehension skills at critical and creative levels, away from any interaction with other variables (Rababah, 2007; and al-Zubaidi, 2007); while the result disagrees with the result of the study of Scheyvens, Griffin, Joco, Liu in., & Bradford (2008) which showed the interaction between the way of teaching and gender; which indicates the need for further studies; to stand on the interaction between the way of teaching and gender. The researcher recommends further studies and research aims to design programs based on international educational programs; for the development of reading comprehension skills at critical and creative levels, and the use of this program in the development of the skills of reading comprehension at critical and creative levels.

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