

## **The Effectiveness of Using Six Hats Strategy to Improve Reading Comprehension for the Eighth Grade Students in Communication Skills Book in Jordan**

Haytham Ali Ibrahim Alshatti

Department of Curriculum and Instruction, The University of Jordan, Jordan

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**Abstract:** This study aimed to show the effectiveness of using six hats strategy to improve reading comprehension for the 8th grade students in communication skills book in Jordan. Specifically, the study answered the following questions: Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students attributed to the teaching method (based on the six hats and regular)? Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to gender (male or female)? Are there significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to the interaction between the teaching method (based on the six hats strategy) and gender (male or female)? The subject of the study consisted of the 8th grade students in the schools affiliated with the education department in the banner of the university in the 1st semester of the academic year 2012/2013 and the sample of the study consisted of 102 students from 8th grade students in the schools affiliated with the education department in the banner of the university/capital. They distributed in 4 classes, 2 for males and 2 for females, they were (51) girls and boys in the 2 classes from (waht almaali) school and they were (51) girls and boys in the 2 classes from (university of Jordan) school, they distributed by simple random into 2 groups: 1 for males and 1 for females in the experimental group (taught by six hats strategy) and 2 in the control group (taught according to the traditional method). The researcher developed a test in the levels of reading comprehension, he sure of the degree in validity and reliability by statistical processes, the validity of the test was appeared from arbitrators and specialists notes and from verified properties psychometric paragraphs which was over 40 which acceptable for the purposes of this study. The reliability of the reading comprehension test was 82 which acceptable for the purposes of this study. Implementing the post and pre achievement test in reading comprehension and analyzing the data and using suitable statistical processes in order to answer the study questions.

**Key words:** Strategy, six hats, reading comprehension, 8th grade, communication skills, teaching, learning, thinking

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### **INTRODUCTION**

God said in the first word to the Prophet Mohammad in Quran Kareem: Read in the name of the God who created (alalk,1) read here does not mean read the letters because the concept of reading here meaning contemplation, thinking and looking for accuracy and to search for meaning in reading so it came find consistent with the concept of the exact process of reading and reading comprehension in the teaching strategy enables the learner to absorb texts and interact with them in a modern way.

Have focused goals teach communication skills in the third episode to the stage of basic education and the decisions of the educational development of Jordan which was held in 1987 on the grounds of assimilation target

nominal goals of reading and the need to give students the skills of literacy that enables them to develop their thinking to keep up with scientific progress and the intellectual, technical and should be considered as a student at the center of the educational process learning and to achieve a functional language has therefore been find teaching strategy modern in the field of reading comprehension fit students currently and focuses on the foundations psychological, social and philosophical and cognitive underpinning the curriculum and interested role of active learning in reading comprehension while at least where the role of the teacher in memorization.

Where the teacher's role is limited to guidance and regulation, control and provide educational environment climate ratio as an active student should be educated and aware of what reads and be able to employ in his career

during linguistic communicate with reading is reading between the important linguistic skills that must be mastered students.

It discusses the transformative process in which the reader reading meaning and mechanisms to be understood or interpreted (Ashour and Miqdadi, 2005).

It is an integrated intellectual activity begins with a sense of rights to the problem of problems, then takes to read all this problem and will in the meantime all the responses required to solve this problem of action and emotion and reflection (Khater *et al.*, 1990). Which improve critical thinking and active using the special methods to build the meaning (Smith, 1987).

**Reading comprehension:** The reading comprehension of subjects educational task in the field of reading in communication skills in Arabic and is the focus of the process of reading which seeks the educational system giving for students to advance the degree of assimilation and understanding to read through the preparation of students who are able to acquire skills actual reading that enable them to assimilation total precise meanings in reading. The reading comprehension also an indicator of the achievements of students in various fields of knowledge. And reading comprehension active mental activity is to infer the meaning of linguistic units based on the customary background of the reader (Harste, 1985).

Strain (1976) know that reach the reader of meaning through the reorganization of the knowledge acquired by the former commercial and fit information and new concepts and reading comprehension process that requires different capabilities for word processing and possess the ability to transform the meanings of those symbols to meanings of mind reflects the turn ideas and facts contained in the text and the ability to trial readable and employment.

It also involves the process of communication and interaction between the reader and the text as readable message writer aims to delivery the reader with a deep understanding of her reading comprehension bridging the old information (Almathani, 1995).

And reading comprehension active dynamic process that requires a deep understanding of minutes while reading text.

Jack (1991) knew as a multi-dimensional mental activity seeks to build semantic perception of what is said or logging where to put reading comprehension first prize for cognitive skills one reader accommodates a result of its interaction with the text reading in a collective context. And reading comprehension reading fruit and evidence of the feasibility and usefulness (Cleland, 1965).

Researchers have put in reading comprehension several categories to organize the reading comprehension skills at various levels.

Including the classification of Debor and Dalman (1970) to accommodate the reading in the three levels, namely; read the lines, read between the lines, read behind the lines. And Strain (1976) organizes reading comprehension also in the three levels, namely; the literal level and the interpretative and at the practical level. Barret (1976) class reading comprehension in the four levels, namely; the literal level and deductive level and osteopathic level and the estimated level.

Harste (1985) type reading comprehension levels to the literal and the interpretative and the monetary and creative level.

The classification adopted by the researcher is classification by Strain (1976) for the reading comprehension skills and classification by Robinson (1970) where many of the classifications in reading comprehension studies and research on the identification of reading comprehension skills at various levels where researchers found skills associated with thinking and perception has identified reading comprehension skills in the following levels. First, the literal level; the absorptive following skills:

- The development of new vocabulary linguistic wealth
- To identify main ideas in the text
- The ability to anticipate the content of the text before reading it

Second, interpretative level: Comprehension skills include the following:

- The ability to interpret phrases
- The ability to mention certain details in the text readable
- Get the overall meaning of the text readable

Third, the symbolic level: Comprehension skills include the following:

- Conclusion or read between the lines
- Understand the symbols in the text

Fourth, integrative level or applied: Comprehension skills include the following:

- Realize the goal of the writer of the text
- To express an opinion on the text and sentenced
- Predict results (implications event) and style of the writer

Researchers have touched on in the area of reading comprehension to factors affecting it and scan for these studies and research to find that mostly revolves around the factors that relate to the context and text properties and characteristics of the reader, including the nature of the learner, the nature of the material, the purposes of reading, environment, reading, nature of the text readable and factors related to teacher and way of teaching and curriculum.

**Six thinking hats:** The researcher has reference to Arab education literature to search for different ways (methods) to teach reading and reading comprehension, reading where it was found by researcher within the limits of his research that there is one general method for teaching reading comprehension in the Arab world which is the traditional method used by most educators or teachers in the educational field in a substance communication skills for Arabic language in the third episode in basic education has been explained Ibrahim (1983) steps that the method used traditionally in the teaching of reading comprehension in Arabic language (for the study of communication skills and reading texts previously) which begins read parameter aloud a role model for students then read the outstanding students, center, ideas collection and then explain the main ideas and contextual semantic only and repeats the teacher in all share the same boring way.

And taken the traditional way need for a time long in explaining the lesson in detail, so that needs lesson per four servings of completion and its focus on the teacher teleprompter and commentator and the role of the student where the few not to exceed participation for some time and read a line or two lines without a search for the meaning of reading but the modern way to teach reading comprehension and overlooked by scholars in search of Arabs in the area of reading comprehension and did not know many of the teachers applied they are teaching strategy using the six thinking hats and internationally known six hats which will be applied to the study sample, to demonstrate their effectiveness in improving reading comprehension among students in the study of communication skills to 8th grade primary in Jordan.

Teaching strategy is characterized by using the six thinking hats undemanding, the request for the training of the teacher and the learner to use and develop the self-confidence of the teacher and the learner and increase the number of individual minds and differentiate between skills of six thinking hats (Qatami, 2010).

The strategy has spread six thinking hats in literature after it issued a foreign de bonner book six thinking hats 1985 through the application of scientific studies and lectures and training courses in several universities in the world in 2006 and moved to its application to Arab educational literature translated into Arabic and the emergence of private centers in the education of thinking did not apply, the six thinking hats in the scientific study because end area and do not include books translation of enforcement mechanisms.

Curran (2003) explains the importance of the objectives and advantages of the six hats method, flexibility and simplification of thinking and develops thinking skills.

De Bono (2007) described the six thinking hats method technically regular and clear and all the hats every hat represents part of the thinking and what comes to clarify her:

- White hat represents objectivity, neutrality and is interested in searching for numbers and information, data and facts
- Blue hat the leader and the team management and decision-making and systematic control officer and thinking about thinking, instructions and law and order
- Yellow hat represents the pros and optimism, hope and positive expression and goodness
- Black hat represents the negatives and weaknesses points and pessimism, failure, sadness, evil and sees

It would be wrong to connect the black hat negativity because wearers' thinking is increase knowledge (Dymer, 2004) and understanding of the difficulties and dangers and caution while to wear the black hat diminish the importance of the provisions of the wearer (Obiedat and Abu Alsameed, 2005).

- Red hat represent feelings, sensations and emotions, religion, ethics and lofty principles
- Green hat represents creativity, good, new ideas and innovation

The focus of the six hats to think about the process of mental intentionally (Jerwan, 2002). De Bono indicates the process remember the function of each hat easy if associated with color and their meanings and fall of meanings and ideas can be thought learner color bilaterally: White, red, black, yellow, green, blue, as well as researchers can wear a hat on the head and takes them off easily by way of thinking and the way games common dating learner on the patterns of thinking and

multiple expansion horizons and understand and absorb it easily readable style instead of one and in a fun way and not boring.

De Bono according that strategy (six hats) enables the learner the ability to succeed shortly in positions of scientific and personal they shift positions rigid positions creative, turning negative attitudes to positive attitudes and this requires switching hats between the educated and the learner of the individual and the transition to a way of thinking again so are hats think-tank inclusive of all six types of thinking and to make learning more like a recreational game or a birthday party.

Six hats can benefit in learning to solve problems and make decisions and overcome shyness and increase self-confidence and make our language dialogue Stewart (Stuart, 2003).

Obiedat and Abu Alsameed (2005) explain and demonstrate that all teachers are thinking at the same time in the same subject from the same corner in case they wear a certain hat.

The six thinking hats method of styles and strategies useful in the teaching of different subjects and raise the motivation of students in active learning effective.

**Previous studies of Arab and foreign:** There were many studies that have addressed the issue of my readers in absorption levels and different skills and different names but made of metal one, the six thinking hats strategy was a rare and Arab studies looked at education programs six thinking hats.

The foreign studies were few in the effective use of strategic six thinking hats to improve reading comprehension among the students of the 8th grade in the study of communication skills and there is no Arabic study within the limits of science researcher and research discussed strategy (six thinking hats) to improve reading comprehension among the students in the 8th grade for communication skills book.

The foreign Arab studies addressed the use of six thinking hats in the fields of pharmacology and special education, nursing, psychology, management business, business technology, engineering and sciences.

**The previous studies:** Al-Ghamdi (2011) study aimed to design unit Engineering models using the six hats of De Bono and building test cognitive processes supreme in the same unit and the measure of ability to make decisions for students in third grade average in Saudi Arabia have reached results of its study on the lessons in the unit engineering models using the six hats and testing of cognitive processes supreme in the same unit and the measure of decision making capacity has used this study

fairly designs descriptive analytical approach and in light of the results of the study, the researcher presented a number of recommendations that can be introduced in the teaching of mathematics in Saudi Arabia.

And Izz al-Din and Charm did study aimed to identify the skills solution creative problems associated with studying the chemistry among students in the 3rd year divisions nature, chemistry and biological faculties of education in Banha and the impact of the use of technical hats study 43 students. The results of the study on the existence of deficiencies in three key skills for a creative solution to the problems before the experimental treatment but to improve student performance after treatment, demonstrating the success of the experimental treatment (technical caps six penance) to acquire the skills students creative solution to the problems in chemistry.

Shaya and Aqeel (2009) study aimed to know the effect of using the six thinking hats in science education on the development of creative thinking and classroom interaction verbal students in sixth grade in the city of sports. The sample consisted of 60 students divided into two experimental and control group rate 30 students each group. The results showed no statistically significant differences among the members of the sample in creative thinking skills individually and in total, the study showed the effectiveness of the strategy six hats in improving rates of verbal interaction to interview the teacher indirect and his direct to speech in general and interview students to their teacher.

Audeh and Naeem did study aimed to measure the impact of the use of methods of brainstorming and hats six lecture detailed in the collection and reflective thinking among the students of the 10th grade in the study of national education in Jordan, the study sample consisted of 6 class in 6 schools, 3 class which for males and 3 class for females, the number of males 87 students and females 80. The student achievement test tool and test of thinking contemplative analysis of variance was used accompanying test (shefeh) and Pearson correlation coefficient to answer the study.

The results of the study on the presence of statistically significant differences in test reflective thinking is due to the way where these differences between groups description mental group six hats for group brainstorming and the presence of statistically significant differences between groups hats six and a lecture detailed in favor of a six hats, as evidenced by the results that there is no statistically significant differences due to gender while there are no statistically significant differences due to the interaction between gender and method, the results also indicated that there is a positive correlation between student achievement and the extent to acquire the skills of reflective thinking.

Barakati and Navin did study aimed to investigate the effect of teaching strategies using multiple intelligences and the six hats and KWL. In the collection, communication and bonding athlete with third grade student's Mediterranean city of Mecca.

The study sample consisted of 95 students, their distribution randomly into 4 groups 3 including a pilot and the fourth officer was the first experimental group teaching strategies using multiple intelligences. And the teaching of the second experimental group using the six hats strategy, the experimental group was taught using third strategy KWL. The control group studied using the usual method or traditional was used achievement test to measure connectivity skills and interdependence sports, study results showed the existence of significant differences outweigh the complexes three pilot to the control group which overtook the two sets of multiple intelligences, hats, six in terms of the level of understanding and communication athlete and the superiority of the two sets of multiple intelligences KWL. In terms of the calendar and level of excellence for both normal control subjects.

Fouda and Abdo (2005) did study aimed to investigate the effect of using art De Bono caps six in science education on the development trends of creative thinking and skills among the students of the 5th grade of primary study sample consisted of 71 students representing the experimental group and 75 students representing the control group and the tools used in the study is a measure tendencies creative thinking and testing creative thinking skills and test (T) and the ETA box to test the validity of the study hypotheses.

Results of the study showed a statistically significant difference between the mean scores of the experimental and control groups on a scale tendencies creative thinking and creative thinking skills test for the experimental group.

Naifeh and Inam had a study aimed at identifying the impact of the way of education in a manner thinking hats six in the collection of 9th grade students basic math, study sample consisted of 118 students from 9th grade students the basic and consisted study tools of achievement test in mathematics and analysis of variance test was used for binary associated hypotheses to test the validity of the study.

The results of the study on the presence of statistically significant differences between the achievement of students who have studied using the six hats and who studied in the traditional manner for the benefit of the way six hats and the results showed no statistically significant differences in student achievement due to gender or the interaction between teaching method and social type.

There were many studies of Arab and foreign that dealt with strategic thinking hats six and rose to the effectiveness of this strategy but there are no studies of Arab or foreign addressed the effectiveness of using a strategy hats six in improving reading comprehension among the students of the 8th grade basic research communication skills (Arabic) in Jordan.

The Arab and foreign studies in a few strategic study of the six hats in general, researcher did not find any study on the effectiveness of the strategy to improve reading comprehension in communication skills.

Alsubyie did study aimed to build a training program based on the six thinking hats of De Bono and measure its impact on the development of leadership behavior in high school students in Kuwait and to achieve this tambourine was designing a training program based on the six thinking hats but in order to measure its impact on leadership behavior has been building a measure of the behavior of the leadership has been selected sample consisting of 80 students from grade students atheist ten from the school of Said bin Prince secondary school for boys in Al-Ahmadi educational and distributed in specializations semesters (literary and scientific) of a high collection and mediterranean collection was divide the sample into 2 groups (experimental and control).

And consisted of each group of 40 students, before you start the application of the training program, the researcher applying a measure leadership behavior, as a test before me for the two experimental and control groups and it took the program 33 session and after completion of the program has been applied measure of leadership behavior test after me, have also been used analysis covariance, compared to averages answer the study questions.

The results revealed the presence of statistically significant differences at the level of significance ( $\alpha = 0.05$ ) between the experimental and control groups to the benefit of experimental group, as the results showed that there were statistically significant differences at the level of significance ( $\alpha = 0.05$ ) among the members of the experimental group a high collection and Mediterranean collection in the total score to measure leadership behavior and dimensions of the following (democratic behavior and take responsibility, initiative) in favor of a high collection, not the results show differences of statistical significance between high collection and Mediterranean achievement in after (the decision) and results indicated that there was no statistically significant differences between members of the experimental group different academic specialization (literary and scientific).

The overall results have shown that the training program based on the six thinking hats was active in MTG lira this study aimed study him.

Carl (1996) wrote a study in the six thinking hats: Dialectical and respond to the model of thinking, this study provides a model cognitive of thinking called six thinking hats and dialectical response to the model and creates a form six contexts artificial to think about which is attributable to patterns of atonement basic and objective and subjective and Alalbaih thinking within the framework of a comprehensive work allows the thinker directing his attention to the desired pattern of thinking.

The study sample consisted of 31 students from the Rochester Institute of Technology in a row I graduated at the Faculty of Management Institute and business. This study focuses on the individual as a model response six thinking hats and the dialectical relationship basmati and applied researcher in this study measure infant and ranch controversial, took researcher row to train associates on how to use the six thinking hats and dish then associate the form on the exercise of thinking designed by the researcher and the members of the commission and conduct a survey on the response associate to use all hat hats six in the model was conducted a series of tests the link and tests covariance data that are classified into low, medium and high for levels of controversy and in order to identify any significant relationships levels and response variables.

The results revealed that the responses of the model and hats individual different in general and recommended data that there is no relationship significant between the level of controversy and the response of the model did not check the controversy prediction good and useful to respond to the model six hats in the patterns of thinking of the individual but it aroused curiosity to know the answers to the questions by prospective studies within this field.

Jensen *et al.* (1999) did a comparative study aimed at effective use of a team based strategy to the six hats in the development and compared with the way technology based Myers Briggs formation in engineering courses (MBTI) and (MBTI-six-hats) and evaluation of a new strategy to increase the academic success the researchers developed and named it (TFS).

Based on the thinking caps, Myers program Briggs for the development of creativity, this study was conducted at the Air Force Academy in America, the sample consisted of 50 students divided into two divisions, each division 25 students, distributors 10 teams, each team consists of (4-5) students, these strategies were applied in full course, the strategy was

applied one on each group, data were calculated by the arithmetic mean and standard deviations for each student grades than the tool.

The results of the study showed that (TFS) based on the six hats have had teams generally more effective than those based on the difference (MBTI).

And finally, yielded results that teams that meet the standards of the six hats were statistically more effective in terms of the other teams.

Keddie (2002) did a study aimed to study the effectiveness of the use of De Bono's six thinking hats to find alternatives to the concepts defined and restricted to the male and the concept of masculinity and factors affecting the concept of masculinity among students and the benefits arising from the strategy six hats to think study sample consisted of 5 children aged (6-8 years) and revealed how much understanding of masculinity and applied in the peer culture and then find that content as an actor in the formation of masculine control about courage, competition and risk of violence and support for and opposition to the concepts of women and femininity.

The study provided confirmation of the work with the boys in the world of early childhood and developed a way to identify the gender and concepts in the early years of school and disclosure laws and concepts of masculinity when boys.

Lesley study aimed to describe how it helps to use the six hats game developed by Edward De Bono on helping students to think about a different way of dealing with patients, department researcher students into groups and the number of each group 6 of male and female students only and applied to each group a particular model and these models are to discuss their experiences in the classroom and students use many models of thinking contemplative was used six thinking hats in each group and offered a researcher on the students two cases of patients were diagnosed case and then apply for the game caps the six students to discuss the situation and reach a better way to treat the condition was divided students into 2 groups and offer them the case study and then ask each group six thinking hats from the standpoint of his hat and only one specific student wearing a hat.

Reached researcher that the use of six hats need a long time and requires a small group of 6 persons only and researcher recommended manner observer and found that the order of hats does not affect the exception of white hat that represents information and there are some hats easier than some and depend on the needs of students and suggested some of them add a new hat; namely (hat purple) which represents the spiritual aspect,

an aspect that is very necessary, especially when sick and this indicates that the student who suggested hat new to have skills in cash and clear evidence on the impact of six hats on student performance.

Mary and Jones study aimed to develop critical thinking skills and develop problem solving skills and teach the concepts of thinking parallel techniques and applied to the ethical dilemmas faced by students in the work pharmacist, sample consisted of 4 students from the Faculty of Pharmacy at the University of Toledo in a session duration 3 h which focused on the way de caps Boon's six thinking.

Method was used six thinking hats as a way to clarify and simplify complex situations in work environments varied, usually faced by the student and need to be tough decisions associated dilemmas at work, may provide a way hats useful way to clarify the elements of prominent decision-making and help pharmacy students in their capacity as owners of the profession in the future exposed to such situations in their work and in their complex were distributed to students in teams consisted of 6-7 members was appointed moral dilemmas for each team. The results of the study revealed improved students' responses after the meetings of tribal responses.

**Comment on the relevant studies:** In light of the review studies previous Arab and foreign notes that the main topic addressed in the research and study is its goal of measuring the effectiveness of using a strategy (six hats) in the development of some of the dependent variables such as the collection and thinking, including a study Carl (1996), Barakati, Alsubyie, Naifeh and Knew these studies differed in their results.

Studies of Audeh (2006) and Barakati, Tonti measure after the six hats method to communicate and interdependence sports as a target for them.

While addressed the study Audeh, Naifeh and Barakati measure the impact of the way six hats on the achievement as its goal while tackled study build a training program based on the six thinking hats with Bono and measure its impact in the development of leadership behavior.

While study compared six hats method other methods of teaching, study investigated (Fouda and Abdo, 2005) the impact of the use of technical De Bono's six hats in science education on the development of creative thinking tendencies and skills.

The aim of the study (Shaya and Aqeel, 2009) to know the effect of using the six thinking hats in science education on the development of creative thinking and verbal classroom interaction.

While the study addressed the Izz al-Din identify the technical effect of using the six thinking hats on the development of these skills.

And there were many studies of Arab and foreign that dealt with strategic thinking hats six and pointed to the effectiveness of this strategy but there are no studies of Arab or foreign addressed the effectiveness of using a strategy hats six in improving reading comprehension among the students of the 8th grade basic study of communication skills (Arabic) in Jordan.

The studies of Arab and foreign rare and limited in strategic study six hats in general, did not find researcher any study on the effectiveness of the strategy to improve reading comprehension among the students of the 8th grade core in Jordan in the book of communication skills for the study of the Arabic language, or their impact on improving reading comprehension in particular.

And previous studies differed in the Arab and foreign appointed in the various stages of education, the study has addressed (Fouda and Abdo, 2005; Shaya and Aqeel, 2009) primary education or basic minimum while the study dealt with on average education addressed by the current research is the 8th grade.

While dealt study, secondary education while the university education the phase study (Carl, 1996; Kenny, 2003).

And previous studies differed in the Arab and foreign findings of which reach effectively through the six hats in collection development at remembering when compared to a multiple intelligences way and the way KWL and the ineffectiveness of the six hats method in the development at the level of attainment calendar by Pyramid Bloom when compared to a multiple intelligences way.

And where the findings to the effectiveness of the six hats method in the development of communication such as sports study.

And from the findings to the effectiveness of a training program based on the six hats in the development of leadership behavior such as Alsubaie study. And where indicated on their effectiveness in the development of creative thinking and verbal classroom interaction as (Shaya and Aqeel, 2009).

## **MATERIALS AND METHODS**

To achieve the objectives of the research was to use the tools in the following:

**Educational material:** Was chosen as the texts of literacy variety of book (communication skills) to be in Arabic 8th grade primary in the 2nd semester and takes into account

the selected diversity in the areas representing literary arts and the researcher regarded texts suitable for students because they are scheduled by the committee of Alta life in the Ministry of Education of Jordan which they are (the texts):

- Text entitled (deep sea imaging satellite) is classified within the text contained within the scientific textbook
- Text entitled (prophetic sayings dishonest) is classified within the religious, a collection honest conversations contained in the textbook
- Text entitled (wa motasemah) classified within the text and historical prose
- Text entitled (literary councils in the court of King Abdullah founder I) justice within modern literary prose, poetry talk with the novel poetry and prose
- Poem (Sir help my mouth) are classified as contemporary Arabic poetry

Then has been taken into account in choosing texts not shared with students before searching where the texts of the 2nd semester were the application in the 1st semester. To adjust for the study variables and circumstances and to ensure that other factors affecting entry in the students' comprehension and after choosing texts have been prepared own worksheets by a worksheet for each text so that it contains all the paper work on a variety of questions vary according to three levels of reading comprehension (literal, expressive and integrative). The aim of these six caps or hats for the purpose of access to the highest degree from reading comprehension of these texts.

#### Reading comprehension test-pre-test and post-test:

The researcher has developed a test to measure the absorption of reading among students and agreed the following steps:

After reviewing the different classifications of absorption reading researcher found that there is a difference but that there is a considerable resemblance between these classifications in terms of form and content and therefore, has adopted a researcher rating Starin (1976) as characterized by this category of comprehensiveness, clarity and comprises three levels: Literal and interpretative and the integrative level.

After selecting the levels of absorption of my readers earlier been a number of pain his skills for each level of these skills to different levels and to verify the veracity of the test and is suitable texts to 8th grade were presented to arbitrators specialists in the field of Arabic language and in methods of teaching Arabic language from the

University of Jordan and the Ministry of Education in Jordan Education. Has been the adoption of the following skills to serve as a basis for the construction of the test:

**Reading comprehension skills in the literal level:** To identify the meanings of new words, to identify main ideas in the text (reading, writing) the ability to anticipate the content of the text.

**Interpretative level:** The ability to interpret phrases text, the ability to give details on the text, get on the overall meaning.

**Integrative level:** Realize the goal of the writer of the text, express an opinion on the text and on the quality of governance, forecasting to the implications of the event and style writer.

The researcher identified the test substance which is the content of the texts of the five, then set goals per a text after analyzing the content for each provision of study and testing in terms of concepts, values, facts, ideas, principles, skills and techniques guaranteed by the fulcrum in the building agenda specifications.

Specification, Table 1 has been prepared for the test periods of 30 paragraph, paragraphs were distributed to test different levels of absorption and also distributed to the five texts adopted in this study.

The figures in Table 1 show the appropriate number of questions for each level of the different levels of reading comprehension and each text, according to the specifications and schedule within the internationally approved specifications on tests of reading comprehension where the total number of questions 30 questions.

**The validity of the test:** Has been verified sincerity reading comprehension pre and post test display texts of the five attached paragraphs test reading comprehension of the 30 paragraph, also attached table distributive of

Table 1: The No. of questions in the specification table of reading comprehension test's for 30 questions

Comprehension level test questions				
Percent	Content/level	Literal level-the	Interpretative level of 35%	Integrative 30% level
		No. of questions/ 35% ratio		
20	Wamotasemah	2	2	2
20	Literary councils in the court of King Founder	2	2	2
20	Poem Sir help my mouth	2	2	2
20	Imaging of deep sea	2	2	2
20	Prophetic words of dishonest	2	2	2
Total (100)	30 questions	10	10	10

questions at different levels of absorption reading was displayed all on the number of arbitrators, Arabic language and the methods taught by teachers of the University of Jordan and the Ministry of Education in Jordan.

Researchers have asked them give their comments behind them in the appropriate degree paragraphs test of the texts and the degree of appropriateness of the level of 8th grade students the basic mental, developmental and the degree of their ability to measure reading comprehension in different levels, based on observations of arbitrators and their opinions have been adopted paragraphs, all with the deletion of some of the alternatives in the questions and others have been modified questions to become as contained in test pre and post achievement in reading comprehension which has been applied to students in and out the results of the study discuss and determine its recommendations.

To investigate psychometric in paragraphs, correlation coefficient was calculated with a total score of paragraph (coefficient of discrimination) and is shown in Table 2.

**The reliability of the reading comprehension test:** To check the reliability of the account the brother was calculated reliability test using the internal consistency of the method based on the equation of Cronbach Alpha where the persistence 0.82 which is acceptable for the purposes of the study.

**The need of this study:** There is a need for this study through: The spread of traditional teaching methods with the Arabic language teachers in Jordan, especially at the stage of basic education in the study of communication skills in Arabic appeared this need through the experience of a researcher in teaching and in an interview Arabic language teachers and through research that seen by the researcher where he studied T. Strategy six hats and many of the previous studies of Arab and foreign therefore the need to use modern teaching methods are appropriate, interesting and comprehensive for students.

The lack of previous studies, Arab or foreign looking at the effectiveness of using a strategy hats six in improving reading comprehension among the students of the 8th grade basic study of communication skills (Arabic) where did not find a researcher at the limits of his knowledge no study Arabic or foreign dealt strategy caps six appointed by the goal in reading comprehension.

Contradict the results of previous studies of Arab and foreign in the effective use of strategic six hats

Table 2: The correlation coefficients between the paragraph and the total score to test for reading comprehension (discrimination coefficient)

Paragraph No.	Discrimination coefficient	Paragraph No.	Discrimination coefficient
1	0.42	16	51
2	0.31	17	36
3	0.49	18	47
4	0.29	19	32
5	0.32	20	44
6	0.71	21	39
7	0.41	22	66
8	0.35	23	55
9	0.37	24	36
10	0.30	25	33
11	0.58	26	50
12	0.61	27	37
13	0.62	28	40
14	0.54	29	70
15	0.38	30	30

thinking and in the materials and m skills are limited, some of which reach an effective way six hats in the development of some of the dependent variables thinking and communicating sports, including the findings to the lack of effectiveness which shows the need to conduct such a study so that other variables discusses. Sample and other environment according to the recommendations of the previous studies of Arab and foreign they come to complement previous studies that dealt with the topic and in response to the recommendations in the sample and a different variables and other communities.

The use of previous studies of Arab and foreign research methods adopted a design descriptive approach and its impact on variables belonging different variables such as a study (Al-Ghamdi, 2011) and other studies that have adopted the descriptive analytical approach while this study used the curriculum quasi experimental in the research but this appeared to the need for this study because it adopted a new approach differs from previous studies curriculum Arab and foreign countries.

Applied to previous studies of Arab and foreign substances scientific seminar such as science, mathematics and business administration, nursing, medicine, engineering did not find researcher any previous study Arab or foreign aimed to measure the effectiveness of the use of strategic six hats to improve reading comprehension among the students of the 8th grade basic study of communication skills in Arabic Jordan in the study variables and appointed and substance of the different approach is different and different variables.

This research is the first Jordanian research examines the effectiveness of the use of the six hats strategy to improve reading comprehension among 8th grade students in basic communication skills in the book study of the Arabic language.

### **Concepts of the study**

**Six hats:** Strategic thinking and teaching aimed at facilitating the process of thinking and analysis and increase their efficiency and simplified by connecting thinking color six and allow students to move from the pattern of thinking to another in a specific topic according to a comprehensive and integrated the subject in all its aspects in accordance perspectives manifold, helping the learner in reading comprehension to read and critique solving the problems of his life and understanding of its affairs so that it becomes a citizen of a viable and creative and thinker comprehensive product and objectively, scientifically and humanly in his thinking.

**Reading comprehension:** Action thinking integrated and interactive between the reader and reading being able to cash readable to build the proper meaning of the text and reading comprehension consists of various levels under each of these levels a number of skills which is the basis of the reading process.

**Communication skills:** An essential book for Arabic language in the 8th grade approved by the Ministry of Education in Jordan and studying compulsory elementary 8th grade students, came the texts of the study than in the 2nd semester.

**Elementary 8th grade:** A middle stage in schools in the Ministry of Education in the Hashemite Kingdom of Jordan in the 1st semester.

**Research procedures:** Research has been prepared in accordance with the following procedures: Sample selection simple random way among the research community schools of the directorate of education in the district of university. Coordination with departments teachers' cooperative and teachers, in order to facilitate the task of applied research and walk according to procedures.

Educational material is selected from the book of communication skills basic 8th grade in the 2nd semester, working papers have been prepared with the provisions of article instruction according to the six hats strategy, designed for research purposes.

Teachers have been trained to use the six hats strategy in accordance with the specific provisions in the organized educational material for research. Where permeated held two sessions per teacher with two clear ideas and steps of the strategy and display the characteristics and advantages and the mechanism of teaching using the strategy (six hats) and do teachers stand learning in their schools to give each of

them the right opportunity to train on the strategic use of worksheets attach researcher them where he became teachers ready to teach using the six hats strategy.

Underwent 2 groups (experimental and control) to test the tribal measure achievement in reading comprehension they have, so as to ensure the degree of parity between them and it turned out correct pre-test they equality in reading comprehension tribal and to compare the 2 groups in the pre-test and post-test through improvements in reading comprehension.

Search continued to be applied for 2 weeks by 5 servings per week. Underwent 2 groups (experimental and control) to test the dimensions measure achievement in reading comprehension. After the completion of the teaching of the specific provisions of the book using the six hats strategy.

### **Method in steps to teaching students in the experimental group using the six hats strategy:**

- The teacher explains to students the concept of the six hats and the significance of each hat
- Pave the parameter studied by male story to conclude the students the concept of the six hats and the significance of each hat
- The teacher divided the students into groups, depending on their level realizable in the Arabic language in a non-homogeneous so that each group includes 3 collectible levels (high, medium and low)
- Each group wears a particular color of hats according to the following steps:
  - The exchange hats between groups of colors so that each group wears the hat for 5 min
  - Are delivered each group cap color and a working paper containing questions in the levels of reading comprehension suitable for color hat used for each group so each group different cap and a working paper is different from other groups by color hat is distributed 6 different worksheets to students
  - Start reading questions and groups linked worksheet colored hat and answer from her book
  - Follow the teacher groups and unnoticed during the work
  - Adjusts the user each time from teacher hat
  - The teacher switched hats between the groups after the end of the specified time
  - Being a teacher dialogue and debate in the classroom so that listens to the answer of each group and the hearing of all the 6 groups and each thinks according to his hat

- Writes the research of each group answers the final questions of the worksheet and the reader is reading and the speaker speaking and defend arguments scientific and logical and the commander of the follow-up work of the group and adjust their participation and the distribution of roles to students in the same group after the launch of the name of each group associated with this name-colored hat set each group
- The teacher with the participation of students resolve questions and write their responses to the board after confirming all groups to wear all the hats

**Research problem:** Studies have pointed to modern educational strategic importance of the application of the six hats in schools for educational phase which starts from the third episode of basic education. They need to mental and cognitive capabilities high with respect to the totalitarian thinking per issue from all aspects and hats used accurately.

Studies have confirmed modern educational importance of adopting strategies for teaching modern and common and appropriate for students to enable them to self-learning and learning deep in improving reading comprehension among students as the educational process has focused the recommendations of the educational development, held in the year 1987 the importance of improving reading comprehension among students through adoption of modern teaching strategies enable students to absorb the reading, critique and interact with.

As the teaching strategies currently used are still traditional and need for development and modernization in response to the requirements of the times and the needs of students and no longer educational systems designed to fill the minds of the students with the knowledge and facts but exceeded it to work on the development of his thinking and education to enable the individual to deal with the demands of modern life (Gado *et al.*, 2007).

The idea of using the six hats thinking to encourage parallel thinking and guide the learner to think in a certain way in the light of the hat worn by the color and then modify it depending on the situation and the subject and so is life (Fathallah, 2008).

And back to the researcher through his experience in teaching school and university and through the studies and sources of weakness thinking totalitarian and reading comprehension among the students of schools and universities, as well as superficial thinking they have and their inability to think of a balanced and integrated in

solving problems of scientific and practical in a logical and scientific and objective and peaceful and their inability to recruit reading in their lives and the emergence of opinion intolerance and inflexibility in dealing linguistic and communication between them and female bias to think about the emotional problems of scientific and practical life.

Therefore, there is a need to conduct a study quasi-experimental in the effective use of strategic six hats to improve reading comprehension among the students of the third episode of basic education was chosen 8th grade because it is located in the average stage of the study sample and because studies population previous pointed to the need to use the strategic six hats with ranks third episode (from the 7th-10th) episodes of primary education in Jordan because it requires the capacity of mentality and of analytical graduate does not have the students in the age group earlier in the episode first and second, therefore came this study to help the teacher and student to adopt a strategy of teaching in the patterns of thinking are diverse and integrated helps the learner in the mental development of an integrated and scientific sense, flexibility and renounce fanaticism passive and diverse forms of violence and the development of students' thinking becomes thinking creatively and comprehensive.

**Research questions:** This research aimed to answer the following questions:

- Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ), in the reading comprehension for the 8th grade students due to the teaching method (based on the six hats and regular)?
- Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to gender (male or female)?
- Are there significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to the interaction between the teaching method (based on the six hats strategy) and gender (male or female)?

**The importance of research:** This research derives its importance from the strategic addressed by a strategy that using six hats because they are of modern strategies in teaching reading comprehension because this research is a scarce research that dealt with the effectiveness of using the six thinking hats strategy in improving the reading comprehension of 8th grade students in Jordan.

And because this research is one of the first research that dealt with substance (book) for communication skills for 8th grade in the 1st semester in Jordan.

Well as the lack of educational studies that dealt with the effectiveness of the use of the six hats strategy in improving the absorption of definitive loan among the students in Arabic language; therefore came this research to fill a gap in educational studies of Arab and foreign, as well as to the research gave a description of the model in the learning stages and specific actions and show evidence quasi-experimental impact six hats strategy in improving the reading comprehension of 8th grade students in Jordan.

The research gave strategy in the teaching model of the six hats teacher can use in teaching, research also strengthened the effectiveness of the six hats strategy and its impact on improving students' reading comprehension and develops their thinking and reading.

It was the selectors in this search that limit the dissemination of its results outside his community or subject determinants is the following:

- This research restricted to a sample of 8th grade students (male and female) in schools directorate of education and the university Brigade in Jordan in the 1st semester, so the dissemination of its results will be limited to these students
- Limiting the search to two schools of the University Brigade Schools, one for males and females (Typical University of Jordan school-ahn moodjeah) and the second for females (schools excellencies oasis-waht almaali) and this limits the possibility of generalizing the results outside the research community (subject) and appointed (sample)
- The research provide tool of acceptable grades and characteristics of honesty and consistency

**The research subject and sample:** The subject was the 8th grade students in the Directorate of Education, University Brigade, enrolled for the academic year 2012/2013 in the 1st semester.

The research sample consisted of 102 students were selected randomly distributed sample on the two divisions for male students and two divisions of the female students in two schools.

School for male students and the second for females students, were distributed to each of the two divisions per school simple in random way, to experimental group and another control are shown in Table 3. Members of the research sample distribution by group and gender.

Table 3: The distribution of the research sample by the group and gender (male, female)

Groups	Gender		Total
	Girls students	Boys students	
Control	26	25	51
Experimental	25	26	51
Total	51	51	102

## RESULTS

The purpose of this study to know the effectiveness of using the six hats strategy to improve reading comprehension among students in the 8th grade in the book of communication skills with the Arabic language in Jordan. Specifically, this study aimed to answer the following questions:

- Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students attributed to the teaching method (based on the six hats and regular)?
- Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to gender (male or female)?
- Are there significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to the interaction between the teaching method (based on the six hats strategy) and gender (male or female)?

To answer questions about the study was calculated arithmetical averages and standard deviations of the measured tribal and measurement post-test for 8th graders to test reading comprehension of the experimental group (who studied according to the six hats strategy) and the group control which (who studied according to the regular strategy) has also been an Analysis of Covariance duo (ANCOVA), to verify the significance of the differences between the experimental group and the control group and between males and females and verify the significance of the interaction between the variables group and gender are presented below for these results (Table 4).

Shown in Table 4, the existence of differences between the experimental and control groups in the tribal measurement and dimensional measurement reading to accommodate the basic 8th graders and to find out whether these differences were statistically significant virtual analysis of variance was performed bilateral joint (Table 5), the following presentation of these results:

Table 4: The averages and SD for 8th graders scores on reading comprehension test in pre and post test measurement according to the variables of the group and gender

Groups	Gender	No.	Tribal		Posttest	
			Average	SD	Average	SD
Experimental	Male	24	12.92	1.32	18.54	1.98
	Female	27	14.70	2.27	23.63	2.11
	Overall	51	13.86	2.07	21.24	3.27
Control	Male	24	11.88	1.03	15.25	1.59
	Female	27	14.11	1.85	19.63	2.19
	Overall	51	13.06	1.88	17.57	2.92
Overall	Male	48	12.40	1.28	16.90	2.43
	Female	54	14.41	2.07	21.63	2.94
	Overall	102	13.46	2.01	19.40	3.59

Table 5: The results of the analysis of covariance duo to significant differences in reading comprehension for the 8th grade students between the categories of basic variables of the group and gender and their interaction

Source of variation	Total deviations	df	Average squares	F	The level of significance
Absorption tribal	184.45	1	184.45	87.45	0.000
Group	214.56	1	214.56	101.72	0.000
Gender	182.13	1	182.13	86.35	0.000
Group gender	7.22	1	7.22	3.42	0.067
Error	204.60	97	2.11		
Overall	1304.52	101			

**The results of the first question:** Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ), in the reading comprehension for the 8th grade students attributed to the teaching method (based on the six hats and regular)?

Shown in Table 5, the existence of significant differences in the skills of reading comprehension between the experimental group and the control group where the value of  $F = (101.72)$  which is statistically significant at the significance level ( $\alpha = 0.05$ ) were the differences between the arithmetical averages adjusted for the benefit of the control group (which studied using a six hats strategy) where he was the arithmetic average dimensional average of the experimental group (20.81) while the arithmetic average rate for the control group (17.82), as shown in Table 6 suggesting that the strategy of teaching using the six hats contributed to the development of reading comprehension skills more than the usual strategy in teaching.

**The results of the second question:** Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to gender (male or female)? Shown in Table 5, the existence of statistically significant differences in reading comprehension between males and females where the value of  $F = (86.35)$  which is statistically significant at the significance level ( $\alpha = 0.05$ ) were the

Table 6: The arithmetic averages posteriori degrees of 8th grade students at reading comprehension skills test according to the variables of the group and gender

Groups	Gender	Dimensional arithmetic	
		average rate	The standard error
Experimental	Male	18.98	0.30
	Female	22.63	0.30
	Overall	20.81	0.21
Control	Male	16.52	0.33
	Female	19.11	0.29
	Overall	17.82	0.21
Overall	Male	17.75	0.23
	Female	20.87	0.21
	Overall	18.98	0.30

differences between the averages calculations amended in favor of females where the average was dimensional arithmetic average for females is (20.87) while the arithmetic average of the rate for males is (17.75) as shown in Table 6.

**The results of the third question:** Are there significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to the interaction between the teaching method (based on the six hats strategy) and gender (male or female)?

Shown in Table 5, the lack of statistically significant differences in reading comprehension due to the interaction between the variables of the group and gender where the value of  $F = (3.42)$  which is statistically significant at the significance level ( $\alpha = 0.05$ ), suggesting that there is no difference in the effectiveness of strategy six hats in the development of reading comprehension between males and females.

## DISCUSSION

**The discussion of the results relating to the first question:** Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to the teaching method (method stand on the six hats and normal)?

The results showed the existence of differences between the experimental and control groups in the measurement of tribal and measurement post-test for absorbing reading the request expel 8th grade core, for the experimental group (which learned using the six hats) and to find out whether these differences virtual statistically significant analysis was performed covariance duo, it is clear that the differences are statistically significant and thus differed reading comprehension among students in two ways (six hats and traditional) in favor of a six hats strategy and justified that it is advisable to use a six hats strategy because when a promotion to the confidence of the student himself and the development of his thinking

where the student building meaning depending the perception of complementarities and inclusiveness of the subject of all aspects (leadership, emotional and informational and negative and positive and creative) and come to the meanings and ideas through its focus on minutes reading reviewed by continuing to him and because the six hats strategy effective and new for students and interesting, so aroused interest and longing learning and improved the degree of absorption of illegible. And enabled them to think about the topic using colors, so absorbed linked memorable was absorbed for a comprehensive and readable integrated and always constant (De Bono, 2007).

Because the teacher's role in the strategy of the six hats a few, limited to guidance and counseling question. The role of students was great, enabled them to rely on themselves and increased self-esteem their effectiveness and their interaction with the new strategy (six hats) and grew their absorptive capacities. The teaching using the six hats strategy to build on the specific arrangement and logical and a clear plan, enabling them to improve the absorption of readable, unlike the traditional way (regular) which is dependent on the teacher often. Does not take into the needs of the learner and inclinations and feelings and appreciation for itself and its ability to self-learning and continuous destruction and assimilation of the subject with a new and interesting way.

This result is consistent with the findings of most previous studies of Arab and foreign as Naifeh study and Shaya and Aqeel (2009).

**Discussion the result with the second question:** Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension for the 8th grade students due to gender (male or female)?

The results of analysis of variance duo for signs of students on achievement test post-test in reading comprehension, there is a difference with statistical significance at the significance level ( $\alpha = 0.05$ ) between the average performance of the female and the average performance of males and in favor of females and attributed this difference to the nature of females and their ability linguistic and their sense of independence and maturation in adolescence central which is characterized by the growth of thinking and imagination among females and because the ability of females to focus in the same subject and details minute more than males. Because the way entertaining and enjoyable away females from boredom and routine and achieve happiness and motivation in learning, it is suitable to the nature of the female. This result agree with the results of study

Al-Ghamdi (2011) and other results of previous studies and vary with the results of Audeh study. Where it was noted that most of the studies confirmed that females are more comprehension and thinking than the male.

**Discussion of results related to the third question:** Are there any statistically significant differences at the level of significance ( $\alpha = 0.05$ ) in the reading comprehension in the elementary 8th grade students attributed to the interaction between the method of teaching (six hats) and the gender (male, female)?

Fitted six hats strategy males and females because it was a new and interesting method, drew their attention and focus and lazy boredom and routine located in the usual traditional way (method).

Because the six hats strategy develops thinking destruction of the subject in all its aspects and because the role of the teacher a few depends on the time management, guidance and regulation and the role of the student big enabled them to rely on themselves and a sense of their independence and increase the confidence understanding through the self-esteem of their thinking strategy (six hats) because the idea of a six thinking hats between the idea and the perceived color easy to remember the idea in the future. This result is consistent with the result of Naifeh study and Audeh (2006)'s study.

## CONCLUSION

The result was given after using ANCOVA and calculating the averages and standard deviations. The result of the first question showed that there is statistically significant differences at the level ( $\alpha = 0.05$ ) for the benefit of the experimental group (which studied using a six hats strategy) compared to the control group (which studied in the normal method).

The result of the second question showed that there is statistically significant differences at the level ( $\alpha = 0.05$ ) in reading comprehension between boys and girls for the benefit of girls when using six hats strategy. The result of the third question showed that there is no statistically significant differences at the level ( $\alpha = 0.05$ ) in reading comprehension due to the effect of interaction between the teaching method (based on six hats strategy) and gender (male or female).

The researcher recommended that the teachers and the students need to use six hats strategy in teaching texts in Arabic language books and other schools book in other language and in social sciences and the researcher recommended that the teachers guides book shoed be consist the methods of teaching reading comprehension skills, especially six hats strategy.

And training the teachers, schools managers and the students in using six hats and urged the students to use it in solving their problems, cooperative learning and reading comprehension.

Finally, the researcher recommended making similar experimental studies in other classes to identify the generalization the results in this research out the conditions, variables, subject and sample of the research.

### RECOMMENDATIONS

In the light of previous findings the researcher recommended that:

- Teachers, school managers and educators need to use strategy arrest at six hats in thinking and in teaching texts in all Arabic language books, especially the book of communication skills and school materials similar to it
- Must included six hats strategy in the teachers' manuals to its importance in improving reading comprehension for students
- The need to do studies similar to this study in outside her subject and sample and out of the circumstances and determinants and variables. Finally, the researcher recommended making similar experimental studies in other classes to identify the generalization the results in this research out the conditions, variables, subject and sample of the research

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