

# The Effect Of Using Metacognitive Strategies On Acquiring And Retaining Historical Concepts Among Second-Grade Intermediate Students

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#### Summary

This research aims to know the effect of metacognitive strategies in acquiring historical concepts for second-grade intermediate students and keeping them in the social subject. On the basis of that, the researcher formulated the following hypotheses: -

\* There is no statistically significant difference at the level (0.5) between the average scores of the female students who studied social sciences using metacognitive strategies and the average scores of female students who studied social studies in the traditional way in acquiring historical concepts.

\* There is no statistically significant difference at the level (0.5) between the average scores of female students who studied social studies in the metacognitive strategy and the average scores of female students who study social studies in the traditional way in preserving historical concepts.

For this reason, the researcher chose the experimental design, and the choice was random, so the choice fell on the average of the accreditation in Al-Mahaweel District to be the research sample, where the number of her students reached (60) students, with (30) students for each group. The second average, and the researcher identified 16 concepts and formulated behavioral objectives, and the researcher prepared teaching plans for the two groups, and the researcher conducted a conceptual test to determine the extent to which the students acquired historical concepts. Pearson's correlation. The value of the correlation, after correcting it with the Spearman-Brown correlation coefficient, was (0.89).

The study came up with the following results:

\* There is a statistically significant difference at the level (0.5) between the average scores of the experimental group students who studied according to metacognitive strategies and the average scores of the control group students who studied in the traditional way in the

results of the post-test to acquire historical concepts and in favor of the experimental group.

\* There is a statistically significant difference at the level (0.5) between the average scores of the experimental group students who studied history according to metacognitive strategies and the average scores of the control group students who studied in the traditional way in preserving historical concepts and in favor of the experimental group.

On the basis of these results, the researcher came with several conclusions, including the adoption of a metacognitive strategy in teaching social studies, and recommended the need to use modern methods of teaching.

#### Introducing the search

#### First: the research problem

The era in which we live is witnessing a great development in all fields, and as a result of this development, it has become necessary for all educational institutions to pay attention to all means and methods that lead to achieving the desired goals (Al-Hilah, 2000, p. 16).

Despite the information revolution that has greatly affected the humanities in general and social subjects in particular, there are many problems that have become a major obstacle in the course of the educational process. Thinking, Analysis and Imagination (Al-Fneesh, 1975, p. 108).

Especially the study of history, which became concerned only with memorizing information and teaching it to students instead of focusing their attention on thinking and passion for the subject, as a result of its lack of many basic factors that help to revitalize the material, such as not focusing on the use of educational aids . (Al-Ghabashna, 1998, pg. 60).

As a result of these problems, it has become necessary to follow methods and strategies that help solve these problems, in particular relying on models that make students think conceptually interconnected, because the study of concepts in the subject of history has a major role in the educational task because it is a key to knowledge and despite its importance, it has become complicated for For students because of following traditional methods (Al Hammadi, 2000, pg 4).

One of the reasons for students' weakness in acquiring historical concepts is the way the teacher uses in clarifying these concepts (Al-Waeli, 2004, p. 85).

In light of the foregoing, the research problem crystallizes in the following:

Does the metacognition strategy have an effect on the acquisition of historical concepts for second-grade female students in the middle school in social sciences?

#### Second: The importance of research

We note at the present time that the countries of the world are in a struggle with each other in order to raise the standards of their people, whether they are scientific, economic or political, so that they can join the ranks of contemporary civilization. Bringing out a large constellation of scientists in addition to paying attention to future generations and working to develop them and in order to face the current developments that are increasing day by day, and all of this requires attention in educational methods greatly.

These methods are considered an important tool of education in achieving the goals because they are considered a tool for interaction between the teacher and the student. Therefore, developed nations always pay great attention to the education process because they consider learning to be a self-organizing skill that includes sufficient awareness to accomplish the educational task necessary to perform the required tasks, in addition to that learning cares Significantly, the arbitral skills, which include the skills of students evaluating their scientific information before, during and after completing the task required of them, as well as the skill of planning the steps necessary to accomplish a specific task (eads, 2005, p. 121).

The need to use metacognitive strategies in the educational stages has become very necessary for teachers and students in particular because it transforms the student at this stage to be able to think, analyze and link concepts together and solve the problems he faces at any stage. We also note that education curricula always aim To the formation of a human being with the ability to think and conscious awareness of the modern methods that surround us in studying the universe and the environment, understanding the movement of human history and the characteristics that distinguish it at each stage and benefiting from its facts (eatiah,2007 p. 16)

Modern methods have a major role in changing students' perceptions because of the close connection between learning and concepts. As a result of this connection, the concept has become a basic necessity that helps in learning in general. The concepts are repeated in the individual in his normal life and in the educational field as well. Concepts may form towards study subjects because concepts act as stimuli And conclusions at the same time and the concept in education is a process related to the cognitive growth of the individual (alkawaldeh,2007,p57)

On this basis, this research is important in identifying metacognitive strategies, because knowledge of these strategies and the ability to realize and manage them correctly 231 | Maryam Muhammad Habbana The Effect Of Using Metacognitive Strategies On Acquiring And Retaining Historical Concepts Among Second-Grade Intermediate Students leads to awareness of students' thinking and opens several doors in learning. Therefore, we can summarize the importance of the research as follows:-

\* Students generally benefit from using metacognitive strategies in developing their scientific thinking.

\*Through this study, teachers benefit greatly from it because it opens new doors in the use of modern methods of teaching, especially metacognitive strategies.

the importance of studying

\* Recognizing the effect of using meta-cognitive strategies on the educational level of second-grade students in the middle school in social sciences.

The importance of modern strategies in the development of educational curricula.

The importance of concepts as a way to help save time and reduce effort.

search objective

This research aims to identify:-

The effect of metacognitive strategies on acquiring historical concepts among middle school students.

The effect of metacognitive strategies on the retention of the second intermediate grade students in the concepts of history for the social subject.

search limits

The current search is limited to:-

\* Students of the second intermediate grade in middle schools in Al-Mahaweel District.

\* Historical concepts in the social book for the second intermediate grade.

\* A sample of middle school students.

## **Research hypotheses**

The researcher formulated hypotheses in order to achieve the research objectives:

\* There is no statistically significant difference at the level (0.5) between the average scores of female students who studied social studies in metacognitive strategies and the average scores of female students who studied social studies in the traditional method in acquiring historical concepts.

\* There is no statistically significant difference at level (0.5) between the average scores of female students who studied social studies in metacognitive strategies and the average scores of female students who studied social studies in the traditional way in preserving historical concepts.

# Terminology of study

## metacognitive strategies

\* It is the individual's awareness of the nature of his thinking when performing the required tasks, in addition to that it includes planning and organizing the individual for the required work (qitaami,2013,p78).

\* It is thinking and reflecting on information and the awareness of individuals about cognitive processes or organizing them to solve educational problems (Obeid, 2000, p. 34).

\* It is the knowledge that can cover the field of information and the methods and methods of understanding that are related to knowledge in itself because it is a mental activity that makes mental states and processes subjects in thinking and contemplation (qatiyt,2008,p165).

## acquisition

\* It is to help the student with all the examples that indicate the concept or its fragmentation in a way through which the desired concept can be reached (Al-Azargawi, 1991, p. 38).

\* It is a set of stimuli that the students can acquire by observing them once and repeating them in the same way they acquire them (Qatami, 1990, p. 108).

\* It is the first stage of learning through which a living organism represents a noble behavior that becomes an important part of its behavioral outcome (Abu Jadu, 2003, p. 424).

## concept

\* It is a word or term that refers to a group of adjectives or characteristics that give meaning or understanding (Al-Nashef, 2009, pg. 29).

\* It is a basic rule for the educational process through which it forms generalizations and theories for studies (Al-Sakran, 2000, p. 44).

## Date

\* It is everything that happened in the same past (Nuhad, 1995, pg. 49).

\* It is everything that happened in the past. It is a science that deals with human activity through different times, which made this a very close link with all sciences (Al-Jamal, 2005, p. 6).

keep

\* It is everything that remains in the memory of the study, which is measured by means of grades (Al-Laqani, 1999, p. 7).

\* It is a set of relics that remain after experience and expertise (Razouki, 1977, pg. 97).

## **Theoretical Aspects**

Metacognition strategies are concerned with higher levels of thinking that include active control of cognitive processes related to learning, especially activities planning how to learn and reviewing and evaluating our progress to finish any task (Jay, 2010, p. 36).

The researchers found that metacognition helps learners to play a large and effective role in collecting, evaluating and organizing information during the learning process. Students' learning improves greatly when they are aware and interested in their thinking during their decisions and solutions to the problems they face because it helps them to perform better, and studies have proven significantly that there are differences Significant metacognitive abilities between successful learners and unsuccessful learners Students with high scores always notice them tend to possess metacognitive skills more than their non-achieving colleagues (Al-Zayyat, 2001, pg. 600).

We note that some researchers have included a meta-knowledge strategy within the curriculum offered to students, which greatly enhances the effectiveness of training on its use, and thus allows students to maintain their behavior in the educational situation (Qatami, 1990, p. 65).

We find the modern approach to learning based on three things:

Learning is the process of building knowledge, not just taking it and absorbing it readymade.

Learning is a process that relies heavily on the use of previous knowledge to build new knowledge.

\* Students must be aware of cognitive processes and can control them and be effectively influenced by what they learn.

From all this it becomes clear to us that learning that simulates metacognition is important because it is one of the requirements for successful education, and that 234 | Maryam Muhammad Habbana The Effect Of Using Metacognitive Strategies On Acquiring And Retaining Historical Concepts Among Second-Grade Intermediate Students metacognition is an ability that helps students increase their ideas through the experience they gain through the learning process.

Teaching through concepts is considered an easy matter because it makes the exchange and acquisition of information easy. Therefore, concepts are considered relationships through which students can be provided with a means that enables them to catch up with the growth in knowledge because it is of a great degree of flexibility and allows the assimilation of new facts without shaking the knowledge system, and in a way In general, it becomes clear to us that concepts are nothing but abstractions that organize the world of events and phenomena (Al-Dibsi and Al-Shahbani, 2003, p. 74).

Concepts have a large and important role in providing the individual with a kind of evidence when dealing with other stimuli in the treatment of things and ideas (Marzouk, 2012, p. 20).

The way concepts are formed depends on the type of concept. If the concepts are sensory, then their formation is through perceptions and images that the senses pick up in interaction with anything that can come across. But if the concepts are abstract from anything, we will find that they are formed through imaginations and perceptions of any concept (Khawaldeh). 2007, pg. 207).

Despite the importance of concepts, there are factors that greatly affect them when learning and acquiring them, especially the type and nature of the concept because the concepts are different in their difficulties and thus affect the educational process, as well as individual differences between learners and their great impact on information acquisition due to the difference in mental levels, so The teacher has to employ the appropriate teaching aids so that the high concepts are clear and meaningful to everyone (Raji, 2007, p. 48).

Finally, the process of acquiring concepts by learners is necessary to understand the basics of human knowledge and increase their abilities for self-learning and follow-up on all aspects. Therefore, it became a duty for all school curricula to show great interest in concepts and their teaching (Al-Rubaie, 2012, p. 11).

#### previous studies

\* Abu Bashir study (2012) (The effect of using metacognitive strategies in developing reflective thinking skills in the technology curriculum for ninth grade students in Al-Wusta Governorate) This study was conducted in Palestine and Gaza and aimed to identify the effect of metacognitive strategies in developing reflective thinking skills In the technology curriculum for ninth grade students in the central governorate, the study sample consisted

of (104) male and female students, and the sample was divided into two experimental and control groups. The results showed that the effect of meta-cognitive strategies in developing reflective thinking skills and that teaching according to meta-cognitive strategies makes students discover by themselves and apply the scientific knowledge they reach in new situations, which helps to discover knowledge in a scientific manner.

\* Al-Ahmadi study (2012) (The effectiveness of using metacognitive strategies in developing some creative reading skills and its impact on metacognitive thinking among middle school students) This study was conducted in the United Arab Emirates and aimed to identify the effectiveness of using metacognitive strategies in developing creative reading skills and this affected the metacognitive thinking." The sample of the study included 50 students, 25 students for the experimental group and 25 students of the study showed that there are statistically significant differences in the students' scores in the post application of creative reading skills, and the level of supracognitive thinking among the students of the experimental group and the students of the experimental group in creative reading skills. And the level of the students of the experimental group in creative reading skills. And the level of thinking above cognitive in favor of the experimental group.

\* Al-Mashhadani study (2008) (the effect of the Thelin and Kemp model on the acquisition and retention of historical concepts among the students of the Teachers Preparation Institute) This study was conducted in Iraq, University of Baghdad, College of Education, Ibn Rushd, and aimed to identify the effect of the Thelin and Kemp model on the acquisition and retention of historical concepts The study sample consisted of 97 students, 32 in the first experimental group, which studied using the Thelin model, the second experimental group, which studied using the Camp model, with 32 students, and the control group, with 33 students, who studied in the usual way and aimed to identify the effect of the model. Thelin and Kemp in acquiring and retaining historical concepts among the students of the Institute of Parameter Preparation. The statistic is the Scheffe test for statistical variance, and the results showed that the first experimental group was superior I studied using the Thelin model by acquiring and retaining historical concepts on the second experimental group that studied using the Kemp model and the control group that studied using the usual method, and also the superiority of the second experimental group that studied using the Kemp model in acquiring and retaining historical concepts over the control group that studied in the usual way...

Al-Sudani study (2007) The effect of the group discussion method on acquiring and retaining historical concepts among second-grade intermediate students. The average sample of the research consisted of 64 students, 32 students for the experimental group, 32 students for the control group. The researcher conducted an equivalence between the two groups in the variables of chronological age, intelligence, and previous academic achievement. The researcher also prepared a test of acquisition of historical concepts of the type of multiple choice, and the T-test analysis of two independent samples also used it. And the chi-square test, paragraph difficulty equation, paragraph discrimination coefficient, Pearson correlation coefficient, and Saberman-Brown coefficient. The study resulted in the superiority of the students who studied history using the discussion method over the students of the control group who studied history in the traditional way...

#### **Research Methodology**

The researcher chose the experimental method to achieve the desired research goals, as they are a method that suits the research procedures and their nature, in addition to the fact that the experimental research method is based on the scientific method that begins with the problem of what researchers face and therefore requires them to search for these causes and conditions by conducting experiments (Daoud and Anwar, 1990, p. 247)

#### **Experimental Design**

The researcher developed an experimental plan for the success of the research and achieving the desired goals. Therefore, the researcher conducted an experimental design for the research as shown in the table below.

the group	independent variable	depende	the tool					
		nt						
		variable						
experimen	metacognitive strategies	Acquisiti	Acquisiti					
tal group		on and	on and					
		retention	retention					
control		of	of					
group		historical	historical					
		concepts	concepts					
Calculating the difference between the results of the two groups in the test of acquisition								
and retention of historical concepts								

#### The research sample

The sample of the study included 69 female students, 35 students for the experimental group and 34 students for the control group. After the researcher excluded the data of the students who failed in the two groups, and their number was five students in the experimental group and four students in the control group because the persistence of their data gives an imbalance in the results of the research, so it became The number of female students in the experimental group is 30 and the number of female students in the control group is 30, so the total group became 60 students. The researcher taught the experimental group in metacognitive strategies, and the control group taught them according to the usual or traditional method. Before starting the experiment, the researcher was keen to equalize between The students of the two research groups in some of the variables that they believe can significantly and negatively affect the course of the experiment, and among these extraneous variables is the chronological age, where the researcher made sure of the convergence of ages between the two groups in the study stage, and the sample of the research was controlled to represent the second-grade students average, and the researcher taught the same subject to the two groups in an equal manner, except for the existing method of teaching The researcher herself supervised and taught the two groups according to the plans prepared according to each method that was experimental or control. As for the time variable, this variable was controlled by the researcher by subjecting all members of the two groups to one period of time with no difference between them. As for the place variable, the researcher allocated one classroom To teach the two groups, each group according to its allocated time in the school schedule, and to determine the scientific subject, where the researcher identified the scientific subject and included topics related to history from the book devoted to social studies for the second intermediate grade...

## Formulating behavioral goals

As a result of the importance of the behavioral goal for the teacher and the student and for the educational process in the classroom, the researcher formulated a set of goals that pertain to the history subject from the social book for the second intermediate grade. Observing and measuring it (Awdah, 1998, pg. 78).

#### **Teaching plans**

Teaching plans are nothing but plans for the lesson's activities in the future because they help the teacher achieve the desired goals of the lesson (Ibrahim 1989, p. 22), and on the basis of that, the researcher prepared teaching plans in the light of metacognitive strategies, and also prepared teaching plans according to the traditional method over the

specified time For the experiment, the experimental group was taught according to a metacognitive strategy, and the control group was taught according to the usual method. These plans were presented to a group of experts and specialists to benefit from their opinions and observations.

## **Test Correction**

The researcher assigned a mark of one for the paragraph whose answer is correct and zero for the paragraph whose answer is incorrect, and that the left paragraph or that has more than one answer was treated as a wrong answer.

## The validity of the test

Honesty is one of the most necessary characteristics of the test because it indicates that the scale's ability to measure the subject that was prepared to measure it, and the scale is always honest in assessing the characteristic of individuals if it is free from any influence or any factor extraneous to it (Atawi 2000, p. 136).

Therefore, the researcher was very careful to verify the validity of the test and make it actually measure what was set to measure it in order to achieve the desired goals, by relying on the apparent honesty. This honesty depends on the examination of the test items by experts and arbitrators. Be able to cover the study material in order to achieve the educational goals (Al-Hamuz, 2004, p. 23).

## Statistical means

The researcher used several statistical methods, including the t-test for two independent samples, the chi-square test, the difficulty coefficient, the power of discrimination coefficient, the effectiveness of wrong alternatives, the Pearson correlation coefficient, and the Saberman-Brown coefficient.

## Presentation and interpretation of results

In light of the hypotheses developed by the researcher came out with the following results: -

\* There is no statistically significant difference at the level (0.5) between the average scores of the experimental group students who studied history according to metacognitive strategies and the average scores of the control group students who studied the same subject in the usual way in acquiring historical concepts, and the researcher verified that through Extracting the arithmetic mean and the variance in the scores of the students of the experimental group and the control group, using the t-test for two independent

samples, to test the significance of the difference between the two averages as shown in the table

Significance level The two T-values The degree of freedom The variance Standard deviation Arithmetic mean Number of the sample Group

the group	sample	SMA	standard	variance	degree of	The two t	values	Indication
	number		deviation		freedom			level
						calculated	and	
							tabular	
Experimental	30	29.65	5.10	26.07	58	4.07	2	Statistical
								function
the officer	30	23.82	5.92	35.05				

It turns out to us from the above table that there is a statistically significant difference between the scores of the students of the two research groups, and in favor of the experimental group. The experimental group who studied according to metacognitive strategies and the average scores of the students of the control group who studied in the usual way in the results of the post test for acquiring historical concepts.

\* There is no statistically significant difference at the level (0.5) between the average scores of the students who studied history according to metacognitive strategies and the average scores of the students who studied history in the traditional way in preserving historical concepts, and the researcher verified the validity of this hypothesis by extracting The arithmetic mean and variance of the scores of the experimental group and the control group students in the historical concepts retention test, as the results shown in the table below: -

Significance level The two T-values The degree of freedom The variance Standard deviation Arithmetic mean Number of the sample Group

the group	sample	SMA	standard	variance	degree of	The two t	values	Indication
	number		deviation		freedom			level
						calculated	and	
							tabular	
Experimental	30	30.52	4.88	23.85	58	3.11	2	Statistical

						f
the officer	30	25.72	6.90	47.72		

It turns out from the above table that there is a statistically significant difference between the average scores of the students of the two research groups and in favor of the experimental group. Thus, the null hypothesis was rejected and the alternative hypothesis accepted, which states that there is a statistically significant difference at a level between the average scores of the experimental group students who studied in some strategies Metacognition is the average score of the students of the control group that we studied in the usual way in retaining the concepts.

#### **Interpretation of results**

As a result of the results shown by the research, the researcher interpreted these results through:

\* Metacognition strategies allow students to know the relationship between concepts by providing the perceptions that support the concepts so that they become more able to solve all the problems they face.

The use of metacognitive strategies greatly helps students to build and consolidate all the cognitive requirements that help them acquire concepts

\* Metacognition strategies make students more able to think and employ the conceptual structure of students, and this helps them to learn

Metacognitive strategies work to attract students' attention and focus their attention, and thus they have great enthusiasm for learning this strategy

Conclusions, recommendations and suggestions

#### Conclusions

\* Metacognition strategies proved to be effective by increasing the acquisition of the concept of history among middle school students, as it was proven that they were superior to the control group students who studied in the usual way.

\* Impulsivity of the experimental group students with strategic steps beyond knowledge in understanding the characteristics of the concept

Teaching second-grade students at average according to the strategies of metacognition for the subject of history makes them more focused

## Recommendations

\* Emphasis on the need to use metacognitive strategies in teaching history to second year intermediate students

\* Preparing development courses and involving teachers and teachers of history in them

\* The necessity of making the student the main focus in the educational process and giving her a great role in the discussion so that she can be creative and thinking

#### suggestions

Carrying out a study similar to the current study on students of the second intermediate class for males

\* Carrying out a similar study in the stages of its description

\* Carrying out a similar study on other variables such as achievement and attitude towards the subject

Carrying out a comparative study between metacognitive strategies with other modern strategies, especially in the teaching of social sciences

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