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The effect of teaching history using the Barman model on developing lateral thinking among fifth grade literary students

Dr. Firas Zaboun Shalash Al-Jizani

General Directorate of Education, Baghdad Al-Karkh I / Department of Preparation and
Training
mntzrfras861@gmail.com

Abstract

The goal of the research is to identify The effect of teaching history using the Barman model on developing lateral thinking among fifth grade literary students In order to achieve the research goal, the researcher tested the null hypothesis that was expected There are no statistically significant differences between the average achievement scores of the experimental group students who study history using the Barman model and the average achievement scores of the control group who study the same subject without using the Barman model. The research community consisted of fifth-grade literary students in secondary and middle schools affiliated with the First Karkh Baghdad Education Directorate, who numbered (1544) students. While the random research sample consisted of (54) students, with (27) students in the experimental group, and (27) students in the control group, the researcher relied on the statistical analysis program. (SPSS)For the humanities and social sciences in analyzing the research data, the researcher reached the following results:

There are statistically significant differences between the average achievement scores of the experimental group students who study history using the Barman model and the average achievement scores of the control group who study the same subject without using the Barman model in favor of the experimental group.

Keywords: Effect, Teaching, Barman Model, Lateral Thinking, Fifth Grade Literary Students.

Chapter One: Introduction to the research First: the research problem

"This study addresses the problem of the effect of teaching history using the Barman model on the development of lateral thinking among students in the fifth literary grade. The research aims to examine how the application of this model can contribute to stimulating critical and creative thinking among students as they study historical topics. This interest comes as a result of the urgent need "To develop history teaching methods that promote lateral thinking as a basic skill for understanding historical context and analyzing events. The research seeks to provide detailed insights into the effectiveness of the Barman model in developing lateral thinking among this age group, which contributes to improving the quality of education and enhancing students' interaction with historical content."



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Hence, the research problem arises in the following question: What is it? The effect of teaching history using the Barman model on developing lateral thinking among fifth grade literary students?

Second: The importance of research

"The importance of this research comes from the need to understand and improve the process of teaching history to fifth-grade literary students through the use of the Barman model. This research reflects our commitment to improving education and developing students' skills, as it focuses on developing lateral thinking as an essential key to understanding history concepts and interacting effectively with them. It is expected to emerge The results obtained from the research showed a positive effect of teaching history using the Barman model in promoting lateral thinking, which indicates the importance of adopting this model as an effective educational tool. In addition, the research results can contribute to enriching knowledge about methods of teaching history and providing evidence-based recommendations. To improve educational practices in this area."

Third: The goal of the research

The current research aims to identifyThe effect of teaching history using the Barman model on developing lateral thinking among fifth grade literary students.

Fourth: Research hypothesis

NothingfledAndIt is statistically significant between the average achievement scores of the experimental group students who study history usingaBarman model and the average achievement scores of the control group who study the same subject without using the Barman model.

Fifth: Limits of research

Objectivity border: The effect of teaching history using the Barman model on developing lateral thinking among fifth grade literary students.

Time limits: The current research was conducted and applied in the academic year 2024 AD. Spatial borders: Iraq-Baghdad.

Sixth: Defining terms

the teaching

Teaching is the process of imparting knowledge and guiding students to understand concepts and develop their skills. Teaching refers to the efforts made by the teacher to impart information and guide students in achieving learning. Teaching involves designing and delivering lessons and learning activities in ways that encourage students' understanding and skill development. (Abu Jado, 2003, p. 79)

It is the process in which the teacher directs minds towards understanding concepts and acquiring skills, through the use of a variety of educational methods and means. (Abu Riyash (2009, p. 76)

Barman model

A practical model that contains a set of organized, logical, and gradual steps and procedures that are followed when implementing the educational process in the classroom. It serves as a guide and guide for application.

(Barman, 2004, p. 30)

Lateral thinking



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Lateral thinking (lateral thinking)Lateral Thinking is a type of creative thinking that involves following unconventional paths to solve problems or think of new ideas. This method comes from the perspective of Edward de Bono, a psychologist and writer, who coined this term to denote the way in which individuals discover unusual solutions or think of unconventional ways of handling situations. (Al-Janabi, 2017, p. 156).

Chapter Two: A theoretical framework and previous studies First: a theoretical framework Teaching

Teaching is a purposeful educational process that takes into account all the factors involved in the learning process. During which the teacher and student cooperate to achieve specific educational goals. It is a selective social process in which all parties involved in the educational process interact, from administrators, workers, teachers, and even students, with the aim of developing learners and meeting their desires and characteristics.. (Abu Zeina, 2011, p. 76)

Teaching is a situation characterized by interaction between all parties, each of whom plays specific roles that contribute to the achievement of set goals. The traditional concept of teaching focuses on bringing about a change in the student's behavior, while the modern humanistic concept focuses on helping each student recognize his unique characteristics and capabilities, develop them, and then create the conditions for him to participate in them and exploit them to achieve goodness and benefit. (Al-Tamimi, 2005, p. 54)

The importance of teaching

It appears in several aspects that contribute to the development of the educational process: (Al-Tamimi, 2015, p. 21)

- 1. **Detailed information:**Teaching is an effective way to detail and explain the concepts established in the curriculum, as the teacher analyzes and explains the material in a way that can be better understood and absorbed by the students.
- 2. **Clarifying the mysterious:** The teacher plays a vital role in clarifying any ambiguities or difficulties students may have in understanding the information. The teacher uses illustration techniques and examples to make concepts clearer and more understandable.
- 3. **Developing good qualities:** Teaching works to develop good moral and psychological qualities in students, by positively influencing their behavior and encouraging them to learn effectively. This is based on the concepts of educational psychology and their effective use in the educational process.
- 4. **Balance between science and art in teaching:** Teaching is both a science and an art. Through the scientific aspect, the teacher transfers knowledge and concepts of the subject, while the artistic aspect lies in choosing strategies and methods that suit the nature of the content and students, thus making the learning process more effective and inspiring. (Al-Rubaie, 2018, p. 70)

Barman model



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It is a scientific model that contains a set of coordinated and gradual steps and procedures that are applied within the classroom and serves as a guide and guidance for application.(Al-Tamimi and Rasha, 2015(p. 5)

Barman's model is based on the constructivist theory based on the learner's interpretation of phenomena and the extent of their comprehension in light of previous experience, as it called for the necessity of using constructivist ideas in teaching by returning students to the starting point to measure their individual ability to interpret a set of cognitive experiences and developing this ability by linking it to the experience that He had previously learned or gotten to know it at different educational levels and overcome the problems that it encountered hinder them. (Al-Moumani, 2002(p. 22)

Charles Barman launched it in 1990, based on what his contemporary psychologists and educationalists had done, with new concepts related to the concepts and mental processes that must be acquired by students at different levels of study and for different ages, as well as based on the large number of educational development programs that were designed, prepared, and implemented based on the special perspective of committees. Piaget called it the metacognitive learning cycle, and it has the plural Barman between the uses and models of metacognition and the principles and foundations of Piaget's theory. Barman suggested that the regular learning cycle does not contain a specific method for demonstrating prior knowledge. Barman's model does not differ from the learning cycle except that teachers make students' perceptions of scientific concepts clear before the beginning of the lesson, and the modification that Barman's addition is the element of guessing, predicting, or using prediction sheets for students Until the information is clear to them.(Al-Tamimi and Rasha, 2015(p. 69)

The teacher has an active and influential role in the success of the educational process, as he is the mentor and guide, while the student has a role in discovering the subject concept (and dealing with it, collecting important information and notes about it, assigning descriptions to it, discovering new applications through applying the concept and expanding it, and searching for knowledge, not knowledge itself.(Attia, 2008: 257)

This model consists of four stages:

First: The stage of identification or estimation (prediction)

The teacher defines the concept to be presented to the learner, and the teacher writes a list of all the tangible experiences that can be provided that are closely related to the concept that was previously identified, and the teacher expects the learner to interact with them in a reasonable way along with those activities that are directly related to the concept to be presented. (Zaytoun, 1996, p. 21).

Second: The investigation stage

At this stage, the teacher prepares the learners with the materials and tools necessary for the investigation or exploration process, and asks them to carry out the investigation process and ask questions. The teacher can also present the scientific topic of the lesson, and the role of the teacher at this stage is that of a mentor and mentor to the learners as they practice the activities and



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encourage them to continue. Thinking to find an appropriate solution in solving problems Asked(Al-Afoun et al. 2012(p. 61)

Third: Dialogue stage:

Some call this stage the concept extraction stage, in which the basic concepts are presented and clarified through dialogue and discussion within the classroom The teacher and the learner are supposed to direct him to some sources to obtain answers to the questions that arise for them, and the role of the teacher at this stage is fundamental, because he works The learners discuss the information they have obtained, and thus extract the concept.

Fourth: Application stage

At this stage, the teacher helps the learners apply the concept and information they obtained in the previous stages, and their interaction with it is a direct interaction with the concept of learning. At this stage, the learner gets to know New activities that expand concepts in... New situations, and encouraging them to discover new relationships between variables (Al-Tamimi, 2018, p. 67)

The importance of teaching according to the Barman model

- 1. The Barman model is a method of learning and teaching, in which the students themselves carry out the investigation process that leads to learning. It is distinguished from other education models in that it takes into account the mental capabilities of the learners, so the learner is not presented with any concepts except what he can learn, and learning in it proceeds from part to part. All, and it pushes the learner to think by using the concept of loss of cognitive balance, which is considered the main motivation for searching for more scientific knowledge, and stimulating students' thinking. (Ali Jameel, 2012, p. 76)
- 2. The Barman model works to increase students' achievement, as it focuses on concepts and generalizations and provides students with an opportunity to practice mental processes to a better degree than the prevailing methods based on memorization and memory.
- 3. The teacher works through this model to communicate concepts that students find difficult to understand. The model also contributes to introducing students to abstract concepts that are difficult to learn through traditional teaching methods, when there is good planning, effective implementation, and the appropriate environment.
- 4.Barman's model is a good application of the educational ideas contained in Piaget's theory of cognitive development, which is that learning is an active process carried out by the individual. He experiments, searches, and searches for knowledge himself. He compares his findings with those of his colleagues. (Sabry, and Taj El-Din 2000(p. 49)

Lateral thinking

ConceptLateral thinking

Mahmoud defined it as a style of thinking that depends on creating the largest possible number of solutions and alternatives. Through it, one can look at more than one aspect of the problem or situation and jump through the steps of solving the problem, that is, keeping all available information, and not relying in its steps on the clear path as it is in thinking. Vertical thinking, which proceeds in successive and sequential steps, and lateral thinking focuses on the reality of the matter, not the matter Reality (Mahmoud, 2006: 189)



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Al-Amer defined it as a mental trend that includes the desire to try to look at things in multiple ways, and it also includes understanding how the mind uses models, and the extent to which The need to get rid of framed models of thinking to other models that are not. (Al-Amer, 2009: 63).

Al-Kubaisi defined it as thinking characterized by searching and moving freely in multiple directions and angles instead of moving in one direction to solve a problem or clarify a specific situation. It focuses on generating new ways of seeing things. If creativity is the way to use our minds, then lateral thinking is the best way to use our minds, as it is the tool of creativity. It is possible to develop His skills are practiced and trained. (Al-Kubaisi, 2013: 108).

The importance of lateral thinking

Lateral thinking is a daily process that constantly accompanies a person. It is a natural performance that he performs constantly. Given the importance of thinking and individuals' need for it, it has been the subject of dialogue since ancient times. Since the Greek philosophers and until now, there has been no consensus on how we think and how the human brain works, and that interest in thinking in the past was A simple interest, but in the modern era, as a result of the complexity of society, the need has emerged to think in new ways, as the old customs, traditions, and methods are no longer sufficient at the present time. There has become an increasing interest in directing efforts towards improving learning and teaching processes. There has also been a strong tendency towards interest in developing the integrated personality of the individual. It is no longer The goal of the education process is limited to acquiring common knowledge and facts, but rather it extends to developing the abilities of thinking, analysis, and criticism Analysis, generalization, and the like.(Al-Surour 2009, 249-250). Most specialists agree that teaching lateral thinking skills is an important goal for education, and that schools must do everything they can to provide thinking opportunities for their learners, but the data shows that we produce huge numbers of students whose experiences are mainly manifested in remembering and recalling information, while they noticeably lack Their expertise is primarily in remembering and recalling information, while they noticeably lack the ability to use that information to make informed choices, alternatives, or decisions...

Second: Previous studies

Rasha Hikmat Jameel,2015,The effect of Barman's model on developing reading comprehension among fourth-grade female students in the reading subject

The research aims to identify the impact of the model Barman in developing the reading comprehension of fourth-grade literary students in reading, and the experimental method was used in order to achieve the goal of the research. The experiment was conducted that lasted for an entire semester for the academic year 2013-2014, as the researcher chose the Iraqi Preparatory School for Girls in Al-Khalis district intentionally to implement the experiment and determined the research sample. (50) female students, (25) female students for the experimental group, and (25) female students for the control group. The two groups were rewarded on variables (chronological age calculated in months, parents' academic achievement, mid-year grades for the academic year 2013-2014, linguistic ability test scores) and were approved. The researcher designed an experimental design with partial control, with a pre- and post-test for the two research groups. The experiment began on February 17, 2014 and continued until May 8, 2014. After completing the experiment, the results were analyzed statistically using a t-test for two independent samples. T. test, and the results



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showed the superiority of the experimental group who taught using the Barman model over the students of the control group who taught using the usual method in developing understanding. Hikmat Ghazi Muhammad, 2021, The effect of the Barman model on the acquisition of physical concepts and inferential thinking among second-year intermediate students

physical concepts and inferential thinking among second-year intermediate students The research aimed to identify (the effect of the Barman model on the acquisition of physical concepts and inferential thinking among second-year intermediate students). The research sample included (84) students from the second intermediate year, with (42) students in the control group, and (42) students. In the experimental group, the researcher rewarded the two research groups with the variables: (chronological age calculated in months, intelligence, previous information, and deductive thinking). The researcher formulated (121) behavioral objectives within the levels (remembering, understanding, applying, analyzing) according to Bloom's classification for the cognitive field. The researcher prepared a test for the acquisition of physical concepts consisting of (39) objective items of the multiple-choice type. The researcher also adopted a test of deductive thinking consisting of (39) objective items of the multiple-choice type. Of (36) objective multiplechoice items, the psychometric properties of the two tests were confirmed after processing the data statistically using the equation (t-test) for two independent, equal samples, and the Kuder-Richardson equation 20 to find the stability of the test for the acquisition of physical concepts, and the Cronbach's alpha equation to find the stability of the test of deductive thinking. After showing the results, it indicated that there is a statistically significant difference between the two groups and in favor of the experimental group in the two variables of the acquisition of physical concepts and the test of deductive thinking. Thus, it was lost. The researcher reached a number of results and interpreted them, and in light of them, the researcher recommends adopting the Barman model in teaching students because of its useful advantages, and employing it for different levels of study.

Qais Hatem Hani Al-Janabi,2017,The effect of the Barman model on the acquisition and retention of historical concepts among first-year intermediate students

The research aims to identify (the effect of the Barman model on the acquisition and retention of historical concepts among first-year intermediate students), and for this purpose the researcher formulated the following two hypotheses: 1 - There is no statistically significant difference at the level (0.05) between the average grades of students studying the subject History using the Barman model, and the average grades of students who study history in the traditional way in acquiring historical concepts. 2- There is no statistically significant difference at the level (0.05) between the average scores of students who study history using the Barman model, and the average scores of students who study history using the traditional method in retaining historical concepts. To verify this, the researcher chose an experimental design with partial control, and the sample was chosen randomly, so the selection fell on the (14 July for Boys) middle school affiliated with the General Directorate of Babylon Education in the center of Babylon Governorate to be a sample for the research, as the average number of first grade students was (51) students. There were (26) students in the experimental group and (25) students in the control group. The researcher conducted equality between the students of the two research groups in several variables, namely: (chronological age calculated in months, intelligence test, history grades in the first semester test for the 2015-2016 academic year, previous information test, fathers' academic achievement, and mothers' academic



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achievement). After determining the scientific material, represented by the topics of the last two chapters of the book on the history of ancient civilizations for the first intermediate grade for the academic year 2015-2016 AD. The researcher identified (20) historical concepts and (60) behavioral objectives for the last two semesters, prepared teaching plans for the two research groups, and presented two models of them to a group of experts and specialists in social studies and history teaching methods. The researcher prepared a conceptual test to demonstrate the extent to which students acquired historical concepts. The test consisted of (60) multiple-choice test items. The researcher confirmed its validity and reliability. The duration of the experiment lasted eight weeks for both research groups. The results obtained by the researcher showed the superiority of the experimental group. On the control group.

Chapter III

Search procedures

Firstly: Research Methodology

aAdoptThe researcher uses the experimental approach to identify (the effect of teaching history using the Barman model in developing lateral thinking among fifth-grade literary students) because it is the appropriate approach to the nature of variables Search and Its goal and hypothesis, In addition to that Prepare One of the most important curricula currency In educational and psychological research.

Second: Experimental design:

The experimental design aims to identify the research groups and choose appropriate statistical methods (Mansi, 2000: p. 234). Choosing the experimental design is the first step that falls on the researcher when conducting a scientific experiment. Since the safety and validity of the design are the basic guarantee for reaching sound and accurate results, the researcher therefore adopted an experimental design with partial control and a post-achievement test, as shown in Figure (1):

Figure (1) shows the experimental design

the test	Independent variable	the group
Posttest	aParman model	Experime ntal
Posttest	-Without Parman model	Officer

Third: The research community and its sample:

a- research community:

The research community consists of schoolsSecondary and secondary school day schoolsTo the General DirectorateTo raise the first Baghdad Al-KarkhThe number of students in the classLiterary fifth(1544) students.

B- The research sample:

The sample is defined as part of the original community on which the study is being conducted and which the researcher chooses to conduct their study on, according to special rules in order for it to be a correct representation (Daoud and Anwar Hussein, 1990: p. 66). To achieve the goal of the



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current research and implement its experimental design, the researcher selected research groups of class studentsLiterary fifthAccording to the following procedures:

- 1-Sample schools:to chooseThe researcher is sent to the General Directorate of EducationFirst Baghdad Al-Karkh, Statistics Division, with the aim of obtaining data on school namesSecondary and middle school in the General Directorate of Education, Baghdad, Al-Karkh IIt appeared using a simple random drawing methodAl-Karkh Secondary School for Boys.
- 2- Student sample: After the school was randomly determined in which the experiment would be implemented, the researcher visitedAl-Karkh Secondary School for BoysResearch sample for the academic year (2023 AD 2024 AD).

They chose for a researcher by random drawing one of the three branches, which is the (aThe number of students is (30) asked students to represent the experimental group and chose Section (C) in the same manner, with a number of students (31) students to represent the control group and did not use any of the tribal strategies with their students.

After excluding the failed students (7) Students became the final total of students (research sample) (54) Asking (2) to explain this.

Table (1) Students represent the research groups

Number of students	Division	the group
27	a	Experimental
27	С	Female officer
54		the total

Fourth: Equality of research groups:

Before starting the experiment, the researcher made sure that the individuals were equalMy research groupStatistically, some variables that may affect the results of the experiment, and these variables are:

- 1- The chronological age of students calculated in months
- **2-** Father's academic achievement.
- **3-** Mother's educational attainment.
- **4-** History grades in the final exam for the first intermediate year of the previous academic year.
- **5-** IQ test scores.
- 1 The chronological age of the students is calculated in months:

The arithmetic mean of the experimental group was (161,21) and for the control group (159,31The calculated T-value was (0,651) which is less than the tabular value of (2,021) at the degree of freedom (52This indicates that the two research groups are equivalent in chronological age, and Table (2) shows this:

Table (2)



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159,31

27

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officer

It shows the arithmetic mean, variance, and tabular and calculated values for the ages of students in the two research groups

T value **Degree** the **Arithmet** Significan of varian **Tabulati** Calculat numb the total ce level freedo ic mean ce ed er on m Experiment 161,21 27 27,57 al 0.05 2,021 651 52 Female 31,060

2 Final history subject grades for the classLiterary fifthFor the 20th academic year22-2023:

The arithmetic mean of the experimental group was (71,29) and for the control group (70,72The calculated T-value was (0,421) It is less than the scale of (2,021) at the degree of freedom (52This indicates that the two research groups are equivalent in grades for the history subject, and Table (4) shows this:

Table (3) Shows the mean, variance, and tabular and calculated values For subject gradesthe dateFor my research group in the final exam of the classLiterary fifth

	T va	llue	Degree			the	
Significanc e level	Tabulatio n	Calculate d	of freedo m	variance	Arithmeti c mean	numbe r	the total
0.05	0.001	0.401	50	6595,76 0	71,29	27	Experiment al
0.05	2,021	0,421	52	6445,68	70,72	27	Female officer

3 The father's academic achievement:

The academic achievement of the fathers was obtained through the information form and the school card, where the level of achievement was divided into four categories. To verify the equality of the two groups in this variable, the chi-square test was used, and Table (4) shows this:

Table (4) It shows the chi-square value in the educational achievement of parents between the two research groups

Signific	Chi-se val	quare ue	The degre	the		Father's a achieve		c	Ale o
ance level	Tabula tion	Calcul ated	e of freed om	num ber	Coll ege or	Prepara tory school	Medi um	Prim ary	the group



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					abov				
					e				
				27	8	6	8	6	Experim ental
0.05	7,641	1.579	3	27	11	6	6	5	Female officer
				54	18	19	14	11	the total

Table (5) shows that the value of squared (1.579) is less than the tabulated value (7.641), and this indicates that it is not statistically significant, which confirms that the two research groups are equivalent in this variable.

4 The mother's academic achievement:

The academic achievement of the fathers was obtained through the information form and the school card, where the level of achievement was divided into four categories. To verify the equality of the two groups in this variable, the chi-square test was used, and Table (5) shows this:

Table (5)
It shows the chi-square value in the mother's academic achievement between the two research groups

	Chi-se val		The	The		Father's academic achievement			
Signific ance level	Tabula tion	Calcul ated	degre e of num freed om	Coll ege or abov e	Prepara tory school	Medi um	Prim ary	the group	
				27	10	7	6	5	Experim ental
0.05	7,641	0,591	3	27	8	7	8	5	Female officer
				54	18	14	14	10	the total

It was shown from Table (5) that the value of squared (0.591) is less than the tabular value (7.641), and this indicates that it is not statistically significant, which confirms that the two research groups are equivalent in this variable.

5_ Intelligence test scores:

Before starting the experiment, the researcher administered an intelligence test-Raven's test-standardized on the Iraqi environment on students of both research groups, and the arithmetic mean for the experimental group was (33857) and for the control group (32678) and the calculated T value was (0,498) which is less than the tabular value of (2,021) at the degree of freedom (52This indicates that the two research groups are equivalent in intelligence, and Table (5) shows this:

Table (6)



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The mean, variance, and tabular and calculated value of the intelligence test are shown

	T va	lue	Degree			the	
Significan ce level	Tabulati on	Calculat ed	of freedo m	varian ce	Arithmet ic mean	numb er	the total
0.05	0.001	0.400	5 0	163,968	33,857	27	Experiment al
0.05	2,021	0,498	52	133,911	32,678	27	Female officer

Fifth: Controlling extraneous variables:

The process of controlling some variables in experimental studies and in educational and psychological research aims to remove any influence of any variable other than the independent variable, because the dependent variable is affected by many factors other than the experimental factor, and this means isolating other factors or variables that may affect behavior, and keeping them away from the experiment. (Owais, 1997: p. 109)

In addition to the above statistical equivalence procedures between the two research groups, the researcher tried to avoid the effect of some extraneous variables that affect this type of experimental designs. The following is a presentation of these extraneous variables and how to control them:

- A Experimental extinction: Throughout the duration of its conduct, the experiment was not subject to any student leaving, interrupting, or moving from one class to another or from and to school, except for some individual cases of absence that occurred in the two research groups in small percentages, and in an almost equal manner.
- B Experiment conditions and accompanying accidents: Accompanying accidents mean natural accidents that may occur during the implementation of the experiment, such as disasters, floods, earthquakes, hurricanes, and other incidents such as wars, and others that hinder the conduct of the experiment. The experiment in the current research was not exposed to any emergency circumstance or accident that hinders the conduct of the experiment. Its progress, and affects the dependent variable alongside the independent variables, so it can be said that the effect of this factor could be avoided.
- C- Differences in sample selection: The researcher tried as much as possible to avoid the impact of this variable on the research results by conducting statistical equivalence between the students of the two research groups in five variables whose interference with the independent variables could have an impact on the dependent variable..
- D- Measurement tool: A unified tool was used to measure the achievement of students in both research groups, which is a unified achievement test prepared by the researcher for the purposes of the current research.

<u>And</u>- Confidentiality of the research: The researcher was keen on the confidentiality of the research in agreement with the school administration not to inform the students of the nature and purpose



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of the research, so that their activity or interaction with the experiment would not change, which might affect the integrity of the experiment and its results. It was revealed to the students that he was a teacher assigned to complete his quorum of lessons in this school.

T- Distribution of shares This factor was controlled through equal distribution of classes among the three research groups, as the researcher taught four classes per week, two classes for each group, according to the Ministry of Education's curriculum for the history subject for the grade. Literary fifth The researcher agreed with the school administration and the history teacher at the school to organize the class distribution schedule so that the history subject was on Tuesdays and Wednesdays. Table (7) shows this.

Table (7)
Distribution of history classes to students of both research groups

9.5 o'clock	At 8.15	the days
Experimental	Female officer	Tuesday
Female officer	Experimental	Wednesday

Sixth: Determine the scientific subject:

The researcher determined the scientific material that would be taught to the students of the two research groups during the experiment period according to the curriculum vocabulary and its chronological sequence in the history book scheduled to be taught to the students of the class. Literary fifth The topics are:

- 1-French Revolution 1789 AD.
- 2-The independence of the United States of America from British colonialism and the nature of its political system (1775 AD 1865 AD).
- 3-European revolutions during the nineteenth century
- 4-The unification of Italy and the German Confederation and the emergence of the colonial system 5-World War I 1914-1918 AD
- 6-The international situation between the two world wars.

Seventh/Formulating behavioral goals:

Formulating behavioral objectives for any Modeleducational Teaching The basic step in building it; Because it helps the teacher determine the content of the educational material, organize it, determine the appropriate learning conditions for the various tasks that the learner must learn, choose the appropriate teaching methods, methods, tools, and activities, and represent the basis for evaluating the educational process.

The teacher's responsibility is greater than simply describing the educational work or formulating goals in behavioral terms. It also includes classifying the formulated goals according to the behavioral categories to which they belong. (Abu Hatab, 1996: p. 106)

The researcher formulated (27) a behavioral goal based on the general goals and content of the topics that will be studied during the duration of the experiment, distributed among the first three levels of Bloom's taxonomy (knowledge, understanding, and application).

In order to verify its validity and fulfillment of the content of the academic subject, it was presented to a group of experts and specialists in history, its teaching methods, measurement and evaluation, and a number of history teachers at the secondary level..



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After analyzing the experts' responses, some objectives were modified and deletedObjectivesWhich did not reach the percentage of agreement adopted by the researcher, which is (80%) or more, and thus the number of behavioral objectives in their final form became (25) behavioral objectives..

Eighth: Preparing teaching plans:

Since preparing teaching plans is one of the requirements for successful teaching, the researcher prepared teaching plans for the topics that will be taught during the experiment period from the history textbook for the class. Literary fifth In light of the content of the book and the behavioral objectives formulated, and in accordance with... Berman's model of lateral thinking And the traditional way. All of these plans were presented to a group of experts and specialists in history and its teaching methods, To seek their opinions, observations and suggestions for the purpose of improving the formulation of these plans, making them sound and ensuring the success of the experiment, and in light of the opinions and observations expressed by the experts, some necessary amendments were made to them, and they became final..

Ninth: Search tool:

One of the requirements of the current research is the presence of an achievement test to measure the effect of the independent variable on the dependent variable, and due to the lack of a ready-made achievement test, the researcher prepared an achievement test based on the content of the subject and behavioral objectives. The test was prepared in the following steps:

1- Preparing the test map:

The optional map is a detailed plan for the achievement test that includes part of the academic subject, in which the levels of educational goals and outcomes are determined, with the relative weight of each level against each topic. Therefore, the researcher prepared a test map that includes the six topics and the behavioral goals for the topics.

Table (8)

It shows the optional map of behavioral objectives and the number of achievement test items distributed according to the relative importance of the first three Bloom levels

	Behav				
Number of questions	Application 30%	Understanding 30%	Knowledge 40%	Relative importance	Levels Topics
3	1	1	1	12%	French Revolution 1789 AD.
3	1	1	1	12%	Independence of the United States of America



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6	2	2	2	24%	European revolutions during the nineteenth century
5	1	2	2	20%	Unification of Italy and the German Confederation
4	1	1	2	16%	World War I 1914-1918 AD
4	1	1	2	16%	The international situation between the two world wars
25	7	8	10	100%	the total

2- Formulating test items:

The researcher adopted multiple choice as the basis for his test. The number of optional items in their initial form reached (27) items, distributed among the six topics to be taught, and covering the behavioral objectives prepared by the researcher and based on the optional map he prepared for this purpose.

3- Validity of the test:

Validity is one of the characteristics of a good test, and the test is valid if it measures what it was prepared to measure (Al-Assaf, 1989: p. 429). In order to verify the validity of the test prepared by the researcher, it was presented along with the test map to a number of experts and specialists in history, and in the educational and psychological sciences.,To express their opinions and comments about the validity of the items in measuring what they were designed to measure. After the researcher obtained the experts' comments and opinions, some paragraphs were amended, others were reformulated, and some paragraphs were deleted. Because it did not obtain the approval rate that the researchers set at (80%) or more from the total number of experts, the test became composed of (25) items..

4- Exploratory application of the test:

To verify the integrity and clarity of the test items, their level of difficulty, the strength of their discrimination, and to calculate the reliability coefficient, the researcher applied the test to a sample of grade students. Literary fifth From the same research community and having the same



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specifications, the research sample was (20) students. It became clear that the paragraphs were clear and not ambiguous for the students, and that the average time spent answering was (15) minute.

A- The level of difficulty of the paragraphs:

After the researcher calculated the difficulty factor for each test item, he found it to be between (33, 0) and (61, 0), and (Ebel) believes that the test items are considered acceptable if their difficulty rate is between (20, 0) and (80, 0). (Bloom, 1971, p: 66)

This means that all test items are acceptable. Table (9) shows this.

Table (9)
Difficulty coefficients of achievement test items

Difficulty factor	Paragraph
	sequence
0.34	1
0.41 0.44	2
	3
0.49	4
0.50	5
0.43	6
0.54	7 8
0.45	8
0.47	9
0.61	10
0.39	11
0.43	12
0.51	13
0.55	14
0.41	15
0.52	16
0.40	17
0.34	18
0.41	19
0.32	20
0.44	21
0.33	22
0.37	23
0.49	24
0.49 0.41	25

B- The power of distinguishing paragraphs:

After the researcher calculated the discriminatory power of each item in the test, he found it to be between (33, 0) and (63, 0), and the literature indicates that the item whose discriminatory power coefficient is less than (20%) is recommended to be deleted or modified (Imtanios, 1997: p. 100)



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Therefore, the researcher kept all the paragraphs without deleting or modifying, and Table (10) shows this.

Table (10)
Discriminatory power coefficients for achievement test items

The power of	Paragraph
discrimination	sequence
0.41	1
0.45	2
0.42	3
0.54	4
0.52	5
0.41	6
0.62	7
0.42	8
0.47	9
0.39	10
0.51	11
0.52	12
0.34	13
0.62	14
0.36	15
0.47	16
0.45	17
0.40	18
0.58	19
0.38	20
0.40	21
0.59	22
0.32	23
0.46	24
0.33	25

C- The effectiveness of the wrong alternatives

After the researcher conducted the necessary statistical operations for this, it appeared to them that the incorrect alternatives to the achievement test items had attracted a larger number of students in the lower group than students in the upper group, so it was decided to keep them all without deleting or modifying them. Table (11) shows this.

Table (11)

The effectiveness of incorrect alternatives to the items of the post-achievement test



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The	The	Effectiveness	Т
effectiveness	effectiveness	of the first	_
of the third		wrong	
false	false	alternative	
alternative	alternative		
-13	-10	-16	1
-10	-16	-30	2
-4	-26	-16	3
-10	-16	-34	4
-1	-16	-23	5
-2	-2	-13	6
-11	-13	-2	7
-10	-3	-4	8
-10	-11	-13	9
-30	-10	-16	10
-4	-26	-16	11
-13	-10	-16	12
-10	-16	-30	13
-2	-2	-13	14
-11	-13	-2	15
-10	-3	-4	16
-1	-16	-23	17
-2	-2	-13	18
-11	-13	-13	
-11 -10	_	-4	19 2
-10	-3	-4	0
-10	-11	-10	21
-10 -10	-11	-13 -3	2
-10	-11	-3	2
-10	-11	-13	2
10	11	13	3
-30	-10	-16	2
30	10	10	4
-4	-26	-16	2
-4	-20	-10	5
			5

7- Test stability

The stability of the test means reaching the same results when it is re-applied to the same sampleEbel states that the stability of the test means the accuracy of its items and their consistency among themselves in measuring the characteristic to be measured (Daoud, 1990: p. 122).



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The researcher conducted a retest method on the exploratory sample to calculate the reliability of the test. The first test was conducted after the second test (14) days. When correcting the answers to the two tests, the researcher used the Pearson correlation coefficient, so the reliability coefficient reached (0.9).1The degree of stability is considered appropriate for the purposes and nature of the research.

8_ Test application

After the end of the experiment and in the first week of the end of the experiment, the researcher conducted a test on the topics he studied and applied the test to the students of the two research groups (experimental and control) on the day4/2/2024On Sunday at nine-thirty, after the students had organized in the classrooms and the researcher personally supervised the conduct of the test and explained the purpose of the test and how to answer the test in order to maintain the integrity of the experiment.

Tenth!: How to correct the test

The researcher gave (1) marks for the correct answer to each test item and (0)To answerIncorrect answers. Left out paragraphs, paragraphs for which the answer was not clear, and missing answers were treated as incorrect answers.

Thirteen: statistical methods

1- square ka2 Ka2 = Mg	(L - Q)2
M = Total L = Observed Frequency S = Exp 2- Pearson correlation coefficient to extra	
R=n mg x y	– (mg x (mg y))
	S)2][Mj S2 - (Mj S)2] ayati, 1977: p. 293) nr p + nr d
n 4- Paragraph recognition equation = —— 1/2 (p + d) NAM - NDM 5_Effectiveness of the alternative = ———	
n It represents:	

NAM: Number of students who chose the wrong alternative from the top group

N A D: The number of students who chose the incorrect alternative from the lower group



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N: The number of members of one of the two groups (Al-Zahir, 1999: p. 91)

5- T-test (T-test) for two independent samples

The fourth chapter

Presentation and interpretation of results

This chapter includes a presentation of the research results and an interpretation of them to determine (the effect of teaching history using the Barman model in developing lateral thinking among fifth grade literary students) and to determine the statistical significance between the averages of the experimental and control research groups to verify the research hypothesis as follows:

First: Presentation of the results

By using the hypothesis that says (there are no statistically significant differences between the average achievement scores of the experimental group students who study history using the Barman model and the average achievement scores of the control group who study the same subject without using the Barman model)

It was shown from Table (8) that the average grades of the experimental group students who They studied History material using Parman model (19.142) with a variance of (29.495) and the average score of the control group students who They studied History material without use Berman model (16.392) varies by (8.450), When using the t-test to determine the difference between the two research groups, there appeared to be a statistically significant difference at the level of (0.05) with degrees of freedom (24) For the benefit of the group's students Experimental The calculated T-value was (11.819), which is greater than the tabulated T-value of (2.021), and thus the null hypothesis is rejected, and Table (8) shows this.

Table (8)

It shows the arithmetic mean, standard deviation, variance, and calculated and tabulated values for the two research groups in geography.



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Significan ce level	Degree of freedo m	T Tabulati on	the value Calculat ed	varian ce	standar d deviati on	SMA	the numb er	the group
Statistically significant at (0.05)	52	2,021	11.819	29.495	5.431	19.14 2	27	Experimen tal
				8.450	2.907	16.39 2	27	Female officer

SECOND: INTERPRETATION OF THE RESULTS

In light of the results presented, teaching history using the Barman model represents a distinct educational approach that seeks to enhance lateral thinking among students. bar man(Parmen) is an educational model that focuses on encouraging students to explore historical topics from multiple angles and analyze events and phenomena in different and unconventional ways. By teaching history in this manner, students can achieve a deeper and more comprehensive understanding of historical material and apply critical and creative thinking in analyzing events and situations.

The effects of teaching history using the Barman model on developing lateral thinking among fifth-grade literary students can include::

- 1. **Stimulate logical and creative thinking**: When historical material is presented in unconventional ways, students learn how to apply creativity in analyzing events and thinking outside the box to understand historical context.
- 2. **Enhancing research and analysis skills**: Barman's model encourages students to actively research and gather information from multiple sources, thus enhancing their analysis and critical thinking skills.
- 3. **Promoting a comprehensive understanding of history**: Thanks to lateral thinking, students have a deeper understanding of history and the mutual influences between different events and cultures.
- 4. **Develop problem-solving skills**: When students learn how to look at events from multiple angles, they develop the ability to apply this holistic approach to problem solving in other areas as well.
- 5. **Promoting cooperation and social interaction**: The Barman model encourages collaboration and interaction among students, as they share opinions, work together to better understand historical material, and apply lateral thinking to solve problems at hand.

CHAPTER V: CONCLUSIONS, RECOMMENDATIONS, PROPOSALS

First/ Conclusions.

- 1. **Develop lateral thinking skills**Barman's model contributes to enhancing students' ability to think in multiple ways and find creative solutions to problems by analyzing historical events from multiple angles.
- 2. **Stimulate curiosity and active research**: Barman's model encourages students to self-exploration and actively search for information, which enhances their comprehensive understanding of history and helps them develop research skills.



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- 3. **Promoting a deep understanding of historical topics**: The Barman model gives students the opportunity to understand the historical context more deeply and comprehensively, enhancing their comprehensive understanding of historical events and developments.
- 4. **Promote social interaction and cooperation**: The Barman model contributes to encouraging social interaction between students and cooperation in work groups, which enhances the exchange of ideas and the development of communication skills.
- 5. **Developing creative solution skills**: The Barman model helps develop students' skills in finding creative and innovative solutions to complex historical problems.

Second/ Recommendations:

- 1. Adopting the Parman approach in educational curricula Educational curricula should integrate Barman's model as an essential part of the teaching process in history subjects, in order to enhance lateral thinking among students.
- 2. **Training teachers to use the Barman model** Training courses should be provided for teachers to learn how to implement the Barman model of teaching, including developing teaching strategies that encourage lateral thinking.
- 3. **Promote research and active interaction**: Students should be encouraged to actively research and engage with historical materials through group discussions and research projects that encourage the exploration of different angles of historical events.
- 4. **Providing appropriate educational resources** Appropriate educational resources that support the Barman model should be provided, such as books, articles, and electronic learning materials that encourage lateral and creative thinking.
- 5. **Continuous evaluation and modifications to the curriculum**: The effectiveness of teaching the Barman model should be continuously evaluated and the curriculum updated according to the findings, with changes directed towards improving the development of students' lateral thinking skills.

Third/ Proposals:

In continuation of the current research, the researcher proposes the following:

- 1. Evaluating the effectiveness of the Barman model in enhancing lateral thinkingAn experimental study can be conducted to measure the effect of teaching history using the Barman model on developing students' lateral thinking skills compared to traditional methods of teaching history.
- 2. Study of the use of technology in applying the Barman model: Research can be conducted on how technology, such as interactive content and multimedia, can be used in implementing the Parman model to improve the learning experience and promote lateral thinking.
- 3. The effect of teaching history using the Barman model on students' research skills: A study could be conducted to analyze how Barman's model affects the development of students' research and analysis skills and their ability to explore history topics more deeply.



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- 4. Studying the effect of teaching history using the Barman model on social interactionResearch can be conducted on how teaching history using the Barman model affects social interaction between students and their ability to cooperate and exchange ideas.
- 5. **Develop assessment tools for lateral thinking skills**Research can be conducted to develop effective assessment tools used to measure the effect of teaching history using the Barman model on developing students' lateral thinking skills.
- 6. Studying the effect of teaching history using the Barman model on students' academic performance: Research could be conducted to analyze how teaching history using the Barman model affects students' academic performance, including improving writing and analytical skills

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