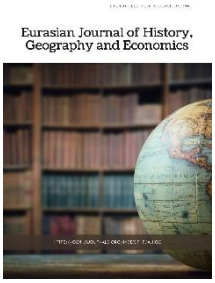

The effect of the numbered heads strategy on the achievement of fourth year middle school students in history

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ABSTRACT

The research aimed to identifyThe effect of the numbered heads strategy on the achievement of fourth year middle school students in historyIn order to achieve the goal of the research, the researcher tested the null hypothesis that concluded in advance that there are no statistically significant differences at the significance level (0.05) between the students of the experimental group who studied according to the numbered heads strategy and the students of the control group who studied in the traditional way.

The researcher relied on an experimental design with two experimental and control groups in order to suit the research variables, and on the basis of that, the research sample consisted of fourth-grade middle school students in Al-Karkh Boys' Secondary School within the first Baghdad Al-Karkh Education Schools, whose number reached (61) students, with (30) students in the group (The experimental group and (31) students in the control group were selected by a simple random method, and the researcher used a statistical analysis program.(SPSS)for the Humanities in analyzing the research data, and the research reached the following results:

1- There are statistically significant differences between the average of the students in the experimental group who studied according to the numbered heads strategy and the average of the students in the control group who studied in the traditional method, in favor of the experimental group.

2- It is a strategyNumbered headsEffectively affectedOn the achievement of fourth grade middle school students in history.

Keywords: Impact, Numbered Heads Strategy, Achievement, Fourth Year Middle School Students, History.

Chapter One: Introduction to the research

First: the research problem

This study lies inExploring the effect of using the numbered heads strategy on the achievement of fourth-grade middle school students in history. This interest comes as a result of the growing need to improve the quality of education and stimulate academic achievement. The literature on the importance of teaching strategies in stimulating student achievement will be reviewed, with a focus on previous studies that have used the numbered heads strategy. It will be explained how to implement this strategy in the context of teaching history, in addition to analyzing the collected data using statistical methods. Through this research, we seek to understand the impact of the numbered heads strategy and provide interpretable and practical results, with a focus on improving students' achievement in history and enhancing their academic competencies.Hence, the research problem arises in the following question: What

is it?**The effect of the numbered heads strategy on the achievement of fourth year middle school students in history?**

Second: The importance of research

This research highlights the importance of exploring the effect of the numbered heads strategy on the achievement of fourth-grade middle school students in history. This reflects the interest emerging from the challenges faced by the education system in enhancing the quality of education and stimulating academic achievement among students. By understanding the impact of the bulleted heads strategy, we can identify effective ways to enhance students' engagement with history content and enhance their deeper understanding of historical concepts. This research aims to provide scientific evidence that enhances effective teaching techniques and contributes to the development of future teaching practices, which serves the overall goal of enhancing student achievement and raising the quality of education..(Mohammed ,2014, p. 32)

Third: The goal of the research

The current research aims to identifyThe effect of the numbered heads strategy on the achievement of fourth year middle school students in history.

Fourth: Research hypothesis

There are no statistically significant differences at the significance level (0.05) between the students of the experimental group who studied according to the numbered heads strategy and the students of the control group who studied in the traditional method.

Fifth: Limits of research

Objectivity border :The effect of the numbered heads strategy on the achievement of fourth year middle school students in history.

Time limits: The current research was conducted and applied in the academic year 2024 AD.

Spatial borders: Iraq-Baghdad .

Sixth: Defining terms

- **The strategy:**

1. (Attiya - 2009) defined it as: a set of consistent and sequential steps that the teacher can transform into teaching methods that reconcile the teacher, the students, the academic material, the conditions and the resources available for the purpose of achieving the pre-determined goal. (Attiya: 38)
2. The researcher defined it procedurally as: a set of procedures adopted by the teacher in the classroom to implement the steps that he plans in advance with the aim of creating interaction between him and the students to achieve the objectives of the lesson.

- **Numbered heads:**

1. (Atwa et al. - 2010) defined it as: a strategy based on dividing students into groups bearing similar numbers. The group members put their heads together to verify the correctness of the answer to the question posed by the teacher, and the bearers of the relevant number present the answer to the class as a whole. (Atwa: 34-25)
2. The researcher defined it procedurally as: a strategy based on dividing students within the class into groups whose members are symbolized by numbers instead of names, which leads to the repetition of one number as many groups as there are.

- **The date:**

1. (Al-Yasiri - 2007) defined it as: researching past events and the documents and records left behind by man and analyzing them in order to benefit from them to understand the present and face the future. (Al-Yasiri: 10)
2. The researcher defined it procedurally as: a set of events that the Arab world was exposed to in the modern era and the people's position on them, and it is taught sequentially to the students in the class.Fourth preparatory schoolPrepared by the Ministry of Education in Iraq.

- **Collection:**

1. Al-Kasbani (2010) defined it as: the information and skills that students acquire as a result of a specific subject or unit of study. (Al-Kisbani: 76).
2. The researcher defined it procedurally: as the information and skills that the learner acquires and that appear in his behavior after completing the study of the prescribed topics, which differ from what he was before the study in question.

Chapter Two: A Theoretical Framework And Previous Studies

First: a theoretical framework

Numbered heads strategy

The numbered strategy is a teaching technique that uses sequential numbering to make it easier to understand and organize concepts and information. This strategy involves placing sequential numbers or identification marks on different items in the course content. These numbered headings are arranged hierarchically or sequentially to provide a logical structure to the topic or lesson.(Metwally,2019, p. 183)

This strategy aims to make it easier to understand the relationships between ideas and present information in an organized way. The strategy can be effective in enhancing focus and comprehension, as students benefit from seeing a clear structure and sequence of learning materials. Numbered bulletins promote active interaction and participation, and can help develop students' analytical and organizational thinking skills.(as a fighter,2004, p. 54)

Objectives of the numbered heads strategy

The numbered headings strategy adopts several goals that contribute to improving the learning experience and understanding of the academic content. Among the main objectives of this strategy:(Al-Kubaisi, 2000 (p. 109)

1. Content organization:
    - Achieving a logical order and sequence in educational content to facilitate understanding the relationships between ideas and concepts.
2. Stimulate interaction and participation:
    - Encourage students to participate actively by providing a clear structure that enables them to contribute and understand the lesson better.
3. Improve focus and comprehension:
    - Providing visual reference points that attract students' attention and contribute to improving comprehension of the material.
4. Develop thinking skills:
    - Promote the development of analytical and organizational thinking skills, as students examine the relationships between heads and understand the overall structure of the topic.
5. Facilitating recall processes:
    - Support recall by providing a structure that students can refer to while reviewing material.
6. Stimulate cooperation:
    - Providing a means of collaboration and participation among students, where they can exchange and clarify ideas effectively using the numbered header structure. (Qatami, 2000, p. 83)

The role of the teacher in the numbered heads strategy

The teacher's role in the numbered heads strategy is vital to making the most of this teaching method. Here are some of the key roles a teacher plays(Al-Qatami, 2010, p. 42)

1. **Lesson planning:** The teacher establishes an appropriate arrangement of numbered headings in the lesson syllabus, focusing on the sequence of concepts and information.
2. **Directing attention:**The teacher uses numbered headings to attract students' attention and direct them toward major topics and important relationships between them.
3. **Clarifying relationships:**Illustrates the relationships between the headings and explains how the sequence and order are consistent with the lesson objective.
4. **Motivate participation:** The teacher encourages students to participate in organizing the headers and adding their notes, which enhances their engagement with the content.
5. **Provide examples and explanations:** Uses examples and illustrations to show how numbered heads can be used to understand certain concepts.
6. **Follow up on students' progress:** The teacher monitors students' progress in organizing information using numbered headings and provides guidance and support when needed.

7. **data analysis:** Uses data collected from the use of numbered heads to analyze student achievement and adjust teaching method if necessary.
8. **Stimulate analytical thinking:** The teacher encourages students to develop analytical thinking skills by asking questions that encourage them to explore relationships between numbered vertices.
9. **Integration with educational tools:** The teacher integrates numbered heads integrally with other teaching aids, which enhances student interaction and contributes to achieving lesson objectives. (Qarni, 2013, p. 457)

The learner's role in the numbered heads strategy

The role of the learner in the numbered heads strategy plays an important role in the process of learning and understanding concepts.And thisSome of the most important roles of the learner in this strategy(Ghanem, 2002, p. 79)

1. **Effective interaction:** The learner actively participates in organizing the numbered headings, and actively interacts with the content to enhance his interaction with the study material.
2. **Using heads as a thinking tool:** Students use numbered headings as a way to facilitate thinking and organizing information, which helps them better understand the structure of the content.
3. **Identify the main points:** The learner identifies key points and key concepts through numbered headings, further enhancing their understanding of the topic.
4. **Participate in analytical thinking processes:** The use of numbered heads allows learners to engage in analytical thinking processes, where they can examine relationships between heads and understand the hierarchical order of concepts.
5. **Facilitating recall:** Learners benefit from numbered headings as a tool to facilitate recall, as they are able to refer to the organized structure while reviewing the material..
6. **Collaborate with colleagues:** Learners can use bulleted headings as a way to collaborate with classmates, sharing ideas and contributing to the organizational structure of the course..
7. **define the priorities:** Using numbered headings helps learners prioritize and understand the importance of different concepts.
8. **Active participation in the lesson:** Using numbered headings encourages learners to actively participate in the lesson by organizing their information and asking questions.

Assumptions of the numbered heads strategy

The numbered heads strategy may be based on several basic assumptions, which are aspects that you assume are correct to make the strategy effective.And thisSome of these assumptions include:(Alyan, 2008, p. 56)

1. **Understandability:** It is assumed that numbered headings are an effective means of facilitating and improving understanding of content, and that learners can easily recognize and understand the hierarchical structure of information.
2. **Hierarchical arrangement of information:** It assumes that concepts can be organized hierarchically or sequentially, an assumption that is fundamental to the use of numbered heads.
3. **Improve organizing comprehension:** It is assumed that the use of numbered headings promotes effective organization of information and contributes to improving students' overall understanding.
4. **Stimulate analytical thinking:** It is expected that the numbered heads will contribute to motivating learners to think analytically and examine the relationships between concepts and ideas. (Abdel Qader 2018, p. 87)
5. **Student response:** It is assumed that students will respond positively to using numbered headings as a means of

organizing information and improving their engagement with the topic.

6. **Motivate participation:** It is assumed that encouraging learners to participate in organizing heads will contribute to improving the level of interaction and effective participation.
7. **Consistent use of headers:** It is assumed that teachers will use the numbered heads consistently and systematically to ensure the effectiveness of the strategy.
8. **Integrated application:** It is assumed that the numbered heads strategy can be easily integrated with other educational methods and various teaching methods. (Abbas, 2020, p. 76)

Numbered heads strategy objectives(Al-Saifi, 2009, p. 27)

1. **Content organization:** Facilitating the organization of information and concepts in an organized and sequential manner, which contributes to a better understanding of educational topics.
2. **Stimulate interaction and participation:** Encouraging students to participate actively in the processes of organizing content and developing headings, which enhances their interaction with the study materials.
3. **Facilitate comprehensive understanding:** Achieve a comprehensive understanding of topics and relationships between concepts, which helps build a strong knowledge base.
4. **Enhancing analytical thinking:** Stimulate the development of analytical and critical thinking skills in students, as they have to examine the relationships between heads.
5. **Facilitating recall:** Providing an organizational structure that helps students better retrieve information during review and study processes.
6. **Identify the main ideas:** Enable students to identify main ideas and key points in content, enhancing their ability to distinguish between main ideas and details.
7. **Promoting active participation in the lesson:** Enhance student engagement in the lesson by motivating them to organize understanding using numbered headings.
8. **Improve collaboration between students:** Encourage cooperation among students by organizing headings and exchanging ideas and notes in an organized manner.
9. **Providing an effective visual style:** Provide an effective visual means to illustrate the structure of the content, which enhances focus and understanding.
10. **Enhance exam preparation:** Providing an effective tool to prepare students for tests and examinations by facilitating review and reminder processes. (Al-Shammari, 2011, p. 167)

Characteristics of the numbered heads strategy

The numbered headers strategy has several characteristics that distinguish it and make it effective in organizing educational content and improving student interaction.And thisSome main characteristics: (Salam, 2021, p. 79)

- Providing a logical order and sequence of information, where numbered headings can be represented hierarchically or sequentially to reflect the structure of the lesson or material.
- The numbered header structure is simple and clear, making it easy for students to understand and reducing complexity.
- Encourage active interaction by encouraging students to participate in arranging and organizing the numbered heads.
- It helps clarify the hierarchical structure of information, which contributes to understanding basic relationships and details.
- It is used as an effective tool in mnemonic processes, as students can easily retrieve information by referring to the numbered headings.
- Promotes improved focus on key points and key concepts, reducing information clutter.
- It encourages analysis and deep thinking among students, as they

have to examine and analyze the relationships between numbered vertices.

- The numbered heads strategy can be easily integrated with various teaching methods and other learning methods.
- Encourages active participation in class by encouraging students to contribute to creating and organizing headers.
- It can be effectively integrated with the use of advanced teaching techniques, enhancing engagement and understanding. (Saada, 2008, p. 235)

Second: Previous studies

Wafa Younis Mahmoud, 2019,Teaching chemistry using the heads-up-together strategy and its impact on the achievement of second-grade female students and developing their reflective thinking

The research aims to determine the effect of using the numbered heads strategy together on the achievement of second-year intermediate school students in chemistry and developing their reflective thinking. To achieve the goal of the research, two null hypotheses were formulated, and for the purpose of verifying them, the research sample was selected from female students in the second intermediate grade for the academic year (2017 - 2018). The total number of its members was (66) students. This sample was divided into two sections, one of which represented the experimental group and the other represented the control group. (34, 32) female students respectively, and an equivalence process was conducted between the female students of the two research groups. To achieve the objectives of the research, two tools were used. The first is an achievement test in chemistry consisting of (30) objective test items. The test was characterized by validity and reliability, as its reliability coefficient reached (0.81). The difficulty factor, the discriminatory power, and the effectiveness of the alternatives for its paragraphs were also extracted, and all of them were within the acceptable range. The second tool is the reflective thinking test, which consists of (20) objective items to measure reflective thinking skills (contemplation and observation, detecting fallacies, reaching conclusions, giving convincing explanations, and developing suggested solutions). It was characterized by validity and reliability, as the reliability coefficient reached (0.83) and the discrimination coefficient was also extracted, all of which were within the acceptable range. The results indicated that there was a statistically significant difference at the significance level (0.05) between the average scores of female students in the experimental and control groups in achieving chemistry, and between the average scores for developing contemplative thinking, in favor of the experimental group.

Hassan Ali Abd Jawad, 2015,The effect of the numbered heads strategy(NHT) in the achievement of literature and texts among fifth grade middle school students

The current research aims to identify the effect of the numbered heads strategy (NHT) in the collection of literature and texts among students in the fifth year of middle school. To achieve this, the researcher chose a sample of (48) students from the students of the fifth year of literature, who were chosen - intentionally - from the research community for the academic year (2013-2014). The choice fell on Tripoli and Dubai high schools for boys. In order for the administration of the two secondary schools and the Arabic language teachers to cooperate in implementing the experiment, and to achieve the goal of the research, the researcher formulated the following null hypothesis: (There is no statistically significant difference between the average grades of the students of the experimental group, which studies the subject of literature and texts using the numbered headings strategy, and the average grades of the students of the control group, which studies the subject Literature and texts in the traditional way). The researcher balanced the two groups of the experiment (the research sample) statistically in light of the approved experimental design (equal groups). Two equal groups were prepared in a number of variables (chronological age, Arabic language score for half the year, educational level of the parents). Then, in a simple random manner, the

researcher distributed them to the research groups. An experimental group studied using the numbered heads strategy (NHT) and consisted of (23) students, and a control group in the usual way and consisted of (25) students. In order to achieve the research goal, the researcher prepared an objective test of the multiple choice type consisting of (30) items and its validity was extracted. It was presented to a group of experts and arbitrators, and its veracity, reliability, difficulty coefficient, and strength of discrimination were confirmed. After the researcher prepared the research groups, teaching plans, and research tool, he carried out his research experiment on (3/4/2014).

Chapter III

Research methodology and procedures

The researcher will addressThis chapter presents a presentation of the methodological procedures that were usedHafrom where:

First: research methodology

The researcher adopted the experimental method, because it is consistent with the nature of the research and its goal aimed at finding out (the effect of the numbered heads strategy on the achievement of fourth year middle school students in history.), as it is considered the appropriate method thatYThrough it, the researcher will be able to choose hypotheses that relate to cause and effect relationships, as it is based on the use of scientific experience in studying the subject, and this use is characterized by research with sound procedures and accurate results, which leads to scientific value. (Abdel Hafeez and Mustafa, 2000: 107)

Second: Experimental design:

The experimental design is one of the first steps that the researcher thinks about when conducting his research. (Al-Zobaie and Muhammad, 1981, p. 94).

Measuring tool	Independent variable	the group	Random
Posttest	strategyNumbered heads	Experimental	P*
	←	Female officer	A

1-The research community

It is a group of individuals who focus attention in a particular study or a set of measurements collected from those individuals (Sobhi et al., 2000: 181). The total population of the current research consists of fourth-grade female students.CounterIn middle and high school day schoolsNinIn the center of the governorateBaghdadAffiliated with the General Directorate of Education BGhadad Al-Karkh firstFor the academic year (2023– 2024).

2- Research sample:

The sample is part of the population on which the study is conducted, and the researcher chooses it to conduct his study on it according to special rules in order to correctly represent the population (Mahjoub, 2005: 144).

A/Sample of schools

This research required selecting one school from among the preparatory and secondary day schools for boysyeninBaghdadAffiliated to the General Directorate of EducationThe first Karkhfor the academic year(2023- 2024) And using a simple random drawing method*, it was chosenHigh School Al-KarkhFor pulpNinTo be the basic research sample and a field for implementing the experiment.

B/T sampleLap

After the researcher chose middle school (Al-Karkh Secondary School)is foundIt includes two sections for the fourth gradeCounterThey are (A, B), and by simple random drawing**, a group (B) was chosen to represent the experimental group that is studied using the strategyNumbered headsSection (A) represents the control group taught in the traditional way, and the total score was reachedFor studentsThe two divisions (64) IcoreWith (30) the experimental group and (31) the control group, the researcher statistically excluded data related to mathematicsLapRAspenAll of itMAnd the adult is a numberthey(3) iLapThis is due to his experienceMThe previous topics were

covered so as not to affect the results of the research, and after exclusion, the number of members of the sample became (61) students, with (30) students from Section (B), the experimental group, and (31) from Section (A), the control group.

Fourth: Equivalence of the two research groups:

One of the requirements of experiment or research is thatYThe researcher rewarded between iLapThe two research groups (experimental and control) statistically examined some of the variables that they believe affect the results of the experiment, so this is sufficientandResearcher betweenthe studentsMy research group looked into the following variables:

1- Chronological age calculated in months:

T-test resultsLapThe two groups researched chronological age calculated in months

Statistical significance at level 0.05	T value		Degree of freedom	variance	SMA	the number	the group
	Tabulation	Calculated					
Not statistically significant	2.000	0.816	59	65.77	191.97	30	Experimental
				72.93	193.71	31	Female officer

2- Average grades of the first semester of the history subject taught in the fourth semesterCounterfor the academic year (2023- 2024):

T-score test resultsstudentsMy research group in the middle of the year in the subject of history

Statistical significance at level 0.05	T value		Degree of freedom	variance	SMA	the number	the group
	Tabulation	Calculated					
Not statistically significant	2.000	0.821	59	195.72	71.27	30	Experimental
				266.99	68.06	31	Female officer

3- Parents' academic achievement: Frequencies of academic achievement of parents of female students in the two research groups

Significance level (0.05)	Two values (Ca2)		Degree of freedom	University or above	Preparatory school and diploma	Medium	Reads, writes, and elementary school*	the number	the group
	Tabulation	Calculated							
Not statistically significant	7.815	1.991	3	9	7	6	8	30	Experimental
				6	5	9	11	31	Female officer

4-Academic achievement of mothers: frequencies of academic achievement of mothers of students of the two research groups, the degree of freedom, the two (Ca2) values (calculated and tabular), and the level of significance.

Frequencies of mothers' academic achievementLapMy research group

Significance level (0.05)	Two values (Ca2)		Degree of freedom	University or above	Preparatory school and diploma	Medium	Reads, writes, and elementary school	the number	the group
	Tabulation	Calculated							
Not statistically significant	7.815	3.858	3	8	7	5	10	30	Experimental
				6	6	12	8	31	Female officer

5- Student scores in the previous historical information test: results of the t-test for the significance of the differences between the students of the two research groups in the scores of the historical information test

Statistical significance at level 0.05	T value		Degree of freedom	variance	SMA	the number	the group
	Tabulation	Calculated					
Not statistically significant	2.000	0.631	59	14.01	56.57	30	Experimental
				221.41	58.90	31	Female officer

6- Intelligence test: T-test results to indicate the differences between the students of the two research groups in intelligence test scores

The arithmetic mean and standard deviation for the two research groups in the intelligence test

Statistical significance at level 0.05	T value		Degree of freedom	variance	SMA	the number	the group
	Tabulation	Calculated					
Not statistically significant	2.000	0.533	95	97.81	39.23	30	Experimental
				74.30	37.97	31	Female officer

Fifth: adjusting variables

The search variables have been defined as follows:

1 - The independent variable for the experimental group (strategyNumbered heads).

2 - The dependent variable (achievement).

3 - Extraneous variables that affect the soundness of the experimental design and the dependent variable.

Controlling an experiment does not simply consist of the researcher controlling one of the variables to see its effect on a second variable, but rather it must consist of observing, identifying, and controlling other variables that may affect the dependent variable, whether they relate to the individuals of the experiment or to the circumstances surrounding the experiment. . (Al-Zobaie and Muhammad, 1981, p. 91)

Sixth: Research requirements

- Determine the scientific material

The researcher determined the scientific subject that would be taught to himLapThe two research groups before starting to implement the experiment included five chapters (Chapter Eight, Chapter Nine, Chapter Ten, Chapter

Eleven, Chapter Twelve) from a history book.The decisionTeaching for the academic year2023-2024 AD)

- General objectives for teaching history

After the researcher reviewed the general objectives of the history subject in the preparatory stage prepared by the Ministry of Education, he put those objectives into practice by translating them into the form of precise behavioral objectives.

- Defining and formulating behavioral goals

After the researcher reviewed the general objectives of the history subject in the preparatory stage prepared by the Ministry of Education regarding the subject of the history of Arab-Islamic civilization, and based on the topics in the chapters of the book, the researcher formulated behavioral objectives based on the content of the topics that will be studied during the period of the experiment and in accordance with Bloom's six levels of knowledge (knowledge). Comprehension, application, analysis, synthesis, evaluation) and in order to ensure the validity of these objectives, they are presentedHaThe researcher included a group of experts in teaching methods, measurement, evaluation, and history teachers,In light of their opinions, suggestions and observations, some of them were modified, and the researcher adopted 80% of their opinions as a criterion for their validity and suitability until they became, in their final form, (125) behavioral objectives.

- Preparing teaching plans

Pre-planning of the lesson is an organized, systematic work aimed at achieving the desired goals. Therefore, the researcher prepared teaching plans for the number of chapters in the five chapters, which amounted to (46) plans for the academic topics that will be taught to the first grade in the subject of history.,For the last five chapters (eighth, ninth, tenth, eleventh, and twelfth) scheduled to be taught during the second semester of the academic year (2023-2024M) with (23) plans for the experimental group according to (strategyNumbered heads) and (23) plans for the control group according to the usual method.

Seventh: Preparing the post-achievement test

The researcher prepared a post-achievement test at the end of the experiment to determine the extent of the influence of the independent variable on the dependent variable to distinguish the test that was preparedHThe researcher demonstrated its objectivity, honesty, comprehensiveness, and consistency in light of the content of the subject specified for the study, and that tests are among the most common evaluation tools for learning outcomes (Al-Haila, 1999, 407). For this reason, the researcher prepared a test consisting of (40) It was poor. The test went through several steps that preceded its application, including:

1- Determine the purpose of the test

This step is considered one of the most important steps in preparing the achievement test, as the test items are formulated and designed in a way that is compatible with the goal for which it was designed, as the achievement test that the researcher prepared aims to measure the effect of the independent variable (strategyNumbered heads) in the dependent variable (final achievement in history) for fourth year middle school students.

2- Test levels

The researcher committed to measuring the six levels of Bloom's classification of the cognitive domain available in the behavioral objectives that were preparedHaresearcher.

3- Preparing a table of specifications

The researcher prepared a test map that included the last five chapters (eighth, ninth, tenth, eleventh, twelfth) of the history book.,According to the six levels (knowledge, understanding, application, analysis, synthesis, evaluation) of the cognitive field of Bloom's taxonomy, the relative importance of each chapter of the academic material was calculated, and the importance of the content percentage, percentages, and the number of test items in each chapter were extracted.

4- Drafting achievement test items

The researcher prepared an achievement test consisting of:40) A multiple-choice test paragraph with four alternatives and (10) paragraphs of essay questions.,The researcher determined their preparation according to the

behavioral objectives and the importance of the academic subject to measure the extent to which the specific behavioral objectives are achieved according to the six levels of the cognitive field (knowledge, understanding, application, analysis, synthesis, and evaluation) of Bloom's classification.

5- Correction instructions

The researcher developed instructions for the achievement test, which are:

-Answer instructions

-Correction instructions

6- Validity of the test

The validity of the test means that "it measures what it was designed to measure" (Melhem, 2007:270). In order to verify the validity of the test, the researcher used two methods (face validity and content validity).

7- Survey application for testing

A- Sample statistical application

Test: The researcher applied the test to a statistical application sample consisting of (40) samplescorefromstudentsfourth gradePreparatory school, at Al-Thawra Preparatory School, corresponding to 7/10/2023The test was conducted after agreement with the school administration and the subject teacher after the end of the courseLapFrom studying the last five chapters of the article and reporting aFor studentsThe date of the test in a history subject is one week before the specified date.

B- Sample of statistical analysis of test items

The researcher applied the test toAl-Karkh Secondary School for BoysWhich represents the statistical sample of (100) studentsBHe agreed with the subject teacher at school to apply the test tostudentsfourth gradePreparatory schoolafter finishingtheyFrom studying the last five chapters of a history book.

The following is an explanation of the procedures for statistical analysis of the test items:

أ- Paragraph difficulty factor

After the researcher calculated the difficulty factor for each paragraph of the test (objective items), he found that it ranged between (0.37-0.70).,As for the essay paragraphs, they ranged between (0.42-0.57).

ب- The strength of the paragraph

When calculating the discriminating power of each test item (objective items), it was found that it ranged between (0.33-0.43), while the discriminating power of the essay items was limited to between (0.33-0.43).

ت- The effectiveness of the wrong alternatives

After calculating the effectiveness of the incorrect alternatives for each test item, it was found that it ranged between (-0.26 and -0.04).

ث- Test stability

The researcher relied on the split-half method, which is commonly used because reliability is estimated by applying the test once, which saves a lot of time, effort, and cost (Al-Zahir, 1990:145). This method relies on dividing the test items into two sections, the first section includes the scores of the items. The individual section and the second section includes the scores of the marital items for the students in the survey sample, and the reliability between the two halves was extracted with the Pearson correlation coefficient, which was (0.8).7After correcting it with the Spearman-Brown equation, it reached (0.93It is considered a good reliability coefficient, because the reliability coefficient is considered good and high if it reaches (0.67) or above. (Abu Allam, 2004: 324)

– **Patch stability**

To correct essay test items, the researcher prepared a criterion for correction, presentedHA group of experts and specialists in teaching methods, measurement and evaluation,Their agreement rate was (80%), and after taking into account the experts' observations, the researcher relied on the correction according to this criterion, so the total score was (two marks) for each essay paragraph.

1- The agreement is the house of corrections

2- Agreement between raters

The researcher used the correction with another corrector (Willi, 1998: 400). In order to verify the stability of the correction, the researcher agreed with the subject teacher to correct the essay test items and agreed with her on the size of the score and not to place signs or marks on the answer sheets to reduce the

influence of the corrector after he had paththeyOn how to correct the reliability sample answers according to the correction criterion, so the Cooper equation was used to determine the percentage of agreement between the researcher and the subject teacher *, so the reliability coefficient in the correction was (85%), which is a high reliability coefficient.

Ninth, statistical methods

The researcher used the following statistical methods

1- T-test (T-Test for two independent samples.
2- Pearson correlation coefficient.
3- Spearman-Brown equation.
4- Chi square ka2.
5- Difficulty factor equation for objective paragraphs.
6- Difficulty factor equation for essay paragraphs.
7- Discrimination coefficient equation for the substantive paragraph.
8- Discrimination coefficient equation for the essay paragraph.
9- The effectiveness of the wrong alternatives.
10- Cooper equation.
11- Effect size equation.

The fourth chapter: Presentation and interpretation of results

First: presenting the statistically significant result

The researcher applied the post-achievement test on TLapThe two research groups, then the arithmetic mean, standard deviation, and variance of the scores were extractedstudentsThe two groups (experimental and control), using the t-test (t-test) for two independent samples. The t-value was found, and it became clear that the difference was statistically significant and in favor of the experimental group at the level of (0.05), as the mean of the experimental group reached (69.97), with a standard deviation of (10.35), and a variance of (107.12), and the mean of the control group reached (60.71), with a standard deviation. (13.20) and with a variance of (174.24) if the calculated T value is (3.042), which is greater than the tabular value of (2,000).

Second: Presentation of the scientifically significant result:

The researcher calculated the effect size and used the equation for calculating the size, as the effect size measures the strength of the relationship between the variables present in the study. This means that the effect size is a number or evidence of the importance of the result of the study, such as the strength of the relationship between two variables or the change resulting from the intervention of the independent variable in the variable. dependent, using one of the statistical measures of effect size according to the research sample (Abdel Majeed, 2004: 15-53)..

Second: Interpretation of the results:

1- This strategy is based on activating the learner's memoryyenDo not neglect his previous knowledge foundationMWhich helps speed up learning and increase academic achievement. (Ahmed, 1984, 111).
2- The study of history works on the principleNumbering of teachersThis principle is one of the steps of this strategy (strategyNumbered heads) Which helped TLapTo increase collection. (Badawi, 2003:212)
3- Teaching history is based on a strategyNumbered headsGet your attentionLapIt stimulated his thinkingMAnd move his motivesMtowards the subject and its understanding, which made the history lesson more lively.

Chapter V: Conclusions, recommendations, proposals

First, the conclusions

1- Teaching with a strategyNumbered headsHe contributed to reorganizing the experiences and information he obtainedstudentsThe experimental group comparedWith studentsControl group.
2- Using a new strategy as a strategy (Numbered headsThe steps it contains and the positive participation of all students in the lesson led to an increase in their ability to achieve academic achievement in historical information for a longer period.
3- There is a need for itLapThe preparatory stage uses modern teaching methods to help himMWe must think, read, and research,

especially at this stage, which is considered a starting point for a new educational stage.

Secondly, recommendations

1- Taking into account individual differences between...LapAnd treating each student according to his type of intelligenceHAnd trying to reach the level expected of him in light of his potentialHIn light of the strategyNumbered heads.

2- Holding intensive training courses for the teacheryenAnd the teacheratIn history, on how to use modern strategies, including strategyNumbered heads.

3- Working on issuing a teacher's guideyenAnd the teacherflexibleIt includes modern teaching strategies for useMIn teaching history and distributing it to schools, including strategyNumbered heads.

Third: Proposals

1- Conducting a study on the effectiveness of the numbered heads strategy in acquiring historical concepts among middle school students.

2- Conducting a study on the effect of the numbered heads strategy in developing critical thinking for history among middle school students.

3- Conducting a study on the effect of the numbered heads strategy in developing creative thinking skills for history among fourth-year middle school students.

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