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The Effect of the P.L.A.N Strategy on Developing the Cognitive Representation of Fourth-grade Literary Students in the Subject of History

Abstract

The current research aims to identify the impact of the PLAN strategy on the development of knowledge for students of the fourth literary grade in the subject of history, and the researcher has put the hypotheses, including that there are no statistically significant differences at the level (0,05) between the average scores of the students of the experimental group who study the subject of history B (PLAN strategy) and the students of the control group who study the same subject (the usual method) in the post-cognitive representation test. Cognitive representation, tribal and dimensional.

The researcher chose two schools in the Samarra Education Department to conduct his experiment, the number of students of the research groups reached (69.) Students of (34) students for the experimental group and (35) students for the control group prepared a test of cognitive representation that consisted of (25) items, which were presented to a group of experts and specialists to verify the validity of the test and to analyze its paragraphs and calculate its stability, and after analyzing the results of the answers of the sample students and treating them statistically Using the appropriate statistical means, it was found that all the test items are valid, and to calculate the stability of the test, Couder-Richardson coefficient-20 was used, as the reliability was (0.84), which is Good stability factor.

After the procedures we figured to the average scores of the experimental group students in a test of cognitive representation and in favor of the post, and the results also showed a statistically significant difference between the average scores of the experimental group students in the pre and post tests Cognitive representation.

Keywords: P.L.A.N Strategy, Developing the Cognitive, Representation.

The Definition of Research

Introduction

Teaching with modern strategies is the effective approach to teaching in primary and secondary education. Among these strategies are metacognitive strategies, and students' use

of metacognitive strategies increases their awareness of what they are studying in the educational situation, "task awareness," how they learn optimally, "strategy awareness," and to what extent they have learned "performance awareness." As Rebecca sees Oxford that metacognitive strategies help students to

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organize their own knowledge and to focus, plan, organize and evaluate their progress in performance.

And that this importance can work on the development of all cognitive, psychological and social qualities of students. The subject of internal representation of knowledge has attracted the attention of researchers, and one of the studies that dealt with the efficiency of cognitive representation is the study of Muhammad (2006), which aimed to identify the efficiency of cognitive representation in the light of the Triple Bigs model among a sample of students. They were measured quantitatively and qualitatively in the study, and the study dealt with the efficiency of the cognitive representation of information in its relationship to learning outcomes (quantitative and qualitative outcomes) according to the Sulso division. From the results of the study, it is also possible to predict the efficiency of the cognitive representation of information through the students' grades in the entrance to learning.

Through the importance of the two variables above, researchers are trying to employ one of the metacognitive strategies (p.L.A.N) in the cognitive representation of middle school students. (Al-Hasso, 2003).

The Research Problem

Teaching history today faces many problems. Reliance on memorization and indoctrination prevailed by teachers in most of our schools. The goal of teaching history is to memorize facts and interest in cognitive aspects only, and to fill students' minds with as much information as possible without distinction or focus. What made teaching in our educational institutions today is limited to the students' ability to refine and develop their knowledge in developing their concepts and personalities in all its cognitive and non-cognitive aspects. Date.

However, our educational reality suffers from some shortcomings in the field of teaching methods.

Our education in all stages was limited to memorization only, especially education in the preparatory stage, which is in dire need of development, as well as recent developments in methods and strategies. It is necessary to keep pace with scientific development and In addition to the importance of the technical subject, history actually has an effective and distinctive role, but the methods and methods of its teaching are characterized by shortcomings and negative in some cases, due to the role that the teacher plays in the classroom by relying entirely on himself, which makes the student in a non-positive position as the recipient only (Al-Hissu, 2010).

The Importance of Research

The world is witnessing clear scientific and technological developments at the present time and changes that have had an impact on all the characteristics of knowledge, resulting in a huge accumulation of human knowledge, as it made rapid changes that have passed through the world and their effects are reflected in the educational field, thus imposing on education new responsibilities and tasks represented in how to deliver this huge amount From knowledge, new trends have emerged calling for the importance of the educational process to help it keep pace with this scientific progress and follow the modern approach and adapt to it, and thus it becomes a major system concerned with identifying and classifying educational problems related to aspects of learning while providing appropriate solutions to these problems (Khawaldeh, et al., 1995).

Therefore, it has become necessary to work on following a sequential plan, in which the curriculum is one of its main pillars, and social materials are distinguished by a prominent position among the curricula, as interest in these curricula has developed in planning, design, analysis and application in order for educational institutions to realize the importance of these curricula in reality and the extent of their impact on the events that occur in society. (Al-Khatib, 2003).

There must be modern teaching strategies that can be used in the educational situation, capable of addressing the obvious shortcomings in teaching methods, which called the researcher to use meta-knowledge strategies that have an effective role in modern research and studies in the educational world today, so we can say the urgent need for educational institutions To help students of different levels, tendencies and mental abilities to activate their metacognitive strategies by building educational curricula and programs that can carry out teaching plans capable of developing students' achievement and its impact on the educational process. In the subject of history (Aldrej, 2004).

Hence the importance of metacognitive strategies, including the (P.L.A.N) strategy, because of its advantages, including:

- Helping students develop their plans of action in the classroom for evaluation and reflection, as well as planning work before the implementation process and keeping pace with the procedural steps to know the level of awareness and the time required for it.
- It helps enable students to observe, observe and interpret the decisions they make in the lesson.

- Enables students to understand perception, not their actions, activities, and influence among their peers.

The cognitive representation is the structure that represents a unit of growth in a particular field of expertise, and this experience is measured for the individual by what he has of cognitive representations, as well as the main goal of the growth of cognitive representation is to reach the degree that textual texts can be used as cognitive images stored by the individual who is trying to transfer them to others through words. It is characterized by distinctive characteristics, so the thinking that appears to the individual through the words he uses reflects his methods of perceiving and organizing experiences in the form of images called cognitive structures (Abu Jado, 2000), and the importance of the current research can be demonstrated through the following:

- The importance of history as an important part of the social sciences, as it works on developing the students' knowledge abilities, and it is one of the essential subjects in the preparatory stage that has a clear impact on refining the students' personalities.
- The importance of using modern strategies in teaching to develop the cognitive representation of students, because students suffer from the difficulty of absorbing history at this stage.

The Research Aims

This research aims to know the effect of the P.L.A.N strategy in developing the cognitive representation of fourth-grade literary students in the subject of history.

Hypotheses of Research

To achieve the aim of the research, the following hypotheses were formulated:

- There are no statistically significant differences at the level (0,05) between the average scores of the students of the experimental group who study history b (strategy P.L.A.N) and the students of the control group who study the same subject (the usual method) in the post-cognitive representation test
- There are no statistically significant differences at the level (0,05) between the average scores of the experimental group students who study history b (the

P.L.A.N strategy) in the tribal and dimensional cognitive representation test.

Limitations of the Research

- A sample of fourth grade literary students in middle and secondary day schools in Salah al-Din Governorate / Samarra District.
- Some topics of the history book of Arab and Islamic civilization for students of the fourth literary grade for the academic year (2018-2019) in the first semester.

Defining Terms

- Impact: "It is the result of a desirable or undesirable change that occurs in the learner as a result of the learning process" (Shehata and Zainab 2003)
- Strategy: "as directed plans to perform tasks in a successful manner, or to produce systems to reduce the level of dispersion between the individual's current knowledge and the goals he wishes to achieve (Schunk, 2000).

Theoretical Aspects

Metacognition Strategies The concept of metacognition arose at the beginning of the seventies of the twentieth century to add new ideas in the field of educational and psychological sciences, especially in cognitive psychology and teaching methods, and this concept succeeded in the educational and academic field, especially in the field of experimental studies and theoretical discussions in Many topics, including thinking, intelligence and learning skills, and the development of the concept of metacognition in the last century in its eighties, as a new strategy and method in teaching and in the development of thinking, learning and non-thinking skills, and it still attracts the attention of many researchers and this was confirmed by.

The origin of the concept of metacognition goes back to two stages of development, where the first emergence of the metacognition strategy is as follows (Abu Jado and Nofal, 2007):

First: Increasing the interest of scholars and researchers in the processes of learning and intellectual moderation through knowledge and focus on the use of visible language, through the various important situations that the individual goes through.

Second: The scientific development that took place in technological progress, the explosion of knowledge in the fields of

computers, the knowledge revolution that took place in the fields of life, and the cognitive systems called the information processing theory (Al-Maliki, 2011).

Metacognition skills are among the most prominent mental skills, which are one of the components of behavior in information processing, as they develop with experience and chronological age and focus on controlling all thinking activities to solve problems and using all abilities and cognitive tools for individuals with every interaction to meet the requirements of knowledge (Jarwan, 2010) and refers to the following:

- Planning - Evaluation - Monitoring - Control.
- Defining the task - representing the task - formulating a strategy - identifying sources - monitoring the implementation of the task - evaluating the completion of the task.
- Knowledge about knowledge - declarative knowledge - procedural knowledge - conditional knowledge.

Organizing knowledge - planning - managing information - controlling and monitoring - correcting learning errors and evaluating.

Determining learning objectives - managing time - following up on understanding - using learning resources - self-monitoring - determining the basic requirements.

- Self-organization - task performance skills - procedural control skills
- Goal setting - monitoring - organization - evaluation (Bahloul, 2004).

Strategy P.L.A.N

The credit for inventing the Plan strategy goes back to the American scientist David Caverly, in the year 1995 AD represents the birth of the P.L.A.N. strategy, which he classifies as a graphic organizer that helps students to summarize the reading group. Rather, it is (B - D - A) that is used before, during and after reading the text (Caverly, 2011), Each letter of the term denoting it (P.l.a.n) indicates a stage of applying this strategy in education. The researcher has prepared an illustrative scheme for this strategy as follows:

The letter (P) refers to the verb (predict) with which the first stage of the application of this strategy begins.

The letter (L) indicates the verb (determine) with which the second phase of this strategy begins.

The letter (A) refers to the verb (add) with which the third phase of this strategy begins

The letter (N) refers to the verb (observed) that begins the fourth stage of this strategy (Atiya, 2010).

Cognitive Representation

"It is a coding and deduction in which the learner sees, perceives or translates what is present around him of stimuli in his environment" (Abu Jadu, 2008) and it is also the basic process through which new ideas are stored in associative relationships with the ideas that exist in the cognitive structure of the individual (Al-Zayyat, 2006).

The studies reviewed by the researcher center that there is a relationship between the cognitive representation and the cognitive structure, as the cognitive structure is characterized as a basic concept in cognitive growth in the process of cognitive representation of mental information that includes the integration of new data with the original knowledge structures And that the cognitive representation of information is a complex basic procedures consisting of a number of simple mental operations that design a series of levels in a hierarchical form of levels, where memorization and storage come at the beginning of the hierarchical base and means keeping the information in its raw, initial form, and keeping it in the knowledge building of the learner or his memory In order to represent a part of it, and at the second level comes the linkage and classification, and this means linking the information received with those that exist in the learner's memory and categorizing it into categories that facilitate retrieval Ha, and synthesis comes at the third level, which means cross-fertilization between the deposited and old information in the memory.

At the fourth level, derivation and generation come, and it means the generation and deduction of new information, for new meanings and ideas from that information in memory (Al-Atoum, 2010) from the foregoing, the researcher concludes the following:

1. Cognitive representation is cognitive mental processes through which auditory sensory stimuli are transformed in their raw form, which were received into a new form of derivations, combinations, or modifications, which differ in terms of quantity and quality from their original form.
2. Cognitive representation is cognitive mental processes through which linking relationships are built between the combinations and modifications that

were received with those previous ideas stored in memory.

Cognitive representation is a cognitive mental process through which the benefit of sensory stimuli that has been known and stored in short-term memory.

Previous Studies

1 .Study (Al-Hijami, 2015)

The study aimed to know (the effect of using the PLAN strategies and activating prior knowledge in acquiring physical concepts for fourth-grade science students). The research consisted of three groups consisting of (100) students, 34 students for the first experimental group and (33) students for the experimental group. The second and (34) experimental group, and the failed students were excluded, their number was (16) from the three groups.

The duration of the experiment took two semesters, and this experiment was successful for the study, and this trial version consisted of (48) test items from the multiple-choice test. The researcher prepared it in its final form from (60).

2 .Study (Mohammed, 2007)

The current study the study aims to (recognizing the effectiveness of a remedial education program in developing representation in the sixth grade of primary school) and it consisted of (42) sessions distributed among the sixth and fifth levels that include cognitive

representation. The researcher used the cognitive representation test between the five levels.

The simple researcher used the following (Mann, Whitney, Coxson test and z-value).

Aspects of Benefit from Previous Studies

1. Determining the dimensions of the problem, defining the experimental design, and benefiting from setting and formulating behavioral goals.
2. Determine the variables with which the researcher rewarded the three research groups (Two groups, experimental and control).
3. Identifying the steps for building an achievement test, by looking at similar tests in previous studies.

Research Procedures

Choosing the experimental design is the first step and the optimal method that falls on the shoulders of the researcher and should be implemented because it is the right choice that ensures accurate and sound results when studying human phenomena in general. The design was tight and appropriate for the phenomenon to be studied (Daoud and Anwar, 1990), so that the process of control in this research remains partial, regardless of the measures taken in it. Partially controlled, pre-test and post-test, and diagram (1) illustrates this.

Table 1.

Experimental design

The group	Post test	Dependent variable	Independent variable	Pretest
Experimental control	Cognitive representation test	Cognitive representation test	P.L.A.N. strategy	Cognitive representation test
			Ordinary	

Research Community and Sample

The research community means the total group with the elements that the researcher seeks to generalize the results related to the problem, and that defining the research community is one of the main tasks in the experiment that the researcher must carry out accurately and mastery. A set of classroom procedures (Al-Ajili et al., 2001).

The current research community includes governmental preparatory and secondary schools for the morning study for boys in Salah al-Din Governorate, and the aforementioned

schools intentionally to apply his experience. In the usual way to represent the control group, and the researcher adopted the simple random drawing method, so Division (B) was the experimental group that will be taught using the "PLAN" strategy, and Division (B) from Al-Mizhar School, the control group that will be taught in the usual way, the number of students in the two groups reached (69) students, with (34) students of the experimental group and (35) students of the control group after excluding the failed students, and they were excluded from the final results while keeping them in the class in order

to preserve the school system and the confidentiality of the experiment because the researcher presented the students with the form

of a new teacher for history and table (2) shows this:

Table 2.

The number of students in the two groups before and after exclusion

The group	Section	Number of students after exclusion	The number of students who have failed	Number of students before exclusion
Experimental	B	34	3	36
Controlling	B	35	4	39
Total		69	7	76

Equivalence of Groups

1. The chronological age calculated in months. The researcher obtained the chronological age of the members of the two groups by reviewing the school card of each student to ensure the correctness of the information. Then the researcher converted the ages into months. It is clear from Table (2) that the average score of the experimental group that

was studied according to the "P.L.A.N." strategy was (197,94) with a standard deviation of (7.31), while the control group that was studied in the traditional way reached the arithmetic mean (195,32) with a standard deviation (10,23), which means that the two groups are equivalent in the chronological age variable. As shown in Table (3).

Table 3.

Chronological Equivalence

The group	The number of sample members	S.M.A.	Standard deviation
Experimental	34	197,94	7,31
Controlling	35	195,32	10,23

2. The grades of the final exam for the previous year in the subject of history (2017/2018) and after the researcher obtained the grades of the final exam for the third intermediate grade in a history subject for the students of the three experimental and control research groups from the school records and it appeared that the average grades of the experimental group that were studied according

to the strategy " P.L.A.N." was (61,21) with a standard deviation of (6,39) in terms of the control group that was studied in the traditional way, the arithmetic mean reached (62,31) with a standard deviation of (10,77), and this means that the two groups are equivalent in the variable of final grades for the history subject For the academic year (2017-2018). Table (4) shows this.

Table 4.

The grades of the final exam for the previous year

The group	The number of sample members	S.M.A.	Standard deviation
Experimental	34	61,21	6,39
Controlling	35	62,31	10,77

3. Tribal cognitive representation test The researcher prepared the cognitive representation test and the test items were presented to a group of experts and specialists in order to verify the validity of the paragraphs and in the light of their opinions and observations, some items were modified, and then the researcher applied, on Tuesday 9/10/2018, the tribal cognitive representation test On the three research groups

before starting the experiment as indicated in the research tools, and after completing the application of the test and correcting the answers, and obtaining the test scores. The results showed that the average score of the experimental group that was studied according to the "PLAN" strategy was (14,44) with a standard deviation of (4) 79) As for the control group, which was studied in the traditional way,

the arithmetic mean was (14.06) with a standard deviation of (3.94), which means that the two groups are equivalent in the variable of the tribal

cognitive representation test, and table (5) shows this.

Table 5.

The results of the arithmetic mean and standard deviation of the three research groups in the cognitive representation

The group	The number of sample members	S.M.A.	Standard deviation
First test	34	14,44	4,79
Controlling	35	14,06	3,94

Adjusting Extraneous Variables

Despite the development of educational and psychological sciences and their attempt to catch up with the natural sciences in the accuracy of procedures, and the frequent use of the experimental method by specialists in this field, they are fully aware of the difficulties they face in isolating or controlling the variables of the phenomena they study, because behavioral phenomena are immaterial and complex phenomena. The factors overlap and intertwine (Hammam, 1984), so the researcher controlled some of these variables that may affect the credibility of the results of the experiment, as follows:

1. Experimental extinction: it means the effect resulting from leaving a number of students (the research sample) and their interruption through dropout, death, or transfer during the experiment. As for the current research, students were not exposed to abandonment, dropout, death, dropout, or transfer from school for a long period of time. Experience. Except for the individual absences that the two research groups were exposed to.
2. The effect of the tribal test: The researcher determined this factor by applying the tribal cognitive representation test.
3. Maturity: It means the growth processes (physiological and biological) that occur in individuals who participate in the duration of the experiment, which may lead negatively or positively on the results, and the maturity factor represents a threat to internal honesty through the changes it causes that can be observed on the dependent variable (Mulhem, 2010) The researcher controlled the effect of this factor by selecting the experimental design that used a control group corresponding to the two groups, and applying it to the experiment in a unified time period.
4. Ensuring confidentiality of the experiment: The researcher agreed with

the administration and all the teaching staff since the beginning of the school year for the academic year (2018-2019) not to disclose the nature of the task performed by the researcher so that the students' behavior would not be affected, and in order for the results of the experiment to be as accurate as possible, so the school administration informed its students The researcher is a new teacher who was transferred from another school.

5. Duration of the experiment: The duration of the teaching experience in history was equal for the two groups, as it started on Monday, 14/10/2018, and continued until Monday 14/1/2019.
6. Study subject: The researcher adopted a history book (Arab-Islamic Civilization) for the academic year (2018-2019)), which is scheduled to be taught by the Ministry of Education, and the subject was unified for the two groups, the first five chapters.
7. The teacher (researcher): The researcher studied the two groups himself, and this gives the results of the experiment a degree of accuracy and objectivity, and the researcher believes that allocating a teacher to each group may make it difficult to return the results to the independent variable, as it may be attributed to one teacher's mastery of the subject more than the other. or to his personal characteristics or other factors.
8. Distribution of classes The researcher controlled this factor through equal distribution of lessons, as the researcher was studying two classes per day, according to the curriculum of the distribution of classes established by the Ministry of Education (for the subject of history) and this was done in agreement with the administration of the two schools to organize the schedule and distribute the classes of history subject Arab and Islamic civilization For the fourth literary grade and table (6) shows this.

Table 6.

Distribution of the history classes of the Arab Islamic Civilization

Day	The second lesson 8,50 A.m.	Lesson Four 10,30 A.m.	The fifth lesson 11.20 A.m.
Sunday	Experimental group	Controlling group	
Monday	Controlling group		Experimental group

Research Requirements

- **Cognitive representation test:** Since the current study requires the preparation of a cognitive representation test for students of the fourth literary grade (the research sample) and because there is no ready test, suitable for the current study, and after referring to Arab and foreign sources, Iraqi and Arabic studies and literature, the researcher was able to prepare a test consisting of (5) Levels namely.

- The first level (the feature of synthesis): It consists of three questions with the number (3,2,1) that require answering and linking words to form a sentence or arranging sentences to compose an idea or concept with a cognitive meaning
- The second level (meaning feature): This level consists of a reading text followed by three questions with numbers (6,5,4) according to the multiple-choice test.

The third level (retention feature) The retention feature consists of reading text and linking that text to pictures, followed by (4) questions with numbers (1,9,8,7). The method of answering is organized according to multiple choice.

- Fourth level (linking and derivation feature): This level consists of a reading text followed by (4) questions with numbers (11, 12, 13, 14). The method of answering is organized according to multiple choice.
- The fifth level (the characteristic of mental flexibility) consists of a text to be followed by reading (3) Questions with numbers (15, 16, 17), which require the examinee to write essay answers.
- **Validity of the test:** For the purpose of verifying the availability of this characteristic in the cognitive representation test, the researcher used two types of honesty:

1. Apparent honesty: Virtual honesty is a type of honesty that indicates that the test items are related to the measured behavior, as many researchers resort to this type of honesty, as the test or questionnaire is presented to a group of experts and specialists in the fields of education and psychology. Measurement, evaluation, teaching methods, supervisors and specialized teachers. The researcher agrees with what Ebel referred to that the apparent honesty determines the extent to which these paragraphs are related to the variable to be measured, and is represented by the general appearance of the tool in terms of its paragraphs and how and how appropriate the tool is for the purpose for which it was set and from the above depends this type On the observations a number of experts (Jarwan, 2011).
2. Content validity: It is the honesty that is achieved by conducting a logical analysis of the test materials, paragraphs and clauses to determine the extent to which they represent the test subject and the situations included in the test, a careful and orderly examination (Ghanim, 2010).
3. Difficulty coefficient: Finding the coefficient of difficulty is in order to identify those who give a correct answer and those who give a wrong answer. (Al-Ajili et al., 1990), and the difficulty level was calculated for the test items after the researcher calculated the difficulty coefficient for each of the test items. It ranges between (0,33) and (0,65), and the test items are considered acceptable if their ratio ranges between (0,20) and (0,80).
4. Paragraph discrimination coefficient is sometimes called the validity coefficient or the item ability coefficient, and it is known in general as the measurement of the extent of the test's ability to distinguish between high students and low students (Al-Ghareeb, 1985), and after calculating the power of discrimination of each of the test

paragraphs, it was found The researcher said that it ranges between (0, 31) and (51, 0), and the test items are good if the strength of their discrimination is (0, 30) or more.

5. Test stability: It means consistency in the results. The test is considered stable if we get the same results from it when reapplying it to the same sample under the same conditions (Ferrickson, 1990), In order to verify the reliability of the cognitive representation test.

The researcher used the method (Coder Richardson-20) because it deals with tests in which the degree of correction is (one or zero) and the test reliability coefficient was (0,81).

average scores of the experimental group students who study history b (strategy P.L.A.N.).

And the students of the control group who study the same subject (the usual method) in the dimensional cognitive representation test. It is clear from table (6) that the average scores of the experimental group that were studied according to the "P.L.A.N." strategy was (17,32) with a standard deviation of (4.03) while the control group Which was studied in the usual way, the arithmetic mean reached (15,63) with a standard deviation of (3,34), where the researcher calculated the arithmetic mean and the standard deviation of the scores of the dimensional cognitive representation test, table (7) illustrates this.

Research Results

The first hypothesis of the research states that "there are no statistically significant differences at the level (0,05) between the

Table 7.

The arithmetic mean and standard deviation of the scores of the two groups in the post-test cognitive representation

The group	The number of sample members	S.M.A.	Standard deviation
Experimental	34	17,32	4,03
Controlling	35	15,63	3,34

The second research hypothesis states that there are no statistically significant differences at the level (0,05) between the average scores of the students of the experimental group studying history b (strategy P.L.A.N.).

In the pre-posttest cognitive representation test. It is clear from Table (7) that the average

score of the experimental group that was studied according to the "PLAN" strategy was (15.00) with a standard deviation (4.98) in the post test, while the arithmetic mean after the post-test was (17,32) with a standard deviation (4, 03) This indicates that there are statistically significant differences at the level (0,05) in the post test.

Table 8.

T-value of the cognitive representation test for the experimental group (for two correlated samples)

The group	Number	S.M.A.	Standard deviation	Average differences	Deviation of the differences	T-value		Statistical function
						Calculation	Tabular	
Previously experimental	34	15,00	4,98	32,2	26,4	18,3	2,04	Function
After experimental	34	17,32	4,03					

Interpretation of Results Related to Cognitive Representation

1. The use of the experimental group, the P.L.A.N strategy, enabled the students to have a more accurate understanding of the knowledge content that they learn clearly, as it enabled the students to know the beauty areas in the idea and imagination, and their arrangement and sequence, which increased their

2. The experimental group's use of the P.L.A.N strategy in teaching history has an effective effect in increasing students' cognitive representation, ensuring quality performance, representing meanings, understanding, summarizing, and knowledge of intellectual and linguistic methods.

3. The experimental group's use of the P.L.A.N strategy provided the opportunity for each student to participate in the classroom to practice some intellectual activities that contributed to arranging and forming positive attitudes with each other, which contributed to increasing their knowledge representation.

Conclusion

- The experimental group's use of the P.L.A.N strategy is linked according to the constructivist theory, which generated in the students an intellectual depth that led to adaptation and harmony with the curriculum.
- Studies in education, educational and psychological sciences emphasized the need for students to participate in the lesson and to be a positive, effective and active researcher in knowledge.

Recommendations

- Directing history and social studies teachers to take care of using modern strategies in teaching history at all academic levels.
- Benefiting from the cognitive representation test prepared by the researcher to train students on the five areas included in it, and the teachers' adoption of it as a tool for evaluating students' cognitive ability and developing their scientific abilities.

Proposals

- Conducting an experimental study in the variable of multiple intelligence.
- Conducting a comparative study between P.L.A.N's strategy with other models and strategies to identify its preference in teaching historical subjects.

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