The Effect of Co-Education on Students' Achievement in Murals for Students of the Art Education Departments, University of Babylon

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Abstract: The current research aims at (the effect of co-education on students' achievement in the subject of murals for students of the departments of art education at the University of Babylon).

The current era is the era of science, technology and progress and is witnessing many rapid changes and amazing developments in various fields of knowledge, which increases the demand for education in large numbers that exceed the capabilities of educational institutions, which makes them face difficult tasks, the most important of which is developing and modernizing educational methods, teaching methods and techniques. The importance of the research The researcher presents future visions for modern trends in learning together to be more appropriate than the methods and methods currently used in our schools and universities. The main objective of the research aims to know the effect of learning together on students' achievement in the subject of murals for students of the departments of art education, University of Babylon, by achieving the null hypothesis and its effect on motivating and thinking of students in the Department of Art Education, College of Fine Arts, University of Babylon, and identifying this effect, if it exists, leads to the existence of statistically significant differences or not, by identifying the skills of students possessed by males and females in both groups, and whether these differences are statistically significant in favor of the experimental group or in favor of the control group. Using the experimental analysis method, a study was conducted on students of the College of Fine Arts, Department of Art Education, University of Babylon based on a pre-prepared curriculum. The research sample was selected (42 male and female students) that included the experimental group (21 male and female students each), and the control group (21 male and female students each). The statistical results showed that the averagegrades students The group empiricism he(25.67)And he is It varies. on middle grades students The group The officer(22.00), To test indication this Difference I run a test t on two equal independent samples, so the calculated t value is (8.17), significance level (0.05), degree of freedom (40), greater than (2.00), which indicates that this difference is statistically significant, which means that the experimental group that learned according to the common learning method outperformed the control group of students who studied according to the traditional method in cognitive tests, thus rejecting the null hypothesis.

First, the research problem

The current era is the era of science, technology and progress, and is witnessing many rapid changes and amazing developments in various fields of knowledge. This era is witnessing the largest population explosion ever seen, which increases the demand for education in large numbers that exceed the capabilities of educational institutions, making them face difficult tasks, the most important of which is developing and modernizing educational methods, teaching methods and techniques for the better so that these institutions can achieve their set educational goals. Education has begun to undertake tasks that are distributed over several basic axes, the most important of which is providing the appropriate conditions to bring about the desired changes in the behavior of learners. This can only be achieved by overcoming all the difficulties and obstacles that hinder the educational process in its various stages in order to prepare an educated generation capable of facing the challenges of the era and keeping pace with the changes that occur in all areas of life. Hence, the need arose to develop the

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educational and teaching process and move learners towards development and transformation from the classical methods and approaches in education based on memorization, rote learning and indoctrination towards modern methods and approaches that depend on stimulating thinking, creativity and inference.(Al-Taie2007)

Second: The importance of research

The importance of the research lies in presenting future visions for modern trends in learning together to be more appropriate than the methods and approaches currently used in our schools and universities, which do not agree with our purposes. Because what we lack at the present stage is the integration of the elements of educational and pedagogical policy based on a clear philosophy based on a comprehensive social philosophy and the clarity of its objectives and its consistency with the existing political, social and economic system and its ability to anticipate future horizons and develop appropriate alternatives for potential variables.

Third: Research objectives:

The research aims to know the effect of learning together on students' achievement in the subject of murals for students of the art education departments in Babylon Governorate.

Fourth: Research hypotheses

There are no statistically significant differences at the level (0.05) in the achievement of students who study using the combined learning method and the traditional method.

Fifth: Research limits

➤ Time frame: Academic year 2021-2022.

➤ Spatial boundaries: Babylon Governorate - Department of Art Education - College of Fine Arts - University of Babylon.

➤ Subject boundaries: Using the learning method together and the mural material

Sixth: Determine search terms

1. The effect:

Ibn Manzur (2003) defined the trace linguistically as the remainder of something, and the plural is traces and athar. To trace something means to leave a mark on it, and the trace with the fat-ha: what remains of the drawing of something, and I came out of its trace and in its trace.

2. Learning

It is the process of semi-permanent changes in an individual's behavior that are not directly observed but are inferred from the individual's perceived performance or behavior and result from practices that arise from changes in the individual's performance.

3. Education

It is from knowledge, and he taught him something by teaching, so he learned, and from this is the saying of God - the Almighty -: "And He taught Adam the names - all of them. Then He showed them to the angels and said, 'Inform Me of the names of these, if you should be truthful.'" As what is meant here by teaching

4. Education together

It is one of the teaching methods that contribute to motivating students and encouraging them to participate effectively in classroom and extracurricular activities.

5. Collection

Al-Khudhair defined it as: the extent to which the student has achieved educational goals as a result of his study of a subject of study (1996: p. 81).

6. Murals:

I knew him Al-Basri (2005)

"A two-dimensional structure executed on an architectural space using a variety of techniques, styles and colours to express the social philosophy from which it was born and its general religious and cultural beliefs, cast for a purpose according to the service of specific measurements."

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Chapter Two

Theoretical framework

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Axis 1: Learning Together

First: The beginnings of learning together

Interest in learning together began a year ago.1900 ADHowever, studies and research did not begin to focus on its applications until the beginning of the seventies, and different patterns were developed to apply learning together in the classroom. Among these methods is the student work team method developed by (Salvian) 1983 based on psychological theories. Also, (David and Rogers) 1989 developed the learning together method based on the theory of social psychology.(Imran2003) Rogers Johnson and David Johnson (1991) and Slavin (1995) also confirmed that research in the field of learning together in all its forms indicates that students learn tasks more and like them in a tangible way, and feel positive feelings towards their educational achievement when they complete the activity using the learning together method.(Al-Balushi2002)

Second: The concept of learning together

The concept of collaborative learning, as one of the teaching methods introduced by the contemporary educational movement, is not new to educators and teachers, as they use small groups from time to time to carry out one of the various educational activities. Learning is a situation in which group members depend on one or two students to complete the work, and learning together finds an organizational structure for the work of student groups that immerses all members in learning according to clearly defined roles, while ensuring that each member of the group learns the educational material. Collaborative learning includes small groups of students (2-6), which enables them to work together effectively. And help each other to improve and achieve common educational goals. Student performance is measured by the progress of group members in performing the tasks assigned to them by comparing them with pre-set standards. The basic characteristics and elements that distinguish educational groups from other types of groups are that not all groups are collaborative groups, and merely placing students in a group to work together does not make it a collaborative group.

Third: Basic principles of learning together

1. Reliance on mutual learning: It includes two important elements:

a. Self-education (learning the subject assigned to him).

b. Ensure that all individuals have learned.

2. Reinforcement (direct interaction):

Learning together requires face-to-face interaction between students through which they reinforce each other's learning and success. Encouraging students to teach each other helps in the emergence of healthy social patterns. Reinforcement has great value in the learning process, as it can increase learner participation and encourage both good and weak learners to raise their level.

3. Individual assessment (individual issue)

Individual evaluation is a matter of each individual in the group about his contributions and knowing his level and the extent of their need for assistance, because the main goal of learning together is to make each individual better than if he worked alone. Each member of the group is responsible for contributing his share in the work and interacting with the rest of the group members positively, and he

has no right to interfere in the affairs and work of others. The group is also responsible for understanding and achieving its goals and measuring the extent of its success in achieving those goals and evaluating the efforts of each of its members. When the performance of each student is evaluated and the results are returned to the group, individual responsibility appears.

Group assessment (group treatment):

It is an evaluation of the group's work as a whole and the work of each individual independently, and identifying the work of the individuals that contributed to progress towards the goal and which work was weak for progress, and then the group is able to make a decision about which work to continue with or abandon.

4. Relationship skills

It is of great importance for students to learn academic tasks along with the social skills needed for cooperation (such as leadership, decision-making, building trust and managing conflict) for the success of learning groups together. Because the skills related to interpersonal relationships and small group work form the basic bond between students.

Axis II: Murals

First: Philosophical mural:

Mural art is one of the arts that has accompanied man since the beginning of time, during his pursuit of the unknown. Continuous murals have been discovered on the walls and ceilings of caves, temples and residential communities, as well as in areas associated with pottery construction. Mural art is also considered one of the most important cultural artifacts in Mesopotamia, where the ancient Iraqi artist learned about this art and was able to innovate in it, especially since his drawings covered large areas of the walls of buildings and religious sites, and these sites were the most important cultural document in Iraqi culture. Murals were created in both hand-drawn and carved types on the walls of caves and rocks. During ancient times, indicating the breadth of cultural expansion,

The interpretations and theories differed in explaining its origin, and by looking at all these interpretations, it is possible to note the confirmation of the social role of these drawings and the efforts of the early artists to express the spirit of the group and their ideas and beliefs, and it becomes clear to the researcherthatFrom all these interpretations, it falls on a straight line, the ends of which are benefit and beauty. Between the benefit that man gets from the shapes drawn on the wall, which contribute (according to their beliefs) to repelling evil, as he used to draw animals on his cave, trying to convey the events that he goes through during animal hunting campaigns, or his struggle with them in defense of himself, so he used to draw the animals that he fears and that he hunts while in the positions of the watchful or the afraid, and this corresponds to the personal photographs that people decorate their homes with in the current era, and between the desired beauty through drawing abstract shapes with the motive of beautifying the walls of caves, which is the form that corresponds to the interest of man today in organizing his home and its interior design.(Al-Dalfi2012)

Second: Historical mural painting: -

In ancient times, man inhabited various parts of the world, including the lands of the Tigris and Euphrates Valley. He lived in a constant struggle with various natural factors, and despite his simple capabilities, he was able to win this struggle, and he was able to make the first achievements and inventions in the course of human life. At that time, man's habitation was concentrated in mountainous areas, relying on what nature generously provided of caves and rock shelters to be headquarters and shelters that protected him from the severity of the cold. He depended for his food on hunting animals and collecting fruits and wild plants, meaning that he collected food, not produced it with his own hands(Sahib2010)

The Paleolithic era is considered the beginning from which man began to record his feelings, thoughts, and observations inside caves (on their walls). Although the motivation for these drawings differs from

one era to another, the abundant evidence indicates the extent of human need to transfer their experiences and transform them into pictorial symbols

(Nobler1987)

Among the aesthetic characteristics used in the style of formulating the material. The researcher will review those types and styles of artistic formulation in the plastic work, which are:

1. Mosaic

This type of drawing and surface decoration that covers the walls consists of pieces of solid materials of different types and colors such as ceramics, colored glass, shells and stones after they are arranged together and fixed with a binding material arranged in a way that forms a decorative model or a pictorial design.

2. Fresco

This term originally comes from the Italian language and means fresh. The drawing is carried out on the wall when its whiteness (plaster) is soft and moist. Lime (calcium hydroxide) is the intermediate in the manufacture of the color and is the basic material from which the prepared painting ground is composed. The area of the surface prepared for the drawing is equal to the period of time required to complete the drawing before the surface dries so that the color is absorbed and enters the lime mortar, thus ensuring that it lasts longer.

3. Psycho

It is the process of drawing on different dry plaster floors, using casein, watercolors and colloidal dyes. A quantity of glue is prepared with a little alum added (to prevent mold), and the color oxides (which are in the form of powder) are mixed separately with the glue colors, after which the coloring is started using drawing tools.

4. glazed tilesDecree:-

Mostly square pottery tiles, of different sizes, on which drawings are carried out with colored glazed oxides. After entering the kiln at high temperatures, they come out glazed, and are then taken to the designated wall for a digital system to be installed on it to create a mural with bright and shiny colors. (Odisho1987)

Third: Murals in Mesopotamia: -

One of the oldest cities in the world, in the history of human civilization, dates back to the civilization of Mesopotamia, which was inhabited by different peoples and governments such as the Sumerians, Babylonians and Assyrians, where the greatest artistic architectural monuments were built. The arts of Mesopotamia greatly influenced the arts of the neighboring countries, as the peoples of the Near East used the writing method used by the people of Mesopotamia, each according to his language. The word Mesopotamia or Mesopotamia (Mesopotamia) refers to the flat area on both sides of the Tigris and Euphrates rivers. We must mention here that civilization in this region grew and developed not only between the rivers, but mainly on both sides.(Al-Naimi2011)

Chapter Three

Search procedures

First: Experimental design

The experimental design was chosen for two independent samples with a post-test.

Second: Research community

The research community in the current study consisted of first-stage students - Department of Art Education - College of Fine Arts - University of Babylon) for the academic year (2021-2022), first semester, morning study, who study the murals course prescribed in this academic stage, numbering (126), including (29) male students and (97) female students.

Third: Research sample

The University of Babylon, College of Fine Arts, was chosen intentionally because the necessary conditions for the experiment were available at this university.

The researcher classified the samples used in the current research into:

1. Experimental sample: studied according to the learning together method, and their number was (21) male and female students.

2. Control sample: studied according to the usual method, and their number reached (21) male and female students.

3. Survey sample: (10) students were selected to identify the efficiency of the support team and the difficulties facing the sample.

4. Construction sample: It was selected and its number was (70) male and female students.

Fourth: Equivalence of the two research groups

Before starting the experiment, the researcher was keen to ensure that the students of the two research groups were statistically equal in some variables that he believed would affect the integrity of the experiment, as "not controlling the variables would reduce the researcher's ability and intent to reduce the effect of the independent variable during learning. These factors are (the students' chronological age, previous experience, and scientific background). The researcher obtained information about the aforementioned variables directly from the students through a special form that the researcher prepared and distributed to the students with a cognitive test that included a knowledge test about this knowledge. The following is an explanation of the mechanisms of statistical equality in the variables between the experimental and control groups in the field of research.

1. The chronological age of the variable is calculated in months.

Table No. (1) shows the equality of students' ages expressed in months.

Statistical significance	Significance level	T-value		Degree of freedom	Standard deviation	Arithmetic mean	number Students	The group
		Tabular	Calculated					
Non-moral	0.05	1.68	0.89	40	4.28	228.24	21	Experimental (Q2)
					3.97	228.19	21	Officer (Q1)

1. previous experience variable

Table No. (1) It shows the equivalence of the two research samples according to the previous experience variable.

Statistical significance	Significance level	T-value		Degree of freedom	Standard deviation	Arithmetic mean	Number of students	The group
		Tabular	Calculated					
Non-moral	0.05	1.68	1.45	40	1.48	20.90	21	Experimental (Q2)
					0.97	20.33	21	Officer (Q1)

Fifth: Research tools

The current research required the creation of a cognitive achievement test. The construction of this test is of great importance to the educational designer's office because it facilitates the examination of the information and cognitive abilities of students (target population) regarding the subject of murals. To achieve this, the researcher carried out the following procedures:

1. Cognitive test construction:

The researcher prepared a cognitive achievement test consisting of (20) paragraphs based on sources, literature, previous studies and research that relied in their procedures on designing teaching plans together and in light of educational and behavioral objectives, and the content of the scientific

material. It is an objective test as it included (multiple choice, fill in the blanks) as they are the most common and used tests. The test became composed of two questions, containing (20) paragraphs. (One and a half points) were assigned to each paragraph for the first question consisting of (10) paragraphs (multiple choice) for the correct answer and (zero) for the wrong or left answer. As for the second question, there were (10) blanks for each blank (one and a half points) for the correct answer and zero for the wrong answer. Thus, the total score became equal to (30) points.

2. Instructions for answering the cognitive test paragraphs:

The researcher attached an instruction sheet for the test containing information about the student, the objective of the test, the number of paragraphs, the time required to answer, and the distribution of marks among its components. The test design included a direct way of addressing the question on the test paper, and students were assured not to leave any question unanswered. Their answers must follow the logical sequence of the paragraphs.

3. Cognitive test validity:

The intended meaning is the degree to which the test measures what it is intended to measure, and to verify the legitimacy of the test items, the verification method used is called face validity, which is derived from the necessity of verifying validity. The general appearance of the test, which is determined by the type of vocabulary it uses, the clarity of its description, its suitability for the sample individuals, and the extent of its success in achieving the research objectives.

The researcher presented the test, which consisted of several pages of texts, instructions and answers, to a group of experts in the fields of (plastic arts, art education, measurement, evaluation and design), some of which were modified according to the experts' recommendations without deleting any part of the text. The test was re-presented to the experts after modification and their approval was obtained. As a result, the test maintained the number of its paragraphs (20) paragraphs, and was considered a project in evaluating students' achievement in the subject of murals.

4. Cognitive Test Survey Application:

The cognitive test was used in a survey dated (6/3/2022) that included (10) morning male and female students in the same department and the same stage. The purpose of the survey was to calculate the averageAmount the time Necessary To answer And clarity Questions Test.It was completed appreciation Duration.To answer on Questions BrotherCognitive test through average observationthe time that took it The student the first And the last one To complete Their answer, It was completed registration the time Total And it was as Next:

➢ The time for the first student to answer the cognitive test items = 15 minutes.

➢ The time for the last student to answer the cognitive test items = 25 minutes.

Average time = 15+25 = 40÷2 = 20 minutes.

As for the cognitive test paragraphs and instructions, they were clear and understandable to all students, and the researcher did not notice any questions or ambiguity from the students during the test.

5. Construction experience:

The cognitive test was used in the structural sample on (3/16/2022), which included (70) men and women. The researcher conducted a statistical analysis to identify the weaknesses of the test and attempt to reformulate, delete, or exclude the impermissible aspects, and ensure that the aspects of the test took into account the individual differences between students through its ease of use and difficulty, and its ability to distinguish between students with high abilities and students with low abilities). The response sheets were reviewed, collected, and the scores were organized in descending order for the purpose of conducting the statistical analysis, which leads to the production of psychometric properties (i.e., the following is a comprehensive description of this):

A. The paragraph difficulty factor is the percentage of the level of complexity that the student faced in answering the test paragraph. The difficulty is determined by the percentage of those who answered

the paragraph incorrectly. After calculating the paragraph difficulty factors using the equation for calculating the difficulty factors, it was found that all the difficulty factors were acceptable because they ranged between 10 and 50 percent, and the average was30.

(36, 0-45,0) is within the typical range of difficulty factors (20, 0-80,0) common among metrologists, so a particular paragraph was not excluded due to its complexity or ease, and Table (3) shows this.

Table No. (3) shows the complexity of the paragraphs.

Difficulty factor	T	Difficulty factor	T
39, 0	11	25, 0	1
46, 0	12	41, 0	2
45, 0	13	39, 0	3
47, 0	14	28, 0	4
38, 0	15	42, 0	5
33, 0	16	51, 0	6
49, 0	17	49, 0	7
52, 0	18	44, 0	8
41, 0	19	45, 0	9
48, 0	20	35, 0	10

B -Difference coefficient: The ability of the item to distinguish between students with high and low levels in a specific characteristic measured by the test and is called its difference coefficient. After conducting the statistical analysis, it was found that the degree of discrimination against the items ranged between (0.57-0.68), which is an effective indicator. It was found that the cognitive test items are clear and have the ability to distinguish between students in the upper and lower grades (survey), and Table (4) shows this, as Ebel believes that the test items are effective if their vocabulary has the ability to differentiate between students ranging from (30%) to (70%).

Table No. (2Paragraph discrimination coefficient

Coefficient of Excellence	T	Coefficient of Excellence	T
59, 0	11	57, 0	1
62, 0	12	59, 0	2
66, 0	13	60, 0	3
63, 0	14	63, 0	4
68, 0	15	57, 0	5
58, 0	16	64, 0	6
59, 0	17	71, 0	7
61, 0	18	63, 0	8
63, 0	19	62, 0	9
59, 0	20	63, 0	10

Cognitive test reliability:

Reliability is the consistency or stability of measurement results over time. The test that shows the greatest degree of consistency is the test that shows the greatest degree of consistency or stability, which places the individual in the same measurement category at different times (Al-Batsh et al., 2007:134). The reliability of the test was estimated using the (Richardson-20) coefficient because the test items have two responses, either (fail or pass). The correction score for each item was determined as (one and a half points) for each correct answer and (zero) for each wrong answer, which is consistent with the test formula for calculating reliability. After calculating the reliability coefficient, the test score was (0.83), which indicates that the current test has a degree of reliability. Research in

the field of measurement and evaluation also indicates that the test is reliable, as its reliability value reached (0.70). And additional)

Sixth: Procedures for implementing the experiment:

The researcher carried out a set of procedures during the implementation of the experiment, which are as follows:

➢ Basic preparations for the experiment:

✓ The researcher met with the head of the Art Education Department and the murals teacher there, and explained to them the objective of his study and the procedures he would follow. He obtained their approval and readiness to implement the experiment on first-year students in the department.

✓ The researcher visited Hall (1, 2) for the first stage and made sure that they were regular in their studies. He learned about their numbers in each hall and obtained the official list of their names.

✓ The researcher reviewed the distribution of murals subject classes for students (research sample), and the researcher found that the distribution of weekly classes was appropriate for conducting the experiment, and no modifications were made to it.

✓ Choosing the mural hall as a suitable place for the experiment in order to provide the conditions of the educational environment.

➢ Conducting the experiment:

The teaching method that is consistent with the joint teaching plans that were developed as a result of the students' requirements and preferences requires measuring the impact of the learning process on the students' success in the subject of murals for secondary school students. Art Education Departments in Babylon Governorate and comparing it with the standard method.

As a result, the researcher studied the plans using the joint learning method in the experimental group starting from Thursday, February 17, 2022, after conducting the pre-cognitive test for the two groups (experimental and control). Since the chronological order was followed in presenting the educational program units as it is in the content, the researcher chose this method to study the plans. The teaching process continued at a fixed rate of (one hour), and the presentation was completed on Tuesday (3/22/2022), where the post-cognitive test was conducted in the mural hall/Art Education Department.

As for the control group, it started The researcher conducted the teaching process according to the traditional method. He described the teaching strategies for the control group using the traditional method, and taught them all on the same day of each week. The pre-test was conducted on Monday 3/28/2022, and the post-test for the experimental and control groups was conducted on 4/10/2022.

Experimental group

The learning process together is a combination of planning, implementation, evaluation and taking actions that have goals. Here it is important to consider the students' motivations and determine the activities they should participate in to achieve effective learning. The researcher did this before the first lecture to clarify the following:

A.Introducing students to the nature of learning together, its importance and steps, because it is a new method that they have not been exposed to before.

B.The researcher divided the experimental group into four equal groups, each group including five students of different achievement levels (excellent, very good, good, average) based on their grades in the final exam for the murals subject for the previous academic year. The researcher informed the groups' names and the names of their members.

D.Each member of the small groups is assigned a number that is kept throughout the experiment, as shown in Table (5)

Table No. (5Arrange the students of the experimental group within the groups together.

| Duties | Number of members | | The group | T |
	Females	Males		
Leader, Registrar, Researcher, Coordinator, Evaluator	3	2	The first	1
Leader, Registrar, Researcher, Coordinator, Evaluator	3	2	Second	2
Leader, Registrar, Researcher, Coordinator, Evaluator	3	2	Third	3
Leader, Registrar, Researcher, Coordinator, Evaluator	3	3	Fourth	4
	12	9	the total	

Control group

This group was taught using the usual method used in teaching murals by the same teacher.

Chapter Four

Display and interpret search results

This chapter includes the researcher's research results and their interpretation, in line with the research objective that was originally intended to be achieved, which is:

The statistical results showed that the averagegrades The group empiricism He was higher from middle grades The group The officer Which Reached (25.67) Opposite (22.00). To evaluate importance the difference, It was completed Use a test t for two identical and independent samples. The estimated t value was (8.17) at a significance level of (0.05) and the number of degrees of freedom (40) was greater than the tabular value (2.00), which means that the difference is statistically significant as shown in Table No. (6). This means that the students of the experimental group who learned according to the above-mentioned method performed better than the students of the control group who learned according to the typical method in the cognitive test, which means that adopting the above-mentioned method led to a significant improvement. The difference between the students of the first stage, as is evident from the superiority of the students of the experimental group over the students of the control group in the subject of mural science, which leads to the rejection of the null hypothesis that states that: A significant difference. At a significance level of (0.05) between the averagegrades students The group empiricism who They study material the sciences The mural Using style(Learning together), And average grades students The group The officer who They study The material in the sciences The mural Using Style Model According to the post-test, there is a statistically significant difference in favor of the experimental group.

Table No. (6) Results of the T-test for students of the two studies in the cognitive test (final).

| Statistical significance | T-value | | Degree of freedom | Standard deviation | Arithmetic mean | Number of students | The Division | The group |
	Tabular	Calculated						
Significance level (0.05) is statistically significant.	2.02	8.17	40	1.59	25.67	21	A	empiricism
				1.30	22.00	21	For	The officer

First: Interpretation of the results

After examining the results related to the null hypothesis, it was found that the group that followed the learning together method had a greater superiority in the cognitive test than the control group that followed the typical method. This indicates that the learning together method had a positive effect on the cognitive abilities of the students, and this may be due to the following reasons:

1. The method of presenting the subject (Mural Science) using learning together is a new and interesting strategy that is being used for the first time in teaching this subject, which has increased the students' enthusiasm and interaction with each other in groups. This is one of the things that has helped increase learning.

2. The researcher presented the behavioral objectives for each class in (worksheets) and distributed them to each student in the group, making the students aware of what is required of them to exert maximum efforts and work to achieve them, which led to an increase in their achievement of this subject.

3. Students receive feedback at the end of the lesson by having the researcher present a detailed explanation of the behavioral objectives specified in the teaching plans in PowerPoint, and directing questions to the students to answer, which helped to arouse motivation towards learning and retaining and remembering information.

Second: Conclusions

In light of the research results reached by the researcherThThe following can be concluded:

1. Learning together had an effective impact on teaching mural science compared to the traditional method, although the latter also left a positive impact on the learners and on their cognitive test results, but the distinction was for the experimental group over the control group.

2. The use of modern methods, which have not been used before in teaching the students themselves (the research sample), such as the learning together method, leads to an increase in students' motivation towards learning.

3. Learning together not only contributes to raising the level of academic achievement, but also achieves other goals such as belonging, love of communication and appreciation, which increases their social cooperation.

Third: Recommendations

In light of the research results and conclusions, the researcher recommends the following:

1. Training teachers on learning together strategies and using them for all educational stages (universities, institutes and schools) and encouraging them to apply them.

2. Using learning together in teaching mural science and other subjects, including practical subjects.

3. Explaining learning together in the Art Education Guide of the Ministry of Higher Education and Scientific Research and the Ministry of Education

4. Focus on modern teaching strategies that develop students' mental, psychological, emotional and skill-based abilities, including learning together strategies.

Fourth: Proposals

In continuation of the current research and its development, the researcher proposes conducting the following studies:

1. The effect of the learning together strategy on achievement in the subject of mural science in other variables, such as motivation, tendencies and direction.

2. Comparing the effect of learning strategies together on students' achievement in mural science with other modern strategies.

Conducting studies similar to this study on different educational levels, such as middle school, secondary school, or university levels, for different subjects.

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