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## IMPACT OF KWL STRATEGY IN THE COGNITIVE PREFERENCE FOR STUDENTS OF THE INSTITUTE OF FINE ARTS IN CONTEMPORARY ART HISTORY COURSE

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### ABSTRACT

KWL strategy is considered one of the modern strategies that aims to revitalize the learner's previous knowledge and make it a focal point to link it with the new information that he learns. Therefore, it has been widely applied in the field of education, which motivated the researcher to use it in teaching the history of contemporary art as it works to enhance the role of the learner and activate his cognitive patterns. In light of his acceptance of the educational content of this article, Occupied Philosophies Modern education is at the present time taking center stage in enriching the educational process according to some teaching strategies that transform the learner from a passive recipient to an active and participant individual in light of the self-activity that he exerts upon gaining experience in the educational material; It is stretched Transitions Fast The educational process of contemporary wheel keep pace with the latest development of cultural progress and the T Have responded Return look at Methods and methods of teaching reveal the impact that they can leave on the learner through the process of activating previous experience and making it the starting point. And since education forms in its basis a set of purposeful and renewed human interactions and activities with the changes of life and with the development of the frameworks of science and technology, as it is a process of continuous interaction and

response between it and the human being and the environment surrounding him that forms the basis of his existence, so if the education stops, lags behind, or moves away from what is happening Around it from new developments, it will thus lose a vital factor in its survival and development and its effectiveness with the requirements of man and his renewed needs with the wheel of progress that does not stop spinning. Accordingly, the contemporary world is witnessing a number of informatics challenges in the areas of public life and educational sphere of education in particular, as can be seen through the changes and developments in education inputs and outputs because survival on what it is makes it incapable of the educational system to meet these challenges and developments that were produced the information revolution in information technology. "As the traditional teaching methods, which are still common in educational institutions and at all levels, starting from the primary stage and ending with university education, which focus on indoctrination and memorization, were and still represent a challenge that contributes to limiting the development of the mental and cognitive abilities of learners. It restricts their cognitive and performance skills. "(Al-Rubaie, 2003). The study of fine arts subjects that constitute a civilized façade for any society is a measure of the progress and prosperity of this society, and a prerequisite for the development of the cognitive and aesthetic experience of its members. Our society suffers from many of these negative aspects whose effects are evident in the learner in general, and the learner in The field of fine arts in particular, so we are in dire need of making the learners as individuals who focus most of their attention towards acquiring these experiences according to their abilities and knowledge styles. And is a contemporary art one of the most prominent cognitive experiences dealing with the fine arts materials through a study of trends in the light of the visual and aesthetic characteristics of the technical configurations of artistic accomplishment and try to understand and reveal the aesthetic, functional and expressive values while enjoying it and taste it , and thus preferences development of knowledge of the learner about The artistic work is to be reflected in his artistic experiences. The adoption of the teacher's subject of the history of contemporary art the usual method (lecture and lecture) in sending the content of the material to learners mainly without using modern methods and strategies can affect the patterns of the learner's cognitive preferences towards learning this subject. "Presenting the educational material as indicated (Al-Zayat, 2009) using the traditional method does not help to achieve the educational objectives of this subject, in which the teacher becomes a source of information and data, as he fills the student's mentality of information and does not leave space for intellectual discussion so that it forms a kind of weakness of his conscious abilities and develops memory. Without creation and creativity. "(Al-Zayat, 2009) . Therefore, the teacher should take advantage of the diversity of teaching methods and strategies that have emerged with the efforts of researchers and scholars in the field of education, which he can use to face the individual differences between the teachers, so that they are allowed to participate in the educational process with positive and continuous activity, each according to his capabilities, patterns of thinking and readiness. He notes. "The use of modern teaching methods, strategies and models that make the learner think coherent and logical mental thinking by testing the teachers of these strategies and models appropriate to the learner's abilities, desires and previous experiences." Interest in how the learner deals with information based on the principle that what the learner prefers is related to his knowledge background of the educational material, enhances the process of his acquisition of educational content in a way that is consistent with his cognitive perceptions and preference methods that appear between four

patterns (retrieval, principles, application, etc.) Critic (according to standard) Heath, 19 64In cognitive preference it plays a distinct role within educational situations .

## Introduction

**Research problem:** Based on the foregoing, the researcher touched on the problem of her research through the data that were indicated in the light of the exploratory study that was conducted on a sample of students of the Institute of Fine Arts and teachers of contemporary art history about the extent of application of modern teaching methods and strategies in communicating the content of the educational material and its impact on the development of preferences The cognitive learner towards the subject of the history of contemporary art, and he found that there is a reluctance to use these methods within the educational situation and in the content presentation process, which formed an incentive for the researcher to experiment with modern and appropriate teaching strategies represented by a strategy KWL“It is a widely used strategy that aims to activate the learner’s previous knowledge and make it a focal point for linking it with the new information that he learns.” (Ibrahim, 2005). Therefore, there is a possibility to activate the learner’s role and activate his cognitive patterns in light of his acceptance of the educational content of the contemporary art history subject.

**The aim of the research:** The current research aims to know the impact of a strategy (KWLIn the cognitive preference for students of the Institute of Fine Arts towards the subject of contemporary art history, and to achieve this goal, the researcher puts (6) null hypotheses.

## Research Methodology

The researcher adopted the experimental method in designing her research procedures, as it is considered one of the most appropriate scientific methods to achieve the goal of the research and verify its null hypotheses. It is an approach that requires making an intentional change in the position of the research experiment and within specific conditions and following up on the changes that may result from these conditions.

**Research community:** The current research community consists of students of the fifth grades in the Institutes of Fine Arts - Morning Study (male category) of the General Directorate of Education in Baghdad Al-Karkh First, of which (190) students are divided into (6) artistic departments and their specialized branches for the academic year 2019/2020, who are studying a subject History of contemporary art scheduled in their phase and was selected the Fine Arts Department of the fact that the requested studying material contemporary and planned art on them , which corresponds with the aim of him , a researcher at the current discussion, was selected as a sample of students in the fifth grade of (60) students were divided into two groups , one trial included a sub (drawing And the graphics) and by (30) students, and the other officer included the two branches (sculpture and pottery) and by (30) students in order to apply the experiment. The researcher adopted the teaching using a strategy KWL A theoretical framework on which I relied to design the educational content of the plans, as it is compatible with the nature of the educational material (the history

of contemporary art), while there follows a detailed description of the steps for designing the instructional plans. To show the results, the statistical bag was used (SPSS) To process the data and information obtained by applying the T-test for two independent samples, the Pearson correlation coefficient and the Alpha-Cronbach equation . Based on that, the current research problem is crystallized by trying to answer the following question: What effect does a strategy have? KWL. On the cognitive preference for students of the Institute of Fine Arts through the educational content of the contemporary art history course?

**Research importance:** 1-The results of the current research may direct the attention of educators to the interest in strategies and methods of teaching art and the history of contemporary art. Several scientific conferences and seminars held in Iraq, including (College of Basic Education Conference - 20 2 0) have recommended the need to develop the teaching and educational process through familiarization with Modern teaching methods and methods achieved by international and Arab experiences and the necessity of the learners' participation in the educational situation and the development of their learning capabilities.

2 -The current research can be considered a qualitative addition in the field of methods of teaching art in general and the history of contemporary art in particular through an attempt to investigate the impact of implementing a strategy ( KWLIn the cognitive preference for the learner towards the subject of the history of contemporary art in order to keep pace with modern educational trends in the use of one of the metacognition strategies that activate the learner's previous experiences and make it a starting point for acquiring new experiences.

3-Presenting a set of teaching plans for the history of contemporary art according to the strategy of (KWL) It can be used by the teacher when teaching to develop the cognitive preferences of the learner towards this teaching material.

**Research limits:** The current research is limited to: 1 -Human Frontiers: Students of the Institute of Fine Arts in the fifth grade - male category. 2 -Spatial boundaries: Department of Fine Arts - Institute of Fine Arts for Boys - Baghdad Governorate. 3 - Temporal boundaries: the academic year 2019 AD - 202 0 AD. 4 -Substantive boundaries: includes the application of a strategy **KWL** In teaching the history of contemporary art compared to the usual method, and adopting the cognitive preference variable in the patterns of ( retrieval , principles, application, and criticism) according to the standard of He ath, 1964) , And limited search experience on Ted Rees theme of contemporary art trends for arts post - modernism represented by ( post - modern - abstract expressionism - folk art - visual art - kinetic art - Alsobrialah) according to the curriculum scheduled fifth grade in fine arts in Iraq institutes.

## Literature review

### 1. Definition of terms

The researcher defined the terminology mentioned in the title of the research as well as the most important terms that require a description of the research procedures and their content:

**Impact:** The researcher defines it operationally as:

The amount of change in the cognitive patterns that reflect the style of dealing with fifth-grade students in the Department of Fine Arts at the Institute of Fine Arts for Boys with educational experiences that are acquired with the contemporary art history course determined on them according to a KML strategy) Compared to the usual method by preferring one cognitive style over another .

**the strategy:** the researcher defines the term strategy, procedurally, as:

An organized plan that reflects the procedures, methods and methods that are adopted in order to achieve the outputs and results within the educational situations in which fifth-grade students in the Fine Arts Department of the Institute of Fine Arts acquire educational experiences in the history of contemporary art in order to reach the outputs and results that are reflected in their knowledge preferences.

**KWL strategy:** The researcher defines a strategy K. WL Procedurally, it:

The set of teaching procedures and steps that the researcher applied in three stages in which the experimental group learners determine what they know about the topic and what they want to know and thus what they have learned from studying the topic of contemporary art trends for the fifth grade at the Institute of Fine Arts.

**Preference of knowledge:** develop a definition of a researcher procedurally preference for cognitive:

Fifth-grade students in the Fine Arts Department of the Institute of Fine Arts dealt with the cognitive educational content of the history of contemporary art assigned to them mentally in its order by answering the cognitive preference test for patterns of (retrieval - complement - principles - application). Prepared by the researcher after completing the implementation of the teaching plans according to a strategy KWL) For the experimental research group, and the usual method for the control group, in which students take the most weighted preference (4) degrees and the least (3) degrees ... and so on, and the cognitive preference patterns were identified with four patterns according to the above.

**The normal way:** The researcher knows the usual method by procedure:

As the positions of teaching carried out by the teacher of contemporary art history in the technical sections of the Institute of Fine Arts, and the role of its pivotal j depends on the explanation and narrative theory and questions oral, and provide vital information Matt and concepts to the demand of.

**History of Contemporary Art:** The researcher defined it procedurally in line with the objectives of the current research:

A theoretical scientific course prescribed in the preparation program for students of the Institute of Fine Arts, which includes the artistic production (paintings) carried out by the artists of the postmodern arts trends represented (visual art - Suprialism - folk art - kinetic art) as well as the characteristics of these artistic trends.

## 2. Metacognition and strategy KWL

The growth brought about by the knowledge and technology revolution imposed new roles that the human mind played in digesting and processing methods of acquiring knowledge and experiences according to the stimuli surrounding this mind, so it was necessary to keep pace with global progress by reaching new mechanisms and patterns of thinking, so the concept of what appeared (Metacognition) At the beginning of the seventies at the hands of the world Flavell) Which came as a result

of the investigation of human memory processes through a selection of experimental studies in variables such as intelligence, thinking, awareness, preference, and others. The concept of metacognition has merged with many approaches to educational psychology in which the term (Knowledge(With the term)Learning) And the (Thinking(In light of the self-control exercised by the learner during meta-processes to acquire educational experiences, as determined)1976,Flavell) In (Al-Otaibi, 2015) the term meta- knowledge as “a process of representing the individual’s knowledge by the products of his cognitive processes, in which the learner monitors the extent to which he actively uses thinking processes and organizes them according to his objectives in building knowledge” (Al-Otaibi, 2015).The concept of metacognition is also considered "one of the theoretical formations presented by contemporary psychology , as it received tangible attention at both levels: theoretical and applied , as it was conducted by the scientist (BrownThere are multiple applications in various academic fields, and through these applications he has reached the critical importance of the role of both knowledge and metacognition in effective learning. (Al-Zayat, 1996).Thus, the concept of education for thinking becomes one of the variables that were the offspring of modern trends in the educational process, which he was keen to adopt and develop for those interested in the field of education and education based on the philosophy on which it is based and which aims to acquire and provide the learner with the tools of knowledge through disclosure in order to reach Higher levels of thinking, after providing the educational environment that stimulates interaction during thinking processes , and from this point of view (Al- Khazindar, 2007) believes that “thinking about thinking processes or metacognition can be divided into two basic components: 1-Self-awareness of knowledge. 2- Self-organization of knowledge.

#### ▪ **Metacognition Strategies**

The strategies of metacognition are one of the learning strategies that are based on a pattern of teaching that allows the learner to use his own skills, by developing independent learning for the individual that enables him to assume self-responsibility for this learning. It provides procedures that the learner performs through knowledge of activities, mental processes and learning methods. And self-control, which it uses, as these strategies represent a set of behaviors that aim to achieve metacognition requirements, they depend on the learner as the learner plans, monitors and evaluates his learning during the learning process with the help of the teacher to accomplish this learning, so these strategies as you see (Darwaza 2004) consists of a set of basic elements, namely: 1“ -Awareness and alertness of the mental processes employed by the individual .

2 -Control and control of these processes and employ the appropriate ones. 3 -Guidance, Correction, and Deficiency. (Darwaza, 2004)

In the view (Aram, 2012), the metacognitive elements emphasize: 1“ -The individual's awareness of the mental processes he uses. 2 -Attention while using mental processes. 3 -The individual's control of mental processes is reflected in the continuous planning of the learning process. 4 -Self-evaluation and continuous orientation to ensure that mental processes are appropriate for educational situations.” (Aram, 2012) (Jarwan, 2002) also emphasizes that learning with metacognitive

experiences and the ability to manage and use them in different educational situations lead in one way or another to reducing learning difficulties, and at the same time contribute to achieving advanced levels of thinking, processing and employing the knowledge obtained. It also helps learners to organize their own knowledge and to focus, plan, organize and evaluate their progress in performance and gain educational experience. When using metacognition strategies, the learner will be able to hold the reins of thinking by vision and contemplation, and raising the level of awareness to the extent that he can control and direct it with his initiatives Subjectivity, and modifying the course of the direction that leads to the attainment of the desired goal "(Jarwan, 2008).

▪ **The pedagogical significance of metacognition strategies**

Educators have agreed that effective teaching includes teaching learners how to think? How do they learn? And how do they raise the motivation of themselves, so there are many benefits that are reflected on the learner and teacher as a result of the use of metacognitive strategies in teaching, including:

▪ **contemporary art ... features and interactions**

Art is manifested through a framework that oscillates between rationality and irrationality, loving isolation to reach openness, lying between the embrace of new experiences that have fragmented the aesthetic tendency and deconstructed the prevailing tastes towards profound upheavals that affected the general aesthetic sense of the recipient and entered into the plastic art lexicon various concepts and expressions that reflect the phenomena of artistic movements that It was formed and nourished from the nectar of the accumulations of modern photography arts, in order that this would lead to the establishment of references of an artistic revolution that changed the features of the general image of art, and also changed the perceptions of the individual towards it, and it was an attempt to bring about a qualitative transformation in the artistic, intellectual and technical frameworks to discover new undiscovered areas of the aesthetic experience on the one hand, And to cause a shock to the recipients on the other hand, to announce the beginning of a new era of new artistic values, and to search for aesthetic concepts, shattering and piercing the existing image and searching for meanings, until the severe transformations that appeared in modern day arts affected the flow of multiple artistic styles and perspectives drawn The bastion of change and openness towards the portal of postmodernism, embodying the features of contemporary art that adopted the idea of the psychological event and the movement of form and its openness, and matter. The incomplete ones that suggest movement through the anxiety of the shapes and their techniques, "These transformations came to be changed according to intellectual and cultural changes, including the second half of the twentieth century with the so-called contemporary plastic art, which denied all the artistic norms, trends and methods previously recognized and declared art as a human characteristic. It is not confined to a specific elite of people only, but it is an authorized humanitarian activity for all people. " (Qantrah, 2017), and (Nawar, 2003) states, "Contemporary art represents the complex relationship between the past and the present, reinterpreting the heritage, blending different styles, using irony paradox, ambiguity, contradictions, heterogeneous harmony, and the multiplicity of symbolic connotations" (Nawar,

2003). (Charles Jenkins) The combination of the various styles versus the one international style - which is the popular and the plural versus the ideal and the fixed - the semiotic form versus the deterministic form - represents the expression of content and the development of language with its functional overtones” (Treki, 1992), Therefore, the researcher finds that there is an elite group of axes through which it is possible to study the aesthetic and philosophical problem of the data that affect the cognitive structure of contemporary art, as follows:

1-The problem of the term (contemporary art or postmodernism?): It may be a difficult task to come up with a definition of contemporary art, as its contemporary meaning is not completely clear, so this concept has been mixed with the connotations of postmodernism and has become synonymous with it. It was used for the first time in 1934 to denote aspects of a response. The act is against modernity, then the English historian used it Toynbee Arnold 1938 to refer to the globalization and cultural pluralism that must emerge according to the nature of the historical role "(Al-Bahnasi, 1997). In its basic sense, the term contemporary art refers to art - that is, painting, sculpture, photography, installation, performance, video art and artistic product in general, and perhaps this seems Simple, but the details surrounding this concept are often somewhat ambiguous and the interpretations differ widely and widely. Therefore, the exact starting point of this genre is still a matter of debate; however, many art historians consider the late 1960s or early 1970s (end Art Nouveau or Art Nouveau) aptly recognized.

2 -Contemporary art in postmodernism Description: “This concept opens up in its intellectual encounters to share with many levels in its connotations to describe implicit relationships and what is going on between them, or to produce a painting that takes on features of contemporary art or descends perhaps on a smaller scale than it, for example it may be a design Outside of a page in a fashion magazine or a critical newspaper, or a counter-tendency to teleology, an attack on the metaphysics of presence, a general weakening of feelings, a fondness for artistic images, symbols and methods, a process of fragmentation, or the centralization of a topic, or questioning what is behind the narration, or the explosion The internal meaning, or the dread of self-destruction, or the vast social and economic transformations towards the era of communication, consumption and multinationalism . " (Smith, 1995)

**Research Procedures:** This chapter deals with a presentation of the procedures used by the researcher to achieve the goal of the research, which is based on identifying the impact of a strategy KWL In the cognitive preference of students of the Institute of Fine Arts for the subject of the history of contemporary art , therefore the researcher adopted the experimental method in designing her research procedures because “it is one of the most appropriate scientific approaches to achieve the goal of the research and verify its null hypotheses. It is an approach that requires an intentional change in the position of the research experiment and within conditions Specific and following up on the changes that may result from these conditions.” (Abbas, 2009)

- **Experimental Design**

"The experimental design is a work program and a blueprint for how to implement the experiment and define it according to the circumstances and factors surrounding



the studied phenomenon." (Abd al-Rahman, 2007), and highlights "the importance of this type of designs in that it is the part that summarizes the logical structure of the experiment, and includes an explanation of the variables that are included in the research material." (Abu Hawaij, 2002), and it also carries importance in "laying down the first steps through which the researcher intends to fulfill her hypotheses that help her reach conclusions about the relationship between (independent and dependent) variables" (Al-Zobaie, 1981). And because the current research studies two independent variables and one dependent variable, as follows:

1 -The first independent variable: teaching according to the strategy of (KWL) For the experimental group.

2 -The second independent variable: teaching in the usual way for the control group.

3-The dependent variable: the cognitive preference of fifth-grade students - fine art institutes for the educational content of the history of contemporary art assigned to them, so the researcher chose the experimental design with partial control for two groups, one of them is control and the other is experimental, and as in Table (1), as for the justifications for adopting this type Among the experimental designs, it is :

Identify patterns of cognitive preference for the experimental group and the control group (the research sample)

1 -Measuring patterns of cognitive preference by identifying the prevailing preference pattern through the response of the research sample of the two groups (experimental and control) in the post application of the achievement test for cognitive preference in a way that contributes to the verification of the hypotheses of the current research .

**Table (1) the experimental design of the research**

the group	Parity	The independent variable of	Dependent variable	
the group Experimental	Chronological age Intelligence Cognitive preference	KWL Strategy	Cognitive preference	Cognitive preference test
the group Control		The usual way		

**Research Community:** The current research community consists of the students of the fifth grades in the Institutes of Fine Arts Morning Studies (male category) of the General Directorate of Education in Baghdad Al-Karkh First, of which (190) students are divided into (6) artistic departments and their specialized branches for the academic year 2019/2020, who study the contemporary art history course scheduled for their stage, as shown in Table (2).

**Table (2) Research community (males) of fifth grade students - Institute of Fine Arts**

Technical departments of the Institute of Fine Arts	Branches				Total
Department of Fine Arts	Draw	Sculpture	Pottery	Graphic	62
	19	10	22	11	

design department	Typographic design	Industrial design	Interior Design	Fabric design	46
	13	13	10	10	
Department of Performing Arts	the acting		Directing		34
	15 <sup>th</sup>		19		
Department of Audio and Visual Arts	25		25		25
Department of Arabic calligraphy and decoration					
Department of Music					
Total					

**Research sample:** The researcher intentionally chose the Department of Fine Arts from among the departments of the Institute of Fine Arts for the following reasons: 1 -The department's administration cooperated with the researcher. 2 -The presence of a sufficient number of students. 3 -The availability of a model hall for teaching art history in the Department of Fine Arts, which facilitated the application of the experiment. 4 -The willingness shown by both the Director of the Institute of Fine Arts for Boys and the Head of the Fine Arts Department in facilitating the researcher's task to apply the experiment.

5 -The Plastic Arts Department was chosen because its students are studying contemporary plastic art that is prescribed to them, which is consistent with what the researcher aimed to do in her current research. A sample of the fifth-grade students was selected, amounting to (60) students, which were divided into two groups, one of them experimental, which included two branches. (Drawing and graphics) by (30) students, and the other was an officer, which included the (sculpture and pottery) branches, with (30) students in order to apply the experiment, and Table (3) illustrates that .

**Table (3) Preparing students in the research sample and the number of those excluded**

the group	The number of students before exclusion	Number of students who failed	Number of students after exclusion
Experimental	30	0	30
Control	32	2	30
Total	62	2	60

**Equality of the research groups**

**1 -Internal integrity of the experimental design**

The internal integrity of the experimental design means that the results of the research are valid to the extent that the difference between the results of the experimental group and the results of the control group can be attributed to the effect of the

independent variable and not to other extraneous factors (Abd al-Rahman, 2007), so the researcher was keen to reward the two groups in The variables that may affect the results of the experiment, he (Van Dallen, 1990) asserted that “the researcher must form equivalent groups with respect to the variables that are related to the research.” (Van Dallen, 1990,) and the meaning of equivalence to make the research groups equivalent, i.e., similar in C- All variables except for the independent variable whose effect is to be studied (Al-Assaf, 1989). To ensure verification of some variables that the researcher believes have an effect on the results of the experiment, the researcher seized the following variables:

**a -Age in Months**

The researcher calculates the chronological age in months for each student through the form provided to them asked them to mention their generations , as well as knowing the identity of the Civil Status, Appendix 2, the average arithmetic mean of the ages of the experimental group students (240.066) and standard deviation (5,668), while even g The arithmetic mean of the ages of the control group students (241,300) and the standard deviation (7,367), and by using the T-test (t-test) For two independent equal samples to find out the statistical differences between the two research groups, and when calculating the differences statistically, the researcher did not find a statistically significant difference between the average ages of the students of the two groups at the approved level of significance (0,05), and with a degree of freedom (58), as the calculated T value reached (0,727) which is less than its tabular value of (2,021), which indicates the equivalence of the two research groups in the age variable, and Table ( 4 ) illustrates this :

**Table (4) the arithmetic mean, standard deviation, and the calculated and tabular T-value for the experimental and control group in the age variable**

the group	the number	SMA	standard deviation	Degree of freedom	T-value		Indication level 0.05
					Calculated	Tabular	
Experimental	30	240,066	5,668	58	0,727-	2,021	Not a function
Control	30	241,300	7,367				

**2 -Intelligence**

The researcher applied the Raven test for sequential matrices, as it is one of the most common measures of intelligence used in measuring general mental ability, and it was designed to assess the intelligence of individuals without their scores being affected by factors related to education, and the test includes (60) items classified into five series Each group contains (12) increasingly difficult paragraphs, and it can be applied collectively with very simple verbal instructions. (Abu Allam, 2001, pp. 396-397).Therefore, the test was applied on Tuesday 7/1/2020 and after the completion of the test application Correcting the answers and finding the scores Appendix (3) The arithmetic mean and the standard deviation were calculated for the two groups, as the

arithmetic mean of the experimental group was (42.00) and the standard deviation was (6,443), the arithmetic mean of the control group was (41,60) and the standard deviation was (8,712).t-test)For two unequal independent samples, the results showed that the calculated value amounted to (0,202), which is smaller than the tabular value of (2,021) with a level of significance (0, 05) and a degree of freedom (58), and this indicates that there is no statistically significant difference between the experimental group and the control group in Intelligence variable and Table ( 5 ) shows that.

**Table (5) the arithmetic mean, standard deviation, and the calculated and tabular T-value for the two groups in the IQ variable**

The group	the number	SMA	standard deviation	Degree of freedom	T-value		Indication level 0.05
					Calculated	Tabular	
Experimental	30	42,00	6,443	58	0,202	2,021	Not a function
Control	30	41,60	8,712				

**C. Pre-test cognitive preference:**

The researcher prepared the selection of the cognitive preference for the purpose of parity between the two groups and in the results of the research, and the test consists of (20Question) followed by (4) sub-statements, all of which are correct and closely related to the main statement, but they differ in the cognitive preference pattern represented by the four patterns, and each statement of them represents a specific type of the main cognitive preference patterns. In each test paragraph, the learner is required to identify the patterns of his cognitive preferences by He sequences his preferences for the patterns, or for the four alternatives, as he assigns each style a score that depends on the degree of his preference for that style. The one who is preferred in the first place (the highest preference) is given a score of (4) and the lesser is given (3) and the lowest is given (2) and so on, as it is possible to collect the learner’s grades for each pattern and for each learner, and then the prevailing pattern of the learner is identified so it has been applied test in the Hall of Art history scheduled Alck Arts night , were extracted averages and standard deviations for each pattern of preference knowledge of the two sets of research (experimental and control), an extension (4) , as the arithmetic average of the scores of the experimental group students for each style respectively (49 10, 51,77, 50,53, 48,60) and the standard deviation respectively (8,482, 7,811, 8,916, and 7,069), and the mean scores of the control group students, respectively (49,06, 51,90, 50,93, 48.10) and the standard deviation respectively (7,803, 8,953, 6,982, 7,359), and by using the T-test ( t.test) For two independent equal samples to find out the statistical differences between the two research groups, and when the researcher calculates the differences statistically, she did not find a statistically significant difference between the mean scores of the students of the two groups at a significance level (0,05), and with a degree of freedom (58), as the T value calculated for each type reached In the consequence (0.016, -0,061, -0,193, 0,268), which is less than its tabular value of

(2,021), this indicates that the two research groups are equivalent in the variable of cognitive preference patterns and Table ( 6). This explains:

**Table (6) the arithmetic mean, standard deviation, and the calculated and tabular T-value for the total number of cognitive preference patterns.**

Patterns	the group	The number of the sample	Arithmetic mean	deviation Standard	Degree of freedom	the value(t) Calculated	the value(t) Tabularity	Significance is at the 0.05 level
Loopback pattern	Experimental	30	49,10	8,482	58	0,016	2,021	Not statistically significant
	Control	30	49.06	7,803				
Critical inquiry pattern	Experimental	30	51,77	7,811	58	0.061-	2,021	Not statistically significant
	Control	30	51,90	8,953				
Principle's style	Experimental	30	50,53	8,916	58		2,021	Not statistically significant
	Control	30	50,93	6,982				
Applications style	Experimental	30	48,60	7,069	58	0,193-	2,021	Not statistically significant
	Control	30	48,10	7,359				

#### **Controlling extraneous variables:**

"The dependent variable may be affected by multiple factors other than the independent variable. These factors must be controlled and the independent variable alone should be allowed to influence the dependent variable, as it may be affected by the experiment procedures, external conditions, etc." (Abu Hawajj, 2002 , for the purpose of ensuring the internal integrity of the research variables, and making parity between students of the experimental group and the control group in the variables: (chronological age, intelligence, cognitive preference), and for the research to be honest to the extent that the researcher is able to generalize the results of her research in situations Similar experimental, the researcher tried to limit the effect of some extraneous non-experimental factors that she thinks affect the safety of the experiment because controlling it leads to accurate results, because experimental research is exposed to extraneous factors that affect the internal and external validity of the experimental design, so the adjustment process was done as follows:

**Subject teacher:** This variable was controlled by the researcher presenting the content of the educational plans herself to the students (the research sample) in the two groups (experimental and control) that were prepared for this purpose.

**Classes:** Before starting the teaching, the researcher visited the institute and according to the book of the Ministry of Education / General Directorate which supports the benefit from the application of the current study in the Institute of Fine Arts, Appendix (5) , so the weekly schedule was organized in agreement with the Department of Fine Arts in order to study the subject The history of contemporary art, which is determined in their academic phase at the rate of (2) hours per week for the two groups, and at the rate of two classes for each group, as the following schedule

was applied at the beginning of the experiment in the academic year 2019-2020 for the first semester and the duration of the application lasted (8) weeks, with the effect of applying two model plans in one lesson From Tuesday, 1/7/2020 to Tuesday, 2/25/2020, including applying the cognitive preference test before and after. Subject: The two groups studied the history of contemporary art in the first semester.

**The classroom:** The two groups were taught in the art history classroom prescribed in the Fine Arts Department, for its capacity and the availability of appropriate teaching aids in it. Experimental extinction: "It means the researcher's loss of some members of the research sample during the period of experimentation. They may participate in certain activities or be exposed to physical or psychological factors that keep them away from the study groups." (Melhem, 2002, p. 392), and there was no loss among the sample students during the period of applying the experiment.

**3. Research results and their interpretation**

Since the current research aims to identify the impact of a KWL strategy, in the cognitive preference for students of the Institute of Fine Arts for the subject of the history of contemporary art, therefore, in this chapter the researcher will present the results that she has reached according to the approved research hypothesis, and then reach conclusions and some recommendations and proposals, as follows:

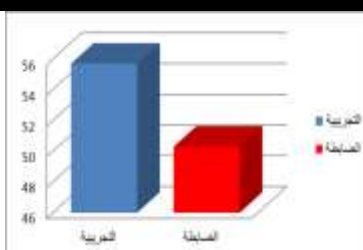
**Presentation of results:** To verify the results of the current research, the researcher extracted the result of the main null hypothesis of the research, which states that ("There are no statistically significant differences at the level of significance (0.05) between the average scores of the experimental group students that were studied according to the strategy KWL. The average grades of the control group students who studied according to the usual method of cognitive preference in the course of the history of contemporary art. Since the cognitive preference is composed of four patterns, the result of these patterns must be extracted separately, so the researcher formulated four sub-hypotheses for each type of sub-hypothesis of its own, and the researcher will verify the result of each hypothesis separately, as follows:

**The first sub-hypothesis:** (There are no statistically significant differences at the level of significance (0.05) between the average scores of the experimental group students that were studied according to the KML strategy. And the average scores of the control group students that were studied according to the usual method in the retrieval pattern of the post application of the cognitive preference test for the history of contemporary art). To verify this hypothesis, the cognitive preference test was applied to the two research groups, as the scores of each individual in the two groups were indicated in the recall pattern and calculates the mean and standard deviation for each group in this pattern. Then the researcher used a test(T-test) For two independent samples to extract a value (TThe calculated value and its comparison with the tabular value for the purpose of identifying the differences between the two groups in the retrieval pattern. Table (8) and Figure (1) illustrate this.

**Table (8) T-test results for two independent samples (Tand Z) in the retrieval pattern**

The level of statistical	T-value	De standard	Ari th met .	Nu mb	Gro ups	Pat ter n typ
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	Tabular	Calculated						
Statistical function	2,000	3,996	58	5,318	55,700	30	Experimental	Retrieval
				5,147	50,300	30	Control	



**Figure 1: Averages of the retrieval pattern for the experimental and control groups**

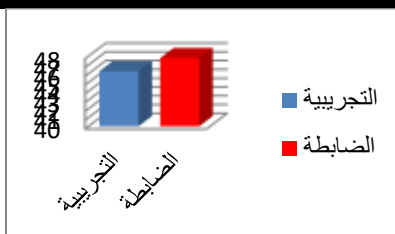
It is clear from Table ( 8 ) that the value(T-test)The computed is equal to (3,996) and it is greater than the tabular value of (2,000) at the level of significance (0.05) and with a degree of freedom (58), thus rejecting the null hypothesis which states that there are no statistically significant differences between the average scores of the two groups in the retrieval pattern and accept The alternative hypothesis recognizes that there is a difference between the mean scores of the two groups and the difference was in favor of the experimental group students. This means that the teaching plans for the history of contemporary art are designed according to the strategy of (KWL It had a positive effect on the cognitive preference by the retrieval pattern of the experimental group in a dimension compared to their tribal information and the reason for this is due to the sequence of presentation of the scientific material as well as its reinforcement with the educational stimuli related to the topic.

The second sub-hypothesis: (There are no statistically significant differences at the level of significance (0.05) between the average scores of the students of the experimental group that were studied according to the strategy (KWL the average scores of the control group students that were studied according to the usual method in the pattern of critical inquiry in the post application of the cognitive preference test for the subject of the history of contemporary art. To verify this hypothesis, the cognitive preference test was applied to the two research groups in dimension. The scores of each individual in the two groups were indicated in the pattern of the critical question and the arithmetic mean and standard deviation were calculated for each group in this pattern. Then the researcher used a test(T-test) For two independent samples to extract a value (calculated T question and its comparison with the tabular value for the purpose of identifying the differences between the two groups in the pattern of a critical question. Table (9) and Figure (2) illustrate this.

**Table (9) the results of the T-test for two independent samples (T and Z) in the dimensional critical question pattern.**

P	a	t	t	e	G	r	o	u	p	N	u	A	r	i	s	t	a	D	T	.	v	a	l	u	e	T	h	e	i	e
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

						Calculated	Tabular	
Critical question	Experimental	30	46,267	7,670	58	0,851	2,000	Not a function
	Control	30	47,767	6,864				



**Figure (2) Averages of the Critical Question Pattern for the Experimental and Control Groups**

It is clear from Table (8) that the value(T-test) The computed is equal to (0,851) and it is smaller than the tabular value of (2,000) at the level of significance (0.05) and with a degree of freedom (58), thus accepting the null hypothesis that states that there are no statistically significant differences between the average scores of the two groups in the critical question pattern. This means that the type of critical questioning that students prefer towards the course on the history of contemporary art is planned in the lessons according to a strategy KWL the usual method was converging for the two groups, and this may be due to the nature of the material being studied.

**The third sub-hypothesis:** (There are no statistically significant differences at the level of significance (0.05) between the average scores of the experimental group students that were studied according to the strategy KWL. The average grades of the control group students who studied according to the usual method in the pattern of principles in the post application of the cognitive preference test for the subject of the history of contemporary art). To verify this hypothesis, the cognitive preference test was applied to the two research groups in dimension. The scores of each individual in the two groups were indicated in the pattern of principles and the arithmetic mean and standard deviation were calculated for each group in this pattern. Then the researcher used a test(T-test) For two independent samples no value is extracted (T The computed and comparing it with the tabular value for the purpose of identifying the differences between the two groups in the pattern of principles, and Table (10) and Figure (3) illustrate this.

**Table (10) the results of the T-test for two independent samples (T and Z) in the dimensional principles type**

Patte rn type	Grou ps	Num ber	Arit hmet ic	stan dard devia	Degr ee of	T -va lue	The level of statis tical
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						Calculated	Tabular	
principles	Experimental	30	43,267	5,514	58	6,254	2,000	Statistical function
	Control	30	53,600	7,176				

**Figure (3) means of the principles pattern for the two experimental and control groups**

It is clear from Table (10) that the value (T-test) The computed is equal to (6,254), which is greater than the tabular value of (2,000) at the level of significance (0.05) and with a degree of freedom (58), thus rejecting the null hypothesis that states that there are no statistically significant differences between the average scores of the two groups in the pattern of principles and accepts The alternative hypothesis acknowledging the existence of a difference between the mean scores of the two groups and the difference was in favor of the control group students. This means that the teaching plans for the history of contemporary art are designed according to the strategy of (KWL) made the students prefer one style over another, so this pattern decreased among the experimental group students.

**The fourth sub-thesis:** (There are no statistically significant differences at the level of significance (0.05) between the average scores of the experimental group students that were studied according to the KML strategy. The average scores of the control group students that were studied according to the usual method in the pattern of applications in the post application to test the cognitive preference for the subject of the history of contemporary art). To verify this hypothesis, the cognitive preference test was applied to the two research groups in dimension. The scores of each individual in the two groups were indicated in the pattern of applications and the arithmetic mean and standard deviation were calculated for each group in this pattern. Then the researcher used a test (T-test) For two independent samples to extract a value (TThe computed and comparing it with the tabular value for the purpose of identifying the differences between the two groups in the retrieval pattern. Table (11) and Figure (4) illustrate that.

**Table (11) the results of the T-test for two independent samples (T, Z) in the type of dimensional applications**

Pattern type	Groups	Number of students	Arithmetic mean	standard deviation	Degree of freedom	T-value		The level of statistical significance is 0.05
						Calculated	Tabular	
principles	Experimental	30	43,267	5,514	58	6,254	2,000	Statistical function
	Control	30	53,600	7,176				



**Figure (4) means of application type averages for the two experimental and control groups**

It is clear from Table (20) that the value (T-test)The computed is equal to (3,645) and it is greater than the tabular value of (2,000) at the level of significance (0.05) and with a degree of freedom (58), thus rejecting the null hypothesis which states that there are no statistically significant differences between the average scores of the experimental sample members in the type of applications The alternative hypothesis is accepted which admits that there is a difference between the mean scores of the two groups and the difference was in favor of the experimental group students. This means that the teaching plans for the history of contemporary art are designed according to the strategy of (KWL) It had a positive effect in preferring the style of applications of the members of the experimental group in the dimension compared to their possession of information beforehand, and the reason for this may be due to the learner's interest in linking the information he studies with the applied aspects of the artistic productions that characterize the vocabulary of the contemporary art history subject programmed in teaching plans according to Strategy (KWL).

**Impact size using the ETA box:**

The size of the effect can be extracted in this way by dividing the square of the calculated T value by (the square of the calculated T-value + degree of freedom). Knowing the size of the effect helps us determine the amount of the relative impact of the strategy, and after extracting the value of the ETA square we compare it with the following criteria:

**The effect is simple: 0,01.**

**The effect is moderate: 0.06 .**

**Impact High: 0.14.**

After extracting the result of the sub-hypotheses related to each pattern separately, it was found that the strategy affected only two patterns (recovery and applications). Therefore, the researcher extracted the size of the effect of the strategy in these two patterns, as the effect size of the pattern of retrieval reached (0.22) and the size of the effect was for the type of applications. (0,19) When compared to the aforementioned criteria, it becomes clear that the size of the impact of the strategy on both types was high.

#### **Interpretation of the results :**

The result of the existence of differences in the two types of recovery and application in favor of the experimental group can be interpreted as a strategic effect (KWL) There is no doubt that this is consistent with the findings of some studies of the second axis, such as the study (Al-Basri, 2009) and the study (Al-Manasir N 2009) and the pattern of application as in the study of (Al- Sakani, 2012), as this strategy works to enable The learner On Application Buildings Cognitive That he acquired From During Study it To content Experience According to this strategy and thus its application in new situations, as this strategy works to assist learners in activating and applying their previous knowledge , in order to understand the educational material, and employ it in a manner consistent with the knowledge building of the learner. This result is consistent with the results of the studies of the first axis such as the study (Sakran, 2019), the study (Mubaslat, 2016), and the study (Abbas, 2013) what was indicated by (Salem, 2007) in “The KML strategy C is one of the constructive learning strategies as it helps the learner to record all his previous information on the subject, then he decides and records what he needs in light of the information the teacher raises, and then records what he has already learned, then records the most important applications on what he has learned, and then He applies the information he learned in previous situations , as this strategy works to rotate the information of the learner and reorganize the cognitive structure, connections and neural networks to link old and new information, in order to achieve coherence and coherence of the individual's cognitive framework by applying his previous information in the process of learning, This strategy also works to activate and restore previous knowledge stored in long-term memory. ” (Salem, 2007). As for the type of critical questioning, the results showed that there are no differences between the experimental and control group, and this indicates that the strategy of (KWL) It does not have a significant impact on this kind of patterns of preference for the learner. As for the explanation of this, it is differences in the pattern of principles in favor of the control group until this result is very logical, as the strategy is) KWL It made the student a preference for two of the four types without the others, as the student’s preference in the experimental group for the two types of retrieval and application logically leads to a decrease in his score in the other modes.

#### **Results**

Based on the results that emerged, the researcher concludes:

1. Contributed strategy (KWL) In bringing about the impact Bnmtin of patterns of cognitive preference among students according to contemporary experimental group of subjects taught in art history teaching plans, making it purposeful and targeted process effectively.

2. The educational content of the teaching plans was distinguished by the simplification of the learning process according to the concepts, artistic outcomes and terminology that characterize the history of contemporary art, which contributed to improving the performance competencies of the experimental group students in organizing their information about cognitive preference responses and measuring it through the test.
3. The enhancement of the educational content of the teaching plans with a set of enriching activities related to the specific topics in that content contributed to the development of the pattern of retrieval and applications for the students of the experimental group as they represent a feedback B.FA associated with these artistic activities.
4. The adoption of progressive education from easy to difficult objectively came through the distribution of the subjects of the teaching plans in a logical manner, which led to an increase in the knowledge of the experimental group students, which directed them to prefer one style over another.
5. The process of designing educational lessons for the history of contemporary art is a successful process, as proven by previous studies or the results of current research, not only in developing cognitive and mental skills, but also in developing patterns of cognitive preference in the field of fine arts.

### **Conclusion & Recommendations**

In light of the researcher's conclusions, the following recommendations can be formulated:

1. A strategy can be adopted (KWL) Approved in the current research in educational institutions to define art history teachers who can be organized in training courses (during service) with this strategy for the purpose of using it in applying the content of teaching plans in order to prove its effectiveness and its ability to make the learner establish his knowledge preferences towards the educational subject.
2. The educational curriculum planners, especially in the field of fine arts, benefit from enhancing modern teaching methods with educational strategies, including the strategy (KWL) Used in the current research to build the cognitive preferences of learners or trainees in the field of fine arts, as it includes a cognitive tributary for the learner in the taste and study of the artistic production of the cultural heritage of contemporary art trends.
3. Visual perceptions and their relationship to the cognitive preference of students of institutes of fine arts.
4. Employ strategy KWL in the development of aesthetic preference for students of fine arts institutes.
5. Impact strategy KWL in the achievement of students of fine arts institutes in the history of Islamic art.
6. Building an educational program to enrich the knowledge preference for students of fine arts institutes with the subject of art history .

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