

## **Educational design to develop hierarchical construction skills for students of the Department of Art Education in the subject of pictorial construction**

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### **Abstract**

The current research aims to reveal:

Educational design to develop hierarchical construction skills for students of the Department of Art Education in the subject of pictorial construction.

The researcher relied on the educational design with an experimental group and a control group on a sample of students of the Department of Art Education, and the research sample consisted of (80) and to reach the results of the research, the researcher used the statistical program and the researcher has two hypotheses. spss).

1- There are no statistically significant differences at the level of (0.05) between the average scores of the experimental group students in the pre- and post-applications of the skill performance test.

2- There are no statistically significant differences at the level of (0.05) between the average scores of the experimental group students and the average scores of the control group students in the post-skill performance test.

Through the results, the following conclusions were reached:

Conclusions:

Based on the results of the study, the researcher concluded the following:

1. There is a need for undergraduate students, especially the third stage, for modern models and teaching methods.

2. Each student possesses a wide range of learning methods referred to, but in gradual proportions in preference.

Recommendations:

In light of the researcher's findings, the following is recommended:

1. Include rehabilitation and training programs for art education teachers on how to build educational designs and implementation procedures, because of their high efficiency in giving good results and helping teachers to achieve their goals and in a way that achieves the economy of education in terms of time, effort and expenses.
2. Stay away from the traditional methods in teaching the pictorial construction of the third stage and benefit as much as possible from the results of the current study.

## INTRODUCTION

First: The research problem:

Education plays an important and major role in the lives of peoples, as it has become a major national strategy for all peoples of the world, no less important and priority than defense and national security, and "the advancement of peoples, their progress and civilization depend on the quality of individuals, not their number." (Al-Rashdan, 2002: 47p)

Therefore, it was clear that scientific and technical progress necessitates educational institutions to prepare scientifically, educationally, professionally and technically qualified cadres to possess educational experiences, information and technical skills that help to continue their path themselves and determine clear relationships with the possibilities and variables that may be imposed by those developments, so it has become necessary to improve teaching methods and methods and the quality of learning and take this as a basic criterion against which the extent of scientific progress and advancement in educational institutions is measured. And the race among them for scientific, technical and educational excellence The teaching of pictorial construction for students as a practical skill subject suffers from many problems, including this is something that invites us to think about searching for new methods of teaching consistent with what is confirmed by modern educational trends in the participation of students and encouraging them to perform The lessons of pictorial construction were and

still are the best means of expression and creativity

(Decree, 2003:p. 4)

Second: The importance of research:

It has become imperative for the educational system with all its elements to adapt to this technological development, and in order to face these challenges, it was necessary to make the learner the basis of the educational process where the student is able to interact with this development in order to build his personality in all its cognitive, emotional and skill aspects, and thus the current situation in society imposes a new reality, which is interest in education.

"Skills development is one of the objectives of teaching art education as it helps the growth of learners' personalities in the future and their abilities to take responsibility and rely on themselves, as possessing a certain skill in any discipline has an impact on the growth of the learner's personality."

(Jabr, 1983: p. 23)

In this era, in which technology has jumped and the gap is widening between educational and educational theories and their practical applications in the field, comes the need to take care of the design of education, to transform education from the theoretical framework based on remembering and memorizing only to the applied form in which learners find effectiveness in applying what they have learned in their lives, and this science serves as

a link between theoretical and applied sciences in the field of education.

Scholars of educational design believe that the educational process is an organized process of the procedures carried out by the teacher inside the classroom, especially when presenting the material and its sequence in its explanation, and they see that the educational process is in essence a process of organizing the content of the study material, which often takes the form of a hierarchy. (Darwaza, 2000: p. 35)

During their growth, people build their knowledge and experience and develop their multiple skills according to educational methods in line with their mental abilities and preferred learning methods, and it is seen that such methods control their thinking styles and problem-solving methods that they face during their various life interactions.

(Zghoul and Shaker, 2007:p. 263)

The learning style is the individual's preference and choices for the conditions of the educational process, which have an impact on his learning and determine the place, time and way in which learning takes place and occurs, and these methods can play a major role in determining how students understand and respond to the educational environment, so the teacher's knowledge of these methods helps him provide options that enhance the student's learning.

It was found that the learning style used by the learner affects the level of development he has, when the learning style of students and the teaching style used by the teacher are compatible, the development of students undoubtedly rises significantly, as the learner's speed increases to develop, acquire and retain information for a longer period of time and transfer its impact or apply it effectively, and

all this results in improving the learner's attitudes towards the subject of learning, which is thus reflected in the level of motivation and perseverance he has, The pictorial construction, as in other human sciences, requires taking into account the different learning styles prevailing among students when teaching them in order to be developed.

1- Take the educational design of learning as a method in research, design and evaluation, and the procedures and recommendations it provides may contribute to the development of science curricula and teaching methods, and curriculum developers in the art education departments of universities.

2- The results of the current study may constitute an addition to knowledge and skill in the field of art education in general and pictorial construction in particular.

The current research aims to: :

Disclosure of an educational design to develop the skills of hierarchical construction for students of the Department of Art Education in the subject of pictorial construction For the purpose of achieving the goal of the research, the researcher formulated the following two hypotheses:

1- There are no statistically significant differences at the level of (0.05) between the average scores of the experimental group students in the pre- and post-applications of the skill performance test.

2- There are no statistically significant differences at the level of (0.05) between the average scores of the experimental group students and the average scores of the control group students in the post-skill performance test.

#### Fourth: Research Limits:

The procedures of this research are determined in the light of The following limits :

- Human limits: students of the Department of Art Education - the third stage - morning study.
- Objective limits: (vocabulary of the pictorial construction material prescribed in the Department of Art Education - ADDIE model for instructional design).
- Spatial boundaries: Al-Mustansiriya University / College of Basic Education .
- Time limits: second semester of the academic year (2022-2023).

#### Fifth: Defining Terms:

##### A- Instructional Design):

##### 1- Arafa Shehata and Al-Najjar (2003) :

It is "a logical process that deals with the necessary procedures for organizing, planning, developing, implementing and evaluating learning in accordance with the cognitive characteristics of the student."

(Shehata and Al-Najjar, 2003: p. 105)

##### 2- The researcher defines (educational design) procedurally as:

An organized educational activity that describes the educational - learning activities in the current research topic according to

Specific interrelated steps organized, in light of the educational and behavioral objectives set by the researcher and includes cognitive and skill experiences and training activities commensurate with the needs of learners.

#### D. Development:

##### 1- Defined by Madbouly (2002):

It is "development and progress for the better in the educational level, and keeping pace with the changes and innovations taking place in educational attitudes." (Madbouly, 2002: p. 83)

##### 2- The researcher defines development procedurally as :

3- It is the performance development and progress of the learner as a result of the exposure of the experimental group to educational designs - learning effective educational variables .

#### F- Skills:

(HE knew it) 2003 :

" It is the ability to do an action, in a form determined by an advanced scale for this purpose, and that on

A foundation of understanding, speed, and accuracy." (HE 2003: 45p)

The researcher defines the skill procedurally as:

It is the performance and steps, which is characterized by a high degree of accuracy in the performance of movements and practical procedures implemented by the student of the Department of Art Education in the subject of pictorial construction and quality in completing tasks in a specific manner and with extreme accuracy, and speed in implementation.

#### G- Pictorial composition):

##### 1- Knew by Scott (1968):

It is "the total system including the shape and floor of any design."

(Scott, 1968: p. 25)

##### 2- Known by Riad (1974):

(Creating unity and integration between the different elements of the artwork through the processes of organization, reorganization,

analysis, installation, deletion, addition and change in shapes, tonals, light values, shadow, areas and other components). (Riyadh, 1974: p. 7)

The first topic

Instructional Design

Instructional design))

- The Genesis of Instructional Design

The educational design has derived its origins and principles from several theoretical fields and behavioral schools, as it was influenced by its educational guidelines. The roots of educational design go back to studies and research in the field of psychology and education, which provided us with the information and skills necessary to improve education strategies and techniques and led to the emergence of different learning theories, aimed at interpreting the learning process, which developed the concept of instructional design, which forms its different models part of the education technology.

1. Research and studies conducted in the field of education and psychology, especially with regard to the process of self-learning and the psychology of individual differences, and programmed education.

2. Research and studies related to learning theories and human behavior science specialized in controlling stimulus, response and reinforcement during the educational situation.

3. Engineering technology that examined the importance of self-learning at the time of using the machine, which helps students in the process of learning it at its own speed. (Jammeh, 2010: p. 71)

4. Research that examined the importance of audiovisual and audiovisual means in the learning process and the involvement of more than one of his five senses at the same time.

5. Engineering technology that examined the importance of the self-learner when the learner uses the machine and helps him progress in his learning at his own speed. (Qatami, 1999: p. 111)

The researcher believes that the roots of educational design came from different fields such as military science, industry and others, so it is seen as valid for vocational education. All the activities and educational developments that have emerged in specific historical and scientific circumstances resulted in innovations that were the result of special theoretical frameworks that soon revealed practical experience weak validity or generalization, it is worth noting that most learning theories had an impact on the emergence of the science of education design into existence, and we find that the design Educational has emerged from the psychological sciences, especially from the sub-behavioral sciences and cognitive sciences, and the most important educational activities and events that paved the way for the emergence of educational design as follows:

- Programmed education in the early fifties was caused by the ideas of "Skinner" and "Percy" and its applications to the so-called mechanization of education.

- Task analysis: where the course is converted into specific tasks and clear behavioral data.

- The spread of the movement of behavioral goals: Although the call for the use of educational goals of all kinds has begun since the beginning of the last century, but the designers of curricula, teachers and students

remained far from the use of goals in their behavioral form in learning until Bloom appeared and presented the so-called educational goal systems between the years 1956 - 1964, which included three cognitive systems, skill and psychomotor.

- Controlled education: It was one of the important doors from which educational design entered and built theoretically and practically on it many successful experiences in academic education, especially the transformation of the education process into detailed and measurable compounds.

- Model of Principles of Learning: All of Kanyer's contributions between the years 1974-1988 were in the service of development and modernization in the process of education and training.

(Al-Zend,2018:pp. 52-53)

From the foregoing, the researcher notes that the educational design contributed to the development of the idea of performance from the random formula to the specific context of the standard that plans with objectives and expected calculated results, and is implemented within specific frameworks that have time and accuracy variables are important factors in calculating the results that all these educational activities should be associated with the continuous follow-up and evaluation system that precedes the planning process and is accompanied in multiple forms by the implementation process and then continues until the end of implementation and after that.

In light of this, the content of the instructional design consists of a set of elements, including (general educational objectives, the content of the educational material, the characteristics of learners, their preparations, capabilities and abilities, pre-measurement, which is intended

to identify the readiness of the learner in order to build the bridging of what he knows and what he knows, the educational activities and procedures that he will use in order to achieve this, the calendar and be comprehensive for all previous steps). (Qatami and Nayfeh, 2000: p. 9)

The second topic

(SKILL)

- Skill concept):

Knowledge of skill in the field of art dates back to ancient times, as man was making tools to achieve his goals that led to the development of his skills in many different fields, and over time his technical methods and artistic achievements evolved as he was old and new, he relied on tradition, accurate observation and experience in learning about things and practicing work of all kinds.

The researcher sees the skill is considered an advanced performance experience and is a means practiced by the individual through the function of performance, and has information in a specific field of knowledge, and has its origins as well as it is a practice that requires in those who practice it a lot of capabilities and capabilities it requires the ability to accomplish work accurately, the researcher believes that the skill is related to work and vice versa, and that the accuracy of work and mastery is linked to the use of scientific and technical devices and equipment, But not mainly can dispense with these machines in some of the traditional things that enter into painting, as the skill appears when the individual is ready and has the desire to develop it in all fields, especially those related to the arts such as photography, sculpture, painting .... etc. of these areas.

(The skill means that the individual exercises it as a means during the function of performance,

and what he owns of information in a special field of knowledge, and has its origins as well as it is a practice and requires in those who practice it, a lot of potential and capabilities, which require the ability to accomplish the work accurately, and the meanings of the skill is also to describe the person as a degree of efficiency and quality in performance and so we find that the skill indicates learning from a high level, Accordingly, the skill indicates the learned or learned behavior that has two essential conditions, the first is to be directed towards achieving a specific goal or purpose, and the second is to be organized so as to lead to the achievement of the goal in the shortest time and the least possible effort).

(Abu Hatab, 1994: p. 658)

The researcher notes that the skill is the acquired ability, which includes the completion of a work with high quality and efficiency, taking into account time and effort, and have useful work, and this is done by employing information effectively and clearly, and that training and continuity lead as a result to refining and improving the skill.

(Photography from nature requires students skills that include quality and accuracy through oil colors to form wonderful paintings, and that these skills come through practice and continuous training, taking into account the notes that the teacher gives to students, and then this skill is refined well, the skill of man as a concept, means a means exercised by performing a function, and has information in a specific field of knowledge, and has its origins as well as a practice that requires those who practice it , a lot of possibilities and capabilities, and require the ability to accomplish a work accurately).

(Al-Gharib, 1962: p. 14)

The researcher believes that the skill of performance of the delicate skills that require the use of small muscles, such as the fingers of the hand, palm or forearm, and often accompanied by this work the use of sight and hand in a compatible manner, and these skills skill drawing, as the skill of continuous performance of planning in the material of construction pictorial makes students increase his practice of other skills such as writing, drawing and sculpture ... And other competencies, and increases his perception of them, in order to be able to use them easily and easily, and in an automatic way in order to create aesthetic forms, and adds to these efforts his experiences, as they are equal between movement and sensory perception.

(Every process in education requires types of skill, and the formation of these skills requires organized work, carried out by the teacher and the learner to develop them, this gains the skill attribute to be skilled in his field of specialization, practically and technically, and this is of course due to the efficiency enjoyed by students in the performance of their skill, as the level of students rises after practicing the work of the teacher and they acquire skill and accuracy in work during their academic life, and this process in the field of arts is not easy to learn). (Al-Jubouri, 2001: p. 192)

This is confirmed by (Croce (1 \* as he said that (manual skill is just a technical experience acquired by practice and exercise). (Salem, 1985: p. 86)

The researcher explains that technical skill is an essential element in the behavioral process of the learner because it enables him to achieve his goals in a distinctive way through the diligent currency, so that he can control the use of his various tools appropriately and in line with the goals to be achieved.

- Skillful performance :

The performance skill works to develop artistic taste, because it is one of the means of building and integrating the social personality, as art allows a person to use his senses and abilities and is an outlet to express emotions and ideas and achieve self-balance and psychological, which is an opportunity to restore self-confidence, and the multiplicity of human skills and hobbies make him more free, happier and enjoy life because he was able to discover plastic and aesthetic relations, (Skill performance means the ability to perform organized and with a high degree of adequacy and there are words related to the concept of multiple skills, including experience, deletion, judgments, mastery, creativity, values, ingenuity, proficiency, excellence, ability, and consists of a set of behavioral constructions that should be built sequentially so that they reach the final performance). (Titi, 2001: p. 165)

The researcher believes that the skill of performance of the delicate skills that require the use of the smallest muscles as in the fingers of the hand, palm and forearm, which often accompanies the use of sight and hand in a compatible manner, and these skills skill drawing, as we can observe and measure the skill in the performance of the individual and the levels of performance vary with the degree of mastery of the individual for this skill.

(Performance is the main and important pillar in the presence of skill, and means the completion of tasks in the form of activities or behaviors Aniani, specific and observable and measurable and at a high level of clarity and accuracy, so requires the individual to possess a degree of concepts, information, trends and knowledge that obliges the individual and directs his required performance behavior and this performance must be strong so as to judge

the individual skill accuracy is a condition, The development of the skill depends on the principles of educational and psychological that emphasize the role of motivation Skill development is better when the skills are important to the learner and he also has the desire to learn them and can be better when the educational activity tries to ensure the development of the skill itself in the event that it is part of the educational activity and not separately).

(Al-Marei and Al-Hila, 2002: p. 216)

The third topic

Pictorial construction)

- (The concept of pictorial composition):

Art is a necessity of life, but it is a sublime message and a manifestation of thought that tries to explain the world and help us understand and accept it, and it serves as a bridge between what the fabric of imagination has accomplished and our visual perception of the forms of nature, art is not a purely automatic process, but rather a process of installation and construction.

(The artistic composition in the plastic arts is one of the important areas, it consists of a set of visual elements" such as point, line and block, as well as the use of colors that are consistent with a certain arrangement of the elements, creating in the soul feelings that have their meanings and vary according to the different visual arrangement, so the best artistic composition is the one that does not strain the recipient and this comes through the arrangement of the elements and the strength of their interconnection with each other in a general composition, as well as its dependence on the method of color distribution and gradations).



(Riad, 1974: pp. 8-25)

The researcher sees a good composition is the arrangement of elements in a coherent unit with a harmonious entity, and specialists of different directions in the pictorial creation see the composition of the artistic painting is done by arranging its elements according to certain rules so that it leads to the highlight of an idea or topic, which means that the creation and construction of the artwork is the link between the idea and the application, as well as the aesthetic aspects it reflects, The construction of the painting in painting requires experience that comes through observation and experience in how to use elements that are linked to known artistic relationships based on linking those elements tightly according to specific rules, foundations and controls, which makes the study of pictorial creation, experimentation and observation all important and irreplaceable.

(The pictorial creation in the drawing consists of several structural rules are balance - harmony - contrast - contrast - repetition - gradient - continuity - symmetry - heterogeneity - rhythm - sovereignty - unity, and the organization of relations between them in terms of mechanical relations and kinetic proportions and the general atmosphere of the painting, which are all linked in order to embody ideas and arouse feelings, and the successful and good pictorial creation in artworks should not distract the eye through the instability of some of its components, so we see in the completed artworks the interaction and harmony of all elements with each other, it is Cohesion for unity has value and not just assemble elements and this is confirmed by Cézanne as he says that the process of artistic photography does not mean a rigid transfer, but rather an understanding of consistency between the various relationships according to a new

logic original, the work of the painting means its formation). (Hammam, 1971: p. 23)

Types of pictorial construction) :

In order for students to carry out a work of art, they must begin to distribute the vocabulary of his painting through what comes to his mind of an idea or topic that he wants to express its content according to a certain organizing mechanism for the forms, sometimes we find that these forms have been employed to direct the recipient's eye inward through the movements of people and lines or by suggesting the face or the direction of looks, while we find, on the contrary, structural formations that have employed their forms to tilt the recipient's eye to the outside, or in both cases. There is an intention by the artist to report on his plastic discourse according to what he sees the need for the situation about a certain content, as the foundations and principles of artistic creation in the plastic arts organize the units of artistic work and according to the rules of construction organization and this organization has divided the artistic creation through its forms as follows: -

#### 1. Triangular Composition ):

It is the construction that forms the lines of its external shapes with each other, the shape of a pyramid, a triangle or even a cone, and its structural strength depends on how the center of sovereignty is placed in terms of the shape of the pyramid, preferably placed at the top of the pyramid so that it is more stable or homogeneous. As in the painting of the artist "Jerico" from the Romantic school entitled (The Raft of Meduza)

Which represents an accurate and elaborate example of hierarchical construction, where the artist used this type of formations, taking

advantage of the overlap of two hierarchical constructions with each other to achieve dramatic emotional movement and create visual balances to edit an expression that is responsible for the size of the emotion of the recipient and the testimony of critics and academics for what this painting has achieved, which is one of the most important historical paintings to create a shift towards the romantic school. (Myers, Bernad: 1990. p. 54)

### Chapter Three

#### First: Research Methodology:

The researcher followed the experimental approach to detect (educational design to develop hierarchical construction skills for students of the Department of Art Education in the subject of pictorial construction).

#### Second: Experimental Design:

The researcher used in this research semi-experimental design with partial control design for the experimental and control groups with pre- and post-test with two groups.

#### Third: Identifying and Specifying the Research Community:

The research community consisted of third-grade students in the Department of Art Education, College of Basic Education in (Baghdad), numbering (161) male and female students.

#### Research Sample:

The researcher chose his basic research sample from the students of Al-Mustansiriya

University / College of Basic Education / Department of Art Education randomly, and they are students of the third stage of the morning study, as the research sample reached (80) male and female students, from the third stage students, in the Department of Art Education at the College of Basic Education, as they were divided into two groups, the first experimental, which reached the number of its members (40) students, and the second officer with a number of members (40) students .

#### Skill Performance Test:

After correcting the students' answers, the total score for each student of the research sample was calculated appendix (16), and the arithmetic mean and standard deviation of the skill performance scores of the students of the two research groups (experimental and control) were calculated, as the arithmetic mean of the experimental group was (37.02) and the standard deviation was (3.81) and the arithmetic mean of the control group (37.27) and the standard deviation was (3.45) and by adopting the T-test (T-test). ) for two independent samples showed the results that the calculated value amounted to (0.307), which is smaller than the tabular value of (2,000) with a level of significance (0.05) and a degree of freedom (78) and this indicates that there is no statistically significant difference between the experimental group and the control group in the skill performance variable and thus the two research groups (experimental and control) are equivalent in the skill performance test and Table (13) shows that.

**Table (1) The results of the T-test for two independent samples to know the equivalence of the students of the experimental and control groups in the skill performance test**

Significance level	T-value		Standard deviation	Arithmetic mean	Number of Students	Groups	t
	Tabular	Calculated					
is a function at the level of (0,05)	2,00	0,307	3,81	37,02	40	Experimental	1

### Interpretation of the results:

Through the presentation of the results of the hypotheses, a clear superiority of statistical significance appeared at the level of significance (0.05) for the students of the experimental group on the control group and the researcher believes that this superiority is due to:

1. The size of the impact of educational design in the dimensional cognitive achievement (0.59) and therefore the size of the impact is a high impact of the experimental group.
2. The size of the impact of the educational design in the dimensional skill performance (0.51) and therefore the size of the impact is a high impact of the experimental group.

### Conclusions

Based on the results of the study, the researcher concluded the following:

3. There is a need for undergraduate students, especially the third stage, for modern models and teaching methods.
4. Each student possesses a wide range of learning methods referred to, but in gradual proportions in preference.

### Recommendations:

In light of the researcher's findings, she recommends the following::

3. Include rehabilitation and training programs for art education teachers on how to build educational designs and implementation procedures, because of their high efficiency in giving good results and helping teachers to achieve their goals and in a way that achieves the economy of education in terms of time, effort and expenses.

4. Stay away from the traditional methods in teaching the pictorial construction of the third stage and benefit as much as possible from the results of the current study.

### Propositions

To complement the current research, the researcher proposes to conduct the following studies:

1. Attitudes of teachers of pictorial construction towards the use of modern strategies and models.

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