

**The effect of Keeler's strategy on developing the skill performance of the students of the Department of Family Education and Technical Professions in the subject of planning**

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Research Article

**The effect of Keeler's strategy on developing the skill performance of the students of the Department of Family Education and Technical Professions in the subject of planning**

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**Abstract**

The research aimed to identify the effect of Keeler's strategy in developing the skill performance of students of the Department of Family Education and Technical Professions in the subject of planning. .

Is determined by the current research students of the Department of Education , Family and technical professions for the academic year 2021/2020 consisted research community ( 220 ) male and female students, and reached the research sample ( 24 ) students who are studying planning material in the second grade morning who applied researcher Wen experience of them, Ast served as the experimental method for the experimental and control groups and b Astkhadd a m skill test material planning tool for research after confirming the validity and reliability and instrument data were statistically treated using ) Altaia test one sample, Pearson correlation coefficient, equation Alvakronbach, test Altaia for two independent samples )

The researcher found Wen to a number of Altaij recommendations and proposals

**The first chapter / the general framework of the research**

**Search problem**

It is a way of planning means thinking that requires exercise and training continued even up to the highest level of self - expression and its surroundings from the reality or imagination and is embodied in the vocabulary of the planning material studied by students in the second grade of the Department of Education , Family and technical professions, making Aldharor of Renewal in teaching methods and methods based on skills development among students, represented by a number of modern strategies, such as the Keeler strategy.

Hence, the researchers formulated the research problem by answering the following question:

-What is the effect of Keeler's strategy on developing the skill performance of students of the Department of Family Education and Artistic Professions in Planning Subject?

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## Research importance

For increased attention to the education of the arts as a means of education in achieving its objectives and technical Education is one of the branches of education dealing holistically knowledge and the development of the creative abilities of the students.

Educators agree that the best teaching methods are those that lead to quality education and help the teacher to succeed in bringing about the desired change among students, including the planned procedures that the teacher follows in dealing with students with the aim of making education easy and affordable ) Al-Laqani , 1976 ,pp . (179-178 .

Individual education systematic expression aims attention to the individual learner and focus in teaching and learning processes and design program for groups of individuals as it is left to their progress to their individual capacities, self and their speed which is all that means : providing education takes into account between the learners of individual differences, and requires the provision of a series of educational goals which relate to a particular goal and a final proposal for the activities of educational learning that help each Mtal m to reach those goals in the manner and speed and the ability that suits him and requires the provision of educational materials and teaching resources needed by affected the science ) the trick , 1999 ,p(270-269 .

The Keeler strategy is the birth of a personal or individual education system by Fred Keeler) Fred Keller (who laid the foundations of this system or strategy , and Keeler employs the principles of university education based on behavioral laws that emerged from the empirical scientific research carried out by the American psychologist Skinner on programmed education ) Al-Khatib , 1993 p(223 .

The material planning of the basic materials and necessary in the field of the art of painting , it is material head of the refinement of education student skills and technical education Family and technical professions, because mastering the principles and rules of this article depends upon the right track and systematic materials technique such as material construction collages, sculpture, anatomy , and graduation project and other.

### The importance of the current research comes through

.1This is the study \_ within the limits of science researcher yen \_ the first study in the recruitment strategy of Keller in the teaching material planning .

-2It may help planning teachers in the departments of art education in the faculties of basic education and faculties of fine arts, as well as the department of family education and artistic professions in the faculty of basic education in realizing the importance of modern teaching strategies in developing the planning skill of students .

-3Improving the scientific level of students by adopting the Keeler strategy in teaching planning , which is considered to have a new dimension in teaching this subject .

**search objective:** The current research aims to identify the effect of Keeler's strategy in developing the skill performance of students of the Department of Family Education and Technical Professions in the planning subject.

And to verify the aim of the research put researcher Wen premise Tin the Â T Tin:

**The effect of Keeler's strategy on developing the skill performance of the students of the Department of Family Education and Technical Professions in the subject of planning**

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

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

**search limits**

Second grade students study the morning / Department of Family Education and technical professions for the year the / 2021 - 2020 material planning using Keller 's strategy.

**Define terms**

-1 Keeler Strategy : Keller knew her )1968( Keller as -:

" A learning and teaching system that motivates learners individually to move across the study units at their own pace and to switch from one study unit to another in the event that the required mastery is reached, while providing encouragement, guidance and evaluation for them by their peers who have completed the study of the units assigned to him ")33: P1968,Keller. (

-2 Planning -/ Haider (1984) defined it as:

" A set of lines give us accustomed to something meaningful or beneficial use, technical and planning translates emotion and feelings of man and his feelings to others and carries coauthored beautiful artistically translates the spirit of the times and also known as a way of thinking, education , and emotion and gives us planning by an honest picture of the components of life ,mental and behavioral when The human being also shows the interaction of the human being with his surroundings ) ” Haider , 1984 : p.(7 .

-Arafa Speed Speed (2004 )

“As an accumulation of the main and secondary lines, in which light, shadow, and linear perspective are taken into account to reach the visual perfection of the forms” .Speed ,2004 p48(:

-procedural definition of planning

" A group of fonts gives us a sense of pleasure and freedom to express the ideas in our minds , and records what goes on in our minds and later translates it into an integrated work of art" .

**Chapter II**

**Theoretical framework and previous studies**

The first topic is the theoretical framework

-1 Keeler's strategy

Use the T strategy Keller in the Table Education of me extensively and underwent T .this strategy to Tq and Yum scientific extensively ,as n evil until 1972 more than 260 scientific study on the effectiveness of a strategy Keller, also used this form prescribed

in teaching more of (850) a course in c the complexes of the United States ) Khatib , 1993 ,p .(224 .

The most prominent characteristic of this strategy for the courses only other to individualize education that the learner in his gets to have a positive interaction between him and the teacher that lose most of Massa' s data individualization other , through the use of assistants or the so - called observers ) Proctors. (

Keeler himself presented a working paper entitled " Goodbye, Teacher " in which he focused on five important advantages:

Based strategy on the principle of mastering the learning process a particular school Bmg before moving to the next unit

The learner advances in his subject at his own pace and is given the time necessary to learn it.

T confirms strategy written lessons and lectures is used only in certain cases.

Has evidence printed to help learners to education, as showing them the behavioral goals and propose appropriate methods, and provides instructions and guidelines, and how to study the unit and carry out the necessary activities supervisory and treatment yeh and directs the learner to learning resources and how Astkhadd of Maha, and references relevant models and tests, and conditions Moving from one unit to another.

And has observers for assessing and yum examinations, and provide immediate feedback for enhanced education, and provides any assistance other required by the learner) Kulik,1989, p:418-422. (

Keller also focuses on the importance of promoting and rewarding reward educational behavior to the maximum degree possible, and at the time itself is designed to minimize to the greatest degree possible the chances of frustration and extinction and the removal of fear and punishment, confirms Keller himself on the use of reinforcement in various pictures e formats e possible through classroom activity ) resourceful , 1999 ,pg.(320 .

The main idea that Keeler pursues is that student learning can increase if the teacher gives a clear description of the materials to be learned and sets individual units to teach them , allows students to determine the speed of their learning and provides an immediate feedback on students' development) Green, 1971, p: 765. (

### **This view of learning translates the principles of behavioral theory that focus on**

Should be an effective learner, as it learns learning Ovdila when the hub of educational activity and a SAS educational process.

Includes learning and practice again, as the repetition is something essential for good performance) Woll folk, 1990, p: 454. (

### **-2Planning:**

Through tracing, we find that the artistic movements and their schools have put for planning an aesthetic philosophical value on which most of the fine art schools are built .And how

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the classics sanctified planning, as it is a basis for them to build all their perceptions of life) .Haydar, 1984, (48

**The composition of the line and its areas, and the meaning of the line**

The nature of the formation of the line and its areas depend on the area and size of the point from which it represents, and here we assume the point is of two types .A circle point and a square point and their scale depends on the hypothesis that we want according to their areas, and the formation of the line depends on the area of the point formed by them) .Abo, 1982, (148

Calligraphy has different types and degrees dependent on this difference and the line has directions that evaluate its meanings such as perspective lines or anatomy of the body or expressive of the physical movements of the various work movements of people. All of these are models that give us strength in expression and different types of lines.

Lines, whether in nature or in works of art and geometric shapes, are divided into the following types:

**1. horizontal lines:**

They are the lines from which all other types of lines are derived and form a base for drawing. They suggest stability, calmness, and comfort. They work to increase the sense of horizontal breadth, and sometimes they suggest the beginning and the end.

**2. Vertical lines (vertical):**

They are the lines that are represented in a vertical and vertical way from top to bottom or vice versa, and symbolize the developing strength, loftiness, greatness and dignity.

**3. Italics:**

These lines give us a sense of upward or downward movement according to the direction of the line's movement, and the sense of movement and its strength varies according to the degree of inclination, as in the movement of the balance lever in children's toys or traditional scale.

**4. Cross lines:**

The intersecting lines express the excitement of conflict, clash and resistance and are used in all arts and according to what the artist needs to express specific artistic situations.

**5. Compound lines (both vertical, horizontal, and diagonal)**

They are the lines that express depth and perspective at the same time and lead the consideration in most cases to the center of sovereignty in the painting, resulting from the overlapping of types of straight, refracted and curved lines. Artworks are often based on this type of lines because of its aesthetic diversity and harmony.

**6. Broken lines:**

It is a set of straight lines that overlap each other to give us sharp angles at times and our feelings tend to associate violence and anxiety and even to denote different types of ancient weapons such as spear, arrow, knife and others.

**7. Circular lines:**

It is a series of connected curves, and it symbolizes infinity and infinity, and does not point to a specific direction, but it is (each in itself) that it is always in a state of balance.

**8. Irregular lines:**

It evokes a sense of confusion and instability because it tends to randomness and decentralization, such as people walking in crowded places, or in absurd lines.

**9. radial lines:**

It is the one in which you see inclined main lines and in different directions, above, below and sideways, and most of them or all of them have converged in one gathering point somewhere within the boundaries of the painting's frame.

Whatever the shapes of the lines, they are the path of a point in a certain direction and perform a number of functions, the most important of which are:

-1 Divide the spaces -2 .Define the shapes -3 .Create movements -4 .Partition of spaces.

These jobs are very important in artistic work, as they constitute the artwork and design. If the artist wants to divide a specific space, his interest is focused on interesting breaks) .Al-Darisa, 2005, (39

This is what gives great importance to calligraphy and planning in the overall artistic process, as it is represented in the following:

- The line is the boundary between shadow and light.
- It records what is going on in the artist's mind initially, and later translates it into an integrated work of art.
- The practice of planning continuously gives us the ability and the possibility to carry out complex technical works easily.
- The line is an active element in suggesting movement and the direction of the line gives us an understanding of the shape.

Therefore, the image to be plotted depends on the nature of the point formation and the resulting line. If the point is dark, its resulting line is dark, and if it is light in color, its line is light in color. These degrees vary in varying proportions according to the artistic purpose .The composition of the lines depends on the type of line composition in terms of width, length, and the degree of light or color in which they are colored) .Abo, 1982, (148

From the foregoing, it becomes clear that the line is a set of points, and it is the rectangular way in the thing or the way connecting two points, which is a length without depth and a group of lines.

### **Previous Studies / Arabic Studies**

#### **-1Hussein's study1998 /**

Title) : The effect of educational modules in the subject of planning and colors on the products of the students of the Department of Art Education in the College of Fine Arts .( The study was conducted at the College of Fine Arts / University of Baghdad . Objective : To know the effect of using three educational modules ) in a self-teaching style ( in planning and colors on the products of the students of the Art Education Department , including : the foundations of planning , the planning of mid-figures. (portraits) pencil , landscape planning (landscapes) Pencil / sample / The research sample included two classrooms . One of them consisted of (16) male and female students 3) male and (13) female students who were randomly selected from among the first graders in the Art Education Department of the College of Fine Arts - University of Baghdad. Researcher supervision . The control group that studied the content of the same modules was represented by the traditional method.

The Tool : For the purpose of achieving the objectives of the research, the three modules were practiced in two ways : First : by presenting the components of each of them separately and combined in their final form to a group of experts from specialists in the field of curricula and teaching methods . Art education, planning, colours, educational techniques, evaluation and measurement, and scientific research methods . The second : through a survey of the opinions of

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an exploratory sample of first-grade students in the Department of Art Education, as they are the target group .

Statistical means : The data were analyzed statistically using ) Mann and Tney - Y ( for two independent samples ( mann whiteneu u.test ) The method of analysis of variance (Analysis of variance) Test ) and Caucasians ( for two samples interconnecting ( wilcoxon - matched.pared signed ranks –test)

Results : The students of the experimental group outperformed their peers of the control group in the level of cognitive information acquisition and practical outcomes.

**-4 -2Moazan study n2013 /**

This study was conducted in Iraq - Mustansiriya University - Faculty of Basic Education , and aimed to / build a training program on digital technology to develop the skills of students in the Department of Art Education in the planning and color material , measure the effectiveness of the training program by applying it to a sample of students in the first grade Department of Art Education / College of basic Education Mustansiriya University for the academic year (2012, 2013).

Sample : The sample of research (69) male and female students , and the small size of the community , including sample members of the community are all after the exclusion of 15 students , the number of respondents (54) students Mozeian equally have been chosen , one randomly , the first hall of the experimental group In the second room , the control group . The researcher conducted a parity between the two groups in the following variables ) chronological age , academic achievement , and previous experience.(

the tool :

1- It is related to the design of a cognitive achievement test whose objective is to measure the cognitive aspect that the learner has acquired after studying the educational content of the two groups ) experimental and control.( .

2- It is related to the design of a skill performance test that aims to measure the performance skills acquired by the learner and can be measured by means of a performance evaluation form that was prepared according to the requirements of the skill side in the subject ) planning and colors( .

Statistical means : The researcher used the following statistical means ) T-test for two independent samples , the equation of the difficulty and discrimination coefficient , the equation ) Cronbach's alpha ,( and the effectiveness coefficient of the alternatives..

Result : The result showed the superiority of the experimental group that was taught using digital technology , over the students of the control group that were taught in the traditional way, and there was a statistically significant difference at the level of significance ) (0.05) Moazan study , ,2013p(112 .

**- 3Study of Al-Olaymat2000 /**

Conducted A'erat study aimed to identify the impact of the education system profile ) Keller Plan ( in the collection of students in the sixth grade basic in Arabic language, and the population of the study (3848) male and female students from the Kasbah Mafraq Directorate for the Academic Year 2000 1999 The sample of the study was the number of Its members are (160) male and female students , and the results of the study revealed that there are statistically significant differences at the significance level (0.05) in direct achievement due to the method of education and in favor of the personal education method, and there are no statistically significant differences at the significance level (0.05) in direct achievement due to gender and interaction. between education and gender . )A'erat , 2000 ,p(188 1 .

–Foreign Studies -1 / Study of Block and Terni) Block and tierney ( 1974 :

This study was conducted in c a spangle California, targeted a to identify the therapeutic methods of model Bloom) Bloom , (and treatment methods for the model) keller (in the learning strategy for the achievement of college students . The study sample consisted of 44 students of the student, chosen by the researcher of the first registered to study the history of Europe by 22 students and 22 students, divided into three groups:

-The first experimental group : its students are studied in the usual way with the use of a model) Keller (for corrective activities and repetition of the study material.

-The second experimental group : Divide its students into small groups, they study in the usual way accompanied by corrective measures according to a strategy) bloomTo learn for the sake of mastery, as the researcher conducts monthly formative tests for students, and the test paragraphs are re-corrected in a cooperative manner among groups of students who meet in typical sessions, and each group consists of four individuals .

-The control group : its students are taught by the method of lecture or class discussion without remedial methods.

Use analysis of variance for with a religion test results Allen Haia statistically, and the back of the following:

-the rate of the second experimental group the results of the effect of a size of the effect of the control group.

-The average results of the first experimental group had a greater effect than that of the control group.

-The results of the two experimental groups had a greater effect than the effect of the control group on the overall achievement rate.

) Block and Tierney, 1974, p: 228–229 (

-2The study of Koldoy and his companions) Coldway . Et . At (1974:

Koldoy and his colleagues conducted a study aimed at comparing the performance of two groups ) small and large ,( the first studied using the Keeler plan method , and the second studied by the lecture method in the psychology course . The researcher defined standard workmanship by , (%90) and the small group included 24 students divided the two groups also while the large group included 30 students.



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The results of the study showed that the average scores of the students of the small group were higher than the average scores of the students of the large group who studied by the lecture method, and that the average scores of these two groups were higher than the average scores of the students of the group that learned by the lecture method. higher than the scores of the students who studied by the lecture method.

( Coldeway . etal , 1974, pp .: 215–233 )

**Chapter Three / Research Methodology and Procedures**

**Research Methodology :** In this study, the researchers followed the experimental method, designing two groups, control and experimental ,with a pre and post test.

**Research community and sample**

The current research community are all students of the Department of Family Education and technical professions in the College of Basic Education morning and evening for the academic year ,(2021-2020) which numbered 220 students.

The researchers chose the research sample from the second grade students, and their number was (24) male and female students

The production researchers Ri equal two sets of research.

**Research tool :** The researchers built a test to measure the skill performance of students in the planning subject ,consisting of (7) main demands, and each question contains (5) sub-paragraphs that measure the skill field according to the levels set by Simpson ) perception, preparation, directed response, creativity .( The items were corrected in a five-step gradation as follows ) excellent, very good, good, average, poor ( and weights (5 , 4 , 3 , 2 , 1) are given in the appendix (1) and after verifying the validity and reliability of the test, it was applied

Was the highest degree obtained by respondents is (175) and the lowest possible score is 35 degrees

**Statistical means :** The data were treated statistically using ) one-sample t-test, Pearson correlation coefficient, Facronbach equation, t-test for two independent samples .(

**Chapter IV / presentation and interpretation of results**

The results of the research will be presented and explained in this chapter and as follows

**The first hypothesis ) : there are no statistically significant differences at the level of significance (0.05) between the average ranks of the students of the experimental group in the pre and post tests of the skill performance test(**

To validate this e hypothesis yeh the T researcher Wen for the use of the test" and Cookson )wilcoxon (To detect differences between the two measurements pre and post with respect to averages arranged grades test performance skill experimental group and (Table ( 1 shows the results relating to care of the e hypothesis Yeh.

**Table ( 1 ) shows the significance of the differences between the mean ranks of the pre and post measurements of the experimental group members on the skill performance test**

		Wilcoxon value	sum		rank	variable
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The meaning of the difference	Indication level	tabular	calculated	rank	middle rank	the number		
D of statistical	0.05	14	3	3	1,50	2	negative	skill performance test
				75	7,50	10		

It is clear from the above table that the difference is statistically significant because the calculated Wilcoxon value is) 3 (is smaller than the Wilcoxon tabular value of ( 14 ) at the significance level ( .05) This means that the strategy has contributed to increase test scores skillful performance of the students of the experimental group.

**The second hypothesis) :there are no statistically significant differences at the level of significance (0.05) between the average ranks of the students of the experimental group and the average ranks of the scores of the students of the control group on the post-test skill performance.(**

To validate the hypothesis extracted researcher Wen average grade experimental group of (16.67) with a total arranged (200), while the average grade control group reached (8.33) total arranged (100), reaching the value of Mann-Whitney calculated (22) It is the smallest From the Mann Whitney tabular value of (37), and at a significance level of (05, (0 This indicates the existence of a statistically significant difference between the average ranks of the scores of the students of the two research groups in the post- skill performance test and in favor of the experimental group, and thus rejects the sixth null hypothesis, which confirms that there is no statistically significant difference between the average ranks of the two research groups in the skill performance test dimension, and table ( 2 ) shows that:

**Table ( 2 ) average ranks and calculated and tabulated Mann and Teni value Grades test performance skills posttest**

The indication is at the level of 0,05	Indication level	Mann Whitney value		total ranks	average rank	the number	the group
		tabular	calculated				
A statistical function of	0.05	37	22	200	16,67	12	<b>Experimental</b>
				100	8,33	12	<b>control</b>

**The magnitude of the effect using Cohen's equation**

It means the difference between the averages of each of the test pre and post divided by the standard deviation weighted , and this helps us to identify the size of the effect in determining the amount of impact relative to the strategy , and to determine the impact level was applied Cohen equation and there is a standard for the size of the effect where:

The effect is simple. 0.20 :

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Average effect . 0.50 :  
 Significant effect. 0.80 :

The effect size was extracted as follows:

.The arithmetic mean and standard deviation of the pre and post tests and the weighted standard deviation of the **skill performance** test variable for the experimental group were extracted as shown in Table.( 3 )

Table( 3 )

The arithmetic mean and standard deviation of the pre and post tests

Weighted deviation	standard deviation	SMA	the test
19,674	6,412	102,250	tribal
	15,840	138,149	dimensional

After applying Cohen's equation ,the effect size was ,( 1,82 ) and therefore the effect size of the strategy in increasing the skill performance has a significant effect for the experimental group.

**Conclusions**

In z light of current research results , the researcher Wen to the following conclusions-:

- 1- Effectiveness of the strategy in Keller reflect yeh performance skills of the students of the Department of Family Education and Professional technical material planning .
- 2- Giving students greater independence and self-reliance positively affects the development of their skill performance.

**Recommendation**

In light of the conclusions reached by the researcher , they recommend the following-:

- 1- The use of Keeler's strategy in teaching planning in a way that develops the skillful performance of students in order to prove its effectiveness and quality compared to the usual prevailing method, increase achievement and improve their sensory perceptions of information .
- 2- Teaching the planning subject to the Keller strategy for the purpose of using it when teaching the subject in the Department of Family Education and Art Professions and the Department of Art Education in the College of Basic Education and Fine Arts .

**Proposals : an** update of the current study of the proposed researcher thon Mayati-:

- 1- Conducting a similar study to identify the effect of Keeler's strategy in developing the skill performance of the drum in other subjects and academic departments in the College of Education and Basic Education .
- 2- An der mispronounce aims to identify the effect of Keller 's strategy with the methods of self -education and other educational Ka bags or educational complexes or programmed instruction .

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**Supplement(1)**

**Planning skill test**

**Q :1 rigid life plans ) still Live(**

- a . I start with a simple layout before completing the details.
- b . B Using the drawing tools ) ruler, protractor, compass, triangle ( in the drawing to adjust the measurements.
- c . Ba emergence of t geometric shapes in the completion of the work of art.
- D . Correctly measure the dimensions and areas of geometric shapes.
- e . Bit system j m different forms of engineering drawing.

**Q : 2Freelance business plans of your choice**

- a . Ba emergence of t horizon line in the painting.
- b . Ba Khet O t the appropriate format for the layout desired shape it.
- c . Draw lines to show the shape to be drawn.
- D . Organize the points to form the line to be drawn.
- e . Show the lines installed in the drawing.

**Q3 : Draw a landscape in light of the following:**

- a . By taking advantage of the thickness of the line to highlight the details he wants in the drawing.
- b** . By showing the shadow areas in the painting based on solar light projections.
- c . By taking advantage of the optical value to highlight the luminosity of objects and surfaces
- D . Show the radial lines in the drawing .
- e . By showing shadow and light through the chromatic power of the lines.

**Q : 4 Employ the following with a work of art:-**

- a . Mixing several types of lines to get the desired shape.
- b . Adapting the lines in the drawing through the perspective ) far and near. (
- c . By adapting the line to simplify and draw shapes ) flat, stereo, projections.(
- D . Arrange the lines in a way that highlights the center of attention in the drawing.
- e . By showing the depth of space inside the painting.

**Q : 5 Perform a work of art in which achieving the following objectives- :**

- a . Organizing a model for stereoscopic shapes.
- b . By taking advantage of the nature of the surface drawn on it in the completion of the desired drawing.
- c . Show the optical value of the shape.
- D . Distinguishing between the real shadow and the imaginary shadow.
- e . Explaining different degrees of shadow in the drawing.

**Q : 6 plans for a work of art- :**

- a . Explain the vanishing points in the painting.
- b . Choosing the appropriate method for the planning process.

- D . Adapting curved lines in drawing a painting.
- e . Organize the painting space in a balanced way.

**Q : 7 Completed artwork simple - :**

- a . By clarifying the correct proportions in the planning of objects with each other.
- b . Draw symmetrical shapes with the same value.
- c . Adapting italics into a simple artwork.
- D . By showing the ability to zoom in and out of things relative to each other in the space of the painting ) ratio and proportion.(
- e . By showing the movement of the line in the space of the painting.