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RESEARCH ARTICLE

The Effect of Pictures and Drawings on Developing Visual literacy in Art Education Among Fifth Grade Students in Jordan

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ARTICLE INFO	ABSTRACT
	This study aimed to identify the effect of pictures and drawings on developing visual literacy in art education. Quasi-experimental approach was used, study samplewas selected from fifth-grade female students in El-Baniyat Elementary School for Girls from Na'our District. Two classes randomly selected (experimental and control) and each group consisted of (30) female student. Study instrument (visual literacy test) was designed and consisted of (24) questions; eight multi-choice questions, six drawings and coloring questions, and ten essay questions, content validity and reliability of the test were found. Results showed that there is an impact of teaching using picturesand drawings in developing visual thinking skill, visual learning skill, visual communication skill and visual literacy as whole. The study recommended art teachers to adopturging pictures and drawings in teaching art education and holding courses to train all primary school teachers on converting educational material into pictures and drawings and using them in the classroom.

INTRODUCTION

Due to the interaction of art with all members of society, art education is highlighted in helping students grow normally and develop their personalities in all mental, psychological, physical, and social aspects. It enables them to express their ideas and concerns positively, develop their ability to understand reality and the facts of natural materials that contribute to their awareness of color combination relationships (Hussein, 2018).

The development of visual art skills is a necessary process for learning. When these skills are enhanced, the student (visually educated) can understand and explain the environment in which he lives, interact with other students, change his cognitive, emotional, and skill behavior, and think better (Fath Al-Bab, 1992).

Visual literacy is defined as a set of skills (visual communication, visual thinking, and visual learning) that enable you to understand the characteristics of images and drawings. Furthermore, the easiest way to acquire visual art skills is through photographs, calligraphic drawings, and illustrations (Dwyer&Mike Moore, 2015).

Images and drawings are visual materials that significantly contribute to the formation of visual literacy since people, in this era, live the momentum of images and drawings that exist everywhere around them. Visual art is inevitably acquired when reading these images and drawings, understanding their meaning, learning from them, and conveying them to others, hence the importance of images and drawings in learning

(Al-Juhani, 2018).In this regard, Abdel-Samad (2011)emphasized the importance of visual educational means: paintings and graphs in the process of teaching and learning. Moreover, Al-Amiri (2015) recommended developing art education following modern tendencies and pathways, including introducing modern techniques to art education: images and drawings, to develop the curricula and methods. Hence, the current study, an attempt to investigate the impact of images and drawings in the development of visual literacy in art education among fifth graders, is a scientific advancement in this field, as well as the increasing need for scientific studies looking at the effectiveness of images and drawings in the development of visual literacy.

The reality of teaching art education in Jordan shows the inferior view towards it in the community. The students with limited ability to think, visualize and imagine, and their families do not worry about art education, so it is minor subject. The studies of (Al-Atoum 2013, Abdul Hamid 2017, Ibrahim 2018,Khalil 2007) confirmed the difficulties in teaching art education, including the unqualified art education teachers for not activating the latest scientific modern strategies in teaching. Moreover, (Al-Najjar 2015, Al-Tai 2010, Faraj 2016, Turki 2019) emphasized that various teaching methods are necessary teaching skills for art education in the primary stage. Wu and Rau (Wu, &Rau, 2019) affirmed the inadequacy of studies aimed at testing how drawing activities help students learn, as the World Conference on Arts Education and Creative Capacity Building for the 21st Century recommended using the latest scientific strategies methods in teaching art education (UNESCO, 2006).

The interest in visual literacy has recently increased, where it is the ability to read, understand and interpret visual messages. Despite this importance, the contemporary reality and the researcher's knowledge confirm a lack of educational programs in general or a lack of images in the curriculum, which hinders the development of visual literacy among children at the primary stage of education.

In this context, the study of (Kamel, 2015& Sheikh, 2012) recommended the development of the performance of art education teachers in the use of visual thinking skills in teaching; thinking strategies play an essential role in the development of teaching methods of art education. Moreover, Ali's study (2017) emphasized the role of activities depicted in children's journals in developing some visual perception skills, while Al-Anzi (2016) pointed to a low percentage of the inclusion of illustrations in the art education curriculum at the primary stage in Jordan.

The above determined that there is a fall in the development of visual literacy skills in art education due to the lack of methods and strategies used in teaching. The fifth-grade course in its current form may not contribute to the development of those skills. Hence, the present study was an attempt to improve the reality of teaching art in Jordan.

Visual literacy skills :

Visual literacy consists of three basic skills: visual thinking, visual learning and visual communication. (Al-Jahni, 2018).

First: Visual thinking

Visual thinking involves combining what the eye sees with the perpetual information sent to the brain, as it decodes, processes, and stores it in memory for later processing to develop technical and creative skills (Al-Jahni, 2018).

Abu Dan (2013) defined visual thinking as a mental capacity in which images, drawings, and shapes are employed, analyzed, and interpreted from visual to written or spoken language, leading to understanding.

The process of developing visual thinking includes images and drawings, colors, lines, shapes, and other visual elements necessary to evoke images, think about questions, organize ideas, visualize possibilities. In human advancement, visual perception precedes verbal perception, where a man can understand and perceive visual information 6,000 times faster than the information presented to him verbally. Additionally, visual thinking is a quick way to transmit information. It is influenced by many factors, including Past

experiences of the individual, the prevailing culture in society, and elements of the environment in which the individual lives (Burmark,2002).

Visual thinking and the left/right brain theory

Visual thinking depends on what the eye sees and what information is sent to the brain, as the brain decodes information, processes, and stores it in memory for later processing. Recently, the desire of researchers has increased to study visual thinking, in particular, especially after the evolution of the left/right brain theory, as recent studies indicate that there are two integrated ways to process information in the brain:

Method 1: It is linear, i.e., it goes step by step, as the left half of the brain analyzes the elements that make up the pattern.

Method 2: It is based on finding the visual relationship that forms the model; it occurs in the right half of the brain.

The studies have shown that when an individual performs activities that require visual thinking, there is a marked increase in the actions of the right half of the brain. On the other hand, a marked increase in the actions of the left half of the brain when an individual performs activities requiring verbal thinking to activate memory and create links between them to make it meaningful information and obtain the learner's response (Novak &Feingold,2008).

Visual thinking skills

Visual thinking skills: the ability to recognize and distinguish the visual forms displayed from other forms while visual forms are symbols, images, drawings, and data since the skill of visual thinking consist of several skills as follows:

1. The skill of recognizing spatial relationships: a skill that indicates the possibility of recognizing the placement of objects in the vacuum and their different location, depending on the location of the individual who sees them.

2- The skill to distinguish between shape and ground: It means the possibility of choosing an influencer, and the shape of the field represents a perception among several other incentives, which represent the ground or background in the cognitive field.

3- The skill of visual closure: It means perceiving the overall shape only when exposing parts of the shape or perceiving the missing part of a set of shapes.

4. The skill of interpreting information: It indicates that each part of the particles of the shape displayed can be interpreted, as the visual shape contains symbols and signals indicating the information drawn.

5. The skill of information analysis: the ability to segment the visual shape into its initial components.

6. The skill of concluding meaning: the ability to infer a new meaning through the shape presented, and this step is the result of the previous steps (Soliman, 2018).

Second: Visual learning

It includes acquiring and constructing knowledge when interacting with visual stimuli (Al-Juhani, 2018).

The concept of visual learning

Visual learning is defined as a system of visual competencies that the individual possesses through vision by integrating and combining some other sensory experiences. The development of these competencies is one of the basics of human learning. When the development is done, the visually educated individual can distinguish and interpret events, elements, and visual symbols, where the term visual learning refers to two aspects: the first is learning through different optics, and the second aspect includes the design of educational optics, and this is related to the designer of educational optics as he must apply the results of

research and theories related to the visual field when designing any educational visual material to ensure its effectiveness (Dwyer & Mike Moor, 2015).

Visual learning features:

Visual learning is a visually based method built on the sense of sight as a source of learning, based on the acquisition of information, concepts, and ideas through images, and one of the essential features of the following visual learning (Abdel Baset, 2018):

The use of images and drawings is more eloquent than using words.

Images, drawings, and shapes make abstract ideas felt.

The use of drawings gives a more effective result in learning processes.

Mental images and diagrams are some of the most important means of organizing and simplifying ideas.

Images and drawings facilitate the description and interpretation of the link between facts and concepts.

It is easy to evaluate the learner and his degree of learning.

Third: Visual communication

Visual communication includes visual symbols to convey and express ideas and meanings, resulting from visual thinking and visual learning (Al-Juhaini, 2018)

The concept of visual communication:

Dwyer and Mike Moore (2015) defined visual communication as using visual symbols to express and clarify meanings and ideas.

This aspect associates with the learner's ability to use visual images and symbols to interact, communicate with and understand others, and share meanings, ideas, information, feelings, and inclinations (Khalil& Ali, 2018).

Distinct reasons to learn more about images and drawings appear as a form of visual communication, each of which shows why there is a need to know how to communicate through images and drawings, which are as follows:

1. Images and drawings as visual elements of communication are easy to convey to a large audience of recipients; the drawings reflect the symbols of our culture and social customs. They are represented in many forms, such as signs, rituals, and symbols.

2. Images and drawings are compatible as visual forms to express our emotions and ways of thinking. The widespread drawings and images can be designed to conform to our tendencies, feelings, and ideas directly. In some cases, drawings are designed to first conform to emotions and ideas, reflecting some political philosophies.

3. Images and drawings are communication instrument if we interpret the drawing correctly or do not, or carefully pay attention to it or do not. Once we look at it, we will get a message. Visionary people are promptly aware of the visual messages within their minds even if the image or drawing is not adjusted. So, the drawings and information received or recorded will remain beyond awareness, which is a mystery of how drawings connect to visual messages indirectly, even if we do not want that.

4. Images and drawings include language and rules that most of us do not know until we begin learning; in a study conducted by Foote & Saunders, where they examined the drawings used in television news, it showed that receivers do not have a specific frame of reference to distinguish the forms of drawings used in visual communication. However, these images and drawings are displayed daily, but that will not be easy to understand and learn for various reasons:

1. Distinguishing and identifying visual shapes (e.g., drawings and images).

2. Distinguishing and determining the functions of drawings and images.

3.Make sure that the visual message re-displays the information contained in the voice message.

Howard Levice noted that research on the interpretation of information contained in visual forms showed that displaying visual hints without previous experience in viewing these visuals will make adults, as what children do, miss some obscure visual information, which presents elements of society's cultural customs and traditions.

5. Images and drawings are designed to create one-way communication for immediate and rapid indoctrination to be easily understood. Most forms of drawings and images are not designed to encourage feedback.

6. We will leave a potent instrument without understanding how drawings and images (visual culture) work in the process of visual communication, i.e., the inability to communicate through visual media; in this case, we will become an element in a one-way communication process in which we receive messages and are unable to respond, and as a result of visual ignorance we will become vulnerable to oppression, violence, and mental acquiescence, as in any dictatorial regime (Dwyer&M Moore, 2015)

Visual literacy relies on art as a instrument. Moreover, students acquire knowledge and information through different kinds of art they practice at school and have the visual expertise to effectively and flexibly employ elements of the art language such as form, line, color, and light (Reed, 2003).

LITERATURE REVIEW

These studies have been ordered from oldest to newest.

Abu Al-Jabeen (2012) conducted a study to reveal the effectiveness of a training program to interact with delicate drawings (photos) in the development of emotional intelligence in a sample of kindergarten children in Jordan. Quasi experimental design was adopted; the study sample consisted of 40 children (male and female): 20 control groups and 20 experimental groups of kindergarten children. A questionnaire was conducted to collect the study information. As a result, the effectiveness of the training program to interact with technical drawings (images) in the development of emotional intelligence in a sample of kindergarten children has been proved.

Anchieta and Margarita (2013) study confirmed a relationship between incubation and the growth of awareness, visual perception, and attention for the nursery child. The research sample consisted of (19 children) (average age between 2-4 years); in addition to (18 pairs of parents and five nannies), a comparison was made between (3) cases of the nursery environment with a focus on its effect on the visual perception skill of the child: pre-accelerator (unprocessed nursery environment), treatment (1) (partly equipped nursery environment), treatment (2) (well-equipped nursery environment), the data was collected using the Nursery Child Visual Perception Scale (PSBS-T) - aimed at parents and nannies.

The study found statistically significant differences (α =0.05) between children's grades on the scales during the three treatments, where children in the second treatment recorded the highest grades. Furthermore, it stressed the importance of equipping and providing the nursery environment with positive instrument for raising awareness levels.

The Peźdek and Stevens (2014) study aimed to identify the relationship between the awareness of nursery environments of the importance of using visual equipment and effects on the growth of visual perception of very young children. By applying the visual attention measure for children to a sample of 96 children who make up the two nursery center children in northern Turkey, the average age of children was between (2.8 years to 3.5 years). The sample was divided into two groups. : The first nursery center equipped with visual effects and equipment as an experimental group (51 children), the traditional second place as a control group, and the study found statistically significant differences at the level of significance (α =0.01) between the children of the experimental group and the control group at visual attention measures, and the test of

visual perception of the nursery child in favor of the experimental group that used the appropriate visual effects and elements of the child compared to the control group.

Heath, Houston - Price, Carmel (2014) study confirmed the nursery nanny's effectiveness in using picture books to improve a child's early visual perception skills. The research sample consisted of 154 children with an average age of (19-26 months) in three nursery child care programs in Reading. Eleven nannies with an average age of 21-36 years participated in the research, and the children participated with nannies in two experiments based on picture books. The research used a visual perception skill scale of the child. The results showed statistically significant differences between the prior and post performances of the child's visual perception skill scale in favor of the post-performance and a marked improvement in the child's visual processing ability.

Al-Qurashi (2015) conducted a study to find out the role of animation in the development of aesthetic taste in early childhood where the descriptive survey method and a test instrument to collect the data were used. Thirteen images applied to the study sample which consisted of 50 children between 5-6-year-olds. Moreover, after processing the data using the SPSS program, the findings are 1. The percentage of the test done by children for realistic perception was 1.75 percent, while the test for unrealistic perception was 9.24 percent. 1. depending on the thirteen displayed images, the percentage of children test for the unrealistic perception was (1.75%) while the percentage of realistic perception was (9.24 percent). That means that the children's votes for images with an unrealistic perception to be the most beautiful were (3) times more than the votes for images with realistic perception. 2. Animation plays a prominent role in developing aesthetic taste in early childhood.

Al Busaidi (2017) conducted a study aimed at investigating the impact of infographics in the development of visual thinking among [11]th graders in biology subject in Amman; the study adopted the Quasi experimental design, and the sample consisted of (60 students); 30 control groups, and 30 experimental groups from the 11th grade. A questionnaire and achievement test were used for the data collection. The study results showed no effect of infographics on the development of visual thinking among 11th graders in biology.

Ali (2017) conducted a study to reveal the role of activities depicted in children's magazines on the development of some visual perception skills in kindergarten children in Egypt; the study adopted the Quasi experimental design, and the sample of the study consisted of (30 children) from kindergarten. A questionnaire was used for the data collection. The study results indicated the effectiveness of activities depicted in children's magazines to develop some visual perception skills in kindergarten children.

Al-Jabri (2017) conducted a study to identify the impact of cartoons on the development of visual thinking skills in science among fifth-grade students in Oman. The study adopted the Quasi experimental design, and the sample consisted of (60 female students): (30 control groups) and (30 experimental groups) from the primary fifth grade. A questionnaire and achievement test were used for data collection. The study results showed in an impact of cartoons in developing visual thinking skills of the primary fifth-grade female students in science.

Hammad (2017) conducted a study to reveal the effectiveness of an animation-based program in developing visual thinking skills in history among middle school students in Egypt. The study adopted the experimental design, and the sample consisted of (144 students): (69 control groups) and (75 experimental groups) at the junior secondary level. A questionnaire was used for the study data collection. The study results demonstrated the effectiveness of an animation-based program in developing visual thinking skills in history among middle school students.

El Naga (2019) conducted a study to determine the impact of employing cartoon concepts in developing visual thinking skills in biology among fourth-grade students in Palestine. The study adopted the experimental design, and the sample of the study consisted of (80 students); (40 control groups) and (40 experimental groups) from the primary fourth grade. A questionnaire was used for the study data collection.

The study results proved the impact of employing cartoon concepts in developing visual thinking skills in biology of the primary fourth-grade female students.

Hellenbrand & Mayer (2019) conducted a study to determine the impact of generative drawing on learning processes among school students in Germany. The study adopted the experimental design, and the study sample consisted of (one experimental group and one control group of school students) from Germany. A questionnaire was used for data collection. The study results indicated the impact of generative drawing on learning processes in school students, where students in the experimental group showed more rereading of words, and a higher percentage of emphasizing on significant words, higher rate of transitions between words and workspace, and a higher percentage of shifts between significant words and workspace.

Hakmi (2023) conducted a study aimed at measuring the effectiveness of a proposed teaching strategy based on pictures and illustrations in developing some visual-cultural skills, symbols, and concepts and achieve some of its Standards of Competence by them for the female students at the College of Science and Humanity Studies in Dharma.

To achieve the objectives of the study, the researcher used the quasi-experimental approach that is including one group. The study consisted of a random sample of (45) female students among the students who are studying Research Methods in Business Administration Department. These students have been taught by using pictures and illustrations. The study concluded with the following results and the most important are a statistical significance at the level (α=0,01) between the average degrees of the students in both pre and post applications for testing visual culture knowledge (concepts, educational symbols).

This was in the favor of the average degrees of the post-application group. Also, a statistical significance at the level (α=0,01) between the average degrees of the students in both pre and post applications for testing visual culture skills (skills, competency standards of visual culture). This was in the favor of the average degrees of the post-application group.

This proves the effectiveness of the proposed strategy in developing some concepts, symbols, and visual-cultural skills. Also, it proves the effectiveness of the proposed strategy in achieving some of the competency standards of visual culture.

Current study did not agree with any previous studies in terms of purpose. On the contrary, this study was conducted to have a new goal of choosing visual literacy.

The current study benefited from previous studies supporting theoretical literature, deepening the sense of the study problem and the adopted research methodology. Moreover, they helped develop the study instrument and see the appropriate statistical methods used to analyze the data in the current study. The results of these studies were used to interpret and justify the results of the current study.

The current study was distinguished from previous studies in the dependent variable levels. No study focused on studying the impact of images and drawings on visual literacy skills (visual thinking, visual learning, and visual communication).

It was also marked for developing visual literacy, as none of the previous studies developed a visual literacy.

It was also distinguished for being conducted in Jordan, where only the Abu Al-Jabeen study (2012) was conducted and done by a significant time lag from the current study. It aimed to reveal the effectiveness of a training program to interact with drawings (images) in developing emotional intelligence.

Purpose of Study:

The purpose of study to reveal the impact of images and drawings on the development of visual literacy in art education among fifth graders.With regard to the aim, the following research questions were formulated:

Question 1: What is the impact of images and drawings on the development of visual literacy in art education among fifth graders?

Question 2: What is the impact of images and drawings on the development of visual literacy skills (visual thinking, visual learning, and visual communication) in art education of fifth graders?

Images and Drawings

Salama (2019) defined images and drawings as a visual teaching method that depends on the sense of sight, from which experience is gained by visual observation.

Furthermore, Images are also defined as visual media with two dimensions of length and width, representing reality without distortion, such as photographs, books, and magazine images. Drawings are defined as the expression of shapes in lines of any color or non-color type (Salama, 2006).

Visual Literacy

Dwyer and Mike Moore (2015) defined them as the ability to understand and use images, including thinking, learning, and self-expression using this image.

It was defined procedurally: as it is the result of the knowledge, customs, beliefs, values, and creations that a student should possess and enable him to perceive things visually through different arts. In addition, it was developed through meditation, concentration, increased knowledge, and awareness of visual and aesthetic relationships in the artwork, which was measured by the visual literacy test prepared for the current study.

METHODOLOGY

Design

The study used the quasi-experimental approach to detect the effect of the independent variable, which has two levels (traditional method, images and drawings method), in the dependent variable (visual literacy).

Participants

The study participants were from the fifth-grade students in Al Bnayyat primary school for girls from Naour district, and the simple random method was used to sort out and distribute the students.

Table 1.Distribution of study participants.

Group	Class &Division	Number	Teaching Method
Experiment	5th grade-D	30	Images and Drawings
Control	5th grade-B	30	Traditional Method

Data Collection Instrument : (visual literacy test)

The Study instrument (visual literacy test) was designed:The test consisted of (24) questions; eight multi-choice questions, six drawings and coloring questions, and ten essay questions. Furthermore, the test included all the skills of visual literacy (visual thinking, visual learning, visual communication). It was distributed as (12) questions on visual thinking, (6) questions on visual learning, and (6) questions on visual communication.

Content Validity of the test has been by verified:After the test was set initially, it was presented with test specification table to a group of specialized trustees in teaching methods and art education from faculty members of Jordanian universities and a group of supervisors and art teachers. They were asked to express their opinion in terms of content, drafting. The test was modified based on their observations, and it became virtually more valid.

• **Reliability** of the Study instrument was found by Alpha, Coder-Richardson-20's& Spearman-Brown equation, Table 2 shows those results:

Table 2.Reliabilitycoefficients.

	Cronbach Alpha	Coder-Richardson-20	Half-corrected split with the Spearman-Brown equation
Visual Thinking	0.843	0.886	0.870
Visual Thinking	0.710	0.758	0.709
Visual Thinking	0.786	0.836	0.915
Macro instrument	0.927	0.952	0.968

Table 2shows that all reliability values were high, which enhances the accuracy and reliability of the instrument to be applied.

Coefficients of difficulty in the form of the initial picture of visual literacy test ranged between (0.30-0.63), while the coefficients of discrimination ranged between (0.31-0.720).

In light of validity, reliability and the coefficients of difficulty and discrimination, and after looking at the items that verify the statistics used in this study, all items were accepted. The test (24 items) the visual literacy test became valid for application to the study sample.

Procedures

In order to answer study questions and achieve objectives, several procedures were followed:

Access to relevant theoretical literature and previous studies.

Developing the artistic expression unit with drawing and coloring by adding images and drawings from the teacher guide to the art subject.

Developing the study instrument

Identifying the community and selecting the sample of the study.

Validity, reliability, coefficients of difficulty, and discriminationfor the study instrument were found.

Distance teaching was applied over a semester in Al Bnayyat Primary school (first semester 2020-2021), Due to the Corona pandemic, it was done once a week where students were asked to meet through the application (zoom) due to the government's decision to make the education through Darsak platform.

The study instrument (visual literacy test) was applied before and after on the sample identified by the zoom application.

Data were Statisticallyanalyzed by SPSS.

RESULTS

Question 1: What is the impact of images and drawings on the development of visual literacy in art education among fifth graders?

From first question stemmed the following hypothesis: There is no statistically significant difference (α =0.05) between the average grades of the experimental group students and the control group on the visual literacy test attributable to images and drawings.

To answer this question, test its hypothesis and determine whether the differences between averages are statistically significant at the level (α =0.05), the ANCOVA analysis has been applied, and table (3) shows the results of the analysis:

Table 3.Results of ANCOVA analysis to find an indication of differences in student performance on the visual literacy test.

Source of Variance	Sum of Squares	Df	Mean Squares	F	Sig.	Eta Square
Prior Performance	34.446	1	34.446			
Group	193.105	1	193.105	39.444	0.000	0.409
Error	279.054	57	4.896			
Total	518.850	59				

Table 3, shows thatdifference in the subsequent performance between the two groups, with all (F) values statistically significant at (α =0.05). The difference in favor of experimental group.

Question 2: What is the impact of images and drawings on the development of visual literacy skills (visual thinking, visual learning, visual communication) in art education of fifth graders?

From second question stemmed the following hypothesis:There is no statistically significant difference (α =0.05) between the average grades of female students in the experimental group and the control group in the visual literacy skills (visual thinking, visual learning, visual communication) attributed to images and drawings.

To answer this question and test its hypothesis, arithmetic averages and standard deviations of performance of fifth-graders in art education were calculated depending on the visual literacy test of skills (visual thinking, visual learning, optical communication). Furthermore, to determine whether the differences between averages were statistically significant at the level (α =0.05)MANCOVA analysis of all skills werefound. Table 4 shows the results of the analysis according to all skills:

Table 4.Results of MANCOVA analysis to find an indication of differences in student performancedepending on the skills of (visual thinking, visual learning, visual communication).

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
GROUP	Visual Thinking	6.814	1	6.814	19.261	.000	.259
	Visual Learning	140.475	1	140.475	40.051	.000	.421
	Visual Communication	91.470	1	91.470	30.963	.000	.360
	Total	577.277	1	577.277	74.953	.000	.577
Error	Visual Thinking	19.458	55	.354			
	Visual Learning	192.906	55	3.507			
	Visual Communication	162.478	55	2.954			
	Total	423.603	55	7.702			
Corrected Total	Visual Thinking	43.650	59				
	Visual Learning	343.650	59				

	Co rrected Total	Visual Communication	285.000	59				
		Total	1090.000	59				
a. R Squared = .554 (Adjusted R Squared = .522)								
b. R Squared = .439 (Adjusted R Squared = .398)								
c. R Squared = .430 (Adjusted R Squared = .388)								
d. R Squared = .611 (Adjusted R Squared = .583)								

As can be seen from Table 4, difference in the post-performance between the two groups, with the value of (F) being a statistically significantat (α = 0.05). The difference in favor of the experimental group, where the arithmetic average of their performance in all skills (visual thinking, visual learning, and visual communication) were higher than that of the control group's performance.

DISCUSSION AND CONCLUSIONS

What is the impact of images and drawings on the development of visual literacy skills (visual thinking, visual learning, visual communication)and visual literacy as whole in art education among fifth graders?

The results for the questions showed differences in the post-performance between the two groups in (visual thinking, visual learning, visual communication) and visual literacy as whole, where the values of (F) were a statisticallysignificant at (α=0.05). The differenceswere in favor of the experimental group in all skills, while the arithmetic average of their performance were higher than that of the control group. So, there is an impact of teaching using picturesand drawings in developing visual thinking skill, visual learning skill, visual communication skill andvisual literacy as a whole.

This finding can be attributed to the fact that images and drawings were appropriate for the development of visual thinking skills. This shows that the students in the experimental group played more active and positive role in the learning process than students of control group did because the unit that was reformulated and organized its content using images and drawings had a significant impact on presenting ideas in an arranged manner in a visual form rather than relying on verbal language. As a result, retrieving visual memory is more straightforward for learners than verbal memory, especially when learners are involved in reorganizing the content, which is what the students of the experimental group did in order to make the learning process easier for them and help them understand many things that were difficult for them to understand, such as remembering the order of events with their dates, names, and the essential works they have done. Therefore, employing the strategy of images and drawings increases the students' mental capacity and help them translate what they see as visual stimuli (drawings and images) into verbal connotations due to the excitement of this technique and the enjoyment of turning texts into drawings that attract the attention and interest of students by helping them to identify the problem and subject easily.

The use of images and drawings has improved visual learning, a new method applied to experimental group students. It may have aroused a passion for learning and attracted their complete attention while displaying images and drawings. The images and drawings chosen and presented to students are effectively employed in their activities and help them learn through role-playing in different life and fantasy situations. Moreover, that deepens the students' awareness, develops their expression and thinking abilities, and enhances confidence in self-reliance and decision-making. The learners, through their interaction with the role, use all their feelings and energies to explore the information themselves or their colleagues' help away from direct indoctrination. The images and drawings, applied contained educational materials, attracted students' attention, including drawings and images that impassioned their senses which ignited their enthusiasm and activity, arousing their motivation to learn and adding a kind of fun and joy to the atmosphere of the class.

It is well known that students are preferred to learn at the primary stage by focusing on experiences and sensory activities, such as the use of images and drawings, as the success of the learning process depends on engaging the greatest amount of the student's senses. One of the most valuable senses in acquiring

knowledge is the sense of sight. During the study, the researchers noted that the control group students, who were taught in the traditional way, had less motivation to learn. That could be due to the tedious nature of some classes, other than often distracting students. As a result, the experimental group outperforms the control group.

It also showed there was a difference in the post-performance between the two groups in the skill of visual communication. The difference was in favor of the experimental group. This can be attributed to the use of images and drawings in education that contributes to improving visual communication and the level of student achievement; involving students as an active part of the learning process, which would have encouraged them, made them more motivated to learn, increased the pleasure of learning and aroused enthusiasm for them. This finding also explains that the use of images and drawings helps to clarify and explain lessons, overcome difficulties, combine entertainment and learning, and stimulate the mind and conscience of the student to learn by himself through imitation and emulation, getting away from routine and repetition, and avoiding the monotony of lessons that make the learner passively inactive.

It is considered that the involvement of all the student's senses in the educational situation has positive implications for the educational process. According to the lack of studies on the role of using images and drawings in the development of visual literacy, especially Arabic, as far as the researchers think, this study is valuable, as it opens the door to the use of images and drawings in education, especially at the primary stage. The researchers believe that the use of images and drawings addresses the students' sense of sight and raises it, which contributes to the success of the educational process and achieve its objectives; which appoints the faculty to develop the visual literacy in art education among fifth graders correctly and adequately for female students.

This result can be explained by the fact that the use of images and drawings leads to the development of visual literacy in art education. At the same time, they clarify the fundamental concepts correctly and help understand them mentally in the same way among all learners. Further, they contribute to attracting the attention of students and increase their interaction in the classroom, as well as eliminate the feelings of tension, embarrassment, and the authority of the teacher, as the use of images and drawings requires the use of female students for their senses significantly, such as listening, focusing and observing, which leads to the development of visual culture. Furthermore, images and drawings have emerged in the students' internal reinforcement and self-satisfaction; they are attractive, enjoyable, exciting, and stimulating. Besides, they control behavior and reduce distraction, which enhances the motivation to develop visual culture. Images and drawings are more flexible and receptive to students; contrary to the usual way, they are easy to deal with, shorten the time, and stimulate exciting ideas. They also make students the center of the learning process effectively and positively in thinking and self-learning. After all, they opened unconventional windows for the development of visual literacy for students.

This result can also be attributed to the fact that images and drawings are only part of the students' lives at this age, which is their world and orientations that contribute to developing their personalities. The focus has been on the use of drawings and images consistent with the level of cognitive growth, such as actual photographs, pictures of books, and magazines, which are more attractive to students at this stage, contributing to the effectiveness of training activities. This result can also be traced back to the fact that images and drawings ensure many situations and life roles that the students face and deal with, making them more active and motivated to learn. The collection of images and drawings containing observation and classification skills, and their use by the student individually or with the participation of other students and the focus on the senses in exploring things and answering the questions they have in mind is the nature of this development stage with the presence of curiosity and the love of reconnaissance. Therefore, using images and drawings helps students scientifically answer these questions by exploring and explaining their classification scientifically and elaborately. So, exploiting students' energies in an integrated individual and collective activity brings them pleasure and joy.

This result can also be countered by the fact that images and drawings attract students' attention and interests and provide the thrill factor. These characteristics are one of the most critical factors leading to learning, and we can note this in the student's preoccupation with browsing comic books and acquiring images. On the one hand, the result of this study met with that of Al-Kubaisi's (2016), which indicated an impact of the strategy of cartoon concepts in visual thinking. Also, it met with the result of al-Jabri's (2017), which indicated an impact on the use of cartoons in the development of visual thinking skills in the science research among the students of the primary fifth grade. In addition, it met with the result of Abu Al-Jabin's (2012), which indicated the effectiveness of the training program (to interact with technical drawings) The images) in the development of emotional intelligence in a sample of kindergarten children. On the other hand, it differed from the Study of Al Busaidi's (2017) results, which indicated that there was no effect of the use of infographics in the development of visual thinking.

Recommendations

According to the results of the study, researchers recommend the following:

Urging art education teachers to adopt the method of using pictures and drawings in teaching art education for fifth grade students; Because it is one of the effective methods in the development of visual culture. It raises the morale of the students and increases their self-confidence along with other methods of education.

Activating the method of using images and drawings in developing visual literacy in particular, given the ease and availability of drawings and images, which develop visual literacy in a fun and interesting way for different age groups.

A recommendation to the Ministry of Education to hold courses to train all primary school teachers on converting educational material into pictures and drawings and using them in the classroom.

Benefiting from the current study and introducing this method in the teacher's guide, and training teachers to use pictures and drawings in order to employ them in teaching art education for the various educational stages.

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