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A proposed training program to develop graphic design skills among tenth grade students in Jordanian Ministry of Education schools and their attitudes towards it

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Abstract. The current study aimed to propose an training program and measure its impact on developing graphic design skills among tenth grade students in the Jordanian Ministry of Education schools and their attitudes towards it. The study population consisted of all tenth-grade students at Khadija Bint Khuwaylid Secondary School for Governmental Girls in the Directorate of Education for the Rusaifa region during the first semester of the academic year (2023-2024), as they numbered (50) students. The semi-experimental approach was used in the current study with two groups. experimental and control. To achieve the objectives of the study, one questionnaire and two tests were developed, and its validity and reliability were confirmed. The study concluded that the effect of the training program on acquiring graphic design skills among tenth grade students was high. In addition to the existence of apparent differences between the mean scores of the experimental and control groups in the post-measurement in the graphic design skills test in favor of the experimental group. And that there are statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of the experimental and control groups in the graphic design skills test. The study also found that the attitudes of tenth grade students towards the training program were high. The study recommended that the Ministry of Education in its various directorates adopt the proposed training program to measure graphic design skills. By perusing it and trying to apply it in its various schools, and for academic leaders to assume graphic design skills critical importance Where it works to stimulate the conduct of studies and research from time to time, to find out the reality of those skills, and work seriously to develop and update them to take into account the technical development of the number of e-training programs.

Keywords. training program, graphic design, direction

Introduction

the present era is witnessing rapid changes in various fields, and dealing with these changes requires a high ability to adapt and take initiative in accordance with the constants of material and human capabilities within institutions. In the field of training, training and educational institutions bear the greatest burden in preparing the available infrastructure and technology, in line with the revolution in Information technology and the means of communication that have been able to transform today's world into a village where temporal

and spatial barriers disappear, as it has brought distances closer and removed social and cultural barriers. The training process is a continuous and important process, ensuring the effectiveness of the desired feasibility of the training programs. The more they are activated, especially electronically, the more they are able to meet the needs of students and trainees, and raise the level of their competencies. The importance of training through training platforms is highlighted in the possibility of student trainees from different regions interacting. They live in a way that combines theory and practical application by including interactive exercises that will achieve the desired goal with the least possible amount of time and effort, within a creative blend and creative thinking that simulates virtual reality, and in a way that carries with it excitement and fun within an elaborate training nature that constitutes a starting point. Real for the trainee and within a framework of relying on the self-inventory and trying to activate it to implement the skills required of him (Al-Baher, 2022).

Training constitutes the ideal means of determining the required amount of information, knowledge, competencies, skills, and experiences of all kinds to be provided to the trainee students, in quantity and quality, to bring about development and raise their efficiency from the applied aspect as well as the theoretical one, in order to ensure their proper performance of the overall skills required to be implemented, so as to ensure the achievement of advanced levels of creative thinking. In addition to the possibility of sharing scientific capabilities and resources, providing continuous communication between different groups, and enabling communication between them in an audio-visual and written manner, in addition to the possibility of providing interaction between the trainees and the teacher (trainer) on the one hand and between the trainees themselves on the other hand, and providing collective feedback for all subjects. And the contents presented (Al-Qarni and Al-Qahtani, 2021).

training has become a feature of the era, which is adopted and adopted by many institutions to train their employees. It has also become the fastest means of providing individuals with the information and skills necessary to perform their work better, especially with the development of science and knowledge on which aspects of contemporary life depend, which in the current era focus on human taste, human inclinations and tendencies. By focusing on the visual and auditory aspects, exploring them, and simulating the practical reality based on electronics and the philosophy of color and its impact on changing the prevailing values across modern societies (Al-Baher, 2022).

Many educational institutions rely on training that simulates e-learning to develop their students' skills. This training provides training opportunities for individuals and helps them combine training with work, and provides training programs based on the real needs of society, which may witness many changes in the future, as the individual changes his profession or develops it and becomes in need of rehabilitation, training, or updating of his knowledge, which is what It requires providing training in multiple fields and with diverse approaches to cover all the needs of the labor market (Al-Mahdi, 2016). Many studies and research conducted in various educational environments have indicated the importance of training, given that it plays an important role in shaping the education given to the trainee student, in addition to the effect of using training programs in developing self-organized training skills, such as the study of Muhammad and Al-Maadawi (2021), And Hamad's study (2018).

The study problem and its questions:

Training constitutes an important basis in building modern-day skills, based on the fact that training represents the actual application of scientific concepts, ideas, principles and theories for all new and innovative technological discoveries and inventions, including

hardware and software, which can be introduced into educational institutions, with the aim of increasing The ability of the trainer and trainee to deal with the educational process and solve its problems, in order to raise its efficiency and increase its effectiveness in a way that suits the growing and accelerating scientific and technological developments, and in a way that ensures a positive impact in directing the trainee's behavior towards interest in technological innovations. Looking at the tenth grade students at Khadija Bint Khuwaylid School, the researcher noted - Due to her work in the educational field in that school - there was a weakness in the skill level of graphic design among these students in the art education course, like the rest of the tenth grade students in public Jordanian schools, and this is confirmed by the results of the study of: Zahir (2018), Ahmed (2015), and Al-Gamal (2015), so the current study will attempt to design an training program to measure its impact on the graphic design skills and creative thinking of tenth grade students and measure their attitudes towards it, by answering the following questions:

- The first question: What is the impact of the training program on the acquisition of graphic design skills among tenth grade students?

- The second question: What are the attitudes of tenth grade students towards the training program? **Purpose of the study**

This study aimed to:

- Investigating the impact of the training program on the acquisition of graphic design skills among tenth grade students.

- Identifying the attitudes of tenth grade students towards the training program.

The importance of studying

There is a need for public schools to provide training concerned with developing graphic design skills among students, so as to ensure their cognitive and professional increase, and in a way that will reflect positively on their level of education and mastery of those skills. It is also hoped that the results of the current study will benefit: Theoretically, there is the possibility of adding new knowledge in the field of graphic design skills and ways to activate them, in addition to providing new research within this field. From a practical standpoint, the possibility of helping in the educational field by ensuring the development of the skills and knowledge dimension of students in the field of graphic design, and providing a real opportunity to develop students' skills.

Terminology of study

In light of the researcher's review of theoretical literature and previous relevant studies, the terms of the study were defined both terminologically and procedurally, and what was appropriate for the objectives of the study was adopted, as follows:

- **The training program (terminally):** It is the program in which an interactive environment is created rich in applications based on computer technology, its networks, and its multimedia that enable the trainee to achieve the objectives of the training process through interaction with its sources, in the shortest possible time, and with the least amount of money. An effort made, with the highest levels of quality, without being restricted by the limits of space and time (Albaher, 2021).

- **The training program (procedurally):** It is a program based on the communication theory that emphasizes the importance of digital learning via networks, and the use of computer technology tools and the Internet in education in order to increase the academic achievement of students in all subjects of study, especially art education, and provide students with the opportunity to communicate and interact. With each other during learning, this program consists of the following tools:

1. (Note): The trainer was able to write and discuss anything he wanted with the trainees. He could also share files and links and specify the time and date of sending.
 2. (Alert): This tool enables the trainer to send a training course alert to those registered in the course, provided that it does not exceed a specific number of characters.
 3. (Assignments): This tool enables the trainer to write an assignment or assignment for the trainees.
 4. (Quiz): This tool enables the trainer to create a test for trainees consisting of several types of questions.
 5. (Poll): This tool enables the trainer to add a vote or poll with answers to note the responses of group members.
 6. (Store): It contains many free and non-free applications and tools that assist in the training process.
 7. (Planner): This tool enables the planner to add a complete plan throughout the semester for the courses offered, and to set assignment dates and test dates, and trainees can also view them.
 8. (Communities): It is a tool that allows communication with specialized trainers and exchanging ideas about the training course, as on the Edmodo platform, as well as communicating with the platform's technical support to answer any questions or inquiries.
 9. (Badges): Through badges, badges can be added or used that help the trainer easily evaluate the trainees' contributions. They also help encourage the trainees, such as badges for the excellent trainee, a job well done, the best trainee of the week, a good question, and others.
 10. (Progress level): Through it, the level of trainees and their progress can be observed.
 11. (Discover tool): Through it, one can discover and search for multiple sources related to the training course of many types, such as applications, articles, images, lessons, lectures, research, courses, and others.
 12. (Library): An library can be created that combines video clips, technical presentations, multimedia, and various documents for access by trainees at any time and in any place.
 13. Folders: Folders through which you can add files and create folders. There is also a Favorites folder to save favorite things.
 14. Google Cloud: Google Drive enables direct connection to the cloud and importing files located in Google Cloud.
 15. (Backpack): It is similar to the trainee's study bag, where the trainee can add important files and links and thus save them and access them at any time.
- **Graphic design (terminally)**: It is one of the visual arts that is based on organizing and coordinating a group of elements (images - writings - shapes - colors - space - texture - shadow and light) according to the principles of design (balance - contrast - unity - rhythm - dominance - alignment).) to produce works that attract attention and convey the message easily and effectively (Al-Samhuri, 2021).
 - **Graphic design (procedurally)**: It is an art that is studied and practiced, based on principles concerned with maintaining balance, rhythm and unity, so that it contributes to presenting the artistic work in its most beautiful form, and in a way that ensures the individual's interaction with what is presented to him and forms in him an internal feeling regarding the importance of the artistic work in question.
 - **Attitude (terminologically)**: It is a hypothetical construct that represents an individual's degree of love or dislike for a particular topic.

It includes three basic aspects: The cognitive aspect, the affective aspect, and the behavioral aspect (Al-Taweel, 2016).

- **Attitude (procedurally):** It is a state of readiness or neuropsychological preparedness in the student, through which his experience acquired from his university education is organized, such that this state constitutes a directive or dynamic influence on the student's response to all topics and situations that provoke this response.

The limits of the study

1. The study was limited to tenth grade students at Khadija Bint Khuwaylid Governmental Girls' Secondary School in the Directorate of Education in the Rusaifah region during the first semester of the academic year (2023-2024).

2. The application of the subject of the study was limited to the second unit (Design) contained in the art education textbook for the tenth grade scheduled in the first semester of the academic year (2022-2023).

Previous relevant studies:

This part includes a number of previous studies - which the researcher was able to view - related Arabic and foreign studies, taking into account their chronological sequence from oldest to most recent, as follows:

Muhammad and Al-Maadawi (2021) conducted a study that aimed to identify the content of the training process by analyzing the reality of the training process and the impact of training on developing technological awareness and attitude. The research sample consisted of (55) faculty members from King Saud University. The survey method was used as a standard model for the steps of collecting data from human vocabulary, and the study reached several results, the most important of which are: That technological software.

It increased the degree of technological awareness among university faculty members, as well as the need to form a positive trend towards using training in training.

Alea and others (Alea, et al., 2021) conducted a study that aimed to identify the extent of teachers' preparedness and experience in preparing to implement the distance learning system during the Corona pandemic. The descriptive analytical method was used in this study, and the results of the study showed that, based on the responses related to... How prepared are teachers for distance learning? The study also recommended that schools should play a vital role in training teachers and implementing workshops for them to be equipped with the skills and knowledge that serve the process of distance learning.

Hamad (2018) conducted a study that aimed to identify the degree to which faculty members in Jordanian universities use training tools in education and their attitudes toward it. The study sample consisted of (50) members who were selected in a random cluster manner. A questionnaire was used to collect data, and a note card was used to measure the degree of members' use. Faculty members for e-learning tools. The results of the study concluded that 76% of the study sample do not use wikis, in addition to the absence of statistically significant differences in the attitudes of faculty members due to gender, academic rank, and type of university.

Zaher (2018) conducted a study aimed at identifying the role of graphic design and multimedia in developing e-educational books for the fifth grade of mathematics. The study adopted the descriptive-analytical approach, and consists of the study population consisted of all operating and completed private schools in the capital governorate, and it consisted of (43) schools. Especially in the capital, Amman, the study found a high degree of the role of graphic

design and multimedia in developing the e-book, and a high degree of the role of e-book design in improving students' understanding of the educational material.

The study by Al-Anzi (2017) aimed to shed light on the results of experiments, applications, and research conducted in higher education institutions and Arab and international universities regarding training programs. The study sample consisted of (305) faculty members. It also relied on the descriptive survey approach in conducting the study. Recommended.

The study prepares training courses for students and trainers on advanced applications to provide trainers with the skills of integrating technological programs into training.

Hashem (2017) conducted a study aimed at revealing the effect of using training programs in developing self-organized training skills and the trend towards employing them for general diploma students at the College of Education. The study sample consisted of (266) male and female students, and the experimental approach was relied upon in conducting the study. The results of the study showed that there were statistically significant differences between the average scores of the trainees on a scale of the trend towards employing training programs in favor of the experimental group and an increase in the tendency towards enjoying them. The results also showed the ease of including scientific content in training videos and websites and the ease of registration and use. The research recommended the necessity of employing programs training in training faculty members and in-service trainers, avoiding paper tests and using tests across platforms due to their ease of preparation and application and avoiding the problems of paper tests.

Cezar (2017) conducted a study aimed at revealing the effectiveness of using mobile phones and e-books in the learning process. The results of the study revealed the lack of use of graphic methods in the design process, from the point of view of the sample targeted in the study. They are students of Ostrfa University.

Ahmed's study (2015) aimed to design a proposed e-book for the biology course for the first year of secondary school in the form of a self-running interactive e-book and to verify its impact on the academic achievement of first year secondary school students in the state of South Darfur. To achieve the objectives of the study, the analytical descriptive approach was used. The following is to describe and analyze the data, and I found the study indicates that the book used in teaching biology for the first year of secondary school positively affects the academic achievement of students, and that the book for the biology course for the first year of secondary school leads to raising students' achievement to the degree of excellence and competence and contributes to Solving educational problems.

Al-Gamal (2015) conducted a study that aimed to build an educational program using a multimedia strategy. An achievement test in Islamic education and the Torrance Test for Creative Thinking were also used.

The study sample consisted of (62) students who were chosen intentionally and distributed into two study groups. The results of the study showed superiority of the experimental group that studied the multimedia strategy in achievement and critical thinking. On the control group. The study recommended the need to train teachers on using multimedia strategies in teaching Islamic education. The study by Benta and Bologna (2014) aimed to reveal the impact of using educational programs in activating and developing the learning process and participating in educational duties, activities and tasks. The study sample consisted of (202) male and female students from Romanian universities, and the descriptive survey method was used. The results showed that there was a statistically significant effect of educational platforms in motivating students to participate in cognitive tasks, and that there were statistically significant differences in students' achievement and performance of their educational tasks and

duties. Summary of previous studies and the location of the current study, including: Through reviewing previous studies, it was noted that some of them dealt with training and others dealt with graphic design and creative thinking. On the first side, we find the study of Muhammad and Al-Maadawi (2021), which aimed to identify the content of the training process through analyzing the reality of the training process and its impact on developing technological awareness. And the trend, as well as the study of Hamad (2018), which aimed to identify the degree to which faculty members in Jordanian universities use training tools in education and their attitudes towards it. On the other hand, we find studies that dealt with graphic design. In the study of Zahir (2018), we find that it aimed to identify the role of graphic design. And multimedia in developing e-educational books for the fifth grade of mathematics. Ahmed's study (2015) aimed to design a proposed e-book for the biology course for the first year of secondary school in the form of a self-running, interactive e-book. What is its impact on the academic achievement of first-year secondary school students in the state of South Darfur, we also find the Al-Jamal study (2015), which aimed to build an educational program using a multimedia strategy. An achievement test in Islamic education and the Torrance test for creative thinking were also used. As for the Cesar study (Cezzar, 2017) In light of this aspect, I aimed to reveal The effectiveness of using mobile phones and e-books in the learning process, Previous studies will be used to develop the current study tool, references and sources will be guided, as will the statistical treatments that were used. The most important thing that distinguishes this study from other previous studies, according to the researcher's knowledge, is that it is the first study that will address the design of an training program to measure the graphic design skills of tenth grade students and their attitudes towards it.

Method and procedures:

- Study Approach:

The quasi-experimental approach was used with two groups, experimental and control, to achieve the objectives of the study.

- Study population:

The study population consisted of all students in the tenth grade at Khadija Bint Khuwaylid Governmental Girls' Secondary School in the Directorate of Education for the Rusaifeh region during the first semester of the academic year (2022-2023), as their number reached (50) students, and the study tools were distributed to a sample. An exploratory study consisting of (25) female students, two weeks apart. The study population was distributed into two groups randomly. The experimental group included (25) female students who were trained according to the training program that was designed in this study. The control group also included (25) female students who were trained. Train them in the usual way.

Study tool:

The study tool was developed by referring to theoretical literature and previous studies, such as the study of Muhammad, Al-Maadawi (2021), Zahir (2018), and Ahmed (2015), in order to achieve the objectives of the study and answer its questions. The researcher prepared an achievement test to measure the impact of the training program. The proposed test in graphic design skills for tenth grade students, as the test consisted of ten objective questions, as well as a questionnaire to measure the tenth-grade students' attitudes regarding the use of the proposed training program, as the questionnaire consisted of (19) items.

Firstly. Achievement test:

With reference to literature, theory, and previous studies, such as the study of Muhammad and Al-Maadawi (2021), the achievement test was prepared and consists of (10) objective questions of the multiple-choice type, so that the trainee chooses the correct answer from four alternatives, one of which is correct, and the test paragraphs were formulated clearly and in easy language that suits the level and abilities of the trainees.

Face validity of the test:

To verify the apparent validity of the test, it was presented to (8) experienced and specialized arbitrators. They were asked to express their opinion on the paragraphs of the study tool in terms of the wording of the paragraphs and the degree of their suitability to the field in which they were placed, either by approving them, modifying their wording, or deleting them due to their lack of importance. Their comments regarding modification, deletion, addition, and merging of paragraphs were taken into account, until the number of questions became (10), including (9) theoretical questions and one practical question. The opinion of what was agreed upon by 80% or more of the arbitrators was taken into account in the arbitration process.

Test stability :

to verify the stability of the achievement test, the test was administered with repetition on a group consisting of (25) female students from outside the study sample, two weeks apart. Reliability was calculated using the repetition method, as shown in Table No. (1):

Table (1): Reliability coefficients by the repetition method for the achievement test questions and the test as a whole

the question	Replay stability
Question No 1	0.96
Question No 2	0.94
Question No 3	0.94
Question No 4	0.92
Question No 5	0.91
Question No 6	0.91
Question No 7	0.89
Question No 8	0.87
Question No 9	0.85
Question No 10	0.85
Total marks	0.90

It is clear from Table No. (1) that the reliability coefficient by the repeat reliability method for the total score of the test was (0.90), which indicates that the test has a good and acceptable degree of reliability for the purposes of the current study. Correcting the achievement test: One mark is given in this test for each correct response of the examinees to the test items, which number (9) theoretical questions and one practical question, so that the total marks on the theoretical questions obtained by the student are (9) as a maximum, and (zero) as a minimum. As for the practical question, it includes one mark for each element of the question: Point, line, shape, and movement.

secondly. Trends questionnaire: By referring to the theoretical literature and previous studies, such as those of Zahir (2018) and Ahmed (2015), an attitudes questionnaire was prepared, consisting of (19) items that were graded on a five-point Likert scale. The apparent validity of the questionnaire: The trends tool was presented in its initial form to a group of specialized arbitrators, the number of whom was (8), as in Appendix (8), and they were asked to express their opinion on the paragraphs of the study tool in terms of the wording of the paragraphs, and the degree of their suitability to the field in which they were placed, either by approval or approval. Or amending its wording, or deleting it due to its lack of importance, and their comments were taken into account with regard to modification, deletion, addition, and merging of paragraphs, until the number of its paragraphs became (19) paragraphs, and the opinion of what was agreed upon by 80% or more of the arbitrators was taken into account in the arbitration process. . Construct validity of the questionnaire: To verify the characteristics of the attitudes scale, the construct validity of the scale was calculated through the discriminatory significance of the items by finding the correlation coefficients of its items with the total score of the scale, and Table (2) shows this:

Table (2): Correlation coefficients of the scale items with the total score of the scale

Association with the domain	Paragraph	Association with the domain	Paragraph	Association with the domain	Paragraph
0.771	Training helps to give judgment on a graphic work	0.778	The training activities helped raise awareness about the importance of graphic design	0.771	Training explains the behavioral objectives in the educational material in an easier way
0.668	The colors used in practical training are appropriate	0.771	Interactive training activities are available in the training	0.776	The scientific material presented is useful and achieves the training objectives
0.771	The drawings, shapes, and pictures are clear and appropriate in size	0.772	The training included a variety of methods, including texts, videos, shapes, and appropriate illustrations	0.772	The training used achieves all the desired goals
0.772	Training that is easy and practical	0.773	The training helped the trainee acquire new skills	0.773	The topics of the teaching material were clear
0.669	The videos are clear in terms of sound and picture	0.775	The training helped to form positive attitudes	0.661	The training content is organized

			towards the importance of technology in teaching design within the art subject		logically and sequentially
0.663	Training helps develop students' imagination skills	0.661	The training included interesting and appropriate presentation methods	0.665	The training content meets the trainee's actual needs in the field of

It is clear from Table (2) that all correlation coefficients of the items with the total score of the scale are statistically significant at the significance level ($\alpha = 0.05$), as they ranged between (0.778 - 0.661), and all of these values are statistically significant. Scale stability: To verify the stability of the scale, the internal consistency method was used according to the Cronbach Alpha equation. Table (3) shows the stability coefficients of the study tool as follows:

Table (3): Reliability coefficients of the attitudes tool among tenth grade students

the number	the field	Cronbach alpha
1	In terms of content	0.94
2	In terms of educational objectives	0.92
3	In terms of training activities	0.91
4	In terms of design	0.91

It is clear from Table (3) that the reliability coefficients were high, ranging from (0.94 - 0.91), which indicates that the scale has an acceptable degree of reliability for the purposes of the current study. Directional scale correction key: The researcher used a five-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree), and the attitude scale was corrected for the positive items as follows:

Strongly agree	agree	Neutral	disagree	Strongly disagree
1	2	3	4	5

The attitude scale was also corrected for negative items as follows:

Strongly agree	agree	Neutral	disagree	Strongly disagree
5	4	3	2	1

Study results and discussion Results related to the first question: What is the impact of the training program on the acquisition of graphic design skills among tenth grade students? To answer this question, the arithmetic means and standard deviations for the pre- and post-measurements were extracted for members of the experimental and control groups on the graphic design skills test. Table (4) shows the results.

Table (4) Means and standard deviations for the pre- and post-measurements for members of the experimental and control groups on the graphic design skills test

Posttest		Pretest		The number	the group
standard deviation	SMA	standard deviation	SMA		
1.249	11.68	1.993	5.84	25	Experimental
1.583	6.44	1.464	6.32	25	The female officer
2.999	9.06	1.748	6.08	50	Total

It is clear from Table (4) that there are apparent differences between the average scores of the experimental and control groups in the post-measurement of the graphic design skills test in favor of the experimental group, as the average scores of the experimental group for the post-measurement in the graphic design skills test reached (11.68), as for the pre-measurement (5.84), while the average score of the control group for the post-measurement on the graphic design skills test was (6.44), while for the pre-measurement (6.32). To find out whether these differences were statistically significant, the “ANCOVA” test was used, and Table (5) shows the results.

Table (5) Results of the ANCOVA test to indicate differences between the two groups on the graphic design skills test

Effect size	Significance level	F	Mean squares	Degrees of freedom	Mean squares	Source of variance
.004	.656	.200	.414	1	.414	Tribal
.774	.000	161.210	333.347	1	333.347	the group
			2.068	47	97.186	The error
				49	440.820	Total

Table (5) shows that there are statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of the experimental and control groups in the graphic design skills test, where the “F” value reached (161.210), and these differences were in favor of the experimental group, and it reached The effect size of the training program on graphic design skills is (0.774), and Table (6) shows the adjusted arithmetic means and standard error for the experimental and control groups in the graphic design skills test.

Table (6) Adjusted arithmetic means and standard error for the experimental and control groups in the graphic design skills test

the group	Adjusted arithmetic mean	Standard error
Experimental	0.289	11.667
Control	0.289	6.453

This result may be attributed to the rapid technological development that has led to highlighting the importance of training programs because of their major role in raising the level of competence and skill of the trained individuals, by providing continuity of training in a way

that is commensurate with keeping pace with scientific and technical developments, as well as because training programs provide Different skills in the field of graphic design and the reliance of graphic design on applications to a large extent. This may also be due to the components of the training program being appropriate to the age group of tenth grade students and their mental abilities, which provided them with the ability to benefit from the program and acquire new skills in the field of Graphic design, as well as basing graphic design skills on applications.

Results related to the second question: What are the attitudes of tenth grade students towards the training program?

To answer this question, the arithmetic means and standard deviations of the tenth grade students' responses to the questionnaire on attitudes toward the training program were extracted, and Table (7) shows the results.

Table (7) Arithmetic means and standard deviations of the responses of tenth grade students to the questionnaire on attitudes toward the training program

The number	Paragraph	Rank	SMA	standard deviation	Appreciation
2	The scientific material presented is useful and achieves the training objectives	.458	4.72	1	high
1	Training clarifies the behavioral objectives in the educational material more easily	.490	4.64	2	high
3	The training used achieves all the desired goals	.712	4.44	3	high
Scope of educational objectives			.304	4.60	high
6	The training content meets the trainee's actual needs in the field of graphic design	.500	4.80	1	high
4	The topics of the teaching material were clear	.542	4.72	2	high
5	The training content is organized logically and sequentially	.458	4.72	3	high
Content field			.260	4.75	high
7	The training activities helped raise awareness about the importance of graphic design	.476	4.68	1	high
9	The training included various methods, including texts, videos, shapes, and appropriate illustrations	.651	4.56	2	high
11	The training helped to form positive attitudes towards the importance of technology in teaching design within the art subject	.583	4.56	3	high
12	The training included interesting and appropriate presentation methods	.651	4.56	4	high
8	Interactive training activities are available in the training	.590	4.50	5	high
10	The training helped the trainee acquire new skills	.653	4.48	6	high
13	Training helps to give judgment on a graphic work	.821	4.44	7	high
Field of training activities			.375	4.54	high
14	The colors used in practical training are appropriate	.277	4.92	1	high
15	The drawings, shapes, and pictures are clear and appropriate in size	.436	4.76	2	high

16	Training is characterized by ease and application	.436	4.76	3	high
19	Training helps develop visual and sensory perception skills	.577	4.60	4	high
17	The videos are clear in terms of sound and picture	.712	4.56	5	high
18	Training helps develop students' imagination skills	.586	4.52	6	high
Design field			.274	4.69	high
Trends towards the training program			.236	4.63	high

It is clear from Table (7) that the arithmetic averages of the tenth-grade students' attitudes towards the electronic training program ranged between (4.44-4.92), all with a high rating, and the arithmetic averages ranged between (4.54-4.75), all with a high rating, and the second area, "Content," came in first place. "With a arithmetical mean of (4.75), followed by the fourth field, "Design," with a arithmetical mean of (4.69), then the first field came, "Educational Objectives," with a arithmetical mean of (4.60), while in last place came the third field, "Training Activities," with a arithmetical mean of (4.54). The arithmetic means of the tenth-grade students' attitudes towards the electronic training program was (4.63) with a standard deviation of (0.236) and a high rating. This may be attributed to the fact that the students look at the electronic training programs with passion and pay great attention to the training programs in all training requirements, but the focus is on the content. As the most important pillar of the training programs, understanding the content is the basis for feeling benefit from the training program. Tenth grade students, through their mental and intellectual abilities, have the ability to distinguish between the elements of the training program, distinguish the importance of each element, and focus on the basic element represented by the educational content of the training program. As well as focusing on the rest of the elements of the training program, represented by design, educational objectives, and training activities. This may be attributed to the fact that training activities come as the last concern of tenth grade students and to a high degree, given that the implementation of the activities is through the trainee's self-application, and he is the one who can determine the extent of benefit from the activities. Training, and paying attention to the basic pillars of the training program that require more learning and training. This may also be attributed to the students' inclinations and direction towards the electronic training program stemming from their desire to develop their skills in various fields. In the current study, it is represented by developing their skills in the field of graphic design and creative thinking skills. This is because students look to developed programs that keep pace with the requirements of the current era, the age of technology, as the most supportive in developing various skills, especially developing skills related to graphic drawing, which requires many electronic skills due to its heavy reliance on technology.

Recommendations:

Based on the previous results, the researchers recommended the following:

- That the Ministry of Education and its various directorates adopt the proposed electronic training program to measure graphic design skills and creative thinking, by reviewing them and trying to apply them, and developing mechanisms to achieve them.

- That academic leaders give great importance to the skills of graphic design and creative thinking, so that they work to stimulate the conduct of studies and research from time to time, to determine the reality of those skills and work seriously to develop and update them

so that they take into account the technical development of a range of electronic training programs.

- Conducting conferences, seminars, and periodic meetings on an ongoing basis to develop the electronic training system at the levels of Jordanian schools of education.

References:

- Al-Jamal, Bisan (2015). "The effectiveness of using web tools in developing multimedia design and production skills in technology among eighth grade students in Gaza." Khan Younis, unpublished doctoral thesis, Islamic University, Gaza.
- Hamad, Lina (2018). The degree of use of e-learning tools by faculty members in Jordanian universities and their attitudes towards it, unpublished master's thesis, Middle East University, Jordan.
- Al-Samhour, Youssef (2021). Graphic design, extracted from the website <https://www.baianat.com/ar/books/graphic-design/graphic-design> on 6/26/2022 at 12:25 PM.
- Al-Taweel, Hani (2016). Organizational behavior in educational organizations, Amman: Dar Wael for Publishing and Distribution.
- Zaher, Ihab (2018). The role of graphic design and multimedia in developing electronic educational books for the fifth grade in mathematics, unpublished master's thesis, Middle East University, Jordan.
- Al-Qarni, Aida, and Al-Qahtani, Muhammad (2021). Obstacles to the use of electronic training platforms in professional development programs in educational training centers in Bisha Governorate from the point of view of female teachers, *Journal of Educational-Azhar University*, 190 (1), 562- 618.
- Muhammad, Saad, and Al-Maadawi, Muhammad (2021). Technological training programs via the electronic training platform and their relationship to the level of technological awareness and attitude among faculty members at King Saud University, *King Saud University Journal*, 2(10), 223-239.
- Al-Baher, Ibrahim (2021). *Encyclopedia of administrative terms*, London: Lambert.
- Al-Baher, Ibrahim (2022). *Cultural intelligence in higher education institutions*, London: Lambert.
- Alea, L. A., Fabrea, M. F., Roldan, R. D. A., & Farooqi, A. Z. (2021). Teachers' Covid-19 awareness, distance learning education experiences and perceptions towards institutional readiness and challenges. *International Journal of Learning, Teaching and Educational Research*, 19(6), 127-144.
- Benta, D, Bologna, J (2014). Case study E- Learning platforms in higher education, *Procardia computer science*, 2(31), 170-186.
- Cezzar, J., (2017) *The AIGA Guide to careers in Graphic Design and Communication Design*, Bloomsbury Academic, *International Journal of Learning, Teaching and Educational Research*, 2(13), 156-178.