The role of infographics in distance education in light of the Coronavirus crisis in the Faculties of Arts

Dr. Aya lotfy zakaria Habbak
Interior Design and furniture, Applied Arts university, Damietta, Egypt
aya_habbak@du.edu.eg

Abstract: -
Technological progress had a great impact on the educational process. Traditional education in its traditional ways of transferring knowledge is no longer able to meet the requirements of that process. Societies began to search for new forms of education that depend on the learner himself, and does not require the presence of the teacher and the learner in the same time and place, this has led to the emergence of distance education and e-learning those types of education that do not adhere to a specific place or time, not even a certain category or number of individuals. Hence the emergence of a pandemic Corona had a major role in universities to activate distance education more and wider than ever before after universities were forced to close to prevent the spread of the virus.
As education in the faculties of arts is of a special nature differs from other colleges, the distance education in those colleges was printed with a new and different nature, so resorting to various methods such as infographic that brings out information in an artistic framework meets the need for technical specialties better.
Therefore, the research problem is summarized in the following question: How effective is infographics in distance education in art colleges?
Hence, the research aims to study the extent of the effectiveness of infographics as an educational method in distance education in the faculties of the arts in particular, and to determine the effectiveness of distance education in studying the faculties of the arts in general

key words: Distance education - e-learning - infographic - colleges of the arts - Corona pandemic.

Introduction:
Distinguished education is an investment of the most precious types of resources and the holiest commodities. The issue of education today is no longer controversial in any region of the world because international experiences have proven that the beginning of sound steps on the map of true progress is outstanding education, and sustainable knowledge in the twenty-first century has become the basis Development with all that it produces by expanding options, opportunities, and developing capabilities and technologies that enable the seeker of knowledge to build a better life by using the various available media and technological tools. It has become clear that those who possess science and technology have the right to stay and the right to join the elite and to join in the developed world, and this will only come through the continuous development of culture through distinguished and comprehensive education.
Since the world is developing in such a rapid manner, and technology dominates all fields, including the education sector, one of the most recent methods used in education is the use of technological media, such as computers, in the educational process in what is called e-learning. The e-learning came not only to keep pace with the feature of the modern and advanced technological era, but its existence was a necessity to avoid the disadvantages of traditional
education such as the time and place barrier and the number of learners, and also to increase its educational effectiveness with the learner, especially with the use of innovative educational methods such as videos, animations, graphics and infographics to facilitate the delivery of information to the recipient.

As William Glaser indicated, a person learns in the sense of (accommodating and realizing) 10% of what he reads, 20% of what he hears, 30% of what he sees, 50% of what he sees and hears, 70% of what he discusses with others, 80% of what he experiences, 95% of what he teaches to another person, where e-learning provides hearing, vision, discussion, and experience, as well as exchanging experience with learners, and the extent of students’ effectiveness with e-learning can be measured by the GEpHora scale of interactivity, digital media has created a new vision between what it was like learning the arts And what happened to it, as the sweep of electronic tools and technologies increased the power of computer and its data such as shapes, drawings, digital images and video clips in art education.

Problem of research:
The research problem is limited to the following question:
• How effective is the use of infographics in distance education for students of art colleges?

Hypotheses of research:
From the previous question, the researcher assumes the following:
• The use of infographics in distance education in art colleges contributes to the delivery of information faster and easier for the recipient.
• Infographic meets the need for artistic majors in education at art colleges.

Objective of research:
This study aims to:
• Emphasizing the importance of infographic in teaching and learning in the arts studies.
• Introducing e-learning and distance education as one of the most important modern methods of education and considering it as a lifeline in the face of the coronavirus pandemic.

Importance of research:
The importance of research lies in the following points:
• The importance of research stems from the importance of education as one of the main pillars of nation's building.
• Emphasizing the use of modern types of education such as e-learning and distance education, which keep pace with modern technology and avoid the disadvantages of traditional education.
• Emphasizing the role of e-learning in the face of pandemics, such as the coronavirus pandemic, as distance education has become a lifeline to the educational process.
• The necessity of using infographics as one of the educational methods in the Faculties of Arts, with the information achieved in an interesting way that meets the need of artistic specialties.

limits of research:
• According to the place limits: Faculty of Applied Arts, Damietta University.
• According to time limits: during the years 2018, 2019, 2020.
Methodology of research

• Descriptive and analytical approach through describing and analyzing the types of modern education such as e-learning, distance education and virtual education, explaining and analyzing the way the educational information scheme works and how it is applied to the curricula of art colleges.

• The critical curriculum through critique and analysis of models of graphical applications implemented by students.

1. E-learning: -
E-learning can be defined as the science of learning without using educational materials printed on paper, e-learning is the use of communication technology to provide information for education and training, and with the progress in developing information and communication technology, e-learning began to appear as a model for modern education, among the most important advantages of e-learning is the liberalization of interactions between learners and coaches from time and space constraints through asynchronous and asynchronous learning network model.

2. Distance education: -
It is the type of education that is characterized by the absence of direct communication between the teacher and the learner, where the educational material is presented through the local or global network (the Internet) through the use of communication technology, Distance education is a form of e-learning, the only difference is that e-learning may include the teacher and the learner in the same place or be remote, while distance learning requires the distance between the teacher and the learner.

3. Infographic: -
Infographics is one of the new means that has spread in various fields, including education, as it is a new form of data visualization that has become very popular due to its effectiveness in transferring information, whether in its printed or digital image through it individuals and organizations can deliver brief messages to their audiences.

4. A case study of the application of the use of infographics in teaching students to one of the Faculties of Arts: -
During the practical lesson of a course, the lecturer presented the scientific material through the PowerPoint program, and the lecturer, during the explanation, used all kinds of infographics. The students were assigned to design infographics on the topic that was explained. The students were divided into four competing groups. The steps of the work were as follows:

a. The first stage is to define the goals and the points to be presented.

B. The second stage is to define the design of the infographic, the shape of the content, and the objectives within it.

T. The third stage is the production stage.

D. The fourth stage is the evaluation stage.

C. The fifth stage is the publishing.
Picture No. (1) and (2) for student during the first and second stage of the infographic

Picture No. (3) and (4) of students' discussions of group work

Picture No. (5) models for students 'applications to make infographic on optical illusion, and in the three models, students are relied on manual design and not using modern design methods that are computer-based, and design is noted as the dominance of visual design over the scientific material presented, while design B, in which we notice that all the required scientific material is not presented, and we find that design C has avoided the previous two errors, but it is difficult to read the scientific material on both sides of the plate to some extent, source: Photo by the researcher
5. A case study to apply the use of infographics in teaching students to one of the Faculties of Arts after applying distance education due to the Corona pandemic:

Just as the new Corona epidemic swept the barriers of time and space, the calls for "distance learning" - which accompanied the spread of the virus - came to sweep the barriers of space and time as well.

Where many countries around the world were forced to close universities and schools to prevent the spread of the virus, then distance education was a lifeline for the educational process, the percentage of using e-learning platforms increased in multiple proportions. The development of curricula appeared in an innovative and interesting way to facilitate the delivery of scientific material to students from a distance is an urgent necessity, with the need to take into account the psychological aspects that students suffer from fear and anxiety from infection with the virus. In addition to that, distance teaching is a new method for some students who have learned the traditional methods most Years of their lives, so resorting to infographics of all kinds (from photos, videos, animations, and all audio-visual resources, illustrations, and animations etc) is an ideal solution for communicating the scientific material in a creative, interesting and easy-to-understand manner.

Pictures No. (6) and (7) illustrate students' reliance in practical courses heavily on computer programs to make designs in distance education.
6. Results: -
a. Distance education and e-learning is an imperative for this era, so after the demise of the Corona pandemic, traditional education will not return as it was before, but distance education must occupy a leading position in order to avoid many of the disadvantages of traditional education, and because it has the advantage of passing the space and time barrier and the numbers of students.

B. The individual differences of students must be taken into account when designing educational infographics.

T. E-learning enables the student to perform the work accurately and quickly, with the ability to amend, and replay again, as well as the ability to print on the appropriate material.

D. E-learning increases the learner's skill in teaching and self-evaluation.

C. The development of teacher and learner skills is an imperative to achieve efficient e-learning.

7. Recommendations and proposals: -
a. It is recommended to increase the activation of e-teaching, and work to raise the efficiency of teaching personnel, because of the e-education role in reducing pressure on the budgets of countries and infrastructure, and for the effectiveness and efficiency of this method in developing the educational process and raising the efficiency of the graduate with an emphasis on the need to keep practical aspects inside or outside universities in order to achieve the objectives of the course.

B. It is recommended to use educational infographics that take into account the visual and educational aspects of teaching colleges of the arts because of its role in communicating the information quickly, accurately and in an interesting manner.

T. It is recommended to create a data bank for each discipline that enables all colleges at the republic level to enter and use it, through the cooperation of professors of joint courses together to provide scientific content that would raise the status of education within Egypt.

D. It is recommended that scientific conferences be held electronically to avoid the consequences of time, place and cost, or that part of them be electronic to ensure access to benefits for the largest number of participants.

C. Seminars and workshops are recommended to raise the efficiency of faculty members for electronic teaching methods and the latest methods that can be activated.

H. Implementing unified Arab projects for education.

X. Implementing local and global joint projects to develop education.

8. References: -
2. The Soldier, Reham." Infographic and data". the first international conference of fine arts in Luxor, 17-19 February 2015: pp. 1-7
3. Darwish, Saad, Bashiwa, Lahcen." E-learning is a societal necessity a theoretical study". University of Bahrain conference, 17-19 April 2006.
7. Zayed, Hani. "Distance learning in the face of the emerging krona." Article published on the Knowledge Bank of Egypt, dated March 17, 2020

B. Internet sites: -
Al-Dustour Newspaper Website - Article entitled: “New Mechanisms for Distance Education in the Faculties of Arts, Helwan University, Friday 15 May 2020 corresponding to 22 Ramadan 1441 https://www.dostor.org/3034851
B. Foreign references: -