Inserting Motion into Still Images by Graphical Processing Software to Be Used in Electronic Educational Presentations

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Abstract:

The aim of the research is to study motion in images of multimedia educational presentations, with a study of the use of graphic processing programs for still images in moving their vocabulary, and synthesis programs for editing video materials and creating a screen language that combines these movements to be used in educational presentations. It shed light on the important role that movement plays in the visual text that is read by the eye, especially within multiple media, such as writings and sound effects. An integrated one that nominates and clarifies the educational material developed, It can be used on the screens of learning centers, in Al-Alim Al-Zumri, or individual education, or self-education, or for groups of learners in classrooms within educational institutions, or in educational presentations on educational platforms, or by e-learning, for all students of different levels, and with different characteristics of learners.

This study also aimed at consolidating the relationship between the photographer and the graphic processing programs, and introducing the designer to modern programs and applications for smart phones. This reduces the digital divide between the photographer and the RETUTURES who perform the POST PRODUCTION of digital photographs. Sophisticated technology plays a pivotal role in the specialization of animation, which is one of the most prominent methods that have recently emerged in the field of graphic works. There is a strong relationship between them from antiquity back to computer graphics. And by the use of computers in the development of these graphics.

Keywords:

Media, Graphic, programs, photo

An Introduction:

With the passage of time, the development in the fields of education has become rapid, which directly confronted the fields of science. In addition to the explosion of information that led to the emergence of what is known as the era of informatics, and a selection of methods and methods that facilitate education were made available (Bin Kharrour, 2020, pp. 128-141). Gradually, e-learning came as one of the most important achievements resulting from scientific development. In this type of education, the primary traditional methods such as memorization and indoctrination are replaced by other methods that depend mainly on creativity and the exploitation of various individual abilities and skills (Al-Momani, 2021 AD, pp. 288-258).

Also, educators have repeatedly sought to modify the old learning environments, that is, those that depend on traditional methods. Learning through electronic means has become one of the

most important aspects of technological development. One of the most important of these technologies and means is the interactive video. In their studies, the researchers stressed the importance of using interactive video technology in education, such as the study (Shehata, 2020 AD), which stressed the importance of interactive video in speeding up the flow of information, activating students' minds, facilitating students' minds, facilitating cognitive work for them, and strengthening their knowledge during the learning process. As it was mentioned above, by observing the challenges of education in the recent times or the last three years since the spread of epidemics or the pandemic, education, especially the university, has become devoid of motivation, and researchers and educators have become in need of new technological means that stimulate the continuation of their education, as well as motivation and increase achievement. Al-Alami (Khaled, 2014 AD, p. 245).

Given that it is obvious and known that the educational video is a technique that is used in the teaching process based on the principle of moving graphics and pictures that contribute to conveying the idea and the scientific message to the mind of the student. And these images that are animated or displayed in a fixed form in the educational video have great importance and a major role in the educational process. Pictures and educational graphics fall under the term visual media. (Freeman, 1990, p. 327-340) The visual educational media has become widely used, as a result of the huge demand for it to turn into one of the means of education. Since it reveals many of the gaps and culture prevailing in society. One of the first educational visual media is still images (Fuady, 2018, p 1-6).

Research problem:

Over the past years, it has been noticed that there has been a great merger between education and electronic means. A number of educational entities, such as schools, colleges, educational institutes, and others, rushed to integrate technology with the explanation. In turn, the students interacted with it to a large extent. For learning purposes, they obtained the advantages of what was called blended learning. However, the Arab world remained short of achieving the required response to the surrounding development in the educational field (Schwarz, 2020, p 715-720). Integrations and the use of multiple visual and tactile media in the context of designing applications or developing programs is one of the modern trends that everyone is keen to adopt. By presenting various information, knowledge and experiences with these technologies, especially in educational environments; in order to achieve certain goals. Most of the time, the media combines still images, written texts in addition to sounds, illustrations, motion graphics, maps, etc. (Soufi, 2012 AD, p. 7).

The research problem can be formulated in the main question: Although most educators stress the need to adopt multimedia in the learning process. The most famous of which is the interactive video that facilitates the course of teaching and learning, but many teachers and teachers in private and governmental education institutions are unaware of the effectiveness of technology programs and applications in their great role in moving fixed graphics. They do not know that there are programs called visual editing programs that are used in editing still and animated images, and they also have a great ability to edit videos:

• How can graphic processor programs be used for still images in moving their vocabulary to create a screen language for moving images to be used with video materials in electronic educational presentations?

Research questions and inquiries:

Through the main question of the research problem, several sub-questions and questions emerge:

• How do we use graphics processor programs for still images in moving these images with high quality?

• What are the forms of employing educational images in the educational field?

• To what extent does the educational animation correspond to the needs of learners and students?

• What programs are used to animate still images?

• What are the procedures for moving a still image by using the capabilities of graphics processor programs?

Research Aims:

The research aims to:

• Those in charge of educational photography make the best use of graphic processor programs to move still photographic images.

• Explaining the importance of educational images and defining their types and characteristics for those working in the field of photography.

• Statement of the importance of movement for each of the educational video and educational still images within the different learning environments.

Research hypotheses :

The research assumes that:

• If moving parts of the photographs are used in harmony with the movement of drawings, writings and topics in educational presentations, it will create a screen language that serves the educational field.

• The use of graphics processor programs with programs to move parts of the image enriches the presented material visually and raises the rhetorical level of the visual language presented.

Conclusion:

The aim of the research is to study movement in the images of educational multimedia presentations, with a study of the employment of graphic processor programs for still images in moving their vocabulary, and synthesis programs for editing video materials and creating a screen language that combines these movements for use in educational presentations, and it has shed light on the important role that movement plays in the text Visual reading by eye, especially within multiple media, such as writings and sound effects, and explained to the photographer who designed educational visual texts the role of graphic processor programs for still images, moving them or moving parts of them, and editing visual texts for educational video materials, within an integrated module that filters and clarifies the educational material placed, that can be used in Screens of learning centers, with group learning, individual education, self-education, or groups of learners in classrooms within educational institutions or educational presentations on educational platforms, or e-learning, for all students of different levels, and with different learners' characteristics.

This study also aimed at consolidating the relationship between the photographer and graphic processing programs, and introducing the photographer to the designer with modern programs and applications for smart phones. Which reduces the digital gap between the photographer and the retouchers (RETUTURES) who perform (POST PRODUCTION) operations of digital photographs.

Advanced technology plays a pivotal role in the field of animation, which is one of the most prominent means that have recently appeared in the field of graphic business. There is a strong relationship between them from time immemorial dating back to computer graphics. And due to the use of computers in developing these graphics, their use in animated designs has expanded. In interaction with surrounding technology and accelerated renewal processes. The process of transforming ambiguous and difficult-to-understand data and information into a set of images and graphics inevitably leads to an improvement in the way they are dealt with. What the animation mechanism actually applies. Because it includes a large amount of pictures and graphics along with the written content accompanying the explanation within the same frame. which achieves satisfactory or above satisfactory results in learning; They include large aspects within the same figure and thus ensure ease of understanding and greater clarity.

On the other hand, the technology of graphics and animation increases the ability of learners to think creatively, by producing new concepts and knowledge that they were not aware of before. This is reflected through the practical application as it is observed through the performance and results indicators. The educational picture with the tasks that you do can develop the mental and mental tasks of the recipient. During the presentation, the recipient becomes aware of all the previous data that were previously stored in his memory. On the other hand, the technique of moving photographs increases the ability of learners to think creatively, by producing new concepts and knowledge that they were not aware of before. This is reflected through the practical application as it is observed through the performance and results indicators. In addition, the educational image is a task that is characterized by development courses and improvement of the learner's mental capabilities and skills in terms of innovation, comprehension, reflection and long-term retrieval. This retrieval, which is based on a wide range of foundations, including the time of displaying the image, the extent and clarity of light and color, the excitement of the recipient, and the work on suspense in order for his memory to be able to retrieve data within units of time.

Thus, the study has answered the research questions and questions that it raised, and achieved its desired goals> as it proved the validity of its hypotheses.

Recommendations:

After completing the study, the researcher recommends the following:

- The need to pay attention to teaching photography students in the faculties of applied arts, departments of photography, cinema and television, to employ the capabilities of graphic processor programs to serve the processes of adjusting and processing the captured photographic image, to accomplish control, adjustment and retouching operations.

- The need for educational designers or photographers to pay attention to movement and its value in educational presentations because of its ability to attract attention and achieve educational goals.

- The need to pay attention to the programs and applications for moving parts or some of the subjects from the photographic image, and to exploit its potential movements that serve the aesthetics and rhetoric of the language of the screen.

- Organizing training courses from time to time for designers, educational photographers and educational technology specialists alike; With the aim of raising awareness of how to create multimedia educational presentations, and constantly looking at the most important developments in this context. This helps to gain new ideas to introduce the appropriate update according to the development in the field.

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