



**Institute of Educational Studies
Department of Educational Technology**

**Effectiveness of a Program based-on the International
Information Network for Developing some skills of the
Digital Photography in the Light of Visual Literacy
Concept at Students of Instructional Technology**

**A thesis Abstract for the Master Degree in Education
Department of Educational Technology**

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Instructional:

Educational institutions began gradually to use the international information network for educational purposes so that the concept of e-learning was combined with the international information network, this concept has become a rolling as the availability of programs of distance education courses via the international information network, and the environment of learning based on the international information network, when the teacher and student are separated from each other by a remote location, all of the available learning tools such as data, video clips, graphics, shapes, Visible and audio often do, in harmony and cohesion with the methods of communication to be used to meet the educational gap.

Also, the international information network is characterized by the graphical user interface, and its content of the messages collected sounds and movies, images and data in one digital design, but this digital interaction is based on the graphical interfaces lead us to the importance and the role of images and Educational digital photos, with the development and growth of e-learning in its various forms, increasing the need for Educational digital photos, they have become used to permanently in communication and education.

The potential of the international information network has been recruited to develop the composition of digital photos skills in the light of the Visual Literacy Concept, the researcher stresses that these skills of the most important skills required for education technology specialist, as well as the visual literacy play a big role in the delivery of this type of skills.

Feeling with the problem:

Researcher felt the problem of searching through the previous view, and through the following points:

- 1- The current educational plan of the program of education technology does not provide students with the composition of digital photos skills.
- 2- A lack of curriculum refers to what learners to acquire the composition of digital photos skills.

- 3- There are a lot of photos in books and educational programs that lack the skill in composition, which loses its function of education.
- 4- Neglect to take advantage of visual literacy and its various fields, Particularly visual learning, as it contains important rules for the design of educational visual materials.
- 5- The direction of Fayoum University to convert traditional courses to e-courses On the international information network, although it is not used this solution to overcome this problem.

Through setting the problem researcher has depended on the following factors:

First: The researcher's experience:

Through participation of a researcher in the teaching of the practical side of photographic production course in more than one semester, the researcher has noticed a lack of composition of digital photos skills in the photos that the students produced in spite of possessing the skills to use digital camera, the researcher found from the previous view that it must develop the composition of digital photos skills, in the light of visual literacy concept, especially with regard to educational visual materials design rules, using international information network; the choice of the researcher to the international information network without a multimedia software due to lack of access to the College of the availability of computer labs equipped, as well as access by international information network for students from outside the province of Fayoum and enrolled in college.

Second: The scientific conferences:

The Twelfth Scientific Conference of Information Systems and Computer Technology (Cairo, 2005) Was recommended it is necessary to use e-learning on-line, Distance and on demand to solve the educational problems that facing the learners, especially those that need the skills of all kinds.

Third: The previous studies:

According to the above- mentioned previous studies, as well as study (Mohamed Mahmoud Abdel-Wahab, 2009) which dealt with the effectiveness of a proposed program in information technology-based

self-learning using the Internet in knowledge acquisition and development of technological skills and awareness among students of business department, faculty of education in Sohag; Study of the University of California, which focused on comparing the outcomes of distance education using the international information network with the traditional learning outcomes (Omari, 2002); As well as the study of (Renee, A., Davis, L., 2000) which compared the traditional approach and the approach is based on the international information network.

Because the composition of educational digital photos skills, is a set of skills that must be mastered by education technology specialist, so it is possible to learn the composition of digital photos skills through a program based on international information network in the light of the rules of design of educational visual materials, as a Field of the concept of visual literacy.

The problem of the research:

The research's problem has noted through answering the following questions:

- 1- What is the composition of educational digital photos skills, that is necessary for students of educational technology?
- 2- What are rules of the program based on international information network to develop the composition of educational digital photos skills?
- 3- What's the effect of using the based on international information network on gaining knowledge of the composition of educational digital photos skills?
- 4- What's the effect of using the based on international information network in the development of the composition of educational digital photos skills?

Objectives of the research:

- 1- Determine the composition of educational digital photos skills, that is necessary for students of educational technology.
- 2- Determine rules of the program based on international information network to develop the composition of educational digital photos skills.

- 3- Determine the effect of using the based on international information network on gaining knowledge of the composition of educational digital photos skills against the traditional method.
- 4- Determine the effect of using the based on international information network in the development of the composition of educational digital photos skills against the traditional method.

Importance of the research:

The importance of this study can be indicated as follows:

- 1- Helping individuals responsible for producing education technology curriculums and observing the new technologies to be effective through the educational process.
- 2- Uncovering the effect of the educational single electronic environments based on international information network to achieve the educational objectives.
- 3- Urged the learners to do new tasks in light of digital technology, which has become a means of education and production.
- 4- The research may be useful in using the educational programs based on international information network, that built-in light of visual literacy for training students on different subjects, as the production of educational Graphics.

The research's limits:

- 1- Course of photography.
- 2- The composition of educational digital photos skills.
- 3- Second grade students, Educational Technology, Faculty of Specific Education, Fayoum University.

Sample of the research:

The researcher has chosen a sample from the students of the second grade of the education technology department at the faculty of the specific education at Fayoum University, because they are studying the course of photography; this sample include (50) students divided into two groups: the experimental group of (25) students and the control group of (25) students.

The research Tools:

- 1- A query of the students views about the composition of digital photos skills.
- 2- A query of the responsables` views about teaching The practical side of photography.
- 3- An observing checklist of the skills doing: before / after of the students.
- 4- The evaluation tools: before / after test measure the knowledgeable side of the students.

Hypotheses of the Study:

First: Hypotheses concerning homogeneity between the control group and experimental group:

- 1- There is no significant difference at level (0.05) between the mean scores of the pretest of achievement of the control group and the experimental group.
- 2- There is no significant difference at level (0.05) between the mean scores of the control group and the experimental group in the pre-application of the observation checklist concerned with the composition of digital photos skills.

Second: Hypotheses concerned with comparing between the control group and experimental group post-application of research tools:

- 1- There is significant difference at level (0.05) between the mean scores of the post-test achievement of the control group and the experimental groups, favoring the experimental group.
- 2- There is significant difference at level (0.05) between the mean scores of the control group and the experimental group in the post-application of the observation checklist concerned with the composition of digital photos skills, favoring the experimental group.

The research's approach and the experimental design:

- 1- The researcher will use the descriptive approach to set the composition of digital photos skills and the norms and description of the education program.

- 2- Also, he will use the experimental approach to experimental the program and compare with two groups, and the research involves the experimental design.

The research Variables:

The present study includes the following variables:

- 1- The independent variable: a Program based-on the International Information Network for Developing some skills of the Digital Photography in the Light of Visual Literacy; there are two following dependent variables:
 - A. The levels of gaining subject: they are measured by a test including a group of individual tests divided according to skill levels.
 - B. The rate of the practical doing the skills: it is measured through an observation.

The research steps:

- 1- Studying the previous researches and studies relating the research's variables, in the field of the international information network, digital Photography, and visual literacy, Particularly visual learning.
- 2- Designing the education program.
- 3- Applying the education program.
- 4- The results, recommendations, and the proposed researches.

Research Results:

First: Results of the hypotheses concerning homogeneity between the control group and experimental group:

The two hypotheses were accepted.

Second: Results of the hypotheses concerned with comparing between the control group and experimental group post-application of research tools:

The two hypotheses were accepted.

Recommendation of the research:

According to the current research's results, the researcher has recommended with the following:

- 1- Apply rules followed in producing this program based on the international information network with designing other education programs.
- 2- Using the program based on the international information network to train students in education technology on the composition of digital photos skills.
- 3- Training of professors and teachers to develop and use programs based on the international information network in education.
- 4- Making more studies and researches about the studying variables of designing and developing programs based on the international information network.
- 5- Provide a modern computer labs, and suitable software for the production and presentation of the program based on the international information network, and the provision of facilities, equipment and devices needed in universities.
- 6- Providing physical support and moral encouragement of professors and teachers for using programs based on the international information network in education.
- 7- Seeking to design and develop programs based on the international information network for the educational courses of public education and university levels.
- 8- -Integration, adoption and recruitment the efforts of individual researchers in the field of e-learning in general, and learning based on the international information network; within the trend of the Egyptian universities to shift to e- courses.