

## **Digital interactive content Design impact on improving the student's level for printing techniques course in academic graphic design software**

**Assist. Prof. Dr. Mysara Atef Mohmed Nagib Al-Moteey**

**Assistant Professor at Graphic Design Department- Al Zahraa College for Women –  
Muscat – Oman**

[mysara\\_moteey@hotmail.com](mailto:mysara_moteey@hotmail.com)

### **Introduction:**

The digital age has become a significant feature of the era of information technology, communications, advanced technology and the process of teaching and learning is not immune to these progressive global changes in the world of information technology. As one of the achievements of the present era is the Internet, satellite channels, and electronic knowledge; this will contribute to the development of teaching and learning methods, and it is necessary to review and evaluate the programs of teacher preparation in order to ensure the role and achieve the overall quality in the education system.

Several studies and studies have recommended the conversion of some curricula and curricula in Arab schools and universities from their traditional form to electronic courses. It has a new learning environment with distinct possibilities that allow learners to interact with the content of course data and information, and to control the course of the learning process positively.

In light of the above, this paper deals with the general definition of electronic courses, their types and characteristics, their relation to the learning environment, the design specifications of their digital content and design stages, the design of digital content for the course of printing techniques for graphic design students and its impact on improving the teaching level. And the associated statistical analysis and conclusions.

### **Research problem:**

The problem of research can be formulated in the following question:

What is the impact of the interactive digital content design in raising the understanding and comprehension of the cognitive aspect, and raising the proficiency of the scientific skills of the decision-makers of print techniques for graphic design students?

### **Research Questions:**

1. What is the definition of e-courses?
2. What is the difference between digital content and electronic content?
3. What is the importance of e-courses and their relationship to the learning environment?
4. What are the types of digital courses? What are their characteristics?
5. What are the standards and specifications for designing digital courses?
6. What are the stages of designing e-courses?
7. What are the challenges facing digital courses?
8. What are the specifications of the digital content of the graphic design software printing techniques?

**Research objectives:**

The research aims at the following:

1. Demonstrate that interactive digital content of decisions is more effective than traditional methods.
2. Assessment of considerations to be taken into account in the design of the interactive digital decision.
3. Take advantage of search results to apply to other courses.
4. Increase the cognitive achievement of graphic design students when studying the decision of printing techniques.
5. Increase the intellectual skills proficiency of graphic design students when studying the decision of digital printing techniques.
6. Find out how high the level of the course is due to using digital content.

**Research samples:**

The search seeks to validate the following two restrictions:

1. **The first is:** if the course is transformed into interactive digital content, it will better achieve educational goals with effective educational results in the cognitive achievement and skills proficiency of students on what has been taught in traditional ways.
2. **Second enforcement:** There is a statistical difference between the intermediate grades of the experimental group and the students of the pilot group for the experimental group.

**Research Limits:**

The researcher committed to the research limits on digital content of the decision printing techniques (19201), scheduled in the first academic year in the graphic design program at the faculty of Zahra for Girls, Sultanate of Oman, and associated with Oman National University in the Hashemite Kingdom of Jordan, with the commitment to describe The course, its objectives and educational outputs, as one of its professional disciplines and its teaching during the period of carrying out the research procedure.

**Research Result:**

After completing the research by his theoretical study, and conducting practical experiments, the researcher reached the following results:

The research proved its first hypothesis that courses of unique nature such as the course of printing techniques for graphic design students in transforming their content into interactive digital content will achieve their educational objectives better and achieve more effective learning results in the cognitive achievement and proficiency of students than studying traditional methods of paper content Printed.

His second hypothesis is that there is a statistical difference between the average scores of the students of the experimental group and the students of the control group in favor of the experimental group.

Courses that are characterized by the dual nature of analytical techniques and practical applications converted from traditional classes in paper content to electronic courses with interactive digital content affects the improvement of the level of student achievement in those courses.

To achieve all the desired objectives of the effectiveness of electronic courses must contain interactive digital media enriched with images and graphics fixed and mobile and provides audio and video files to explain and simplify the information and data related to the subject of the lesson. Therefore, all the standards and specifications of the design of electronic courses must be followed to achieve a positive impact on the level of student achievement.

### Research Form Samples



Figure 1 illustrates e-learning environments



Figure (2) explaining The classifications of the E-course

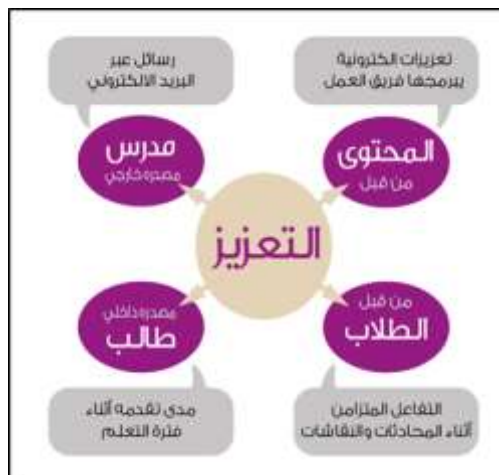


Figure3clarifies the content of the E-course



Figure4: illustrates the design of e-courses



Figure (5) illustrates the design stages of e-courses



Shows



شكل (7) يوضح تصميم الصفحة الرئيسية للمحتوى



Figure 8 illustrates the design of the course's Teaching strategy page

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