The effectiveness of using the virtual classroom environment in developing the skills of undergraduate students in the clothing project

Assoc. Prof. Dr. Elham Abd Elaziz Mohamed Hassanin
Associate Professor, Department of Fashion and Textile Design
College of Design and Applied Arts-Taif University
dr_elhamm@yahoo.com

Introduction:
The world is currently witnessing a major event that threatens all parts of the earth in all areas, which is the spread of the Corona Virus (COVID-19), which affected many areas and stopped many of them, such as industry, trade, etc., and one of the most important of these areas is education, which affected the spread of the virus greatly and worked on the existence of a real crisis in all educational stages all over the world where the educational process stopped completely for some time, then the activity was restored in the educational stages through the use of various electronic learning methods, and there is no doubt that the information technology revolution and the means of communication have turned the world today into an electronic village that fades. There are time and spatial barriers. This change requires educational institutions to provide solutions to benefit from this technology and employ it in the educational process in line with the educational institution’s goals and society’s goals. The use of computers and the Internet in the teaching and learning process is no longer a luxury, but rather a necessity imposed by the huge technological developments and current conditions, Among those developments are e-learning and how to optimize its use in the various educational stages.

Keywords:
Virtual classes, skills, clothing project.

Research problem:
The search problem appears through
1. What is the possibility of benefiting from the virtual classroom environment in teaching the clothes project content?
2. What is the possibility of employing the virtual classroom environment in developing the skills of undergraduate students in the clothing project?

Research hypotheses
1. There is a statistically significant difference at the level (.050.05) between the average scores of students of the experimental group in the pre and post application of the skill performance note card in the curriculum of the clothing project.

There is a statistically significant difference at the level (≤0.05) between the mean scores .2 of female students of the experimental group in the pre and post application of the measure of the trend towards the virtual classroom environment

research aims:
1. Measuring the effectiveness of using the virtual classroom environment in teaching the content of the clothing project decision.
2. Improving the quality of the educational process through virtual classes.

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3. Developing the skills of female students in the undergraduate stage in the graduation project

**search tools:**
1. The scale of female student’s attitudes towards the virtual classroom environment before and after.
2. A practical performance note (Rubric model) to measure female students' skills before and after.

**The research sample:**
The research was limited to a sample of 40 female undergraduate students in the Fashion and Textile Design Department of the College of Design and Applied Arts, Taif University.

**search limits:**
The research was conducted in the second semester of the academic year 1440-1441 (2020).

**Search procedures:**
The research was applied through the use of the virtual classroom environment through the learning platform (Blackboard), which is an electronic academic educational program that enables students to use several different educational methods, including virtual classes, and has been worked on as follows:
1- Then send electronic lectures to the female students to some of the subjects of the course via the black board collectively for the entire 40-year division and send with her the required notes about her operation, understanding and assimilation.
2- Then, three weeks later, a pre-test (tribal) test for some of the subjects that are included in the electronic lectures, which had previously been sent to students via (Black Board).
3- Applying the scale of female students attitudes toward using the virtual classroom environment
4- Then a platform was created for the virtual concurrent and explanatory classes through which the students were online for the same topics that were sent before, as follows:
   A- Simultaneous explanation of sound within the hypothetical virtual chapter
   B- Using the blackboard to write and draw on it for the pattern, grading and different production stages.
   C- Directly downloading and displaying files, and explaining through them.
   W- Upload, gradient and explain Patron images.
5- Then, he performed a skill test (dimension) on the same topics that were explained through the concurrent virtual classes.

**This is to measure the effectiveness of using the virtual classroom environment and its impact on the skill level of female students in the course**

**Interpretation of the results:**
First: The skill performance scorecard in the dress project decision
Calculate the validity of internal consistency:
The application was applied to a sample of undergraduate students in the Department of Fashion and Textile Design at the College of Designs and Applied Arts in Taif University, which consisted of (40) students, and after the application the validity of the vocabulary was calculated using the Alpha Cronbach method (the calculation of total stability and vocabulary
validity), which is an internal consistency model based on a rate. The interconnection between the vocabulary and the card (as a whole) The coefficient of total stability and the validity of the vocabulary equals (0.751), which is a high persistence coefficient. Its axis, as well as the formulation of phrases and the identification and addition of any proposed phrases, has been modified based on the opinions of the arbitrators.

The first imposition:
To verify the validity of the first hypothesis of the research, which states: There is a statistically significant difference at the level (≤0.05) between the average female students’ grades in the pre and post application of the skill performance note card in the curriculum of the clothing project.

To test the validity of this hypothesis, a t-test of two interconnected averages was calculated to compare between the mean scores of the experimental group students in the pre and post application of the skill performance observation card in the project project decision, before and after using the virtual classroom environment, and the following table summarizes these results.

Discussing the first hypothesis:
The first hypothesis of the research was accepted, which states: There is a statistically significant difference at the level (≤0.05) between the average female students’ grades in the pre and post application of the skill performance note card in the clothing project decision.

This is due to the influence of the virtual classroom environment with all its tools to explain and present some of the concepts, knowledge and skills to improve the educational process.

The results of the previous table also clarify that the ratio of the adjusted gain of the experimental group in the pre and post implementation of the skill performance note card in the decision of the clothing project (1.162) which is an acceptable value because it is greater than the correct one, and therefore it can be said that the virtual classroom environment is characterized by an acceptable degree of effectiveness in terms of By developing the skillful performance in the clothing project decision. It achieves a ratio of (Black’s constant rate) greater than (1.02).

![Graph showing the comparison between experimental and general performance](https://via.placeholder.com/150)
Some pictures of the final product of female students ’skills in the project. The standard model for dressing a girl aged 5 years

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Summary of results:
1. There is a statistically significant difference at the level (.050.05) between the average scores of female students of the experimental group in the pre and post application of the skill performance note card in the curriculum of the clothing project.
2. The presence of a statistically significant difference at the level (≤0.05) between the mean scores of female students of the experimental group in the pre and post application of the measure of the trend towards the virtual classroom environment.
3. There is a positive correlation between the experimental group students ’grades on the skill note card in the clothing project decision and their grades on the scale of direction towards the virtual classroom environment.
4. The effectiveness of using virtual classes in teaching the curriculum of the clothing project.
5. The virtual classroom environment helps to develop the skills of female students in the practical side of the course.

Recommendations:
1. Conducting more studies using virtual classes and various electronic learning methods.
2. Carrying out many researches in the field of distance education.
3. Encouraging teaching in e-courses to reduce the rate of technological and information illiteracy among students.
4. Working on the use of modern methods in education, as it saves time and effort and works to increase the level of students' knowledge and skil.

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