

The effectiveness of blended learning strategy to develop students' skills in making seams and retention among female students of clothing and textiles department at the faculty of home economics at Al-Azhar university.

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Introduction

In recent years, there have been many changes and developments at all levels and in all humanitarian fields, including the educational field, which has undergone great transformation since the 1990s. This is the result of a variety of interrelated factors that necessitated reconsidering many of the educational process inputs, including teaching methods and techniques, to cope with contemporary changes and the information revolution.

Blended e-learning provides a new learning environment with unique capabilities that enable learners to interact with e-courses, as well as contribute to control the educational process and guide it to the path of interest where the concentration around the learner and the teacher become directed and facilitator. Success thus turns from being able to memorize to being able to acquire skills and develop higher mental abilities.

Therefore, the two researchers aimed to provide the students with the skill of drawing and making seams as a part of the basic educational outcomes and attention to the learning environment in order to enhance a best learning environment and develop positive attitudes. This is reflected positively on the academic achievement of female students, So the two researchers carried out this study as a result of recommendations of many studies.

Keywords

Educational program, Blended learning strategy, Seams, Retention.

Research problem

Due to the fact that the university teaching suffers from educational problems, especially the overcrowding of classrooms with students, the not consideration of individual differences among students and the difficulty of implementing modern teaching strategies in light of this overcrowding, this led to the low academic achievement, and therefore have negative attitudes towards it.

This has led to the search for teaching strategies that help students to learn outside the traditional lecture halls and to achieve the educational objectives of the educational courses, including the course of (Clothing Production Technology). Where the two researchers found it is difficult to teach large numbers of students in the lecture halls by traditional methods, therefore, the two researchers resorted to using the blended learning strategy based on an educational computer program, where the traditional method is used with the educational program to develop the cognitive achievement and the skill performance of the students in the learning unit (drawing & making seams).

Research aims

Measuring the effectiveness of blended learning strategy in:

- 1 - Development of the cognitive achievement of female students in the proposed learning unit.
- 2 - Developing the skillful performance of female students in the proposed learning unit.
- 3 - Retention of female students in the proposed learning unit.

Research importance

- 1- Contribute to the development of some other courses.
- 2- Utilizing the blended learning in developing the skills of (drawing & making seams).
- 3- Increasing the cognitive achievement of (drawing & making seams).

Research Hypotheses

The Hypotheses of this research are listed as:

- 1- There is a statistical significant difference ($\alpha \leq 0.05$) between the scores of the control group and the experimental group in the post-achievement test.
- 2- There is a statistical significant difference ($\alpha \leq 0.05$) between the scores of the control group and the experimental group in the post-skill test.
- 3- There is no statistical significant difference ($\alpha \leq 0.05$) between the scores of the experimental group in the post test and the delayed achievement test.
- 4- There is a statistical significant difference ($\alpha \leq 0.05$) between the scores of the control group in the post-test and delayed achievement test.
- 5- There is no statistical significant difference ($\alpha \leq 0.05$) between the scores of the experimental group in the post and the delayed Performance observation card of skills.
- 6- There is no statistical significant difference ($\alpha \leq 0.05$) between the scores of the control group in the post and the delayed Performance observation card of skills.

Research tools

- 1- Achievement test to measure the knowledge and concepts acquired by students in the proposed educational unit.
- 2- Observation card to note the students' performance during drawing and making seams.
- 3- Educational program using the blended learning strategy.

Research limitations

This research was limited in:

- 1- Drawing and making seams.
- 2- students of the third year at the Department of Clothing and Textiles, Faculty of Home Economics, Al-Azhar University.

Research sample

The students of the third year at the Department of Clothing and Textiles, Faculty of Home Economics, Al-Azhar University, 24 students, were divided into two groups, 12 students for experimental group and 12 students for control group.

Research methodology

The descriptive approach and the semi-experimental approach were used to measure the effect of independent variables on dependent variables.

Research results

The major findings of this research are listed as:

- 1- There is a statistical significant difference ($\alpha \leq 0.05$) between the scores of the control group and the experimental group in the post-achievement test for the experimental group.
- 2- There is a statistical significant difference ($\alpha \leq 0.05$) between the scores of the control group and the experimental group in the post-skill test for the experimental group.
- 3- There is no statistical significant difference ($\alpha \leq 0.05$) between the scores of the experimental group in the post and the delayed achievement test, indicating that the learning effect of the experimental group remains in the cognitive achievement.
- 4- There is a statistical significant difference ($\alpha \leq 0.05$) between the scores of the control group in the post and delayed achievement test, indicating that the learning effect of the control group doesn't remain in the achievement.
- 5- There is no statistical significant difference ($\alpha \leq 0.05$) between the scores of the experimental group in the post and the delayed Performance observation card of the skills, indicating that the learning effect of the experimental group remains in the skill Performance.
- 6- There is no statistical significant difference ($\alpha \leq 0.05$) between the scores of the control group in the post and the delayed Performance observation card of the skills, indicating that the learning effect of the control group remains in the skill Performance.

Therefore, results indicated that the experimental group (studied by the blended learning strategy) and the retention of students were superior to the control group (which was traditionally studied) in the cognitive achievement and skill performance of (drawing & making seams), using statistical program SPSS V.24.

Research recommendations

In light of the study results, the researchers recommended using the blended learning strategy in teaching other courses in the field of clothing and textiles.

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