

## **Effectiveness of Adobe Illustrator in Learning the Fashion Design Skills for Girls with Hearing impairment**

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### **Introduction:**

Many countries are making great efforts to provide educational opportunities for the students with disabilities and seek to merge them in their various educational institutions. Some of them are distinguished in terms of their usage of advanced learning technology means. The training of the students with disabilities is the problem on the various educational technologies such as computer devices, laptops and others, and it contributed in many of the positive points that they benefit, whether psychologically, academically, socially or economically.

### **The Research Problem:-**

The research problem can be expressed in the following questions:

1. What is the suggested scenario for the training program using "Adobe Illustrator" for learning the fashion design skills with the computer device specialized for the hearing impaired category?
2. How effective is the use of "Adobe Illustrator" in providing children with hearing disabilities with the fashion design skills using the specialized computer device?

### **The Scientific Research Objectives:**

1. Designing a training program using "Adobe Illustrator" to teach the fashion design skills with the specialized computer device for the hearing impaired.
2. Measuring the effectiveness of using the Adobe Illustrator program to provide girls with hearing disabilities with audio skills using the specialized computer device.
3. Contributing to achieving the compatibility of the students with hearing disabilities with themselves and with the surrounding community.

### **The Research Importance:-**

1. The shortage of the electronic programs and training courses specially designed to raise the knowledge and skill level of hearing impaired individuals in the fashion design field.
2. Keeping up with the technological developments in the teaching methods used in educating the individuals with hearing disabilities.
3. Activating the modern technology's role in the field of care of special segments in the community.
4. Enriching the Arabic library in the field of caring for individuals with special needs.

## Research Procedural Steps:

### 1. Research Methodology:

This research was followed by the experimental method in addition to the applied study.

### 2. Research Limits:

Objective Limits: Designing a training program for the individuals with hearing disabilities in the fashion design field.

Human Limits: A sample of 20 female students from the Deaf and Mute Club in Jeddah.

Spatial Limits: Deaf and Mute Club in Jeddah.

Timing Limits: The study was conducted in 2017 CD- 1438 HD.

## Program Procedures (Experience):

- The program took a full semester - The first semester of the academic year 1438-1439 HD - with one meeting per week, the meeting takes two lectures, the lecture timing is 45 minutes, the Deaf Club was selected and an appropriate hall was elected and equipped to match what is planned in the suggested program. The following was taken into consideration when equipping the hall:

- The hall suitability in terms of lighting, good ventilation, its suitability and sample number.
- The appropriateness of the tables and seats and to be comfortable for the students and equipping it in the form of a letter (U), so that all students can communicate visually, sensory and cognitively with the Researchers and with the group in the hall.
- Provide personal accounts in the number of the female students containing (Adobe Illustrator) program.

## The Researcher relied on the following bases when forming the program:

1. A psychological basis in terms of age group features and the deaf features.
2. A methodological basis through a selective education strategy, which allows the student to gradually reach the mastering degree as per this strategy by granting the facilities for the female students to overcome the difficulties and find the means and methods that enable them to master what they learn, and it is suitable for the deaf individuals nature.

## Results:

After the Researcher applied the program to reach the research results using a number of measurement tools, and the data was processed according to a statistical method suitable for the research sample. The research samples were reached, which show the validity of the research hypotheses and proving that there are significant differences at the level (0.01) among the following:

1. The average score of the female students with hearing disabilities for the test of pre and post knowledge for the post application.
2. The average score of the female students with hearing disabilities for the pre and post skill test for the post application.
3. The average score of the female students with hearing disabilities for the pre and post cognitive knowledge test as a whole for post application.

4. There are statistically significant differences in the general consensus level (Personal and social) for students with hearing disabilities before and after the implementation of the suggested program.

**Table No. 1**

The differences indication among the average scores of the experimental group (Cognitive Test) in the pre and post application

Cognitive Test	Students' Average Grades	Standard Deviation	No.	Temperature	Counted Value / Values	Significance Level
Pre-Application	7.4	3.35	20	19	17.02	Statistical function at level 0.01
Post Application	15.35	2.83				

**Table No. 2**

Skills Test	Application	Average	Standard Deviation	No.	Freedom Degree	Counted Value / Values	Significance Level
Drawing a whole uniform	Pre	0.15	0.37	20	19	33.16	Statistical function at level 0.01
	Post	4.65	0.49				
Use the contactor	Pre	0.15	0.37	20	19	32.89	Statistical function at level 0.01
	Post	4.55	0.51				
Drawing surfaces	Pre	0.00	0.00	20	19	40.93	Statistical function at level 0.01
	Post	4.6	0.50				
Preparing production mix	Pre	0.00	0.00	20	19	26.22	Statistical function at level 0.01
	Post	4.45	0.76				
Skills as a whole	Pre	0.3	0.73	20	19	62.9	Statistical function at level 0.01
	Post	18.25	1.25				

**Table No. 3**

Indication of the differences between the average scores of the experimental group in the pre and post application and the test as a whole

Test as a Whole	Students' Average Degrees	Standard Deviation	No.	Freedom Degree	Counted Value / Values	Significance Level
Pre-Application	7.7	3.39	20	19	46.52	Statistical function at level 0.01
Post Application	33.6	3.41				

**Table No. 4**

Indication of the differences between the average scores of the experimental group in social compatibility of the pre and post application

social compatibility Scale	Students' Average Degrees	Students' Average Degrees	Standard Deviation	No.	Freedom Degree	Counted Value / Values
Pre-Application	1.35	0.49	20	19	30.51	Statistical function at level 0.01
Post Application	4.15	0.37				

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