ORIGINAL ARTICLES

Effectiveness of suggested computer program for Development of children's cultural wearing

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ABSTRACT

In this study a proposed electronic program was coded and designed in the sake of the uplift of the cultural wearing of children. The designed program was assessed in terms of remembrance level, comprehension level, application level and the cultural wearing of the sample of the children under study. The results after and before the application of this program were statistically analyzed using the T-test. The statistical analysis was implemented via SPSS statistical package. The findings of this study revealed that comprehension, application, remembrance and cultural wearing of the students have been enhanced significantly by using this computer program.

Key words: Electronic and designed program, cultural wearing, children.

Introduction

The childhood forms the principal key in the formation of the child personality and its future. The child is considered the ammunition which is qualified by the society to bear the personality and dealing with future variables and solve problems. So, the child care is a vital and essential requirement to any development movement aimed at better life. In this regard, the childhood is the maker of the future that rely on what you offer to the children of experiences and skills (Lila Abdel aziz, 1997).

One of the educational functions of the family, school and community is supporting the good standards of the tasting, and work to build the child on the high aesthetic values and uplift the standard of its tasting ability. The advanced societies establish specialized institutions in preparing leaders in the field of tasting development and promote its programs and support its policies. Because they believe that the raise of taste level is the road to progress of the society (Mohamed Attia, 1997). The cultural wearing is reflect to the knowledge experience with the technical components and applying this sense on what choosing of his clothes, as well as the ability to interact with aesthetic values in the clothing style and forming a good aesthetic judge in order to awaken the individual feel to become conscious of the functional and aesthetic aspect in choosing of his clothes (Amany, 2009).

Since we live in the technology era and different means to transfer ideas and information, we will find the computers in the top of these means with its high effectiveness and its possessing various advantages. Every one deals with computers enjoy the positive interactions that differ from the negative relationship between the viewer and the television. Also, computers provides opportunities for experimentations without fear or awe (William, 1991)

Problem statement:

A prospective study is conducted by the researcher in some of different schools in Dakahlia Governorate in Egypt, to identify the reality of the educational wearing of the children, especially the pupils in the end of primary school (Late childhood). The researcher has noticed that although the good cultural and social standard of the children, there is no clear criteria when choosing the clothes. The selection process is according to what is shown without regard to the fitting of the clothes to the body of the children or its suitability to the place or the time that will be wearing them. The need to conduct this study was emerged as attempt to child tasting to all aesthetic and art values and help them to attain some suitable information and knowledge for clothing needs, which enable them to improve their appearance. This will reflect on the good choice of the clothes and show them in a good and acceptable functionally and aesthetically. This will make them good men which have a good and distinct tasting in the future.

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Literature review:

A summary of the previous studies relevant to the subject of the current study and its different fields in attempt to analyze these researches and review its objects and the findings in order to benefit from them in the current research and determine its locate in these researches were handled.

The relationship between the children using computers with three different levels of experiences (the experience of using in the home- the experience of using in school- without experience) was investigated. Innovative thinking test and photographer intelligent test were also applied (Ghada, 2002). An educational program was presented to development the various skills to design clothes for undergraduate students in textile and clothing department. This paper emphasizes on the presentation of scientific and technical methods to fashion design styles on manikin and the design using computer; as well as a detailed discussion to the related skills to each style. This study revealed that this proposed program was an effective in promotion the skills associated with various methods of styles of fashion design. It is also concluded that a large portion supports the design method using computer followed by sketch design and then the design style on mannequin (Lorang, 2004).

Communication means surrounding the child to the development of his thought, and imagination have been studied. A study of modern scientific theories in the development of the child senses through what the provided graphic forms of information was presented (Sahar, 2008). She also introduced a comprehensive and analytical study to design some clothes in the cartoon films; and preparation a proposed program on the computer in design of popular motifs and fashion design in general. These programs were applied to proposed designs for some clothes suitable for the cartoon films. This study detected a relationship between popular motifs in the clothes of cartoon characters using the computer, which leads to the development of innovative thinks among primary school children.

Visual perception skills and clothes tasting dimensions that must be available to the students in education faculties were determined of (Shereen, 2008). A test to measure both the perception skills in fashion design and clothes tasting was built. In addition, a visualize to fashion design program using computer in order to develop each visual perception and clothes tasting was introduced using the application of one unit of the program. The findings of this research proved a significant difference between the scores of pre and post applications and the test of visual perception and the measure of clothes taste in favor of the post application. A program in the field of garment for the pupils in the vocational preparation stage in the intellectual education schools was proposed (Amany, 2010). This program is based on the scientific and methodological foundations the education of the disabled. The effectiveness of the proposed program in the development of the clothes tasting for the pupils of the vocational preparation stage was identified. The effectiveness of the program in learning of the pupils was identified by ruining of some of its units. The findings of this study revealed that this program has proved its effectiveness in achieving the objective of the research. Through the previous offer of the studies, it is proved the importance of the childhood stage in the individual life. Also it is apparent that the need to develop bases and criteria from which the child can have a good judgment and then the optimal choice of his clothes. This is what prompted the researcher to handle the cultural wearing. The researcher provides some simplified information for the children to develop this side, which will be a good stone in providing them with information and knowledge regarding the optimal choice of their clothes.

Research Objectives:

This study aimed at preparing an electronic program to develop the cultural wearing of the children. This main object can be divided into the following objectives:

1- Preparing an electronic program for the development of the educational cultural which suits attitudes, needs and desires of the children in line with customs and culture of our society.
2- Identification the effectiveness the electronic program to promote the educational clothing of the children
3- Supplying the children with information and skills by providing them with some knowledge about the elements and basis of the design using the computer.
4- Preparing a knowledge test related to educational clothing.

The importance of research:

The importance of this study can be listed in the following points:

1- This study contributes to the possibility of using modern technology and how to use them in preparing educational and training programs for the children.
2- To benefit from the proposed program in the development of educational clothing of the children and then the promotion the public taste.
3- Opening the field to find a positive and effective role for the children through identify the good clothing trends and gaining them the ability to trust and rely on themselves.

4- This current research was used to obtain information and knowledge related to the field of fashion and then its utilization in evaluation of children level in the optimal choice of their clothes.

Research limitations:

This research study obliges with the following items:
1- Spatial limits: This study was applied to (Basic education schools in Dakahlia Governorate)
2- Human limits: research group was represented by a sample of 28 six grade pupils of primary school
3- Time limit: The part field was applied for 3 months with one interview per week and for two sections per week.

Research hypotheses:

The hypotheses of this research are as follows:
There is a statistical significant difference between the scores of the children in the experimental groups before and after application of the program on the cognitive test (level of remembering), comprehension level, application level and cognitive test for the cultural wearing in favor of the post measurement.

Research methodology:

The research methodology can be stated in the following two main points:

-Descriptive analytical method:

The descriptive and analytical methodology depends on data collecting, and its classification and analysis through study and survey the previous literature in relation to E-learning and late childhood stage. Also utilization of the previous studies was used.

-Experimental method:

Experiment methods were implemented using selection of group study and applying its tool; the one group system was selected which depends on the pre and post tests for the same group. The comparison between results of pre and post applications was conducted for the grades of the group under study in the cognitive test.

Definition of the program:

The program is a designed plan to study any subject respecting the individual or the society that must be meaningful to perform some specific operations accurately (Reber A 1985).

The program is also an educational system to provide educational programs anytime and anywhere using information and communication technologies to provide interactive learning environment from different sources with synchronous manner without commitment to a specific place, depending on self-learning and the interactive between the instructor and the learner (Ahmed M., 2004).

The program is defined procedurally as a set of educational experiences applied to specific group learners to achieve educational goals especially in a certain period of time. Some of different windows and its explanations for this program were illustrated in figures d1.a through 1.d.
An introduction describes the program title (The effectiveness utilization of electronic program for the development of cultural wearing).
- Download bar shows download program files.
- Enter Key: To sign in to the program.
- Exit Key: To exit the program.
- Animated pictures.

This window shows steeply, when the key "enter" is pressed, the window is opened directly. This window contains the data to enter to the program such as user name and password. For the new user, the key "New user" should be pressed to register his data. If the user want to exit the program he must press "Exit" key.

This window contain some keys such as: program aim, contents, training, and about program key. Also sign in and sign out keys are involved in this window.

Topic list window contains the subject which are studied in this program. In this program 6 subject were studied. "X" key is used to close the program. In the bottom of the window the there is an information which displays a brief topic of the chosen subject.

In this window:
- Title bar: Appears the chosen theme title.
- Aim key: Shows the procedural of the chosen topic.
- Discussion Key: Discuss the chosen topic.
- Training Key: Appears the selected topic.

Fig. 1.a: Some executive windows of the proposed electronic program.
**Fig. 1.b:** Some executive windows of the proposed electronic program.

<table>
<thead>
<tr>
<th>Window Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fig. 1.a:</strong> Practical training window. This window contains:</td>
</tr>
<tr>
<td>- A title bar: Displays the name of the current game.</td>
</tr>
<tr>
<td>- An X key: Closes this window and returns to the main menu.</td>
</tr>
<tr>
<td>- An enlarge key to enlarge the window and animated picture.</td>
</tr>
<tr>
<td>- A video and music section.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Window Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Fig. 1.b:</strong> Some executive windows of the proposed electronic program.</td>
</tr>
<tr>
<td>- X key: Closes this window and returns to the contents menu.</td>
</tr>
<tr>
<td>- Zoom key: Enlarges the window to fill the screen.</td>
</tr>
<tr>
<td>- Voice comment on the subject content.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Window Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fig. 1.c:</strong> This window appears when we press the key &quot;Exit&quot; which emerged from the Start key.</td>
</tr>
<tr>
<td>- Confirmation message: Do you want to exit?</td>
</tr>
<tr>
<td>- Yes key: To agree to terminate the program.</td>
</tr>
</tbody>
</table>
This window appears when you began gradually the achievement test. This window contains the login data such as user name and password and enter key. If you want to end the test press Exit key.

This window appears after the user login to enter the program, provided that the first-time user to access the test.

Set of questions and answers the user to answer it. The student has the right to modify answer at any time.
- Title bar: shows the remaining time of the test
- End test: to close the window and returns to the instruction window

This window appears when you pressed the End test key.
- Confirmation message: Are you want to quit the program
  - Yes key to quit
  - No Key to undo

Fig. 1.c: Some executive windows of the proposed electronic program.
Definition of the cultural wearing:

The cultural wearing is defined as the extent to which the individual can get from knowledge towards the clothing, and its importance to the individual and society with all aesthetic and functional elements (Ehab F., 2007). Procedurally, is defined as the good choice of clothing according to the obtained information and skills from style design to suit both the aesthetic and functional sides in accordance with scientific bases and the culture of the society and the environment to which we belong.

Objectives of the cultural wearing:

The following are the objective of the cultural wearing:

1- Uplift the for the awareness of wearing for the individuals for the purpose of identifying the different brands of clothes
2- Development the technical sense of taste in order to improve the ability to select and purchase based on the functional requirements for the seasons and occasions.
3- Streamlining the behavior of wearing when selecting and purchasing based on the seasons and occasions.
4- Determination of the appropriate raw materials and fabrics based on the climatic conditions of the environment.
5- Cultural wearing Emphasis on the identity of the individual and community through highlighting aesthetic and utilitarian values within customs and traditions (Ehab F., 2007).

Practical framework:

12.1- The objective of the application of the proposed electronic program
The application aimed to access to data to help in identifying the effectiveness of the proposed program for the development of the children taste in cultural wearing using the computer. Science this field is not linked to any course of study, the aim of application is to give the children in the early age the information, knowledge, and skills associated with clothing field and how to properly picked it up and show the body in a satisfactory manner

Selecting the research sample:

The sample of this research was characterized as follows:
- The individuals of the sample did not expose to educational experiences for learning through electronic learning programs, since it is the latest modern technology.
- Any individual of the sample did not study any courses related to the research variables, because the current research interested in using of the computer to develop the tasting of wearing.

Application of the tribal achievement test:

The researcher entered the sample of the research in the school computer lab in order to teach the children how to answer questions of the achievement test electronically, and determining the level of the sample before studying the effectiveness of the proposed program. After completion of the application of the achievement test, the scores of the research sample has been evaluated and the arithmetic average of scores and standard deviation are also calculated and listed it in tables to analyze it statistically.

Application of the proposed program:

The researcher has met the sample under study and explained to them that they will learn some knowledge and information about cultural wearing using the computer. The researcher explained to the children the program idea, and its purpose and the expected from each pupil at the end. The researcher also confirmed the safety of the devices before program application and loaded the program in its final image.

Generally, the proposed electronic program has applied according to the following steps:

- Students to study the subjects of the proposed program.
The topics of the proposed program have applied electronically with the use of discussion to identify some understandable concepts for the pupils. At the end of each topic an electronic test was conducted so that we can stand at the level of each pupil before and after the study of that topic.

- **Link the proposed program to the reality of the life:**

  The researcher linked the topics of the suggested program to the reality that the students pass during their choice and wearing their clothes and what can be changed to the better after learning and the knowledge associated with the cultural wearing.

**Application of the achievement test:**

After application of the proposed program, the researcher applied the achievement test on the sample under study. The application has been conducted electronically. The pre and post application have been implemented at the same conditions. After completion the application, the results have been calculated and averaged. After the standard deviation has been calculated, the total results are listed in tables to be statistically manipulated.

**Statistical analysis:**

In order to detect the significant difference between the results after and before the application of the computer program, a t-test was conducted. The results were assessed statistically at a significant value $0.01 \leq \alpha \leq 0.05$.

**Results And Discussion**

**Effect of program application on the level of remembrance:**

The scores of the sample of children regarding the level of their remembrance a measure of cognitive test after and before application the program were evaluated and plotted in figure 2. The T-test was used to differentiate between the level of remembering level after and before the application of the program. The results of the T-test were listed in table 1. From this table it is noticed that there is a significant difference between the scores of the children after and before the application the program at significant level 0.01. It is shown from figure 2 that the level of the remembrance after application of the program is higher than the scores before using the computer program. The statistical analysis revealed that the average scores of the remembering level for the children has been raised from 8 before application the program to 13.57 after using it. The standard deviation of the scores after and before program application is 2.4 and 2.2 respectively. The statistical analysis also revealed that the effect of program application in the remembrance level is almost 59.7%.

**Table 1:** Results of T-test of the remembrance scores before and after the program application

<table>
<thead>
<tr>
<th>application</th>
<th>count</th>
<th>arithmetic mean</th>
<th>Standard deviation</th>
<th>t-value</th>
<th>d.f</th>
<th>p-value</th>
<th>% effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>before</td>
<td>28</td>
<td>8</td>
<td>2.434</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>after</td>
<td>28</td>
<td>13.57</td>
<td>2.218</td>
<td>8.95</td>
<td>4</td>
<td>0.01</td>
<td>59.7</td>
</tr>
</tbody>
</table>

**Fig. 2:** Scores of remembrance after and before the program application
Effect of program application on the comprehension level:

The scores of the comprehension levels of the sample of pupils after and before the application of the electronic program was depicted in figure 3. The results of the statistical analysis (T-test results) which shows the significant effect of the program application on the level of the pupils comprehension level was listed in table 2. From this table and figure 3, it is apparent that the application of the electronic program has enhanced the comprehension level of the pupil samples with a significant value. From the table it is shown that there is a significant difference in the comprehension level at 0.01 significant level after and before the application of the program. The statistical analysis also showed that the arithmetic mean of the scores of the comprehension level of the pupils before and after the application of the program is 12.8 and 14.9 with standard deviation 2.5 and 2.7 respectively. It is also found that the percentage effect of the program application on the comprehension level is approximately 13.8%.

| Table 2: Results of T-test of the comprehension scores before and after the program application |
|-------------------------------------------------|-------------------|-----------------|-----------------|---------|-----------|-----------|
| application | count | arithmetic mean | Standard deviation | t-value | df | p-value | % effect |
| before | 28 | 12.79 | 2.558 | 2.944 | 5 | 0.01 | 13.8 |
| after | 28 | 14.89 | 2.793 | | 4 | | |

![Fig. 3: Scores of comprehension after and before the program application](image)

Effect of program application on the application level:

The scores of the pupils under study regarding the application level before and after the program application was shown in figure 3. From this figure and the statistical analysis results shown in table 4, it is noticed that there is a significant difference between the scores of the pupils before and after the application of the program in relation to the level of application at 0.01 significance level. It is shown that the level of application of the research sample has been enhanced by the application of the computer program. The statistical analysis revealed that the average scores of the application level are 9.2 and 12.2 with standard deviation 1.9 and 2.2 before and after program application respectively. It is also proved that the effect of application of the program on the application level of the pupils under study is almost 34%.

| Table 3: Results of T-test of the application scores before and after the program application |
|-------------------------------------------------|-------------------|-----------------|-----------------|---------|-----------|-----------|
| application | count | arithmetic mean | Standard deviation | t-value | df | p-value | % effect |
| before | 28 | 9.21 | 1.950 | 5.274 | 54 | 0.01 | 34 |
| after | 28 | 12.18 | 2.245 | | | | |
Effect of program application on the cultural wearing:

The levels of the cultural wearing of the pupil sample under study before and after the application of the computer program was shown in table 4 and plotted in figure 5. The statistical analysis (T test) which detects the significance of the program application on the cultural wearing was listed in table 4. From the statistical analysis it is shown that there is a significant difference between the scores of the pupils before and after the program application at 0.01 significant level. It is shown from figure 5 that the application of the computer program has enhanced the culturing wearing of the pupils significantly. The average scores of the cultural wearing level of the pupils before and after applying the computer program were 29.4 and 39.6 with standard deviations 4.7 and 6 respectively. The statistical analysis proved that the effect of the program application on the cultural wearing of the pupils under study is approximately 47.8%.

Table 4: Results of T-test of the cultural wearing scores before and after the program application

<table>
<thead>
<tr>
<th>application</th>
<th>count</th>
<th>arithmetic mean</th>
<th>Standard deviation</th>
<th>t-value</th>
<th>Df</th>
<th>p-value</th>
<th>% effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>before</td>
<td>28</td>
<td>29.46</td>
<td>4.702</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>after</td>
<td>28</td>
<td>39.64</td>
<td>6.044</td>
<td>7.033</td>
<td>54</td>
<td>0.01</td>
<td>47.8</td>
</tr>
</tbody>
</table>

Fig. 4: Scores of application level after and before the program application

Fig. 5: Scores of cultural wearing level after and before the program application

Conclusion:

The cultural wearing is defined as the extent to which the individual can get from knowledge towards the clothing, and its importance to the individual and society with all aesthetic and functional elements. In order to promote the cultural wearing of pupils in the childhood stage, the researcher designed and coded an electronic program and applied it on the pupils in the primary school stage. A t-test was used to detect the significant different after and before the application of the computer program in terms of membrane level, comprehension level, and application and cultural wearing level. It was found that the application of such program enhanced
and raised the remembrance, comprehension, application and cultural wearing of the pupils sample under study significantly.

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