Implementation of programmed image tool according to the time using the computer for the simple intellectual disability

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Abstract:
The evolution became the most important positive steps in scientific research to give us the truth and scientific guide. Various techniques were used in order to reach scientific knowledge that benefits the chosen community. A specimen of people with simple intellectual disability was chosen. This is done through the design of three diverse images methods using the computer. Every one of them has special features depending on the level of disability. These images are automatically displayed with a period of time. The details of the images are explained clearly. The goal of these methods is to develop the intellectual response of this category of the society. The experiment lasted for three months. Tests are conducted before and after the experiment. We got an amount of evolution in this community with different rates. Our experiments indicate that there is a possibility of developing of intellectual response through the use of a variety of methods such as reviewing programmed images or other means of contribution that aid the development of this class of society.

Key words: scientific knowledge, programmed image tool, simple intellectual disability

1- Introduction:

There are several methods in which the scientists put forward for the development of creativity and creative thinking in
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School. Al-Ani has pointed to a number of styles in this respect and one of them is a style of puzzled programmed image [1]. This type helps to develop clear intellectual responses with abilities and individual’s needs.

In this respect most of the world countries have worked to find scientific and technical means. It has spread computer use in different sciences, and the computer is, nowadays, one scientific field which made a great resonance in all areas. The basic motivation of this research is the lack of scientific research on individuals with simple disabilities intellectual. Furthermore, this category in our societies did not take the wide attention and their lack of computer knowledge, as they are disabled individuals. Therefore, the idea of programming some pictures where the symbols, numbers and other puzzles became a method to help them to improve their focus and attention was implemented. As a result, they will have the ability of fast respond to the contents of these images which are displayed to them according to specific time depending on the levels of these disabilities. The research aims to identify the amount of the evolution occurred using these programmed images methods according to the time between sample members. It also tries to recognize how much are the differences occurring for each level of research sample.

2- Research Methodology:

The experimental design was selected as a tool with the three groups. The experiment lasted for three months through the application of multiple and different image methods that have been conducted before and after experiment for each test group individually. The researchers chose a sample of (30) children which divided into three groups depending on the level of intellectual disability classified by medical specialists (light, medium, heavy) the researcher applied three methods in accordance with the time. The first group used the images style...
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with minor differences and the second group used a different style through shapes and sizes, while in the third group, different through applied that full change through overlapping colours and move away and the multiplicity of characters within the numbered images. The researcher implemented statistical methods to extract the results.

2-1 Mode of work:
Programmed images are automatically displayed by computer with time intervals between images. This has been programmed into the computer. These images are displayed over time according to the type of disability for each style of individuals on the research sample. Each group has programmed pictures and exposed for each group different images starting from the easiest to the more difficult, pictures with the greatest complexity. The number of these pictures is more than 100 photos.

These images contain symbols, shapes, numbers, photos with randomly arranged procedure in accordance with the nature of the disability. A process of clarification of the images contents, differences and colour nature is also adopted as shown in the following figure.

![Programmed Images](image1.png)

(a)

![Programmed Images](image2.png)

(b)
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Fig. (1) Image models used according to the type of disability

2-2 Measurement methods:
The computer programmed images are displayed according to a specific time for each method depending on the level of disability. This is to view the image contents of which remain for a period of time. Then the image changes automatically to another picture carrying different specifications. The computer continues displaying a variety of images, depending on the level of disability.

The image contents are evaluated according to questions which are asked to each informant. These questions are related to image contents and number. Each question has one mark and the number of questions are (10) questions for each test phase.
3- Results:

Table (1): Standard arithmetic mean and deviations of the two tests pre and post and (T) test of the three methods

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Before Test</th>
<th>After Test</th>
<th>(T)</th>
<th>sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X ± S</td>
<td>X ± S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First method</td>
<td>4.34 ± 0.20</td>
<td>6.06 ± 0.05</td>
<td>3.79</td>
<td>0.01</td>
</tr>
<tr>
<td>Second method</td>
<td>5.45 ± 0.10</td>
<td>7.01 ± 0.07</td>
<td>5.92</td>
<td>0.00</td>
</tr>
<tr>
<td>Third method</td>
<td>6.31 ± 0.11</td>
<td>7.83 ± 0.17</td>
<td>3.88</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Table (2): (ANOVA) test for the three groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.396</td>
<td>2</td>
<td>1.198</td>
<td>8.20</td>
<td>.006</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1.753</td>
<td>27</td>
<td>0.146</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.150</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (3): (LSD) test between the three groups

<table>
<thead>
<tr>
<th>LSD Groups</th>
<th>Sequence</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Group 2</td>
<td></td>
<td></td>
<td>7.21 **</td>
</tr>
<tr>
<td>Group 3</td>
<td></td>
<td></td>
<td>7.14*</td>
</tr>
<tr>
<td>Group 1</td>
<td></td>
<td></td>
<td>5.17</td>
</tr>
</tbody>
</table>

The researchers found that the delivery of information to the level of thinking is consistent with the image software
requirements used. This is achieved through the increase of the volume of information. In addition to the focus on the contents of the images if there is convergence of ideas among the research sample. Furthermore, although simple, but the storage of information process within the brain through these images which appear automatically through the computer seem to help to stimulate the brain cells. This can be noticed by their development in the post tests that have contributed to retrieve their information in the previous memory.

This demonstrates that both methods lead the students to this level of thinking. In spite of this convergence in average methods[3], but the average of the experimental group was greater than the average of the control group. But it gives an indication that the computer with the used clarifying programs have helped informants to give basic ideas which they did not have before. Such an opportunity form a chance to enable or motivate them to retrieve their information which is formed in their knowledge structure[4].

This is due to the effectiveness of computer in introducing general quantity and quality information about the scientific topics in addition to assisting the students comprehend the information relating to (physics, chemistry[5], biological science). But, the informants’ follow-up of the provided software during the explanation, helped in stimulating them to re-balance the current information in their structure of knowledge which fits with the new stimuli and were reflected in their responses to the paragraphs of the test.[6] The role of media remains effective through scientific programs[7]. This is achieved through providing the research samples with the additional information that contributed in raising the level of creative thinking in its three levels for the members of both groups. This may be due to the relative effectiveness of the use of computers to increase the acquisition of scientific concepts particularly in giving more examples and
applications for members of this group through software-related subjects8.

4- Conclusions:

Through applied research experience on the groups it proved to be of extreme importance for the computer in the development of mental processes and this has the researcher believes that the approach applied by computer assisted in the development of memory when the sample research and contributed to the education of this medium in addition to the acquisition of the reality of the computer world been proved by the results of the research sample Jerbh members. The idea of using these programming formats that appear in accordance with the time helped the research sample to concentrate in these forms, ie contributed to the development of LED thought processes.

Through these results can take advantage of these tools that have helped this development through the use of other means working to increase their abilities in additional areas and by methods more.

REFERENCES

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