

Summary of the Study

Introduction:

When Children are given the chance and effective environment, they innovate and create far away from the school limited atmosphere and exams related to new ideas and innovations. No doubt, the child in the school atmosphere is not provided the opportunity to express his/her ideas freely, but if he/she is placed in an open environment including capabilities and activities that push him towards brainstorming and innovation, he/she will practice these unlimited activities that enable him/her to work his/her mind to create and innovate.

Hence, what is required is a generation of scientists grow, stay, discover and innovate on Egypt's land. As there are few studies that aimed at examining using extracurricular activities-based programs for developing creative thinking among children in an open scientific environment, the researcher conducted the present study for preparing a generation who can face challenges and solve issues and problems that the society faces.

Statement of the problem:

The problem of the study can be represented in the following questions:-

- To what extent is the activity-based program effective in developing creative thinking among children (Female-male)?
- To what extent is the activity-based program effective in developing creative thinking among children (Female-male) after a period from applying the program?

Significance of the study:

The significance of the present study lies in examining a very important variable, creative thinking which is one of the country's concerns nowadays of children for developing their talents and innovations for coping with developed countries. Furthermore, the study illustrates the effect of the extracurricular activities used on developing creative thinking among children at the late childhood stage, as they are new activities which provide the child with an atmosphere of freedom, novelty and exciting creative abilities and hence the creative product.

In addition, the significance of the study is represented in its attempt to develop creative thinking among children in the late childhood stage. which is a very important stage in the child's life .Through this stage the creative and innovative abilities which need many means for developing them appear. In addition, the present study can provide a theoretical background which can be added to the Arab library and uses the training strategy for developing creative thinking among children. It also presents results, recommendations and suggestions that can direct parents, teachers and experts among children, besides presenting a new concept of the elementary school environment than can contribute to getting rid of lecturing and memorization habits.

Aims of the study:

The present study aims at:

- (1) Developing creative thinking among children aged 10-12 years old.
- (2) Investigating the effectiveness of an activities-based program in developing creative thinking among children.

- (3) Illustrating the difference in using activities for developing creative thinking between males and females.

Terminology of the study:

(1) Activities:

The researcher defines activities procedurally as : "A group of procedures through which the individual displays his/her creative ideas and products after exposing to exploratory models prepared before which are a group of scientific (extracurricular) activities, some of which are free and some are limited and directed. These activities implies various, wide, flexible content of exercises which suit children's dispositions and abilities. These activities are practiced inside an open scientific environment and the researcher prepares these activities and presents them individually or in group according to the nature of the activity.

(2) Creative thinking:

The researcher adopts Torrance's definition (1966:6) of creative thinking as: A process through which the person becomes sensitive to problems, lack and knowledge gaps and aware of weakness, gaps, inharmony and lack in information to identify difficulty in them and look for solutions and make guesses, formulate hypotheses about points of lack, test these hypotheses, re-test them, modify then re-test them and finally present his/her results.

Creative thinking is procedurally defined through the mark get by the subject in:

Torrance's creative thinking test prepared by Abdallah Soliman and Fouad Abou-Hatab (1973).

Method of the study:

The study used the experimental method. The researcher divided the sample into two groups (experimental and control) homogenous in age, intelligence ratio and the degree of creative thinking before the application of the study program, where the experimental group children participated in the program sessions unlike the control group children.

Sample of the study:

The study sample consisted of 64 students who were divided into two groups:

- (1) The experimental group which consisted of 32 students : (16) males and (16) females.
- (2) The control group which consisted of 32 students : 16 males and 16 females.

Tools of the study:

Tools of the study include:

- (1) Torrance's creative thinking test prepared by Abdallah Soliman and Fouad Abou-Hatab (1973).
- (2) Extra-curricular activities program for developing creative thinking among children prepared by the researcher.
- (3) The pictorial intelligence test prepared by Ahmed Zaky Saleh (1978).
- (4) The social, economic and cultural level scale prepared by Hemdan Fadda (1997).

Statistical technique:

- Analysis of variance (ANOV).
- T – test was used.

Results of the study:

The present study achieved the following results.

- (1) There is statistically significant difference at the level of "0.01" between the mean scores of the experimental and control groups, in the creative thinking dimensions (Fluency - Flexibility – Originality – Details) after the application of the program in favor of the experimental group.
- (2) There is no statistically significant difference at the level of "0.01" between the mean scores of males and females in the experimental group, in the creative thinking dimensions (Fluency - Flexibility – Originality – Details) after the application of the program in favor of the experimental group.
- (3) There is statistically significant difference at the level of "0.01" between the mean scores of the pre-test, post-test and after follow-up of the experimental group, in the creative thinking dimensions (Fluency - Flexibility – Originality – Details).

Hence, the present study indicated the effectiveness of the extra-curricular activities-based program in developing creative thinking among children and getting creative products from them.