

EFFECT OF INTERVENTIONAL STRATEGIES ON ENHANCING DRAWING SKILLS AMONG STANDARD VII STUDENTS

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ABSTRACT

This study aims to find out the effectiveness of interventional strategies for enhancing drawing skills among standard VII students. It is a pre-test- treatment- post-test equivalent group experiment study. The samples of the study were 50 students of standard VII. Samples were divided into two groups like 25 students grouped as experimental and another 25 students as the control group by using an equivalent matching technique. The investigator developed interventional strategies for enhancing drawing skills in a science subject. The data were analyzed using t-test and gap closure technique. The major findings of the study revealed that the i) the post-test performance of the experimental groups is greater than that of control group, i.e. the interventional strategies are effectiveness one to enhancing drawing skills among standard VII students.

KEYWORDS: *Interventional Strategies, Drawing Skills*

INTRODUCTION

Teaching is a purposeful activity. The ultimate goal of teaching is to bring an all-round development of a learner. The teaching-learning process facilitates in transmission of knowledge imparting skills and imbibing values and attitudes. Educationists have analyzed the teaching-learning process in terms of the individual development and societal needs. The behaviorist school has classified this process under the three domain of cognitive, affective, and psychomotor (Bloom taxonomy). At the school level, teachers follow the cognitive domain, where it covers the subject matters, under six major levels of objectives such as knowledge, understanding, application, analysis, synthesis, and evaluation. School subjects particularly science subject of school-level mainly based on the objectives of knowledge understanding and application of the cognitive domain. Traditionally, most of the teachers have been using teaching method for content presentation. The teaching requires different types of methods, techniques and the teaching aids. The selection of these methods and techniques depends upon the nature of the task, learning objectives, learners' abilities and their entering behavior. But the teachers handling science subject in upper primary schools are mostly used the traditional way of teaching, but they are not giving separate practice in science drawing. The students are very strong in content but they can't score good marks in a science subject. The investigator has been analyzed this problem at various levels and also identified the cause of the problem. The cause of the problem is "Student's drawing skill is very poor" especially in the biological area. To rectify this problem, the teacher should select an appropriate teaching strategy which helps each pupil attain enough skill in drawing. The mastery of the drawing skill helps the learner to achieve good marks in a science subject.

The theoretical background furnished so far emphasizes the importance of drawing skill in students' achievement in the science subject.

NEED FOR THE STUDY

The investigator has been a science teacher educator. The science subject contains diagrams (both biological and physical science area). The teachers who are handling science subject, as such the teachers are not giving importance in improving their students' drawing skills. The students are unable to follow the scientific way of drawing diagrams, which is a major hindrance to their achievement in science. The chief aim of the investigation is to find out the nature and extent of the problem faced by the students of VII standard and developed the interventional strategies for enhancing the drawing skill among students in science. Students are facing a common error in and the lack to attention of the details and shape of diagrams. From the observation it was understood that drawing skill is mandatory for students' achievement in the science subject.

OBJECTIVES OF THE STUDY

- To assess the level of drawing among the students of standard VII.
- To identify and implement the appropriate strategies in enhancing the drawing skill among the students.
- To improve the performance in science subject by using drawing skill.
- To find out the effectiveness of international strategies in enhancing the performance of Science (Biological diagrams).

Hypotheses

- There is a significant difference between the pre-test and the post-test mean score of the achievement test for the control group to learn drawing skill through the traditional method.
- There is a significant difference between the pre-test and post-test mean score of the achievement test for experimental group to learn drawing skill through interventional strategies.
- There is a significant difference between the post-test mean scores of the achievement test for experimental and control groups.
- The gap closure of the experimental group is greater than the control group.

Sample

The sample of the study was drawn from the Panchayat union middle school in Kadamalaikundu, Theni district. 50 numbers of students of standard VII were selected. The investigator used the matching technique for frame 25 students as an experimental group and another 25 students were the control group.

Tool

The tool contains seven biological diagrams prescribed in standard VII science text-book. The diagrams were evaluated in size, shape, clarity, and neatness etc.

METHODOLOGY

The present study is an experiment. It is based on pre-test, post-test equivalent group design.

Interventional Strategies

The following activities were implemented for enhancing drawing skills as

- Method of Pencil Sharpening
- Method of Making Squares
- Symmetrical Drawing
- Depiction
- Doubling
- Flat Example
- Sketch
- Outline
- Method of Drawing long Curve Lines
- Method of Using short Pencil
- Using rubber
- Enlargement Process
- Reduction Process
- A relation between light and shade
- Method of shading and
- Importance of shading

Analysis of Data

Table 1: Pre Test: Control Vs Experimental Group

Types of Group	Mean	SD	t Value	Level of Significance
Control	18.24	2.51	0.52	NS
Experimental	18.09	2.45		

The table 1 reveals that there is no significant difference between the pre-test and post-test performance of the control group.

Table 2: Control Group: Pre- Test Vs Post- Test

Types of Group	Mean	SD	t Value	Level of Significance
Pre- test	18.24	2.51	3.42	0.01
Post- test	15.20	3.11		

The table 2 reveals that there is a significant difference between the pre-test and post-test performance of the control group at 0.01 level of significance.

Table 3: Experimental Group: Pre- Test Vs Post- Test

Types of Group	Mean	SD	t Value	Level of Significance
Pre- test	18.09	2.45	28.86	0.01
Post- test	39.28	2.47		

The table 3 reveals that there is a significant difference between the pre-test and post-test performance of the experimental group at 0.01 level of significance.

Table 4: Post- Test: Experimental Vs Control Group

Types of Group	Mean	SD	t Value	Level of Significance
Experimental	39.28	2.47	45.53	0.01
Control	15.20	3.11		

The table 4 reveals that there is a significant difference between the experimental and control group performance in post-test at 0.01 level of significance.

Table 5: Gap Closure: Experimental Vs Control Group

Types of Group	Gap Closure
Experimental	39.28
Control	15.20

The table 5 reveals that the gap closure in the experimental group is much greater than that of the control group.

FINDINGS

- There is no significant difference between the pre-test performance of control group and experimental group. This is strong evidence in favor of balancing of the two groups.
- There is a significant difference between the pre-test and post-test performance of the control group at 0.01 level of significance. The mean score of the post-test is slightly greater than the pre-test mean of the control group.
- There is a significant difference between the pre-test and post-test performance of the experimental group at 0.01 level of significance. The mean score of the post-test is much higher than the pre-test mean of the experimental group.
- There is a significant difference between the experimental and control groups in the post-test performance. The difference is in favor of an experimental group. The t values are significant at 0.01 level. This is strong evidence in favor of the experimental group to learn drawing skill through interventional strategies. Enhancing the drawing skill of the students through interventional strategies is more effective than the traditional method.
- Gap closures in the experimental group are much greater than that of the control group. This implies that the learning of drawing skill or enhancing drawing skill through interventional strategies is more effective than that of the traditional method.

CONCLUSIONS

The aim of education is to improve an all-round development of the individual. The present study identified the effectiveness of interventional strategies to enhance the drawing skill in science (Biological drawing skill). This study reveals that the interventional strategies applied to the experimental group improve the biological drawing skill greater than the traditional method (for the control group). This study would also contribute to the development of learners as aesthetic sense.

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