Original Article
ISSN (Online): 2582-7472

ShodhKosh: Journal of Visual and Performing Arts
July 2024 5(7SE), 239–242

EFFECTIVENESS OF STRATEGIES BASED ON MIND MAPPING ON ACHIEVEMENT IN PROBLEM SOLVING ABILITY OF P.U. COLLEGE STUDENTS

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https://crossmark.crossref.org/dialog/?doi=10.29121/shodhkosh.v5.i7se.2024.5881&domain=pdf&date_stamp=2024-07-31

DOI
10.29121/shodhkosh.v5.i7SE.2024.5881

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

This study highlights the value of effectiveness of strategies based on mind mapping on achievement in problem solving ability. Problem-solving skills are the ability to identify problems, brainstorm and analyze answers, and implement the best solutions. The students with good problem-solving skills are self-achiever and they are proactive in understanding the root of a problem and work actively to consider a wide range of solutions before deciding how to move forward. The main purpose of the study is to improve teaching effectiveness and learners' participation. The aim of this study is to identify the effectiveness of the mind mapping strategy on achievement in problem solving ability of P.U. college students. To investigate the significant difference in the 'pre' and 'post' mean Attention scores of students taught through mind mapping strategy.

Keywords: Effectiveness of Strategies Based on Mind Mapping, Problem-Solving Skills, Problem Solving Ability

1. INTRODUCTION

1.1. PROBLEM-SOLVING SKILLS

Problem-solving skills are the ability to identify problems, brainstorm and analyze answers, and implement the best solutions. The student with good problem-solving skills is a self-achiever and they are proactive in understanding the root of a problem and work with actively to consider a wide range of solutions before deciding how to move forward.

1.2. MIND MAPPING CONCEPTION VIEW

Concept mapping is a protean and effective literacy tool that can have a positive impact on a pupil's education by promoting understanding, encouraging critical thinking, and supporting active, creative literacy. Concept charts are also useful for feting both licit and defective ideas held by pupils, as will be addressed further in a posterior section. Mind

charts can be used to explain generalities in an innovative way. They're hastily to make and much easier to flash back and review due to their visual quality, by presenting ideas in a radial, graphical, non-linear manner. Mind Charts encourage an unorthodox brainstorming approach that can induce ideas without regard for a more formal, hierarchical association system Mind chart is one of the most successful and effective educational fashion that have a pivotal part in simplifying both the tutoring and literacy processes through introducing courses in visually seductive manner, perfecting learners' interest and participation, and boosting their appreciation. Mind chart is viewed as one of the most effective educational ways in education. The use of mind mapping significantly improves tutoring effectiveness, learners' participation, and assignment appreciation.

1.3. STATEMENT OF THE PROBLEM

The main purpose of the study is to improve teaching effectiveness, learners' participation. The aim of this study is to identify effectiveness of the mind mapping strategy on achievement in problem solving ability of P.U. college students.

2. OBJECTIVES OF THE STUDY

To compare the pre and post mean Attention scores of students taught through mind mapping strategy. To study about the usefulness of mind mapping strategy of instruction on achievement in problem solving ability of P.U. college students.

3. STATEMENT OF HYPOTHESES

The hypothesis for this study is that there is no significant difference in the pre and post mean Attention scores of students taught through mind mapping strategy

4. METHODOLOGY

The present study was experimental in nature and conducted in two stages first one is for attention tool development and in the second stage experiment was conducted. To compare the pre and post mean Attention scores of students taught through mind mapping strategy. To study about the usefulness of mind mapping strategy of instruction on achievement in problem solving ability of P.U. college students. For this purpose, 40 college students from P.U. College were selected. The idea mapping instructional technique was assigned to the individuals at random for the objectives of the study. This study included an experimental group and a control group that was taught using a more traditional teacher-centered approach. ANOVA and ANCOVA were used to examine the data descriptively and inferentially. The level of significance was set at 0.05 and the level of confidence at 0.01.

5. ANALYSIS AND INTERPRETATION OF DATA

The preliminary phase involves assessing the data on pre-test mean scores and posttest mean scores of the mind mapping teaching strategy group and Control Group on Achievement in problem solving ability Attention scores of P.U. college students using analysis of variance and analysis of covariance.

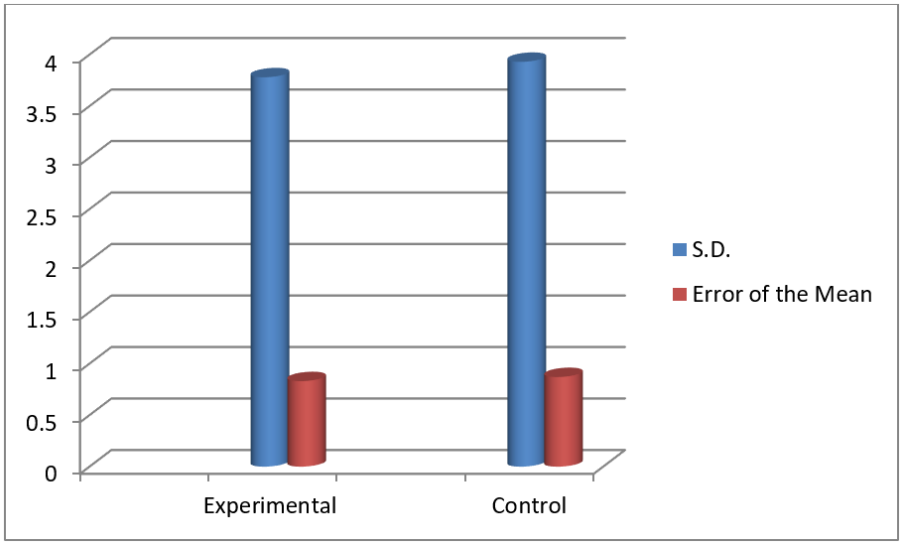
Table 1

The pre mean Attention scores of students

Sr.No.	Variables	Unit	Mean	S.D.	Error of the Mean
1	Experimental	20	73.5	3.78	0.83
2	Control	20	71.9	3.93	0.87

Source – By survey of P.U. College Student.

Graph 1



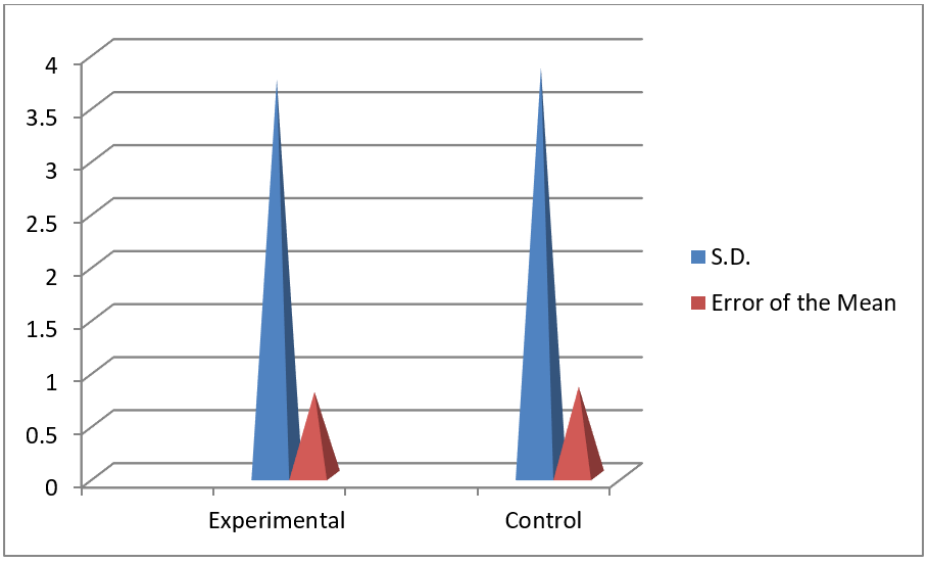
It is clear from the above graph and table that Achievement in problem solving ability Attention scores of P.U. College student, according to the statistical analysis of college students' pre-test scores, the pre-test mean of the experimental group's Attention scores is 73.5 and the standard deviation is 3.78 respectively. There is Also the mean error is 0.83. Whereas the pre-test mean of the control group is 71.9 with a standard deviation of 3.93. Also the pre-test mean error of the control group is 0.87.

Table 2

The post means Attention scores of students

Sr. No.	Variables	Unit	Mean	S.D.	Error of the Mean
1	Experimental	20	74.4	3.74	0.79
2	Control	20	72.1	3.85	0.84

Graph 2



It is clear from the above graph and table that Achievement in problem solving ability Attention scores of P.U. students According to the statistical analysis of the information of college student's post-test scores, the mean of the post-test Attention scores of the experimental group of individuals is 74.4 and the standard deviation is 3.74. Also the mean error is 0.79. Whereas the pre-test mean of the control group is 72.1 with a standard deviation of 3.85. Also the pre-test mean error of the control group is 0.84.

Table 3

The compares of pre and post mean Attention scores of students

Sr.No.	Variables	Mean	S.D.	T Value	Significant value (2 Taild)
1	Experimental	73.95	3.76	1.459	0.154
2	Control	72.00	3.89		

Graph 3

It is clear from the above graph and table that Achievement in problem solving ability Attention scores of P.U. When the college students' pre-test and post-test results were compared, the college student's average is 73.95 while the standard deviation is 3.76. Also, the mean of the control group is 72.00 while the standard deviation is 3.89. According to the statistical analysis, the t-value is 1.459 and the significance level is 0.154.

6. RESULTS

According to the above statistical analysis, the T-value is 1.459 and its significance is 0.154, which is more than 0.01. Achievement in problem solving ability Attention scores of P.U. College students are seen to have a positive effect. It did not have any significant effect. This effect is not significant in the present research. Therefore, this hypothesis is accepted.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

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