Library Progress International *Print version ISSN 0970 1052*
Vol.44, No.6, Jul-Dec 2024: P.619-625 *Online version ISSN 2320 317X*

Original Article *Available online at www.bpasjournals.com*

EFFECTIVENESS OF SYNECTIC MODEL IN IMPROVING CREATIVE THINKING SKILL AMONG VI STANDARD STUDENTS

Ms. U.Agilandeshwari[1] , Prof.P.C.Naga Subramani[2]

[1]*Research Scholar*
Department of Pedagogical Sciences, Tamil Nadu Teachers Education University
Karapakkam, Chennai-97

[2]*Research Supervisor*
Professor and Head
Department of Pedagogical Sciences, Tamil Nadu Teachers Education University
Karapakkam, Chennai-97

How to cite this paper as: Ms. U.Agilandeshwari, Prof.P.C.Naga Subramani, (2024) Effectiveness of synectic model in improving creative thinking skill among vi standard students. *Library Progress International, 44(6) 626-630*

ABSTRACT

The development of creative thinking skills in students is vital for fostering innovation and problem-solving capabilities in the modern educational landscape. This study explores the effectiveness of the Synectic model, an instructional approach designed to enhance creativity, in improving creative thinking skills among VI standard students. An experimental study was conducted with 25 sixth-grade students, who were randomly assigned to an experimental group and a control group. The experimental group was exposed to the Synectic model, while the control group followed the standard curriculum. Pre-test and post-test assessments were administered to both groups to measure creative thinking skills. The pre-test scores indicated no significant difference between the experimental group ($M = 27.48$, $SD = 7.561$) and the control group ($M = 26.84$, $SD = 9.986$), with a calculated t-value of 0.255 ($p > 0.05$). However, post-test results revealed a significant improvement in the experimental group's creative thinking skills ($M = 45.36$, $SD = 8.44$) compared to the control group ($M = 33.92$, $SD = 9.34$), with a calculated t-value of 5.886 ($df = 24$, $p < 0.05$).

The findings demonstrate that the Synectic model significantly enhances creative thinking skills among VI standard students. This study provides empirical evidence supporting the integration of the Synectic model into educational practices to foster creativity. Further research with larger sample sizes and diverse populations is recommended to validate and generalize these findings. This study contributes to the growing body of literature advocating for innovative instructional methods to develop essential 21st-century skills in students.

Key words: Synectic approach, Foster-creativity, Educational practices

INTRODUCTION

The Synectic model, developed by William J.J. Gordon, is a creative problem-solving approach that seeks to enhance creativity by drawing connections between seemingly unrelated concepts. This model operates on the principle that making the strange familiar and the familiar strange can lead to novel and innovative solutions. Synectic model encourages individuals to think metaphorically and analogically, fostering a mindset where they can view problems from multiple perspectives and generate creative solutions. By engaging in structured brainstorming sessions, participants are encouraged to suspend judgment and freely explore ideas, leading to a deeper

understanding of the problem and more creative outcomes. This approach is particularly effective in educational settings, where developing creative thinking skills is essential for students' cognitive and intellectual growth.

CREATIVE THINKING SKILL IN MODERN EDUCATION

Creative thinking is a crucial skill in the modern educational landscape, fostering problem-solving abilities and innovative thinking. It involves the ability to generate new ideas, recognize patterns, make connections, and think divergently. In the context of sixth-grade students, creative thinking is vital as it supports their ability to understand complex concepts, enhances their engagement with the material, and prepares them for future challenges. Traditional educational methods often emphasize rote learning and memorization, which can stifle creativity. In contrast, instructional approaches like Synectic actively cultivate an environment where creativity can flourish, encouraging students to think outside the box and approach problems in innovative ways.

SYNECTIC APPROACH LEADS TO CREATIVITY

The Synectic approach of instruction leads to creativity in students by immersing them in activities that promote divergent thinking and the exploration of novel ideas. Through guided imagery, metaphorical thinking, and analogical reasoning, students are encouraged to view problems from different angles and make connections between disparate concepts. This process not only enhances their creative thinking skills but also boosts their confidence in their ability to solve problems creatively. Additionally, the collaborative nature of Synectic fosters a supportive learning environment where students can share ideas and build on each other's creativity. By integrating the Synectic model into the curriculum, educators can provide students with the tools and mindset necessary to navigate and thrive in an increasingly complex and dynamic world.

REVIEW OF RELATED LITERATURE

Toka and Kandemir (2015) investigated the effects of using creative writing activities on 7th grade students‟ achievement in writing skill, writing dispositions and their attitude to English. The study group consisted of 17 female and 14 males in total seventh grade students of elementary school of Denizli, Turkey. When pre and post 88 test results were compared, it was found that students‟ achievement in writing skill was increased after the experiment. Students‟ writing disposition was also increased when compared to their levels before the experiment. However, students‟ attitude to English course was not increased after the experiment. Results indicated that using creative writing exercises had a positive effect on writing achievement and writing disposition in 7th grade English language classes in elementary schools.

Titus (2016) conducted a study that aimed to test the effectiveness of Synectic Model and Gaming Strategy on achievement and creativity in Mathematics among secondary school students. The sample of the experiment consisted of 240 students of standard IX of Ernakulam and Thrissur Districts of Kerala. The results of the study indicated that Synectic Model was equally effective with Activity-Oriented Method on achievement and creativity in Mathematics among secondary school students. Again, it was found that Gaming Strategy was effective than Activity Oriented Method on achievement and creativity in Mathematics. The study also revealed that Synectic Model and Gaming Strategy were equally effective with Activity-Oriented Method on retention of achievement in Mathematics. Activity-Oriented Method was effective than Synectic Model and Gaming Strategy on retention of creativity in Mathematics among Secondary School Students.

SIGNIFICANCE OF SYNECTIC MODEL IN HIGH SCHOOL STUDENTS

The Synectic model, developed by William J.J. Gordon, has garnered significant attention for its unique approach to fostering creativity among students. This model leverages metaphorical thinking and analogies to bridge the gap between unrelated concepts, encouraging students to think beyond conventional boundaries. By engaging in activities that promote divergent thinking, students learn to see connections between disparate ideas, which enhances their ability to generate innovative solutions. The Synectic model's emphasis on collaborative learning also contributes to its effectiveness, as students benefit from the exchange of diverse perspectives, further enriching their creative processes.

Research has consistently shown that the Synectic model can significantly improve creative thinking skills. Studies involving various age groups and educational settings have demonstrated notable increases in creativity scores among students exposed to this model. For instance, in an experimental study with sixth-grade students, those who received instruction through the Synectic model showed significant improvements in their creative thinking abilities compared to their peers who followed the standard curriculum. These findings underscore the model's potential as a powerful tool in education, capable of nurturing the creative capacities of students and preparing them to tackle complex problems with innovative thinking.

SAMPLE

The sample selected for the study is 50 VI standard students from Government Higher Secondary School, Moovarasanpet, Chennai. Among these 50 students, 25 students were selected as Control group and the other 25 students were selected as Experimental group.

METHODOLOGY

In this study the investigator adopted True Experimental Pre-test Post-test control group design.

PRE-TEST POST-TEST CONTROL GROUP DESIGN

Randomly assigned group	**Pre-test**	**Independent variable**	**Post-test**
Experimental	A	Teaching through the self-instruction method	A1
Control	B	Teaching through conventional method	B1

The researcher provided tests to the participants both before and after the experimental group receives exposure to the stimuli. Researcher tested groups twice, so this structure provides multiple methods of assessing the results.

TOOL

The Creativity Test tool was prepared by the Investigator (U.Agilandeshwari) with the guidance of Research Supervisor (Dr.P.C.Naga Subramani). The researcher tested the reliability and validity of the tool.

OBJECTIVES

1. To find out the significant difference in the Creativity test scores between Control group and Experimental group Pre test scores.
2. To find out the significant difference in the Creativity test scores between Control group and Experimental group Post test scores.

HYPOTHESES

1. There is no significant difference in the Creativity test scores between Control group and Experimental group in their Pre test scores.
2. There is no significant difference in the Creativity test scores between Control group and Experimental group in their Post test scores

ANALYSIS

Hypothesis-1

There is no significant difference in the Creativity test scores between Control group and Experimental group in their Pre test scores.

TABLE 2

N, MEAN AND STANDARD DEVIATION VALUES FOR THE PRE-TEST SCORES OF EXPERIMENTAL GROUP AND CONTROL GROUP

Variables	N	Mean	S.D	't'	Significance
Experimental Group Pre test scores	**25**	**27.48**	**7.561**	**0.310**	**Not Significant**
Control Group Pre test scores	**25**	**26.84**	**9.986**		

It is evident from the above table that the 't' value found out is 0.310. It is lower than the critical value of 1.71 at 0.05 level. It is not significant. Hence, it can be concluded that there exists no significant difference between Experimental group and Control group in their pre -test. So, the hypothesis stated is accepted. Thus, there is no significant difference between the Experimental group and Control group Pre-test scores.

HYPOTHESIS-2

There is no significant difference in the Creativity test scores between the Control group and Experimental group in their Post test scores

TABLE 3

N, MEAN AND STANDARD DEVIATION VALUES FOR THE POST TEST SCORES OF CONTROL GROUP AND EXPERIMENTAL GROUP

Variables	N	Mean	S.D	't'	Significance
Experimental Group Post test scores	**25**	**44.28**	**8.440**	**5.886**	Significant for the df of 24 at 0.05 level (1.711)
Control Group Post test scores	**25**	**33.92**	**9.349**		

It is evident from the above table that the 't' value found out is 5.886. It is higher than the critical value of 1.71, is not significant at 0.05 level. Hence, it can be concluded that there exists significant difference between the Control group and Experimental group in their post test scores. The mean value of the post test scores of the Experimental-group (44.28) is higher than the mean value of post-test scores of control group (33.92). The effectiveness of Synectic Model in improving Creativity is evident, as indicated by the enhanced learning outcomes observed among students in the experimental group who were exposed to this teaching approach. So, the null hypothesis stated is rejected. Thus, there is a significant difference between Experimental and Control group in their post test scores.

FINDINGS

1. There is no significant difference between the Experimental group and control group in their Pretest scores.
2. There is a significant difference between the Experimental and control group in their post test scores.

CONCLUSION

The Synectic model proves to be a highly effective instructional strategy for enhancing creativity among students. Its unique approach of using metaphors and analogies to connect unrelated concepts stimulates divergent thinking and fosters a deeper level of creative engagement. The model not only promotes individual creative growth but also encourages collaborative learning, allowing students to benefit from diverse perspectives. Empirical evidence, such as the significant improvements in creative thinking skills observed in experimental studies with sixth-grade students, supports the model's efficacy. Therefore, incorporating the Synectic model into educational practices can play a crucial role in developing students' creative abilities, preparing them to meet the challenges of an increasingly complex and dynamic world.

Reference

[1]Abed, S., Davoudi, A.H.S., and Hoseinzadeh, D. (2015). The effect of synectics pattern on increasing level of problem solving and critical thinking skills in students of Alborz Province. *Walia journal, 31(1), 110-118*. Retrieved on May 9, 2015 from www.Waliaj.com

[2]Afshari, G., and Ghaemi, N. (2014) Synectics teaching effect on the academic performance of Students' composition among male fifth grade students in Dezful City. *Journal of Life science and Biomedicine. 4(5), 448-451.*

[3]Ahmadi, H., Mozaffari, F., and Shahrood, A. (2017). Creativity in EFL learners' writing through the use of poetry and visualization. *IOSR Journal of Humanities and Social Science. 22(3). 62-65.* Retrieved on June 14, 2015 from www.iosrjournals.org DOI: 10.9790/0837-2203076265 www.iosrjournals.org

[4]Aiamy, M., and Haghani, F. (2012). The effect of Synectics & Brainstorming on 3rd grade students' development of creative thinking on science. *Procedia –Social and Behavioural Sciences. 47(2012), 610 – 613.*

[5]Akhtar, S., and Arif, M. (2010). A study of relationship of cognitive styles with students' academic achievement in the subject of science at elementary level. *Pakistan Journal of Education. journal.aiou.edu.pk.*

[6]Naga Subramani P.C., (2015). "Development and Standardization of an ICT Intelligence Test", Review of Research Journal, V.5, n1, P. 1-5.

[7]Naga Subramani, P. C., & Nandhini, G. (2022). Effectiveness of virtual reality in teaching science among X Std students. *International Journal of Early Childhood Special Education, 14(6).*

[8]Naga Subramani P.C. and Sharmila V., (2011). "A study on Internet Knowledge of Higher Secondary School Teachers in Madurai District", A Journal of Golden Research Thoughts, V.1, n6, P. 1-4

[9]Sharmila V. and Naga Subramani P.C., (2013). "Development and standardization of a Problem solving ability scale", Indian Streams Research Journal, V.3, n6, P. 5-9.

[10]Thavasi M., and Naga Subramani P.C., (2021). "A Study on Problem solving ability of High School Teachers in selected Southern Districts of Tamil Nadu", Elementary Education Online, V.20, n4, P. 3569-3576.