IMPARTING VALUES AMONG VIII STANDARD STUDENTS IN LEARNING PARALLELOGRAM THROUGH PAPER FOLDING METHOD

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ABSTRACT

Values are defined in literature differently from eternal ideas to behavioral procedures. Most often values refer to standards for determining levels of goodness or desirability. A value based educational system is an integral part of human intellectual development. This is because knowledge acquired and valued tends to remain in the learners' memory longer than procedural knowledge. Value education or of any other curricular area depends on a variety of factors such as Psychological, Sociological and epistemological. The present study aims to impart values among VIII Standard students in learning parallelogram through paper folding method. Activities and Achievement Tests (Pre-test and Post-test) were conducted by the investigator. This study was conducted on 25 students of VIII Standard, Panchayat Union Middle School, Aundipatty, Theni District. Pre-test Post- test Experimental Design was employed for this study. In analysis Mean, SD and 't'- value were computed, the performance of Post-test shows the improvement in values among VIII Standard students.

Key Words*: Imparting Values, Mathematics, Parallelogram, Paper Folding method.*

Introduction:

Education develops the individual like a flower, which distributes its fragrance all over the environment. In this sense, education is that conductive process which drags a person from darkness, poverty and misery by developing his individuality in all its aspects – physical, mental, emotional and social. With this type of all-round development, he becomes a responsible, dynamic, resourceful and enterprising citizen of strong good moral character who uses all his capacities to develop his own self, his society and his nation to the highest extent by contributing his best to national honor, national glory, national culture and civilization of the nation of which he is part, an integral part.

Value education is the process by which people give values to others. It can be an activity that can take place in any organization during which people are assisted by others, who may be older, in a position of authority more experienced, to make explicit it those values underlying their own behavior, to assess the effectiveness of these values and associated behavior for their own and others' long term well-being and to reflect on and acquire self and others.

Mathematics helps man to quantify ideas, to be precise and to utilize spatial concepts in his day-to-day living. Due to its place in the sciences and in the practical arts, from the informational and computational standpoints, it is indispensable in our life. Mathematical literacy is essential for every citizen in a society, which is rapidly transforming itself into an industrial and technological society. Mathematics is helpful in meeting basic needs of human beings. A citizen must be a good producer and a good consumer. Mathematics children acquire skills, through speed and accuracy, which prove useful in common transactions and in life-situations.

The inculcation of mathematical values in the teaching and learning of mathematics is grounded in the cognitive and affective domains of Bloom's well-known taxonomy of educational objectives. The efficacy of mathematics teacher's value inculcation is an individual's ability or competence of imbibing ideological, attitudinal, and sociological knowledge and strategies in the effective organization of mathematical content and delivery. Mathematics teachers' self-efficacy in regard to values inculcation is a strong predictor of students' conceptual understanding and a profound determinant of students' achievement. A strong sense of the efficacy of values inculcation enhances teacher instruction and learning strategies. In Bishop's view, "values in mathematics education are the deep affective qualities which education fosters through the school subject of mathematics. They appear to survive longer in people's memories than does conceptual and procedural knowledge, which unless it is regularly used tends to fade" (Bishop, 1999, p. 2).

Objectives:

- To determine whether of value education or of any other curricular area depends on a variety of factors such as psychological, sociological, epistemological.
- To find out if there is any significant difference between the mean scores of the pre-test performance of the boys and girls
- To find out if there is any significant difference between the mean scores of the post-test performance of the boys and girls
- To find out if there is any significant difference between the mean scores of the pre-test performance and post-test performance of the boys.
- To find out if there is any significant difference between the mean scores of the pre-test performance and post-test performance of the girls.
- To find out if there is any significant difference between the mean scores of the pre-test and post-test performance of the whole.

Hypothesis:

- There is no significant difference between the mean scores of the pre-test performance of the boys and girls.
- There is no significant difference between the mean scores of the post-test performance of the boys and girls.
- There is no significant difference between the mean scores of the pre-test performance and post-test performance of the boys.
- There is no significant difference between the mean scores of the pre-test performance and post-test performance of the girls.
- There is no significant difference between the mean scores of the pre-test and post-test performance on the whole.

Methodology:

- Pre-test Post-test Experimental design was adopted for the study.

- A variety of activities was designed exclusively for students to take active participation and self-learning activity was done for 2 weeks

Sample & Tool:

VIII Standard students of panchayat union middle school, Aundipatty, Theni district, constituted the sample size. Total sample of 25 students was selected for the study. Among them, 15 were boys and 10 were girls. The tool was developed by the investigator. It consist of 5 multiple choice questions, 5 fill in the blanks questions and 3 subjective type questions.

Scoring Procedure:

If the VIII Standard students were able to answer correct for the multiple choice and Fill in the blanks questions one mark is awarded for every correct answers and for the wrong answers zero mark. Among the 3 subjective type questions if the student's answers without any mistake then full 5marks were allotted or else one mark was reduced for each mistake.

Pre Test:

The prepared pre-test was administered to the VIII Standard students of panchayat union middle school, Aundipatty, Theni district. The pre-test was conducted with the duration of 45minutes.

Treatment:

During treatment the activities was done in the classroom through paper folding method, the VIII Standard students were asked to participate both by Individual and Group work assignment in the class.

Post Test:

- After carrying out all the activities in the classroom through paper folding method. The students are asked to do a post-test with the questionnaire.
- The same questionnaire which was used for Pre-test was again used to conduct Post-test for the same set of 25 students.

Data Analysis and Interpretation:

Category	Sample size	Mean	Standard deviation	't'-value	Level of significance
Girls (Pre)	10	9.2	2.85	0.208	NS
Boys (Pre)	15	8.9	4.37		
Girls (Post)	10	24.3	1.15	1.712	NS
Boys (Post)	15	22.4	4.06		
Boys (Pre)	15	8.9	4.37	8.766	S
Boys (Post)	15	22.4	4.06		
Girls (Pre)	10	9.2	2.85	15.537	S
Girls (Post)	10	24.3	1.15		
Whole (Pre)	25	9.04	3.9	13.819	S
Whole (Post)	25	23.2	3.3		

S-Significant at 0.01 level; NS-Not Significant at 0.01 level

FINDINGS

- There is no significant difference between the mean scores of the pre-test performance of the boys and girlswhich shows that there is no gender difference.

- There is no significant difference between the mean scores of the post-test performance of the boys and girls. So, there is no gender difference before and after treatment.
- There is a significant difference between the mean scores of the pre-test performance and post-test performance of the boys.
- There is a significant difference between the mean scores of the pre-test performance and post-test performance of the girls.
- There is a significant difference between the mean scores of the pre-test performance and post-test performance of the whole.
- The pre-test mean score was 9.04 and the post-test mean score was 23.16. So, the result of this study revealed that there was improvement in the performance of the students in the drawing of the parallelogram through paper folding method.

CONCLUSION

The post-test performance of the students showed improvement in the drawing of the parallelogram. The introduction of the paper folding method in learning the mathematical concepts was indeed a great benefit to the VIII Standard students. Hence the investigator has attempted to study the student's involvement of learning through the drawing of geometrical concept that is parallelogram in Mathematics for VIII Standard students.

In this study, by adopting individual and group activities, Activity based learning the investigator improved the mathematical Values such as Ideological, Attitudinal, Sociological, Computational and motivational mathematical values. Through the Ideological values, Logical reasoning, working collaboratively, truthfulness was nurtured. In regard to Attitudinal Values, positive feeling, confidence and creativity was nurtured among the students. In case of Sociological values, Social justice, friendship and democratic values was nurtured and where as in Computational value, Curiosity, accuracy and preciseness was developed. At last for motivational value, hardworking, relation to environment, benefits attributed to learn mathematics was developed.

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