

TO STUDY THE EFFECT OF CO-OPERATIVE LEARNING ON SELF CONCEPT IN SCIENCE METHOD OF B.ED. STUDENTS

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Introduction:

Science is considered as one of the important subject in two Year B.Ed. Curriculum. The Indian thinkers and Educationists who supported the study of science held that science method is an integrated part at the intimate contact. They believed that abolition of science would cause serious injury to Education in India. But as a teacher if we can develop the self concept of B.Ed. students with help of our numerous activities. According to Rogers equates self concept with self structure, the self concept as structure may be thought of as organized configuration of perception of self which are admissible to awareness. According to Johnsons there are five elements of co-operative Learning, Individual accountability, positive Interdependence, face to face primitive interaction, small group skills co-operative learning is the new concept and new approach to the Educational process co operative learning method are very effective. When problems are created due to B.Ed. class. In the large classes there is no room to express one idea, activities for Exploration for discussion and to develop higher order thinking.

Co-operative Learning method where the students can work in small group learning helps to use limited resources optimally by large number of B.Ed. students. The teacher to interact with many more students in groups and hence is able to diagnose B.Ed. students more easily.

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Objectives:

- 1) To Study the effect of co-operative Learning science method on Improvement of self concept.
- 2) To study the male and female difference in the effect of co-operative Learning on development of self concept.

Limitations of Research study:

- 1) The study was restricted to teachers trainee of B.Ed. Class from only Government college of Education, Ratnagiri.
- 2) The present study was B.Ed. in year 2023-24.
- 3) The treatment period for both group was 30 minutes per day and it was spread over only for 8 days.

Hypothesis:

- 1) There is no significant effect of co-operative Learning in science teaching method on improvement of self concept.
- 2) There is no significant difference between Male and female teacher trainees in the effect of co-operative learning on improvement of self concept.

Sample:

The Science Subject of study were the teacher trainee B.Ed Class sampling technique adopted was purposive sampling. There were 40 first and second year B.Ed. students in science method. The 40 teacher trainees are B.Ed. College in Ratnagiri city. In this study the 24 female teacher trainees and 16 male teacher trainees were selected. Finally 20 teacher trainees for experimental group & 20 teacher trainees for control group were selected.

Design:

In this study the pre-test, post-test equivalent group design was used to evaluate the effect of co-operative learning strategy in science on self concept with respect to conventional method of teaching.

Research methodology:

In order to achieve the objective of the study and resources available the Experimental research method was used.

Research Tools:

The following tools were used for the present study.

- 1) Dr. Raj Kumar Saraswati self concept questionnaire.
- 2) Programme of co-operative Learning.

According to topic, chosen in science for the study. The Study material were prepared. Each teacher trainees material considered of objective, Discussion material, Activities and Evaluation,

Pre-Test:

Before starting the treatment for the Experimental group pre-test were administered on academic anxiety and self concept to both experimental group and control group.

Treatment/Teaching:

The Experimental group was taught using the cooperative Learning strategy of Learning together model. The control group was taught by conventional method. The co-operative Learning strategy involved teacher trainees working in study materials and were given instructions to discuss and do the activities together.

To implement this technique the following steps were used during 50 minutes classroom lesson transaction.

1. Dividing the B.Ed. Teacher trainees in two groups.
3. Distributing discussion or study material.
3. Allowing minutes to think discuss calculate / Conclusion, Regrouping etc.
4. Allowing 10-15 minutes to think / discussion and share.
5. Consolidation of point each group and presentation by the group leaders and then by the teachers.

During the above 50 minutes period of teacher trainees were actively involved in the thinking, discussion calculating, drawing, conclusion, writing. And some times were given for consolidation. The teacher helped the teacher trainees in grouping, re-grouping management of discipline, facilitating, discussion, consolidation, discussing writing main point on the blackboard for the benefit of the whole class.

Post test: After the transaction of the lesson, self concept scale was again administered as the post test to both experimental and control group.

Analysis and Interpretation:

Comparison of gain self concept of experimental and control group.

Hypothesis - 1

There is no significant effect of co-operative Learning in science teaching method on improvement of self concept.

Group	N	Mean (M)	S.D	t - value
Experimental group	20	16.72	5.22	4.52
Control group	20	12.43	3.38	

Table shows that there is difference between mean gain scores of self concept of Experimented and control group, but the obtained t-value of 4.52 which is greater than the table value of 2 for freedom at 0.05 level of significance. This indicates there is no significant difference between main gain scores of improvement of at self concept, so the hypothesis is accepted. The experimental group slightly better than the control group in improvement of self concept.

Hypothesis-2

There is no significant difference between male and female teacher trainees in the effect of co-operative learning on improvement of self concept.

Experimental group:

	Mean	S.D	t- value
Male	10.40	4.32	4.16
Female	10.32	5.44	

Control group:

	Mean	S.D	t- value
Male	8.12	2.82	2.24
Female	9.58	4.13	

Table show that both for experimental and control group there is difference in main gains in self concept between male and female trainees teacher but the difference are not satisfactory significant is obtained t-value of 4.16 and 2.24 are less than at 0.05 level of significant. Hence the hypothesis is accepted

Conclusion:

The effect of co-operative learning in Science teaching method on improvement of self concept. In comparison the Control group male and female teacher trainee of experimental group there little more improvement in self concept, but thought no significance in case of male this improvement is more than that of female this result may be attributed to the emotional status.

Reference:

- Austin D.A. (1995) : Effect of co-operative Learning on student achievement.
Best J.W. (2001) : Research in Education 8thedition, Prentice Hall, New Delhi

- Burns R.B. (1979) : The self concept in theory measurement and behavior
Dipak Tiwari (2006) : Method of Teaching teacher Education, New Delhi.
Kothari C. R. (2009) : Research methodology and Technique, Now Delhi
Slavin R.E. (1986) : Co-operating Learning Review of education research, Del

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