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TEACHER-EDUCATION: MEETING THE NEEDS OF THE NEW GENERATION

(A Peer-reviewed Research Papers of
the Fourth National Conference of Teacher Educators)



Christian College of Education
Kanyakumari District, Tamilnadu.

in co-ordination with



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Kanniyakumari Academy of Arts and Sciences
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- திருக்குறள்

Nothing is more pleasing to all parents
on this great earth than that their children
should possess real learning

- The Sacred Kural

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DEVELOPING SOCIAL INTERACTION SKILLS THROUGH CO-OPERATIVE LEARNING APPROACH.

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ABSTRACT

An essential component and important prerequisite for academic learning is the teaching of social interaction skills. It encompasses communicating, building and maintaining trust, providing leadership, and managing conflicts and decision making capacities. Students who have never been taught the prerequisite social interaction skills cannot be expected to achieve their social goals. This paper investigated the effectiveness co-operative learning approach in developing students' social interaction skills. The findings of the study proved that the co-operative learning approach was more effective in developing social interaction skills than traditional method.

Introduction

The present class room pedagogy provides less opportunity for social interaction. Many of the teachers adhere to the traditional method of delivering knowledge and often experience failure in implementing social situation. They hold the position of authority and impart knowledge for the students. The mechanical transmission of knowledge through traditional method restricts the social interaction among them. Social interaction skills are essential for developing positive self-esteem, building relationships, and ultimately gaining acceptance into the society. To communicate effectively with others, establish friendships, positive social relationships, and be perceived as a likeable human being, a person must demonstrate good social interaction skills. Higher secondary period is a critical period in the life of adolescents; the expectation is that they know the most common

social rules for the community in which they live. This means that adolescents need to have learned most of the basic social interaction skills that will enable them to achieve their social goals. In this adolescence stage they will be expected to recognize social challenges, problem solving, and resolve various conflicts. However, it is the duty of the teachers to develop social interaction skills for building relationships within the family, with classmates and friends as well as teachers or the members of the community.

Cooperative learning approach is a drastic shift from traditional method. Cooperative learning situation engage students of all levels of performance work together in structured groups toward a shared or common goal. In the words of Johnson, Johnson and Holubc, (1994): "Cooperative learning is the instructional use of small groups through which students work together to maximize their own and each other's learning." In classrooms where cooperative learning is practiced, students pursue learning in groups in meaningful ways. Cooperative learning requires that students work together to achieve goals which they could not achieve individually. In cooperative learning, students achieve many social benefits such as to build friendships, to enhance self-esteem, to build life-long interaction and communication skills, and to master the habits of mind (critical, creative and self-regulated) needed to function as productive members of society. Co-operative learning is an interactive approach to processing information, resulting in greater retention of subject matter, positive attitudes toward learning, and enhanced interpersonal relations among group members.

Since the basic elements co-operation, interpersonal communication and problem solving are critical for the students of today and tomorrow, efforts should be made to assist all students in developing and maintaining social interaction skills. Hence the present investigator made an attempt to investigate the effectiveness co-operative learning approach in developing social interaction skills among higher secondary students.

Objectives of the study

- To investigate the effectiveness of co-operative learning

approach on social interaction skills among the higher secondary students.

- To find out the significant difference between the pre test and the post test scores of social interaction skills the experimental group students.

Hypotheses of the study

- There will be significant difference between the experimental group and the control group in developing social skills among the higher secondary students.
- There will be significant difference between the pre test and the post test scores on social interaction skills of the experimental group.

Design of the study

The investigator employed 'Equivalent group Pre test – Post test experimental design' for the study.

Variables

The independent variable selected for the experiment was instructional strategy. Co-operative learning approach was used for the experimental group and the traditional method was used for the control group. Scores of social interaction skills as the dependent variable.

Sample

The research study was carried out on a sample of 60 students of class XI from a Government Aided school namely, St. Joseph Higher Secondary school, Mulagumoodu in Kanyakumari District, Tamil Nadu. Stratified random sampling technique was used. 30 students in Experimental group and 30 students in control group were taken for the study.

Instrumentation

The tools used for the present study

1. Lesson plans based on Co-operative learning approach (constructed and validated by the investigator)

70

2. Social interaction skills inventory (constructed and validated by the investigator).

Reliability and Validity of the test

The reliability of the Social interaction skills inventory was found out by Split half method using Spearman Brown prophecy formula and it was found to be 0.756. From the opinion of the experts the tool possessed adequate face validity and content validity.

Procedure Adopted For The Study

The investigator applied matched group technique to equate the groups. The two groups (the experimental and the control groups) were matched on the basis of Intelligence test (Ravens Progressive Matrices), Socio-economic status, Previous academic achievement, Age and Gender. After forming the groups, randomly one group was taken as experimental group and the other was taken as control group. From the sample of 60; 30 students formed the experimental group and the other 30 formed the control group. To establish the validity of the 'matched group', 't' test was applied to find out the significant difference between the mean scores of the experimental and the control groups on their Intelligence, Socio economic status, and previous Achievement.

Conducting the experiment

In this study, the investigator used Jigsaw method of co-operative learning for preparing the lesson plan in plus level. First administered social skills inventory as pretest to both the groups to assess the pretest scores of the learners. Then the experimental group was taught through co-operative learning approach and the control group was taught the same lessons through the traditional method for a period of 30 days for duration of 90 minutes per day. Both the groups were taught by the investigator. After the instructional treatment, the same test was administered as post test. The data were collected for analysis.

Statistical techniques used

The investigator used the following statistical techniques

71

- (i) Arithmetic mean
- (ii) Standard deviation
- (iii) t-test (iv)

ANCOVA Analysis and interpretation

Comparison of social interaction skills between experimental group and the control group for the total sample pre test level.

Null hypothesis

There exists no significant difference between experimental group and the control group in social interaction skills at the pre test level for the total sample.

TABLE 1

Pretest analysis

Group	Mean	SD	N	Mean difference	t	p	Sig.level
Experimental	15.20	4.92	30	1.20	0.93	0.359	Not significant
Control	14.00	5.13	30				

As the above table shows, since the p value was greater than 0.05, it was not significant at any level. Hence the null hypothesis was accepted. It indicates that the difference between the experimental group and the control group for the total sample in their social interaction skills was not statistically significant at any level in the pre test. Hence, before the experiment, both the groups had similar social interaction skills.

Comparison of Social interaction skills between experimental group and the control group for the total sample post test level.

Null hypothesis

There exists no significant difference between experimental group and the control group in social interaction skills at the post test level for the total sample.

TABLE 2
Post test analysis

Group	Mean	SD	N	Mean difference	t	p	Sig level
Experimental	40.17	7.80	30	8.74	4.23	0.000	0.01
Control	31.43	8.19	30				

In the above table, since the p value is lesser than 0.01, it is significant at 0.01 level. Hence the null hypothesis was rejected at 0.01 level of significance. It indicates that the difference between the experimental group and the control group for the total sample in their social interaction skills was statistically significant at 0.01 in the post test level. Further, it was inferred from the mean scores, after the experiment the students in the experimental group scored more in social interaction skills than that of the control group. Hence, the cooperative learning approach was more effective in developing social interaction skills among the students.

Ancova Analysis

Comparison of Effectiveness of the Cooperative learning approach and the Traditional method groups on Social interaction skills for the Total Sample.

Null hypothesis

There exists no significant difference between the experimental group and the control group in their social interaction skills for the total sample in the adjusted post test level

TABLE 3

Adjusted post test analysis

	Mean		Source	Sum of squares	df	Mean square	F	p	Sig level
	Exptl	Tradl							
Pretest (X)	15.20	14.00	Between groups	21.60	1	21.60	0.856	0.359	NS
			Within groups	1462.80	58	25.22			
			Total	1484.40	59				
Posttest (Y)	40.17	31.43	Between groups	1144.07	1	1144.07	17.888	0.000	0.01
			Within groups	3709.53	58	63.96			
			Total	4853.60	59				
Sum of squares (SXX, Y)			Within groups	1649.00					
			Total	1806.20					
	Adjusted Posttest (X, Y)	39.49	32.11	Between groups	805.21	1	805.21	24.801	0.000
Within groups				1850.63	57	32.47			
Total				2655.84	59				

A preliminary analysis of variance (ANOVA) was carried for pre test and post test separately. As shown in the figure since p value was greater than 0.05 in the pre test level, there was no significant difference in achievement score between the experimental group and the control group at the pretest level. And for the post test the p value was lesser than 0.01, and therefore, it was significant at 0.01 level. After correcting the final achievement score for difference in initial scores, ANCOVA was applied to the final score. The value of the ANCOVA (F_{yx}) was 24.80, and since $p < 0.01$, it was significant at 0.01 level. From the adjusted post test value it was clear that the final average score on achievement in Mathematics after being adjusted for the initial difference in the experimental group (39.11) was significantly higher than that of the control group (32.11). So it was concluded that the co-operative learning approach was statistically more effective than that of the traditional method in developing social interaction skills among higher secondary students.

Major findings

- There was no significant difference between the students of the experimental group and the control group in their social interaction skills in the pre test level.
- The post test t value on social interaction skills of the higher secondary students showed remarkable difference between the experimental group and the control group. The ANCOVA analysis showed that the social interaction skills of the students of the experimental group were higher than the students of the control group. Hence the co-operative learning approach was more effective than the traditional method for developing social interaction skills among the higher secondary students.

Educational implications

- i. Co-operative learning develops social interaction skills. Therefore the co-operative learning approach could be used for the teaching-learning process.
- ii. Faculty improvement programmes namely orientation courses

- refresher courses, seminars and workshops could be organized for teachers to familiarize them with the various aspects and techniques of co-operative learning approach.
- iii. The present B.Ed and M.Ed curriculum could be reconstructed so as to include the importance, use and practice of co-operative learning approach in it.
 - iv. Developing assertive communication skills through social interaction.

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