
PEER TUTORING AS AN INTERACTIVE LEARNING STRATEGY TO IMPROVE ACADEMIC ACHIEVEMENT OF HIGHER SECONDARY STUDENTS

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Abstract

The purpose of this study was to find out the effect of Interactive Learning Strategy i.e. peer tutoring in improving the academic achievement of Higher Secondary students. For the purpose, an experiment was carried out in a Government higher secondary school, Peravurani. The sample consisted of 25 students in control group and 25 students in experimental group. The independent variables were the interactive learning strategies viz., peer tutoring and traditional instruction. The dependent variable was academic achievement in Economics and the students' back ground variables such as gender, locale and parent education were considered in this study. The data were collected using an achievement test and it was analyzed by applying 't' test. The result of the study tended to be in favour of interactive learning strategy, i.e. peer tutoring as an effective strategy in enhancing better achievement in economics among the Higher Secondary students.

Introduction

An explosion of knowledge is occurring all around us and experiments in the sphere of instruction, instructional technology are being conducted and a new instructional strategy framework is being designed for students right now or to minimize the age old teaching methods are not adopted in classrooms leading to low level of achievement of the students in their subjects. Now-a-days, the teachers are still using the text books and conventional teaching methods are least effective and fail to tap the minds of the students at the higher secondary level and peer tutoring technique help them achieve their learning potential.

Though our teachers are aware of the weakness and short comings which infest the education system and the process of teaching and learning, they also very well realize that the present system cries for a revolutionary change in the methodology of

teaching for bringing about effective improvement, there in and ridding it of all its drawbacks and exposing it to the latest techniques and processes developed in this field. The teachers have to take on this challenge by coming to grips with the new methods and techniques of teaching by adopting them as an innovation in the class room situation. A teacher needs to present new information in smaller chunks and offer strategy stepping points for demonstration, descriptions, summarization, discussion and predictions. Teachers also need to take steps to establish and communicate learning goals and track student progress as they interact with new knowledge (Marzano, 2007). Higher Secondary students are afforded the opportunity to achieve better in their academic excellence side by side with their age-level peers, who will hopefully do be their co-workers. Interactive learning strategy viz. peer tutoring/co-operative learning bridges opportunities to meet student and those opportunities should include differentiated instruction, accommodations and modifications happening, may be due to peer interactive practices at large.

At present economics subject do not find an important place in the higher secondary curriculum. This situation needs to be rectified. Now the financial economics subject is given less importance at the higher secondary level. Economics is being taught in the classes by traditional method. As a result, the main spirit behind economics does not get stirred up fully for the students.

The investigator feels that teaches should adopt interactive learning strategies viz., peer tutoring, and co-operative learning techniques, in the class-room situation with traditional method, which would in motive them to study the subject economics. This would promote the process of teaching learning and better interaction of students and enabling them to attain their knowledge pertaining to the subject economics in the present classroom situation.

Therefore, the investigator felt it necessary to study the "Peer Tutoring as an Interactive Learning Strategy to Improve Academic Achievement of Higher Secondary Students with special reference to Economics".

Objectives of the Study

The objectives of the study are stated as follows:

- To identify the interactive learning strategy for higher secondary students in economics
- To find out the effectiveness of Interactive learning strategy on the achievement of higher secondary students in Economics
- To find out the significant difference between the pre- test and post-test of control and experimental groups
- To find out the significant difference between post-test of experimental group in terms of the variables gender, local and parents education.

Methodology

The pre-test and post-test two group randomized design was followed. For the present study 50 students studying in plus one in Government higher secondary school, Peravurani was taken as the sample. The sample of 50 students was divided into two equivalent groups on the basis of the pre test scores in economics. Among the two groups one was designated as the control group having 25 students. The remaining 25 students were designated as the experimental group. The selected students were randomly assigned to the group. Thus the group was equated in terms of the pre achievement scores. Thus the homogeneity of the two groups was ensured. After selecting the two matched groups for the present study, the investigator taught both the matched group. The experimental group was taught by adopting the peer – tutoring method, while the control group was taught using the traditional method.

Satistical Techniques Used

The following statistical techniques were employed for the analysis and interpretation of the data.

1. Mean and standard deviation
2. 't' test to find out the significance of difference between the means.

Data Analysis

Hypothesis – I

There is no significant difference between control and experimental group at the post test

Table 1 Mean, Standard Deviation between post test scores of control and experimental group in the calculated 't' value

Group	N	Mean	S.D	't' value
Control	25	18.6	3.41	2.79
Experimental	25	21.2	4.53	

The calculated 't' value (2.79) is higher than the tabulated value (2.09) with degrees of freedom 24 corresponding at 0.05 level of significance. When the control group is compared with the experimental group, it is observed that the experimental group excels the control group in the academic performance of the students. Further, the result indicates the significant effect of peer tutoring on improving the academic performance of the students in economics.

Hypothesis – II

There is no significant difference between post-test of experimental group in terms of gender, locale and parents education.

Table 2 Mean, Standard Deviation between post test scores of experimental group in different variables and the calculated "t" value

Variables	N	Mean	SD	't' value
Male	22	23.1	5.31	1.67
Female	28	23.3	4.98	
Rural	22	22.7	4.21	0.98
Urban	27	23.5	4.13	
Graduate Parents	18	22.6	4.79	1.19
Non-Graduate Parents	32	22.9	4.61	

The calculated 't' values (1.67, 0.98 and 1.19) are lower than the tabulated value (2.09), corresponding at 0.05 level of significance. Hence the null hypothesis is accepted. The male and female students, rural and urban students, students of graduate and non-graduate parents were not significantly differed at the post test. The male and female students, rural and urban students and the students of graduate and non-graduate parents are similar in terms of their achievement at the post test level.

Summary of Findings

The findings are presented here under in accordance with the objectives of the study

1. With a view to knowing the effect of Peer-tutoring as an Interactive learning strategy on academic achievement in economics in the experimental group, it was found that the experimental group excel significant progress in post achievement test in comparison to their respective counterpart i.e. control group students. The better achievement among students of experimental group happens, may be due to adaption of peer-tutoring technique.
2. On the whole, the experimental group demonstrated highly significant progress in the total achievement scores in Economics in comparison to the total control group, as the mean value of post achievement test achieved by the total experimental group is significantly higher than the means of the total control group.
3. The male and female students, rural and urban students, the students of graduate and non-graduate parents do not differ significantly in terms of their academic achievement in Economics. All the students were found to be similar in terms of their achievement at the post-test level, this may be due to their attention in introducing the novelty of peer-tutoring technique.

Implications of the Study

The educational implications of the study are follows

- The teachers must learn to use multiple methods, materials and approaches for the students at the higher secondary level and students who may require reinforcement of the content through Interactive learning process to understand the economics concepts better.

- It gives enough opportunities for all students to work together and learn their subject, aside from increasing motivation to learn, improves relations among student peers. Suitable rewards/incentives have to be provided for healthy interaction and involvement in tutoring programmes for the students.
- A peer-tutoring collaborative relationship influences students' deeper understanding about the subject economics. By this process of peer-tutoring and because of the student's experiences, a desirable change in his/her behavior happened among students. Learning occurs with in learners i.e. through their activity. Therefore teachers should provide such opportunities/facing such experiences to them that they may achieve desired outcomes in their subjects.
- Teachers are still adopting age old techniques and aids. Therefore, the select interactive learning strategies viz, peer tutoring techniques, co-operative learning techniques, group discussion may be adopted for students at the higher secondary level. Interactive learning strategy can only much is undertaken where there is not much distraction in the educational environment. It can be away from the class, in the verandah or in the open place etc.

Conclusion

The findings of the study lead to the conclusion that Interactive learning strategy has a significant effect in raising the level of academic achievement of the students in economics. The interactive learning make them progress in acquiring adequate knowledge of the subject. It has been suggested that peer tutoring, co-operative learning are helpful in increasing the interpersonal interaction and communication skills as well as in developing a right attitude towards the subject economics among higher secondary students. This kind of learning methods and interactive/inter personal relationships that will nurture the students a wide range of understanding the subject. Adopting Interactive learning strategy is in accordance with present class room situation all students are able to solve the problems of the class room. This decreases teachers talk in the class increases students' academic tasks in the classroom helps them deeper understanding about the subject.

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