

**COLLABORATIVE LEARNING: AN EXPERIENCE**

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Abstract

Collaborative learning is an educational method or methods where two or more students work together to learn something. It's based on the general premise that groups of students can learn more from each other through sharing and social interaction than they would if they learned on their own. This paper shows general basic information about cooperative learning and it discusses about a small experiment taken on M.Ed. students of Bhavnagar university with its process and results. Findings of this study have been shown as both approaches; qualitative and quantitatively.

Keywords. *collaborative learning, active learning*

Introduction

Collaborative or cooperative learning is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. Generally, students are working in groups of two or more, jointly searching for understanding, solutions, or meanings, or creating a product. Collaborative learning refers to learning processes in which learning takes place in a small group with an interactive social environment through cooperative processes for common academic purposes and shared learning tasks (Alderman, 2000; Gokhale, 1995). In this type of learning, learners work collaboratively on a real problem over a relatively long period of time making use of a variety of resources which enable them to realize various cognitive processes such as organizing and evaluating information. At the end of the process learners present what they have learned through personally meaningful artefacts such as a multimedia presentation, play or poem (Grant, 2002). Learners start this process with dissimilar characteristics. Their attitudes towards, and their beliefs about, education and learning itself (as well as their learning styles) are relatively different. However, during this process they share

their individual cognitions with each other and make decisions built upon the accumulation of these 'individual cognitions'. Collaborative learning processes emphasize searching for and constructing common meaning beyond individual knowledge and subjective meaning while working cooperatively on the same learning tasks. In this process, students define their objectives. Then they outline the project/task plan, and research and design the product. They finalize their products after solving the problems that may arise during the production stage. Group products can be material or verbal. Material products such as posters, written reports or objects facilitate interaction because students can refer to parts of the product that they are constructing. The products provide a joint working space on which the results of joint thinking can be made visible. When students are simultaneously involved in the same task and must achieve a common goal, there is a need for them to communicate, share ideas, coordinate and negotiate meaning (Kimber, 1996). Van den Bossche et al. (2006) say that collaborative processes start with the articulation of personal meaning, and other team members give explanations by using this understanding. If accepted, the offered meaning can become part of the common meaning. However, the team members may diverge in their interpretation and tackle the situation from different perspectives. The team will benefit if divergence in meaning leads to future negotiation. Through this negotiation by argument and clarification, the team works toward a convergence of meaning. The existence of co-construction and constructive conflict in the interaction of the team influences the development of shared ideas positively. Studies show that the effect of collaborative learning depends upon multiple conditions such as the group composition (size, age, gender, heterogeneity and others), the task features and the communication media etc. Keeping mind all these literature and researches, to prepare a design for cooperative learning and to tryout the same on M Ed student were the main objectives of the study.

Collaborative Learning Programme

There are many cooperative learning strategy. Below are some basic characteristics of these learning styles.

Converger: Individuals with converger traits are effective in problem-solving, decision-making, logical analyses of thought, and their implications. They prefer dealing with technical problems rather than social and interpersonal issues.

Diverger: A divergent learning style has opposite learning strengths from a convergent one. The most significant feature of individuals with this learning style is their skill in creative imagination. They like multidirectional information gathering.

Assimilator: Assimilator individuals are highly skilled in creating theoretical models that compile various observations in one definition. They are successful in dealing with large amounts of information and in organizing it logically. For them, the logical validity of a theory is more important than its practical value.

Accommodator: An accommodative learning style has opposite learning strengths from assimilation. The strongest feature of accommodator individuals is making plans and implementing them. They prefer teamwork (Cook, 1997). A simple cooperative learning technique was used for the study. In which, participants just provided learning material- like self learning material and they was asked to learn by reading the material and discussion with their peer group. Role of teacher was as a facilitator who could take part in discussion and provide needed guidance to the participants.

Methodology

This study was carried out on M Ed students of Department of Education, Bhavnagar University of Gujarat, India. Whole group of ten students of Educational Technology group of academic year 2011-2012 was selected as a sample. Single group pre test post test design was selected for the experiment. A sub- point of semester one: The role of educational technology in in-service and pre-service teacher education programme was chosen as content which was given to the participants.

Data collection

Seminar hall of Department of Education, Bhavnagar university was the place where this experiment was taken. Two methods were selected for data collection: first was quantitative method which was used as pre test and post test data. A teacher made test of 20 marks covering objective and descriptive type questions was constructed. The same test was use as pre test and post test. The second method was qualitative. Observation technique was selected for collecting qualitative data. Researcher observed activities carried out by the participants to clarify the concept. Some times researcher took part in their discussion to observe the discussion pattern and guide them, if needed. The data collection process is given below:

Stage: 1 Instruction for topic and test was given to the participants

Stage: 2 Pre test (20 marks- 20 minutes)

Stage:3 Material was provided to the participants

Stage:4 Help provided to participants by researcher to make group and create collaborative atmosphere

Stage: 5 Post test (20 marks- 20 minutes)

Result and Discussion

Data was collected by pre test and post test. Data analysis is given below:

Test	N	Mean	SD	t
Pre test	10	3.50	1.58	12.94
Post test	10	14.50	2.17	

Data analysis shows that mean of post test (14.50) is higher than pre test (3.50) and t value found significant which is 12.94. This shows that students performed much better than the pre one. Observation of the group was interesting, during small-group interactions, they found many opportunities to reflect upon and reply to the diverse responses fellow learners bring to the questions raised. They felt comfortable in small groups which allowed them to add their perspectives to an issue based on their thinking differences. When questions were raised, different students expressed variety of responses. Students learnt to relate to their peers and other learners as they work together in group enterprises. This could be especially helpful for students who had difficulty with social skills. They got benefit from structured interactions with others. In the experiment, Each member had opportunities to contribute in small groups. Students were apt to take more ownership of their material and to think critically about related issues when they worked as a team. Because there were more exchanges among students in small groups, they received more personal feedback about their ideas and responses. Researcher found that it Develops higher level thinking skills, Promotes student-faculty interaction and familiarity and Increases student retention with builds self esteem in students. It enhances student satisfaction with the learning experience and promotes a positive attitude toward the subject matter. It develops oral communication skills and social interaction skills with positive race relations. It fits in well with the constructivist approach . Students developed responsibility for each other and built more positive heterogeneous relationships. The encouraged to use peer assessment

techniques The used a team approach to problem solving while maintaining individual accountability.

Conclusion

Cooperative learning is one of the better ways to learn and retain content. The method permits students to be involved and make decisions about their own learning. Teacher can guide student groups and let them progress at a comfortable environment. The method also increase a sense of “community” among students. Result of this study has been shown positive sign to increase the level of learning for all members of the group. Students build critical thinking skills as they're encouraged to challenge each others' thinking, mediate and come to a group conclusion. When they're grouped with students of diverse backgrounds, and they learnt how to focus on common goals.

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