Research Paper Education

An Approach to Increase Scholastic Achievement: Cooperative Learning

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ABSTRACT

Cooperative learning due to its influential aspects is the most prevalent teaching learning technique in the modern world. Cooperative learning is an educational approach which aims to organize classroom activities into academic & social learning experiences. Cooperative learning is a strategy that develops healthy interaction skills, promotes success of the individual student and group members, and forms personal and professional relationships (Johnson & Johnson, 1999). It promotes thought provoking and interactive environment for the students. Cooperative learning is a great tool that can be used to improve student achievement in any classroom. This paper discusses the effect of cooperative learning on Student Achievement.

KEYWORDS Cooperative Learning, Student Achievement

Introduction

Cooperative Learning is an approach to group work that minimizes the occurrences of those unpleasant situations & maximizes the learning & satisfaction that results from working on a high-performance team. Co-operative learning is an umbrella term used to describe a variety of educational approaches involving joint intellectual effort by students or students and teachers. Co-operative learning represents the most carefully structured end of the collaborative learning continuum, where instruction involves small groups of students who work together to maximize their own and each other's learning with the group's learning being structured around precisely defined tasks or problems (Smith & MacGregor, 1992). Cooperation is working together to accomplish shared goals. Within cooperative situations, individuals seek outcomes that are beneficial to themselves and beneficial to all other group members. Co-operative learning is the instructional use of small groups so that students work together to maximize their own and each other's learning. (Johnson, Johnson & Holubec 1988).

Types of Cooperative Learning Groups

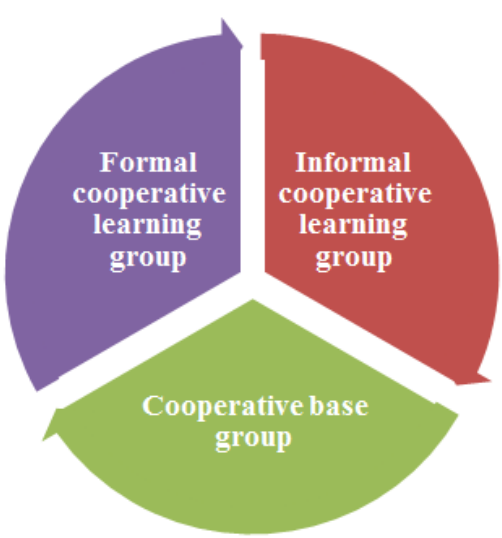

Fig. 1 Types of Cooperative Learning Groups

Essential Elements of Cooperative Learning

Johnson and Johnson (1999) presented five essential elements (fig. 2) that define co-operative learning as an instructional activity. First and most important feature is positive inter-dependence which involves students cooperating, supporting, and helping one another to be successful. The second element is individual accountability which involves participants being responsible for their share of the work and helps to prevent unequal individual contribution. Third, students must possess interpersonal and small-group skills that are necessary for quality co-operative learning and must be motivated to use these skills. Group processing, the fourth key element, requires members to monitor goal achievement and can be fostered by instructors who set specific rather than vague goals, allow sufficient time for group work, and issue clear expectations about group performance. Last key element is face-to-face interaction where students promote each other's success by sharing resources.

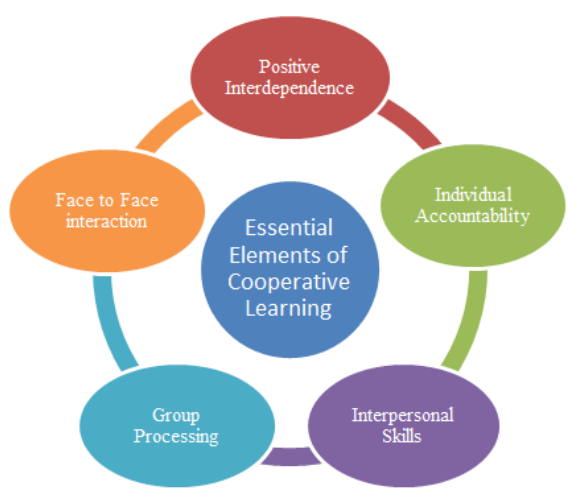

Fig. 2 Essential Elements of Cooperative Learning

Cooperative Learning Strategies

Co-operative learning Strategies such as STAD (Student Teams - Achievement Division), TAI (Team Assisted Individualization), TGT (Teams games Tournaments) & Jigsaw II

are very effective team teaching techniques and they can be introduced to the teacher training programmes in the form of workshops through role-playing. The idea which lies beneath all co-operative learning strategies is that students work together to learn and are responsible for one another's learning as well as their own (Slavin, 1990). In **STAD,** the teacher presents the content in a large group activity in a regular manner with opening, development and guided practice. Then as opposed to individual study, students are provided with learning materials i.e. worksheets developed for STAD that they use in groups to master the content. When students are ready, they are administered formative test. The teacher scores this test and, uses this information to compute improvement points. Chen (2004) investigated the positive effect of Student Teams- Achievement Division (STAD) in teaching English as a foreign language; Tarim & Akdeniz (2007) found positive effects of STAD on Mathematics achievement and retention. **TAI** is specifically designed to teach mathematics to students in grade 3-6. In TAI four or five member mixed ability learning teams work together to and complete their worksheets, checkouts, formative tests and homework. In TAI students enter an individualized sequence according to a placement test and then proceed at their own pace. Teammates check each other's work using answer sheets and help one another with any problems. Final unit tests are taken without teammate help and are scored by student monitors. Tarim & Akdeniz (2007) found positive effects of TAI on Mathematics achievement and retention. Gupta & Pasrija (2011) also found supremacy of co-operative learning method (TAI) over traditional method of teaching. **TGT** involves the same use of heterogeneous teams, instructional format, and work sheets as in STAD, for the learning of information but replaces the tests with weekly tournaments, in which students play academic games with members of other teams to contribute points to their team scores. Although study teams stay together for six weeks, tournaments table composition changes weekly. Teammates help one another to prepare for the games by studying worksheets and explaining problems to one another, but when students are playing the games their teammates cannot help them, ensuring individual accountability. Wyk, M. M van (2010) determined the considerable positive effects of the cooperative learning approach of Teams-Games-Tournaments (TGT) on the content knowledge achievement, retention, and attitudes of Economic education students toward the teaching method. **Jigsaw-II** assigns students to groups and asks each student to become an expert on one aspect or part of an organized body of knowledge. These experts then are responsible for teaching other team members, all of whom are then held accountable for all the information covered by each member. Elmar and Julia (2007) found that third graders used the jigsaw method with satisfactory learning results. **Learning together** involves students working in four-or-five member heterogeneous groups on assignments. The groups complete a single assignment and receive praise and rewards based on the group product as this method emphasizes team building activities before students begin working together and regular discussions within groups about how well they are working together. Keramati (2009) and Kaul (2010) found that learning together technique of co-operative learning method is more effective than traditional teaching methods. **Group investigation** is structured to emphasize higher order thinking skills such as analysis and evaluation in a general classroom. In this method, students form their own two to six member groups. After choosing sub-topics from a unit being studied by the entire class, the groups further break their sub-topics into individual tasks and carry out activities necessary to prepare group reports. Each group then makes a presentation or display to communicate its findings to the entire class. Shachar and Sharan (1994) reported the higher achievement scores for the students taught with the Group Investigation method than in those taught with the Whole-Class method.

Academic achievement

Academic achievement is one of the most important goals of education in this competitive age. Achievement in the educational situation has frequently been referred to as scholastic achievement or academic attainment. The term scholastic achievement signifies various aspects of learning as "Measures of motivation" (Mc Clleland 1953), "Level of aspiration" (Sawrey, 1958). Dictionary of Psychology (Chaplin, 1965) defines educational or academic achievement as specified level of attainment proficiency in academic work as evaluated by the teacher, by standardized tests or by combination of both. Academic achievement is the outcome of education the extent to which a student, teacher or institution has achieved their educational goals. Academic achievement is knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or unit based on pupil's performance. (Trow, 2004).

Cooperative Learning and Academic Achievement

Cooperative Learning is a great tool that can be used to improve Academic Achievement in any classroom. Educators can use various strategies of cooperative learning along with their instructional techniques to enhance learning in a classroom. Stahl and Vansickel (1992) noted that every cooperative-learning strategy, when used appropriately, can enable students to move beyond the text, memorization of basic facts, and learning lower level skills. Bramlett (1994), Megnin (1995), and Webb, Trooper, and Fall (1995) in their contributions noted that cooperative learning activity engages the student in the learning process and seeks to improve the critical thinking, reasoning, and problem-solving skills of the learners. Stevens and Slavin (1995) stated that, the fact that it has been linked to increases in the academic achievement of learners at all ability levels is another reason for its use. Lampe et al (1998) again emphasized that as learners, some of who might normally refuse to speak out in a traditional setting, become actively involved in the learning process through group interaction. Cooperative learning appears to promise positive effect for students, as reflected in increased academic achievement & improved social attitude & behavior. Academic achievements of students have been found to be enhanced by the use of cooperative learning (Mehra & Thakur, 2008; Kaul, 2010; Chhabra & Tabasum, 2010).

Conclusion

Cooperative learning is now widely recognized as one of the most promising practices in the field of education. The fad that working together to achieve a common goal produces higher achievement & greater productivity than does working alone is so well confirmed by so much researches that it stand as one of the strongest principles of social & organizational psychology. It is very important to implement cooperative learning properly to attain the maximum benefit. Students all around the world can benefit from cooperative learning. Educators can use their understanding of cooperative learning and utilize this tool effectively in the class to enhance the academic achievement.

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