CO - OPERATIVE LEARNING: A STANDARD FOR HIGH ACHIEVEMENT

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Learning is not passive absorption of knowledge but an active process. It is the outcome of interaction between the learner and the environment where he is learning. This ‘Interaction effect’ may bring in qualitative and quantitative changes and development in the learner.

Learning occurs best when students are actively engaged in the learning process and work in collaboration with other students to accomplish a shared goal. In order to achieve highest level of achievement, cooperative learning is the best approach.

One of the goals of cooperative learning is to teach students initiation and self reliance. It reveals some of the structural complexities involved in implementing authentic learning in the classroom; moreover, Jigsaw process encourages listening, engagement and empathy by giving each member of the group an essential part to play in the academic activity.

In jigsaw strategy, each member of a group is assigned a different part of a material. Then all the students form different groups, who have the same learning material, gather together and form an expert group to discuss and communicate with each other until they all mastered the material. Later, the students will return back to their home group to teach the material to other members of their group.

The jigsaw strategy places great emphasis on cooperation and shared responsibility within groups. The success of each group depends on the participation of each individual in completing his task. This is an excellent method for improving students team work and communication skills.

"What children can do together today, they can do alone tomorrow.

The present scenario shows that the schools have competitive classroom. Most of the time, students work independently, and they are continually in competition with one another for grades, praise and recognition. In such classroom, winners and losers can be predicted fairly reliably the day they first come into class: those who have succeeded in the past will probably succeed, and those who have failed will probably fail.

Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teacher, memorizing pre-packaged assignment, and spitting out answers. They must talk about what they are learning, write reflectively about it, relate it to past experiences, and apply it to their daily lives, They must make what they learn part of themselves (Chickering & Gamson 1997).

Students learn best when they are actively involved in the process. Researchers report that regardless of the subject matter, students working in small groups tend to learn more of what is taught and retain than when the same content is presented in other instructional format. This is only possible when traditional classroom changes to cooperative classroom, where students are actively involved in the learning process.

COOPERATIVE LEARNING

Cooperative learning may be defined as small heterogeneously mixed working groups of learners learning social skills while working toward a common academic goal or task.

Cooperative learning involves the more conventional notion of cooperation, in that learners work in small group on an assigned project or problem under the guidance of the facilitator who monitors the groups, making sure the learners are staying on task and are coming up with their assignments. Cooperative learning is gaining popularity for a number of reasons. Cooperative learning raises achievement, promotes positive self concept, and develops respect for others. It is especially useful for special children, low socio economic groups and underachievers who have not succeeded to the same degree as other children.

Studies show that we learn.

10% of what we READ
20% of what we HEAR
30% of what we SEE
70% of what is DISCUSSED with others.
80% of what we EXPERIENCE personally
90% of what we TEACH
All this is possible only with cooperative learning.

**ELEMENTS OF COOPERATIVE LEARNING**

There are five essential elements of cooperative learning, and if they are incorporated in the learning process it will be become more effective.

**Positive Interdependence**: It exists when students perceive that they are linked with group mates in such a way that they cannot succeed unless their group mates do (and vice versa) and / or they must coordinate their efforts with the efforts of their group mates to complete a task.

There are number of ways of structuring positive interdependence within a learning group like positive goal interdependence, positive reward-celebrate interdependence, positive resource interdependence and positive role interdependence.

**Face to Face Promotive Interaction**: Positive interdependence results in promotive interaction. Promotive interaction may be defined as individuals encouraging and facilitating each other's efforts to achieve complete tasks and produce results in order to attain the group’s goals. Promotive interaction is characterized by individuals providing each other with efficient and effective help and assistance, exchanging needed resources, such as information and materials, and processing information more efficiently; providing each other with feedback in order to improve their subsequent performance.

**Individual Accountability/ Personal Responsibility**: Individual accountability, which exists when the performance of individual students is assessed, the results are given back to the individuals and the group, and each student is credited by group mates for contributing his fair share to the group’s success.

**Interpersonal and Small-Group Skills**: Social skills must be taught through the cooperative learning.

**Group Processing**: Effective group work is determined by the criterion of how well the group is functioning. Group processing may be defined as reflecting on a group session to:

- Describe what members actions were helpful or unhelpful.
- Make decisions about what actions to continue or change.

**Cooperative Learning Methods**

Cooperative learning methods are structured, systematic instructional strategies capable of being used at any grade level and in most school subjects. There are many techniques under cooperative learning like think-pair-share, numbered heads, three-step interview, team pair solo, jigsaw, etc.

**JIGSAW CLASSROOM**

Jigsaw classroom was developed by Elliot Aronson in 1971 in Austin. Jigsaw classroom is a cooperative learning technique which reduces conflict and increases positive educational outcomes. Just as in a jigsaw puzzle, each piece – each student’s part – is essential for the completion and full understanding of the final product. If each student's part is essential, then each student is essential and that is precisely what makes this technique so effective.

Jigsaw process was implemented on teacher trainees of our college and following steps were followed.

Students were divided into 5 groups (called home groups), consisting of 5 students each. The groups were diverse in terms of gender, ethnicity and ability.

One student in each home group was appointed as leader.

The unit 'Mass Media and Education' was divided in 5 segments and each student of each group was allotted a segment.

Each student was given time to read over his segment and become familiar with it.

Students in expert group were given time to discuss about the segment and make a report.

Students return to their 'home group' after the discussion.

Each student presented his segment to the home group and other students were encouraged to ask questions.

Teacher’s role was to float from group to group, and observe the process. If any group was having problem it was solved immediately.

At the end of the session a quiz was conducted on the material discussed. This helps in individual's assessment.

**Why Jigsaw Classroom**

Jigsaw classroom helped teacher trainees in many ways to learn the concept and also to develop many skills.
It is less threatening for many students (especially underachievers).
It increases the amount of student participation in the classroom.
It reduces fierce competition.
It reduces the teacher's dominance in the classroom.
It reduces student's reluctance to participate in the classroom activities and help create an active learner-centred atmosphere.
It develops valuable social skills such as resolving conflict problem solving criticizing ideas and not people, paraphrasing, asking questions, giving direction to the group's work, and building on each other's information, trust-building communication and leadership skills.
Teacher's role changes from being in the room doing most of the work to being a facilitator of learner learning.
Teachers cover additional materials with more details with learners, who will increasingly enjoy the learning process.

**Constraints on jigsaw**
Teachers face a few challenges in a jigsaw process, which are as follows:
Training and experience is required.
Groups finish the work at different times, which may result into different issues.
Initially, the teaching of social skills takes up great deal of class time, affecting the amount of content covered.
Working in cooperative groups created a level of ‘noise’ which may be uncomfortable for others.
The problem of dominant student.
Some slow students may lag behind or may not be accepted by the groups.
Bright students may find it boring as they will complete the work early.
If not planned properly this process may be time consuming.
What teachers must do
Success of jigsaw classroom depends on the teacher and how the elements of cooperative learning are implemented. Teachers must keep following points in mind to make jigsaw process successful.
Create a sense of positive interdependence in the groups so that learners feel mutually connected to each other.
Keep the size of the group small in order to ensure individual accountability.
Students with poor study skills must be encouraged and their reports must be cross-checked to ensure good presentation in front of the one group.
Bright students must be encouraged to develop the mind set of ‘teacher’; thus, the learning experience can be transformed from a boring task into an exciting challenge.
Cooperative learning is implemented whenever learning goals are highly important, mastery and retention are important, a task is complex or conceptual, problem solving is desired, divergent thinking or creative is desired, quality of performance is expected and higher-level reasoning strategies and critical thinking are needed.
Cooperative learning is not the easiest way to teach, but when used effectively will help learners to become better learners, praise and support each other's learning and develop necessary social/collaborative skills for use in problem solving.
Cooperative learning is good for all students and that is why it is a part of comprehensive school reform efforts. To achieve this reform, teachers must work together to build network within their school community. It is best, to start slowly, be well prepared and let cooperative learning evolve into a teaching style. Most of all, teachers must enjoy the process!