**LEARNERS AS BUILDER AND CREATORS OF KNOWLADGE**

**Mrs Archana V Katgeri,**

**Assistant Professor,**

 **Hansraj Jivandas College of Education, Mumbai University**

**INTROUDUCTION:**

The present scenario necessitates us to bring a change in the outlook of learning that is controlled outside the individual — by a teacher, trainer, instructional designer, or subject matter expert — to a learning that is internally controlled by the individual.

"Learning, is an active, constructive, cognitive and social process where the learner strategically manages available cognitive, physical, and social resources to create new knowledge by interacting with information in the environment and integrating it with information already stored in memory" (Shuell, 1988).

 **Learning is a constructive process:**The view that the learner should acquire the expert's knowledge does not necessarily acknowledge this constructive perspective. Knowledge and skills are gained and regained over and over in an on-going process between the learner and situations in which the knowledge and skills are required. The central notion is that understanding and learning are active, constructive, generative processes such as assimilation, augmentation, and self-reorganization. Thus learning is an active process of discovery and participation based on self-motivation rather than mere passive acquaintance of facts and rules. The role of the teacher is coming more to be seen as mentor or guide, facilitating and playing an essential role in this process. From this perspective, learning can be considered as a dynamic process in which the learner actively "constructs" new knowledge as he or she is engaged and immersed in a learning activity

Teachers can move away from their traditional role as one-way instructors towards becoming facilitators of learning. Emphasis should be on learning as a collaborative activity rather than an individual act, and on learning processes rather than memorization of information. More opportunities should be provided to the learners to think critically and interact socially .Successful organizations in both business and academia are those that are relentless in challenging themselves in the pursuit of better and more effective ways of responding to client needs. The advice that the Roman philosopher Seneca gave us two thousand years ago may be even more relevant today as it was during his time:

***“There is no favorable wind for those who do not know where they are going.”***

The paper focuses on the few of cooperative learning strategies tried out with the B.Ed students in the classroom

**COOPERATIVE LEARNING**

* Co operative learning may be defined as learner- centered instructional process in which small, intentionally selected groups of 3-5 students work independently on a well defined learning task; individual students are held accountable for their own performance; the instructor serves as a facilitator /consultant in group learning activities.
* Co operative learning has six procedural elements:
* Intentional group formation
* Continuity of group interaction
* Interdependence among group members
* Individual Accountability
* Explicit attention to the development of social skills
* Instructor as facilitator
* Some Basic Cooperative Learning Strategies
* Three-Step Interview
* Roundtable
* Think-Pair-Share:
* Gallery Walk
* Jigsaw
* Circle the Sage-

### Think-Pair-Share:

### Think: In this activity the instructor poses a question, preferably one demanding analysis, evaluation, or synthesis, and gives students thirty seconds or more to think through an appropriate response. This time can also be spent writing the response.

**Pair:** After this "wait time," students then turn to partners and share their responses.

**Share**: During the third and last stage, student responses can be shared within learning teams, with larger groups, or with the entire class during a follow-up discussion.

**For example**

The students were oriented to the basics of the incidental learning in the science method class. Later they were asked to think individually for the opportunities that the teacher would provide in the classroom for incidental learning in the subject of science. The students then were asked to share the information with their pairs and then later on with the entire class.

### Gallery Walk

### Assign a topic to be studied by a group. Let the group depict their thoughts, understanding of the topic by means of a concept map. All groups put up their products for the rest of the groups to see. One spokesperson remains near the group’s chart while the other members take a gallery walk to see what others have done. Queries will be answered by the spokesperson. The spokesperson role should be rotated so that no one is left without the stimulation of exploring the different student creations.

### For Example

### This strategy was used in the mathematics method group for the B.Ed students. A group of mathematics method B.Ed students were assigned to work on the life history and the contributions of the mathematicians from the syllabus( Aryabhatta, Euclid, Ramanujan) and later they presented the information in form of charts, pictures which were put up for the rest of the groups to see. The students were asked to take a Gallery walk, the spokesperson explained about the charts. Thus the students could gather information on their own through the gallery walk.

### Roundtable

Roundtable, a cooperative learning structure useful for brainstorming, reviewing, or practicing a skill, uses a single sheet of paper and pen for each cooperative learning group. Students in the group respond in turn to a question or problem by stating their ideas aloud as they write them on the paper. Team members are encouraged not to skip turns, but if their thoughts are at a standstill, they are allowed to say "Pass" rather than to turn the brainstorm into a brain drizzle. Thus, there is almost universal participation in Roundtable. Students, for example, could identify the characteristics of an effective leader or the attributes of terrorism before these topics are formally introduced. Comparing a student-generated list with those of the "experts," creates interest. In Roundtable, the multiple answers encourage creativity and deeper thinking.

**For Example**

This strategy was used to teach the educational implications of the topic Attention in the paper psychology of Learning. The students were given a brief idea about the concept of Attention. Then the students were placed in different groups each group consisting of 6-8 students. Heterogeneous groups were made which consisted of students who were slow learners, isolates, leaders , average and above average intelligence . Through brainstorming the team members arrived to number of implications for the topic of attention. Later one representative from each team was asked to present their thoughts in front of the entire class.

The lecture method would have dealt with the topic only from the teachers perspective were as this helped the students to give their suggestions and ideas for sustaining and attracting the attention of the children in the classroom based on their experiences encountered during the practice teaching lessons.

**Circle the Sage**-

 Divide the class into teams of say 4 to 5 members. Select some students from the class who will be able to explain a concept to the students. Those students (the sages) stand and spread out in the room. The teacher then has the rest of the classmates each surround a sage, with no two members of the same team going to the same sage. The sage explains what they know while the classmates listen, ask questions, and take notes. All students then return to their teams. Each in turn, explains what they learned. Because each one has gone to a different sage, they compare notes. If there is disagreement, they stand up as a team. Finally, the disagreements are aired and resolved.

**For Example**

This technique was used with the science method group to teach the topic of Non-formal Science Education and the role of the teacher. The students who acted as sages were selected by the teacher based on the potential as far as the explaining skills is concerned. The students were guided by the teacher about the content and the requirements. The students worked on the references under the guidance of the teacher and later shared the information with the class as the sages.

After every strategy there was an overall summary given by the teacher. The feedback given by the students was positive and they had thoroughly enjoyed all the sessions as compared to the lecture method. The students experienced how these strategies could be used in the real classroom settings.

Though these strategies demanded more time and effort on the part of the teachers and the students as compared to the lecture method, but the results were very satisfying.

**The Benefits of Cooperative learning:-**

* ***Active Learning*** Children learn more, and enjoy learning more when they are actively involved, rather than passive listeners.
* Education works best when it concentrates on thinking and understanding, rather than on rote memorization. Constructivism concentrates on learning how to think and understand
* It gives students ownership of what they learn, since learning is based on students' questions and explorations, and often the students have a hand in designing the assessments as well.
* By grounding learning activities in an authentic, real-world context, constructivism stimulates and engages students.
* ***Interaction*** :- It promotes social and communication skills by creating a classroom environment that emphasizes collaboration and exchange of ideas. Students must learn how to articulate their ideas clearly as well as to collaborate on tasks effectively by sharing in group projects
* Students must therefore exchange ideas and so must learn to "negotiate" with others and to evaluate their contributions in a socially acceptable manner. This is essential to succeed in the real world, since they will always be exposed to a variety of experiences in which they will have to cooperate and navigate among the ideas of others.
* The interaction among students increases their mastery of the concepts in the tasks.
* It is the opportunity for students to discuss, argue, and hear viewpoints of other members of the group which is the critical element of cooperative learning.
* ***Retention***: learners must engage in some sort of cognitive restructuring or elaboration of material if information is to be retained in memory and related to information already in memory one of the most effective means of elaboration is explaining the material to someone else.

I believe in teaching through cooperative learning because…

Allows for students to become engaged with one another

Cuts out the “talking head”

Children learn through own experiences based on their lives

Remember information down the road of life instead of memorization

As rightly said by **John Dewey that education should be viewed “as a social enterprise in which all individuals have an opportunity to contribute and to which all feel a responsibility.”**

References

[www.jigsaw.org/](http://www.jigsaw.org/)

serc.carleton.edu/introgeo/**cooperative**/index.html

[www.studygs.net/coop**learn**.htm](http://www.studygs.net/cooplearn.htm)

college.cengage.com/education/pbl/tc/coop.html

[www.mjal.org/Journal/Coop.pdf](http://www.mjal.org/Journal/Coop.pdf)

giftedkids.about.com/od/glossary/g/coop\_**learning**.htm