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|       | **Collaborative Learning helps in Critical Thinking and Knowledge Constructionhttp://www.educationinindia.net/images/toppiclinerec.gif****- *Dr. Archana Tomar****Lecturer Navrachana College of Education, affiliated with SNDT Women’s University*

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|   |   | **Introduction:** |

Twenty first century and its globaliged approach demands for building bridge and opening new vistas, which was not heard or seen before. People earlier were comfortable preparing their cakes and eating them with little sharing with the community. These days the sharing element has reached to such an extent if you have grape than also share it. Meaning thereby there is nothing like unique domain. The level of interdependence is most unique phenomena of globalization. This interdependence is important and necessary for growth of individuals as well as groups.We can no longer live in isolation. Keeping this backdrop in mind we at Navarachana college of Education have emphasized **collaborative work** at all levels; i.e from discussion **making, teaching, learning, activities, evaluation** etc.Before going to Navarachana Colleges endeavor. The author would like to focus on the meaning of collaborative learning. John Myers points out that the dictionary definitions of "collaboration", derived from its Latin root, focus on the process of working together; the root word for "cooperation" stresses the product of such work. Co-operative learning has largely American roots from the philosophical writings of John Dewey stressing the social nature of learning and the work on group dynamics by Kurt Lewin. Collaborative learning has British roots, based on the work of English teachers exploring ways to help students respond to literature by taking a more active role in their own learning. The cooperative learning tradition tends to use quantitative methods, which look at achievement: i.e., the product of learning. The collaborative tradition takes a more qualitative approach, analyzing student talk in response to a piece of literature or a primary source in history. Myers points out some differences between the two concepts: "Supporters of co-operative learning tend to be more teacher-centered, for example when forming heterogeneous groups, structuring positive inter- dependence, and teaching co-operative skills. Collaborative learning advocates distrust structure and allow students more say if forming friendship and interest groups. Student talk is stressed as a means for working things out. Discovery and contextual approaches are used to teach interpersonal skills

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| bullet | [**Design**](http://www.educationinindia.net/ta_280106.htm#l1) |
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Collaborative learning is one in which the individual working in group bring their life styles, their culture, their values and work together. The concept of collaborative learning, the grouping and pairing of students for the purpose of achieving an academic goal, has been widely researched and advocated throughout the professional literature. The term "collaborative learning" refers to an instruction method in which students at various performance levels work together in small groups toward a common goal. The students are responsible for one another's learning as well as their own. Thus, the success of one student helps other students to be successful. According to [Johnson and Johnson (1986)](http://scholar.lib.vt.edu/ejournals/JTE/jte-v7n1/gokhale.jte-v7n1.html#Johnson&Johnson), there is persuasive evidence that cooperative teams achieve at higher levels of thought and retain information longer than students who work quietly as individuals. The shared learning gives students an opportunity to engage in discussion, take responsibility for their own learning, and thus become critical thinkers ([Totten, Sills, Digby, & Russ, 1991](http://scholar.lib.vt.edu/ejournals/JTE/jte-v7n1/gokhale.jte-v7n1.html%22%20%5Cl%20%22Totten%2C%20et%20al.%22%20%5Ct%20%22_blank)). Where as **co-operative** learning is simply sharing of ideas to get the end product. Here at Navrachana College of Education practice both co-operative as well as **collaborative learning**. Co-operative learning we use in classroom teaching. Where the immediate neighbors sit in-group of **3-4 discuss** about the given topic for 5 to 10 minutes and get back to the teacher. Guidelines are provided for discussion and points are also given to the student. Strategies for critical thinking include, a willingness to look at you, persistent evaluation, ongoing fair-mindedness’ and commitment to an informed decision.This paper highlights the efforts of Navrachana towards collaborative learning. It has been talks divided into **5 segments**. The **first** one talks about theory, **second** one talks about activities and practice teaching, **third** one talks about evaluation **fourth** one talks about benefits and fifth one talk about problems.

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The design that we have created at Navrachana is fairly simple and for the following reason.

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| bullet | We have a heterogeneous group coming to us.

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| bullet | We have students with different levels of skills, knowledge, exposure, abilities and thinking. |
| bullet | We have students from various socio-economic backgrounds. |

They have different. Interest, attitude and aptitude. |

Now, they have come to a teacher education college, so we need to educate them and as far as possible provide maximum in one year. So, we have simple design which schools also follows, we have houses and house masters to break the initial ice. We have ice-breaking session it helps the group to gradually gel together. Each house has 14 to 15 members. The ice breaking session helps them to identify with group. These groups are randomly created. In theory paper there are 3 to 5 assignments per paper to be given to the students. Students are given the questions, they sit and brainstorm with each other based on the topic they read from book or Internet or even experience based. The groups are house based. The students are given the criteria on which they will be evaluated. One of the criteria is definitely involvement of all members of the house. According to [Rau and Heyl (1990)](http://scholar.lib.vt.edu/ejournals/JTE/jte-v7n1/gokhale.jte-v7n1.html#Rau&Heyl), smaller groups (of three) contain less diversity; and may lack divergent thinking styles and varied expertise that help to animate collective decision-making. According to [Slavin (1989)](http://scholar.lib.vt.edu/ejournals/JTE/jte-v7n1/gokhale.jte-v7n1.html#Slavin), for effective collaborative learning, there must be "group goals" and "individual accountability". When the group's task is to ensure that every group member has learned something, it is in the interest of every group member to spend time explaining concepts to group mates. Research has consistently found that students who gain most from cooperative work are those who give and receive elaborated explanations [(Webb, 1985)](http://scholar.lib.vt.edu/ejournals/JTE/jte-v7n1/gokhale.jte-v7n1.html#Webb). For further clarification they are always free to discuss with the teachers. Role-plays, power point presentations are the showcase of their collective work where the individual task is further compiled. Information for assignments is collected individually and later presented collectively as a power point presentation or a role-play. They put up combined efforts as well as individual efforts. Benefits of this design will be discussed in 4th section.

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|   |   | **ACTIVITIES:-** | http://www.educationinindia.net/../images/top.gif |

Apart from academic we have a number of activities for students like we have assembly activities (non graded), bulletin board competitions, garba competition etc. In all these activities students are supposed to work together we do provide a zero period for practice apart from the zero period the students do practice before and after college. So at the times of practice or any organizational activity students are in college on Sundays, holidays, and from 9.30 in the morning to 7.00 in the evening. In order to increase students personal effectiveness also trains them in seven habits of highly effective people. For every habit there is a group review again house wise. Practical are also integral part of the B.Ed program where the students are expected to work in pairs and perform psychology and A 3 (computer practical) here the pairing is between a novice and a person who has some knowledge. By the end of the year teams are stronger.**PRACTICE TEACHING:**In practice teaching also two problems were there 1. Language problem
2. Second subject mastery

This we took care through collaborative learning where the students without hesitation took help of their friends, before approaching the method masters they got them checked from their friends and finally they came to the method masters, thus reducing the number of errors and better conceptualization. Our practice teaching is staggered. After the three day schedule when they come back we have Reflection session. The practice teaching group sits in different venues and discuss about what were their strong points, what were their weaknesses, what types of opportunities they had, what were their initial fears and how did they overcome them. Thus, bringing a collaborative task in practice teaching. A report is prepared by leader and presented in front of the group. If they had some problems they also focus on it.

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|   |   | **EVALUATION:** | http://www.educationinindia.net/../images/top.gif |

Peer review: in microteaching, simulation and school practice teaching we do take students review where students give their comments for improvement. Bulletin board competition also has the element of peer review, where the marks are given by the peers and also by the subject experts.Evaluation is criteria based where the criteria is prepared by the teachers pool in their ideas. Even if an individual teacher prepares the criteria it is brought for discussion that is how through collaborative effort for evaluation.We also conduct workshop on evaluation, models of teaching to incorporate understanding by design.**BENEFITS OF COLLABORATIVE LEARNING:** According to [Vygotsky (1978)](http://scholar.lib.vt.edu/ejournals/JTE/jte-v7n1/gokhale.jte-v7n1.html#Vygotsky), students are capable of performing at higher intellectual levels when asked to work in collaborative situations than when asked to work individually. Group diversity in terms of knowledge and experience contributes positively to the learning process. [Bruner (1985)](http://scholar.lib.vt.edu/ejournals/JTE/jte-v7n1/gokhale.jte-v7n1.html#Bruner) contends that cooperative learning methods improve problem- solving strategies because the students are confronted with different interpretations of the given situation. The peer support system makes it possible for the learner to internalize both external knowledge and critical thinking skills and to convert them into tools for intellectual functioning.**Benefits for group members:**

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| bullet | Have a more enjoyable, social learning experience. |
| bullet | They make new friends |
| bullet | They get feedback on how learning is going |
| bullet | They receive better explanation for things they don’t understand |
| bullet | Learn a lot by explaining things to fellow learners. |
| bullet | Learn communication skills and develop ability to work in teams |

**Benefits for tutors, facilitators:**

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| bullet | Have some pressure taken away from you |
| bullet | Have learners who are not dependent on you |
| bullet | Have learners who are more likely to be successful |
| bullet | Spend much less time explaining to same thing to different people |
| bullet | Can learn more from learners |
| bullet | Find out more about learners |
| bullet | Find out more about your colleagues |
| bullet | Can save a lot of time and energy |

**Benefits for learning organization:**

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| bullet | Organization will be more successful because people work well together |
| bullet | Will perform better when subjected to external scrutiny |
| bullet | Will turn out learners who are more employable   |

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A small survey was conducted with the students to find out **how the collaborative learning benefits them**. This is what the had to say “ it helps in generating new ideas, it develops spirit of tolerance, they learn from each other, one idea helps in the germination of new and a better idea, we just don’t work on one idea rather we put many ideas at work to see how and which idea works better, depending on the availability of time, knowledge increases and its understanding improves as we can see the same thing from multiple perspective, we learn to adjust with others and their ideas, new talents are discovered and new relationships are also build. There are different types of ideas; delegation of task makes the job easier and faster. There are some problems in collaborative learning:

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| bullet | The teacher needs to assess attendance |
| bullet | Learners don’t like to miss out handouts so issue something, assign something |
| bullet | Ensure the sessions are worth attending |
| bullet | Check the students preparation |
| bullet | Ask them to peer assess their preparation sometimes |
| bullet | **Problems can come from facilitators also** |
| bullet | By favoring some students |
| bullet | Ignoring non participants |
| bullet | Allowing a few to dominate |
| bullet | Lack of preparation |
| bullet | Talking too much |
| bullet | Controlling too much |

**On being asked what are the disadvantages of collaborative learning?** This is what the students had to say: Decision making takes a longer time, even when the decision is taken a brighter idea replaces it, with the changes coming in at times there is confusion, whether to work on first idea or the second one, sometimes after working on second idea we revert to the first idea which definitely is a time waster, sometimes there is undue conflict for implementing ones idea, or by dominance of few in a group, some students are not ready to take initiative thus the responsibility then lies on the shoulders of few students where the other students take the advantage and the credit for tasks, there are unnecessary clashes, some students utilize the time for personal work, good ideas get shadowed. On being asked how it helps in **critical thinking?** This is what they had to say: we get multiple perspectives of the same idea, our thinking improves a lot, competitive spirit rises, we get wise thoughts and also a lot of exposure to various ideas, there is lot of modification in the raw and the finished idea, we come across problem solving, collaborative decision making, arguments, asking questions, clarifying doubts, gather data, review, recognize issues etc.

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It can be concluded that collaborative learning fosters the development of critical thinking through discussion, clarification of ideas, and evaluation of others' ideas. For collaborative learning to be effective, the instructor must view teaching as a process of developing and enhancing students' ability to learn. The instructor's role is not to transmit information, but to serve as a facilitator for learning. This involves creating and managing meaningful learning experiences and stimulating students' thinking through real world problems. In the ideal collaborative environment, the authority for testing and determining the product acquired, may be nice and good but basically whose idea was it, who really contributed towards it and who did not, is difficult to tell and judge also the process employed in the acquisition of foundational knowledge is difficult to set up. Most importantly, in cooperative, the authority remains with the instructor, who retains ownership of the task, which involves either a closed or a closable (that is to say foundational) problem (the instructor knows or can predict the answer). In collaborative, the instructor--once the task is set-- transfers all authority to the group. In the ideal, the group's task is always open ended. Seen from this perspective, cooperative does not empower students. It employs them to serve the instructor's ends and produces a "right" or acceptable answer. Collaborative does truly empower and braves all the risks of empowerment (for example, having the group or class agree to an embarrassingly simplistic or unconvincing position or produce a solution in conflict with the instructor's). There are still number of problems, how to ensure the participation of all the students, what should be the ideal group size for collaborative task? How dominance of few can be removed? How better utilization of time can be ensured? How team efficiency can be ensured without too much of control? How to make students committed to the assigned tasks? What to do with their attitudes? How to resolve the interpersonal conflicts? And finally how to increase personal accountability at all levels across the organization? **REFERENCES:** 1. Daniel Fieldman, (2004) “Critical thinking”, Viva books Private limited, New Delhi
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