

Effectiveness of Co-operative learning for D.T.Ed. Students

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Introduction:

Education is process to reform and cultured the child and shows the proper way to find goal, but the goal cannot be achieved without improving the class room transactions. Today the knowledge aspects became very wide, so it difficult to decide what to teach and how to teach. Education is two way traffic, so a good communication between a teacher and a student should utmost important.

The pillars of knowledge are-

- ✚ Learning to know
- ✚ Learning to do
- ✚ Learning to live together
- ✚ Learning to be.

Learning to know implies learning how to learn by developing one's concentration, memory .skill and ability to think from infancy, young people must learn how to concentrate on objects and on the other people .This process improve concentration skill can take different forms and can be aided by many different learning that arrives in the course of people lives and facilitate lifelong learning, for this it is very crucial to learn how to learn.

Constructivist epistemology assumes that learners construct their own knowledge on the basis of interaction with their environment. Four epistemological assumptions are at the heart of what we refer to as "constructivist learning" Fosnot (1996).

1. Knowledge is physically constructed by learners who are involved in active learning.
2. Knowledge is symbolically constructed by learners who are making their own representations of action.
3. Knowledge is socially constructed by learners who convey their meaning making to others.



4. Knowledge is theoretically constructed by learners who try to explain things they don't completely understand.

Cooperative Learning :

Cooperative Learning refers to a set of instructional methods in which students work in small, mixed-ability learning teams.

The students in each team are responsible not only for learning the material being taught, but also for helping their teammates learn.

Cooperative 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, 1993).

Within cooperative learning groups students **discuss the material** to be learned with each other, **help and assist** each other to understand it, and **encourage** each other to work hard.

Cooperative learning groups may be used to **teach specific content** (formal cooperative learning groups), to **ensure active cognitive processing of information** during a lecture or demonstration (informal cooperative learning groups), and to **provide long-term support** and assistance for academic progress (cooperative base groups) (Johnson, Johnson, & Holubec, 1993).

Any assignment in any curriculum for any age student can be done cooperatively.

Collaborative learning is a situation in which two or more people learn or attempt to learn something together. Unlike individual learning, people engaged in collaborative learning capitalize on one another's resources and skills (asking one another for information, evaluating one another's ideas, monitoring one another's work, etc.). Cooperative Learning: POGIL emphasizes group work based on a premise that, compared with competitive or individualized environments, working in groups leads to improved learning and better attitudes. Differences (in knowledge, reasoning, opinions,) lead to disagreements that, "when managed constructively using appropriate interpersonal, social, and collaborative skills, promote questioning, an active search for more information, and finally a restructuring of knowledge," with this increased use of higher-level reasoning leading to improved mastery & retention of ideas-and-skills. / Editorial comment: All of these claims seem reasonable, but



the benefits of cooperative learning can also be gained from instruction that is less discovery-oriented, as in design activities used for application & extension.

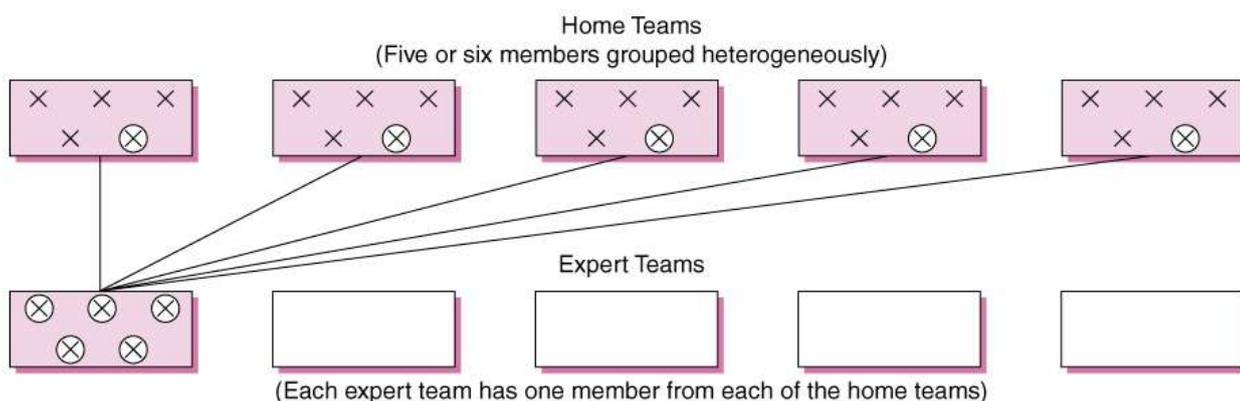
Major Phases

1. Teacher clarifies **goals**, provides a **hook** and **introductory** information
2. Organize student **teams** with clearly defined **roles**
3. **Facilitate** team activities, including **academic learning, social skills & cooperative behavior**
4. **Assess** student knowledge **throughout** the process **and/or** by team **presentations**
5. **Recognize** both **group & individual efforts** such as active participation and taking responsibility for learning

The 3 instructional goals of cooperative learning are:

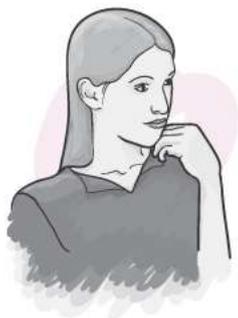
1. **Academic achievement,**
2. **Tolerance and acceptance of diversity, and**
3. **Development of social skills**

Jigsaw-Teams



Think-Pair-Share

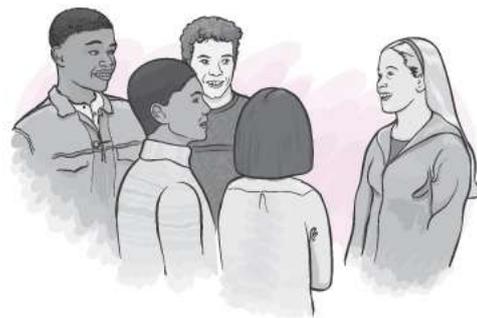




Thinking

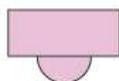
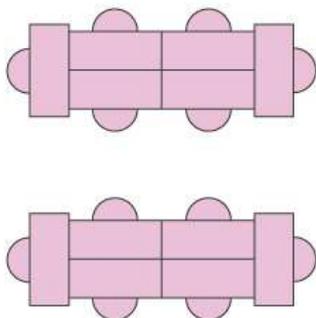
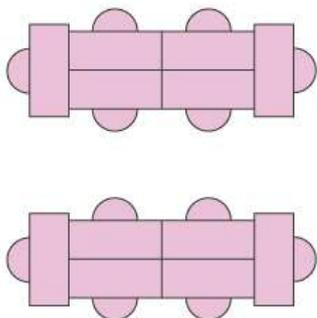


Pairing

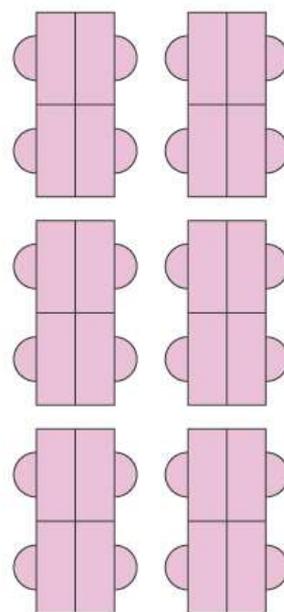


Sharing

Four- and Six-Cluster Seating Arrangements



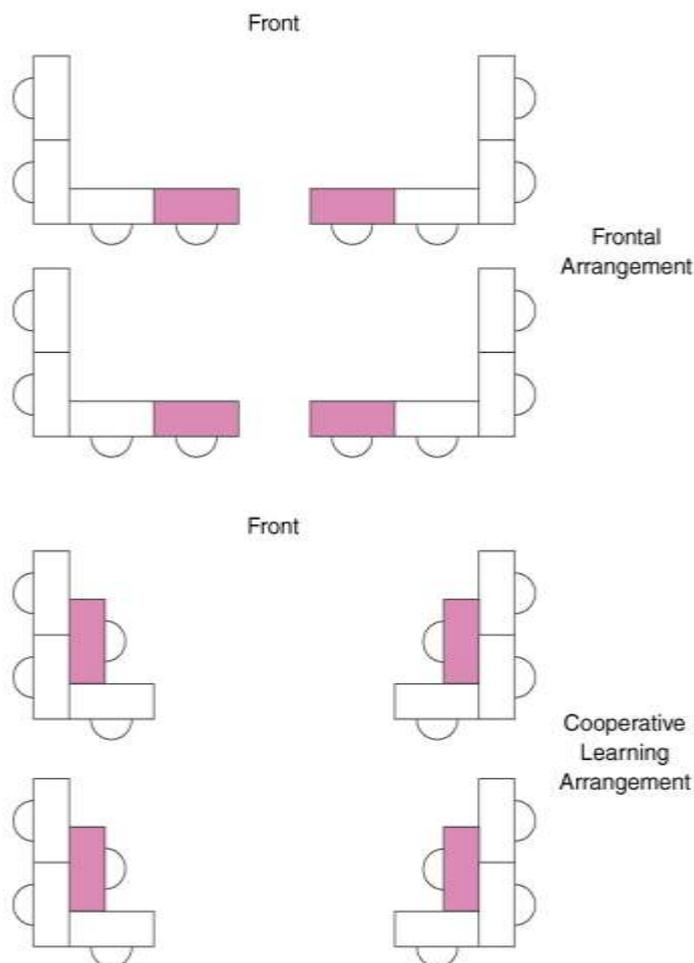
Six-Cluster Seating



Four-Cluster Seating

The Swing Seating Arrangement





Cooperative Learning Roles May Include ...

- Timekeeper
- Cheerleader/ Facilitator
- Monitor
- Messenger
- Group recorder
- Materials collector
- Reporter
- Final copy scribe

Objectives :

1. To help students to learn content of module one of the History method paper through activities done co-operatively.
2. To study the effectiveness of co-operative learning.



Hypotheses:

There is no significant difference between the mean achievement test scores of experimental group and control group after experimentation.

Method:

Experiment method & two matched group design is used for this research.

Sample :

The sample of the study consisted of 60 students studying D.T.Ed. II year of Kasturbai College of Education, Solapur

Tools used : A test in History method constructed and validated by the investigator. In control group and experiment group there were 30 students. Student's achievement test marks considered for dividing students in experiment and control group.

Procedure:

Two group experimental designs were adopted. Researcher selected History of Mughal topic for this research. The Researcher planned activities for D.T.Ed. students to learn co-operatively, helped them to learn co-operatively for experiment group. The Researcher thought control group by traditional method. After the treatment period, post-test was administered for evaluating & to see effectiveness of .. The collected data were subjected to statistical analyses and the results obtained were interpreted.

The 't' test was applied to test the significance of difference between the mean achievement test scores of the experimental group and the control group before experimentation. The 't' value (0.14) was not significant at 0.05 level. Hence, it can be inferred that there was no significant difference between the mean achievement test scores of experimental group and control group before experimentation. The 't' test was applied to test the significance of difference between the mean achievement test scores of the experimental group and the control group after experimentation. The 't' value (12.9) was significant at 0.01 level. The students of the experimental group and control group differed significantly in their mean achievement test scores after experimentation. As indicated by the mean value, the



students of the experimental group fared better in their achievement than the students of the control group. Hence, the Co-operative learning method increased the achievement of the students.

The 't' test was applied to test the significance of difference between the mean attitude towards Co-operative learning method scores of the experimental group and the control group before experimentation. The 't' value (1.21) was not significant at 0.05 level. Hence, there was no significant difference between the mean attitude towards scores of experimental group and control group before experimentation. The 't' test was applied to test the significance of difference between the mean attitude towards Co-operative learning method scores of the experimental group and the control group after experimentation. The 't' value (3.82) was significant at 0.01 level. Hence, the students of the experimental group and control group differed significantly in their attitude towards Co-operative learning method after experimentation. As indicated by the mean value, the students of the experimental group showed favorable attitude towards Co-operative learning method than the students of the control group after experimentation. The students learning with the help of Co-operative learning method showed favorable attitude towards Co-operative learning method than the students learning through the conventional method.

Other findings included no significant difference between the mean achievement test scores of experimental group and control group before experimentation. There was a significant difference between the mean achievement test scores of experimental group and control group after experimentation. The students of the experimental group fared better in their achievement than the students of the control group, after experimentation. This showed that the Co-operative learning method increased the achievement of the students. There was no significant difference between the mean attitude Co-operative learning method scores of experimental group and control group before experimentation. There was a significant difference between the mean attitude Co-operative learning method scores of experimental group and control group after experimentation. The students of the experimental group showed Co-operative learning method than the students of the control group after experimentation. The students learning with the help of Co-



operative learning method had favourable attitude Co-operative learning method than the students learning through the conventional method.

Conclusion:

The results of this study reveal that co-operative learning method has an impact in teaching to D.T.Ed. Students as compare to lecture method.



References:

- Best J.W., Kahn J.V.,(2008); *Research in Education*, 10th Ed., New Delhi, Prentice Hall of India Pvt. Ltd.
- Kothari C.R., (2009); *Research Methodology Methods & Techniques*, 2nd Ed., New Delhi, New Age International Publishers.
- Novak, J. D. & Gowin, D. B. (1984); *Learning how to learn*, New York: Cambridge University Press.
- Novak, J. D., Gowin, D. B. & Johansen, G. T. (1983); The use of co-operative learning method and knowledge via mapping with junior high school science students. *Science Education*, 67 (5), 625-645.
- Editor (2006); *Constructivist Approaches to Teaching and Learning*, New Delhi, NCERT.
- [http://en.wikipedia.org/wiki/Constructivism_\(learning_theory\)](http://en.wikipedia.org/wiki/Constructivism_(learning_theory))

