# Collaborative Learning on Retention of Students with Special Needs in Inclusive Classrooms

## Education

| D.Revathi | Ph.D Scholar, Department of Special Education |
|---|---|
| Dr.G.Victoria Naomi | Professor, Department of Special Education, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore |

**ABSTRACT**    *The Education system in India has undergone a different change over the years to get better system of educational practices. The present study investigates the implementation of collaboration in the learning of special needs students enrolled in inclusive education system. Collaborative Learning is one of the successful approaches to cater the needs of children from diverse background. Research evidences state that high-impact practices that produce meaningful learning gains. Collaboration in inclusion classrooms is an equitable process where teachers value the importance of sharing educational responsibilities for students with and without educational disabilities. The study has the findings of Collaborative Learning strategy enhanced the academic retention of students with Special Needs when compared to posttest mean. The use of classroom collaborative learning is a promising alternative to better serve students with disabilities in a least restrictive environment.*

## Introduction

The Education system in India has undergone a different change over the years to get better system of educational practices. Both general and special education teacher need to have a wealth of knowledge about curriculum and instruction for successful inclusion of students with disabilities in the general education classroom (Smith et al., 1998; Winn & Blanton, 2005).

The present study investigates the implementation of collaboration in the learning of special needs students enrolled in inclusive education system. And thus Collaborative learning is meant for enhancement of learning in inclusion of Students with Special Needs.

## Inclusive Approach: A Focus

Inclusion in the context of education is a term that refers to the practice of educating students with special needs in regular classes for all. Advocates of regular inclusion and full inclusion believe that students with special needs "belong" to the regular classroom. Consequently, Special Education Services are delivered within the normal classroom. Inclusion advocates are opposed to students spending significant time in special education classes or being totally segregated from nondisabled students in specialized facilities.

The traditional classroom is structured as an instructional paradigm centered on efficiently covering subject content, where typically students 'learn about' by passively listening to lecture given by experts in the field (Bass, 2012).

Research evidences state that high-impact practices that produce meaningful learning gains. High-impact practices include students taking responsibility for their own learning, investing time and energy in practice, collaborating with classmates around challenging learning activities, receiving and responding to frequent and timely feedback from instructors, and seeking to connect their learning to real-life applications (Kuh, Kinzie, Shuh & Whitt, 2010). This approach represents a *learning paradigm.* Collaborative learning has been proved one of the high impact practices and hence a study has been attempted in this direction. Hence a study attempted to find out the effect of Collaborative learning on retention of students with special needs in Inclusive Schooling.

## Collaborative Learning

Collaborative learning in general is defined as any kind of group learning in which meaningful learning interaction between learners is taken place (Goren-Bar & Koubek, 2001). Collaborative activities can increase student's achievement boost motivation, offer variety and interest, and allow the teacher to differentiate instruction to target students' needs, interests, and aptitudes (Slavin, 1995).

Collaborative learning ensures to every group member contributes to the work of their group:

- Making group member responsible for a unique portion of the project as in jigsaw activities (Slavin, 1995).
- Assigning interdependent group roles (Johnson, Johnson, & Holubec, 1993).
- Labeling on random group members to report a group's conclusions,
- Administering individual tests or composition, increasing motivation through Peer tutoring and
- Providing Feedback to each group member individually (Putnam, 1997).

Hernandez (2002) reported that team learning improved students' motivation and additionally reported that promotes active and higher level of thinking.

## Collaborative Learning in terms of Inclusion context

The Collaborative learning process models what it means to question, learn and understand in concert with others. Learning collaboratively demands responsibility, persistence and sensitivity, but the result can be a community of learners in which everyone is welcome to join, participate and grow.

Collaboration in inclusion classrooms is an equitable process where teachers value the importance of sharing educational responsibilities for students with and without educational disabilities.

Collaboration in virtual learning communities characterizes itself by heavily relying on interaction among the collaborators (Edwards, 2002; Bistrom, 2005). The collaborators can be instructors and learners, the interaction can be resources discovery, access, and sharing, as well as group communication and discussion, or simply any collaboration which has occurred among the instructors and learners. In addition, the collaboration should be enacted inside and outside of classrooms without limitation of space and time; it can be over the Internet and beyond the geographical boundary. Nevertheless, such collaboration environment is gener-

ally not supported by conventional learning environments. Typical learning services for collaboration in virtual learning communities are content, access of certain learning subjects; making studying notes and annotation on learning subjects; group discussion, brainstorming for knowledge creation and sharing.

A high level of collaboration requires a significant amount of trust between partners and an open, flexible approach in lesson planning and implementation of instructional strategies. Planning time requires a structure in which the teachers' roles and responsibilities are identified and negotiated along with daily management and instructional decisions (Cole et al., 2000; Friend & Bursuck, 2006; Wood, 1998).

## Method
The study was conducted in schools under SSA programme. Purposive sampling technique was used to select the inclusive schools wherein children with special needs were enrolled. Three categories of Special Needs Students viz., Visually Impaired (VI), Hearing Impaired (HI) and Movement Impaired (MI) were included in the study were to assess the Collaborative learning and its implementation for Students with Special Needs.

## Research Design and Instrumentation
Experimental design with treatment, posttest and retention (after 40 days of interval) was taken in the Research study. Curriculum based Assessment questionnaire was developed to assess the academic outcomes for retention of students with special needs involved in the study.

## Data Collection Procedure
The students were tested of their academic performance with the lesson in Grade VI and Grade VIII after implementation of Collaborative learning. Heterogeneous grouping was also done with 4 to 5 children in a group. The Collaborative Learning was implemented in Science Lesson for both Grade VI and VIII. After the introduction of Collaborative learning method, posttest and retention was administered using the questionnaire (curriculum based assessment) developed.

## Analysis and Interpretation
Retention scores of students with Special Needs after introduction of Collaborative Learning

**Table 1:Testing-wise Mean, SD and 't' value for Students with Special Needs**

| Test | N | Mean | SD | t-value |
|------|---|------|-----|---------|
| Posttest | 44 | 63.3 | 12.5 | 2.8[Ns] |
| Retention | 44 | 61.4 | 12.4 | |

*Ns-Not Significant*

From the above table, it is evident that the 't' value for posttest and retention score is 2.8 which is not significant. It indicates that there is significant difference in the mean scores of students with Special Needs after introduction of Collaborative Learning. Hence it is concluded that collaborative learning does not have influence in their retention level among students enhancing their learning.

## Retention level of students after the Introduction of Collaborative Learning with respect to Grade
An analysis was made to compare the retention level of students with respect to Grade. The following table reveals the results.

**Table 2: Testing-wise Mean, SD and 't' value for Retention level of students with respect to Grade**

| Grade | N(256) | Mean | SD | t-value |
|-------|--------|------|-----|---------|
| VI | 118 | 3.97 | 7.10 | 1.97[*] |
| VIII | 138 | 2.12 | 7.75 | |

*\*Significant at 0.05 level*

From the above table, it is evident that the 't' value for retention with respect to grade viz., VI and VIII is 1.97 which is significant at 0.05 level. This indicates that there is no significant difference between students of both non disabled peers and students with special needs in Grade VI and VIII in their retention level after introduction of Collaborative Learning. Therefore it may be concluded that Grade did influence retention. Students in Grade VI secured higher retention score (M:3.97) than students in Grade VIII (M: 2.12).

## Findings and Discussion
Collaborative Learning strategy enhanced the academic retention of students when compared to posttest mean (post mean=63; retention = 61) and it indicates that the retention level of students with Special Needs after 40 days of Posttest was found to be at the same level. Hence it is concluded that Collaborative learning helped the students to retain the concepts for longer time.

When comparing the retention level of students in VI Grade and VIII Grade, students in VI Grade showed better retention (M=3.97) than VIII Grade students (M=2.12). It was concluded that the collaborative learning is more scientific and effective for successful inclusion of students with special needs

This result is corresponding to the study conducted by Totten, Sills, Digby & Russ (1991) stating that when Collaborative learning is provided, students gain higher rates of achievement and retention than learners who work alone. Also the study stating that collaborative learning gives students opportunities to internalize their learning.

## Conclusion
Educating children with disability in inclusive classroom has a problem that many teachers face today. Collaborative learning has created awareness in recent years due to the progress to educate students with disabilities in the least restrictive environment. The use of classroom collaborative learning whether it is online is a promising alternative to better serve students with disabilities in a least restrictive environment. Although teachers share responsibility of imparting the learning of students with special needs, the students must contribute to the accountability of self esteem and its benefit has to be taken by the students consciously and intentionally. This study presented the effect of Collaborative Learning for improving their Academic retention.

## References
1. Cole, S., Horvath, B., Chapman, C., Deschenes, C., Ebeling, D. G., & Sprague, J. (2000). Adapting curriculum and instruction in inclusive classrooms(2nd ed.). Bloomington, IN: The Center on Education and Lifelong Learning.
2. Bistrom, J. (2005). Peer-to-Peer Networks as Collaborative Learning Environments. Paper presented at HUT T-110.551 Seminar on Internetworking, retrieved October 25, 2005 from http://www.sit.fi/~johnny/collp2p.pdf
3. Bruning, R.H., Schraw, G.J., & Ronning, R.R.(1995). Cognitive Psychology and instruction. Englewood Cliffs, NJ: Merrill.
4. Edwards, K., Newman, M., Sedivy, J., Smith, T., Balfanz, D., Smetters, D.

K., Wong, C., & Izadi, S. (2002). Using Speak easy for Ad Hoc Peer-to-Peer Collaboration. Paper presented at ACM 2002 Conference on Computer Supported. Cooperative Work (CSCW 2002), November 16-20, 2002, New Orleans, LA, USA.

5.    Friend, M., & Bursuck, W. (2006). Including students with special needs: A practical guide for classroom teachers. Boston:Pearson Education.

6.    Goren-Bar, D., Koubek, A. Edts (2001) User Processes in Collaborative Learning. Unpublished research study, funded by EC research.

7.    Hernandez, S.A. (2002). Team learning in a marketing principles course: Cooperative structures that facilitate active learning and higher level thinking. *Journal of Marketing Education*, 24, 73-85.

8.    Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1993). Circles of learning: Cooperation in the classroom. Edina, MN: Interaction

9.    Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2010). *Student success in college: Creating conditions that matter*. San Francisco, CA: Jossey-Bass.

10.   Putnam, J. (1997). Cooperative learning in diverse classrooms. Upper Saddle River, NJ: Merrill.

11.   Slavin, R.E. (1995). Cooperative Learning: Theory, Research, and Practice (2nd ed.). Boston, MA: Allyn & Bacon

12.   Smith, A., Doll, B., & Gengel, S. (Eds.). (1998, September). OSERS/OECD International Symposium on Inclusion and Professional Development(Proceedings). Washington, DC: Office of Special Education and Rehabilitative Services. Retrieved June 30, 2008,from   http://eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/23/0e/82.pdf

13.   Supovitz, J. (2002). Developing communities of instructional practice. *The Teachers College Record*, *104*(8), 1591-1626.

14.   Supovitz, J. A., & Christman, J. B. (2003). Developing communities of instructional practice: Lessons for Cincinnati and Philadelphia. *CPRE Policy Briefs* pp. 1-9. Pennsylvania: University of Pennsylvania.

15.   Winn, J., & Blanton, L., (2005). The call for collaboration in teacher education. Focus on Exceptional Children, 38(2), 1–10.

16.   Wood, J. W. (1998). Adapting instruction to accommodate students in inclusive settings. Upper Saddle River, NJ: Prentice-Hall.