

Perspectives of Primary School Teachers Regarding Effectiveness of Cooperative Learning: A Descriptive Study

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Abstract: *This paper attempts to analyze the perceptions and practices of primary school teachers regarding the effectiveness of cooperative learning (CL) method and to identify the challenges that are encountered while implementing CL in schools. Sample was constituted by 65 teachers from a private sector school system with the help of stratified sampling technique. Questionnaire was used to collect data. Descriptive statistics was used to analyze the data. Data analysis reveals that lecture method is highly used teaching method at primary level whereas teachers use other teaching methods as well, such as lecture demonstration (LD), CL, project based learning (PBL) and inquiry based instructions. Findings of the study indicate that teachers have positive perceptions about the use of CL approach in terms of academic achievement, better understanding about subject matter and improvement in interpersonal skills. Whereas, teachers showed their concerns with reference to classroom size, non-availability of learning resources, lengthy syllabus and lack of support from school administration. The study recommends the implementation of CL by providing administrative support and conducive learning environment as well as engaging teachers in continuous professional development programs to equip them with interactive teaching methods.*

Keywords: Cooperation, Interaction, Academic Achievement, Social Skills.

Introduction

Cooperative Learning (CL) is a teaching method, in which students are assembled in small heterogeneous groups and responsible for each others' learning to achieve common learning goals through interaction with each other (D. W. Johnson, Johnson, & Smith, 1991; Brown et al., 2008; Gillies & Boyle, 2010; Patchen & Smithenry, 2014). CL has a worldwide acceptance due to its research based effectiveness in promoting a social learning environment of mutual success (Brown et al., 2008; Gagné & Parks, 2013). Wenzel (2014) states that in CL, group members listen to each other, share information, help out each other to solve a common learning/academic problem. According to him this type of leaning promotes active and independent learner rather passive learners who are only

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recipients of knowledge. CL fosters student centered learning environment in which the role of teacher is facilitator of learning.

Thanh (2011) cited Gow & Kember and Gow & Mok that Asian students are passive recipients of knowledge in a lecture based classroom and little or no exposure of learning independently. This is true with Pakistani classrooms, these classrooms are mostly lecture based classrooms (Inamullah, Hussain, & Ud Din, 2011; Jan, 2013). Inamullah et al. (2011) reported that in Pakistani classrooms, teacher's talk time is about 80%. According to researches, lecture based classrooms do not facilitate interaction among students DiPiro (2009) whereas, in student centered classrooms, while working in groups to find the solution of classroom problems, students interact with each other in an effective manner than working as individual (Humphreys, Johnson, & Johnson, 1982; Larson, 2005; DiPiro, 2009; Gillies & Boyle, 2010).

(Taqi, Al-Nouh, & Akbar, 2014) cited Piaget that in a situation where students interact with each other, they face cognitive conflict and this cognitive conflict leads to new learning. Richard cited in (Taqi et al., 2014) that students learn best if they were *"giving clear and focused instruction, monitoring students' progress, using class time properly, having positive interpersonal skills with students and using rewards to encourage students"*.

According to (R. T. Johnson & Johnson, 1986) when students work in groups they achieve higher order thinking skills through reasoning, explaining concept to each other, negotiating and arguing. In group work they learn how to agree with disagreement. Working in groups accelerates students' academic achievement rate (Slavin, 1987; D. W. Johnson & Johnson, 2009; Gubbad, 2010; Njoroge & Githua, 2013) and social skills (Kader, 2013).

Statement of the Problem

The current study aimed to explore the primary school teachers' existing teaching practices and find out the insights of teachers about CL regarding its effectiveness and challenges associate with it.

Research Questions:

- What are the contemporary teaching methodologies used in Pakistani schools at primary level?
- How do teachers perceive about cooperative learning?
- What are the possible hindrances that may occur during integrating CL practices in regular teaching practices?

Research Hypothesis:

Ho1: Teachers use CL in their regular teaching practice

Ho2: Teachers have positive insights about CL

Ho4: Teachers implement CL in class smoothly without facing any challenges

1 Review of Related Literature

Human beings are cooperative by nature, cooperation is not a learned behavior [Tomasello et al. \(2009\)](#). According to him, “As children grow, their almost reflexive desire to help—without expectation of reward—becomes shaped by culture”. They get to know about their role in social group and are conveyed mutual expectations. While working with other members of group in society they may encourage or discourage humanity and collaboration.

Cooperative learning (CL) is a teaching method in which students are assembled in small groups to work with each other to maximize not only their but the learning of other group members also ([D. W. Johnson & Johnson, 1999](#)) CL constituted by five basic elements such as; Positive interdependence, face to face interaction, individual accountability, interpersonal skills and group processing. In a CL group learners are symbiotic to each other to accomplish a shared task. In a CL environment individual believe that success is only possible when other group member will also be successful (Sink and Swim Together).

Positive interdependence and individual accountability are two very important components of CL and both are interconnected to each other. Working in group not only gives a group recognition and reward but individual recognition and reward also. Individual accountability can be ensured by distributing of equal responsibilities among group members to achieve a mutually shared goal ([Slavin, 1987](#); [Hennessey & Dionigi, 2013](#)).

Social skills development is a significant feature of cooperative learning. During group work students learn and develop leadership, communication, negotiation and trust building skills in cooperative environment so they can perform efficiently. In cooperative groups when students work cooperatively, they develop a sense of togetherness and willing to help each other, in turn they are also received help and cooperation from other group members ([Gillies & Boyle, 2010](#)).

In CL method, face to face interaction is one of the vital elements, it facilitates communication skills of students and facilitate them to comprehend, elaborate, reason and evaluate the concept ([Vygotsky, 1978](#)).

According to [Tomasello et al. \(2009\)](#) when students work together to achieve a common goal they use their socio-cognitive skills, which make them qualify to participate with others in joint task and learn from others and this interaction increase their academic achievement rate.

CL encourages reflective practices among students. Group processing is one of the important components of CL, it encourage students to not only reflect on their own and other group members’ recent performance and how could their performance be improved in future task.

Related Researches in the Field of CL:

An experimental study was conducted by [Kuri \(2013\)](#) to measure the effect of CL on students’ academic achievement in subject of Geography. CL treatment was given to Experimental group and Learning Together Model of CL was used

whereas control group were not given any treatment. It was found that academic achievement rate of students of experimental group was significantly better in Post-test than students of controlled group. These findings are congruent with the findings of (Kosar, 2003) in the subject of Social Studies .

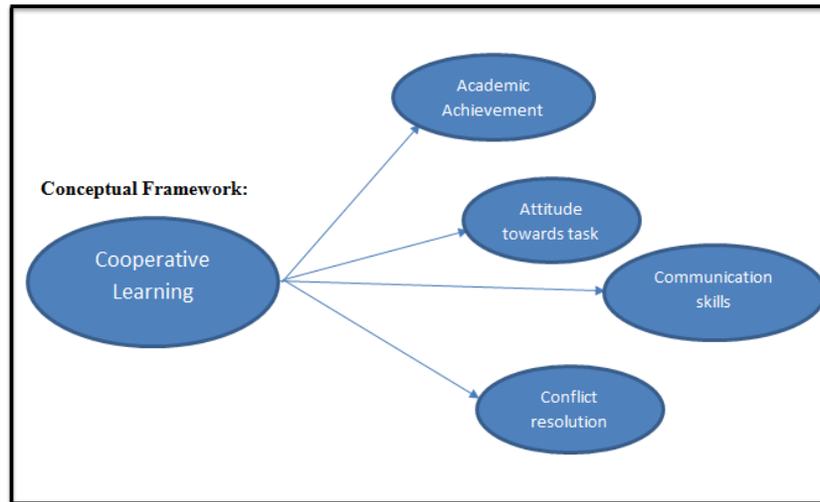
Paul and Ray (2014) validated a theoretical model by conducted an experimental research in laboratory setting to assess the effectiveness of virtual teams. Their research findings reveals that diversity among group members had effect on group atmosphere and group atmosphere play a positive role to develop mutual understanding among team members and increases team participation. Moreover, mutual understanding among team members decreases task conflicts among them.

Keramati, Heydari, Enayati, and Hedayati (2013) were conducted an experimental study in Tehran. They aimed to investigate the effects of CL on science academic achievement of first grade male students and on their test anxiety. True experimental Pre-Test Post Test control group research design was employed to collect the data. With the help of multi stage random sampling technique four sections were selected (two classes as experimental group and two classes as control group). The students of experimental groups were taught by CL and control groups were taught by traditional teaching method. Academic achievement was measured by teacher made test. Students' test anxiety were measured by using test anxiety questionnaire TAI (Abolghasemi & Associates, 1375: 74-61). Findings of the study exhibited that CL has positive effect on students' science academic achievement and it is helpful in reducing their test anxiety. Results of the study proved that in teaching of Science subject CL is more effective than traditional teaching methods.

To measure and compare the effectiveness of three teaching methods, which were traditional instructions; CL loosely structured and Students Team Achievement Division (STAD) model of CL on students' academic achievement, an experimental study was conducted by Ahmad and Mahmood (2010). The findings revealed that CL, Students Team Achievement Division (STAD) model not only increased academic achievement of students of experimental group but facilitated enriched, pleasurable and interactive learning experiences as compare to the students of comparison groups.

Mashhadi and Gazorkhani (2015) conducted Quasi experimental study in Tehran. Pre-Test Post Test Control group was employed and 100 students of teacher training centre was selected as research sample by using simple random sampling technique. Findings of the study revealed that there is a significant difference between average scores of students of control group who were taught by traditional method (13.96) and students of experimental group who were taught with cooperative learning method (15.90).

Mashhadi and Gazorkhani's finding were similar to the findings of Iqbal (2004). Findings of Iqbal's study also proved the effectiveness of CL in teaching mathematics as compare to traditional teaching method. Students in cooperative groups performed significantly better than students of control group in post test.



- Independent Variable: Cooperative Learning
- Dependent Variable: Academic achievement, attitude towards task and conflict resolution

2 Research Method

Procedure:

The current study employed quantitative research approach. Researcher used descriptive research method and conducted face to face survey in ten primary schools campuses of a private sector school. In total 65 questionnaires were distributed and 52 were returned. Participation was voluntary and the principle of anonymity and confidentiality was ensured. Response rate was 69%.

Population and Sample

Population of the study constituted by the teachers of private sector's primary schools of District Karachi. The population of this study has diverse/ heterogenous features. All the participant teachers were permanent employ of a well-known school system and had exposure of extensive in-service teacher training programs. Researcher employed stratified random sampling technique to select sample (Creswell, 2008).

Participants' Characteristics:

Primary school teachers from a private sector school system. Teachers are permanent employ of the system. All of the participants went through from an

intensive in-service teachers' training program, in which they were given an exposure of modern teaching methods and their implication in classroom.

Data Collection Techniques and Tools

Data was collected with the help of questionnaire. Following main points were included in questionnaire for teachers:

- Participants' demographic information
- Existing teaching practices
- Participants' familiarity / knowledge and insights about cooperative learning

3 Data Analysis

The researcher used descriptive statistics to analyze the data by using SPSS 18.

Discussion on Findings

Existing Teaching Practices

Table 1: Teaching Methods

Teaching methods	Always	Frequently	Sometimes	Never
Lecture method	76%	13 %	11 %	0 %
Lecture Demonstration	24%	16%	29%	31%
Cooperative Learning / small group activities	11%	19%	66%	4%
Project Based Learning	3%	17%	24%	56%
Inquiry Based Instruction	8%	13%	20%	59%

In order to find the preferred teaching methods by the teacher, four points rating scale is used. It is found that Lecture Method is the most preferred method used by the teachers among all teaching methods. According to the above table, 100% of participant teachers affirmed that they always, frequently and sometimes use lecture method in classrooms whereas not any teacher told that they never used lecture method. 76% of the total teachers always use Lecture Method while the remaining 24% use it frequently or sometimes. Refer to table 1 teaching table, it is found that 66% of the total teachers use Cooperative Learning/Small Group Activities method while remaining 30% teachers use it always or frequently and 4% have never used Cooperative Learning/Small Group Activities method. It is found that majority of the teacher i.e. 59%, have never used Inquiry Based Instruction method while 13% use it on frequent basis. Remaining 28% always or sometimes use Inquiry Based Instruction method. Table 1 revealed that 56% of participant teachers have never used Project Based Learning while the remaining 44% use it frequently, sometimes or always basis.

Results show that majority of the teachers i.e. 31% of the total teachers have never used Lecture Demonstration Method while 29% teachers sometimes follow that method.

Teachers’ familiarity/Knowledge about CL

Table 2: CL

	Very Familiar	Somewhat Familiar	Not very familiar	Not at all Familiar
How Familiar you are about CL?	59%	25%	14%	2%

According to the teachers’ responses, it is found that majority of the teachers are very familiar with CL method. Table 2 shows that 59% of the total teachers are very familiar with CL while 25% are somewhat familiar with CL. Remaining 16% are not very or not at all familiar with CL.

How often do you conduct CL activities

Table 3: CL Activities

Once in a week	Once in a month	Once in a semester
48%	28%	24%

Above data set reveals that 48% of participant teachers conduct CL activities once in a week whereas 28% of participant teachers conduct CL activities once in a month. Remaining 24% of the total teachers conduct CL activities once in a semester.

Insights of Teachers about CL:

Table 4: Insights of Teachers about CL

S. No	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I believe that when students work together they achieve more than when they work alone	13%	53%	17%	17%	0%
2	I believe that Cooperative learning can improve students’ attitude towards work	8%	44%	31%	17%	0%
3	I believe that Cooperative learning improves students Communication skills	24%	42%	21%	13%	0%
4	I believe that Cooperative learning enhances conflicts among the group members	2%	4%	25%	26%	43%
5	I believe that Cooperative learning improves the performance of high ability students only	7%	21%	7%	42%	23%
6	I believe that Cooperative learning reduces classroom participation	2%	8%	13%	29%	48%
7	I believe that Creativity is facilitated in the group setting	9%	57%	7%	18%	9%
8	I believe that group activities make the learning experience easier.	18%	46%	11%	6%	19%

Table 4 reveals that 66% of the total teachers strongly agree or agree that students achieve more when they work together instead of working alone. 17% of the teachers have opposite views and remaining 17% teachers have neutral opinion.

It is found that 52% of the total response strongly agree or agree that CL improves students' attitude towards work. 17% participants have disagreement with that statement while the remaining 31% teachers have neutral opinion.

42% participants agree and 24% participants strongly agree that Cooperative Learning can help to improve students' communication skills. 13% participants have opposite views while remaining 21% teachers have neutral opinion.

Majority of the teachers i.e. 69% strongly disagree or disagree that CL enhances/increases conflict among group members. 25% of the total participants have neutral opinion while the remaining participants strongly agree or agree with this statement.

It is found that 65% of the total respondents strongly disagree or disagree that Cooperative Learning only helps to enhance the performance of those students who have high ability. 28% of the respondents supported the statement while remaining 7% teachers have neutral opinion.

Results also show that 77% of the total participants strongly disagree or disagree that CL reduces classroom participation while only 10% teachers have the same views and the remaining 13% teachers have neutral opinion.

66% teachers strongly agree or agree with the statement that creativity helps in the formation of groups While 27% strongly disagree or disagree with that statement. It is also found that 64% teachers believes that CL makes learning easier while 25% have different views and remaining teachers have neutral views.

Challenges

It is found that 73% teachers strongly agree or agree that Cooperative learning helps in the creation of classroom management problems among students while only 6% strongly disagree or simply disagree and remaining 21% teachers have neutral views.

51% teachers strongly hold the views of supporting cooperative learning from the school administration in order to succeed. Only 8% teachers strongly disagree or disagree with that statement and remaining teachers have neutral opinions.

64% teachers strongly agree or agree that when cooperative learning method is used, other group members are expected by the students to get the work done. 30% teachers strongly disagree or disagree with that statement and remaining teachers have neutral opinions.

Table 5 shows that majority of the teachers strongly agree to implement cooperative learning without specialized materials. 64% teachers are in the favor of that statement and 24% teachers have opposite views.

Results also show that it is difficult to evaluate students in the presence of cooperative learning and 35% teachers have the same views while 46% have opposite views.

Table 5: Challenges

S. No	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Using cooperative learning is likely to create classroom management problems among students	9%	64%	21%	4%	2%
2	For me to succeed in using cooperative learning requires support from the school administration.	51%	34%	7%	5%	3%
3	If I use cooperative learning, too many students expect other group members to do the work	23%	41%	6%	21%	9%
4	It is impossible to implement cooperative learning without specialized materials	33%	31%	12%	19%	5%
5	It is impossible to evaluate students fairly when using cooperative learning	13%	22%	19%	34%	12%
6	My students are resistant to working in cooperative groups.	11%	23%	4%	41%	21%
7	Implementing cooperative learning requires a great deal of effort	34%	32%	17%	12%	5%
8	Implementing cooperative learning takes too much class time.	41%	43%	5%	9%	2%
9	If I use cooperative learning, my classroom is too noisy	12%	23%	11%	36%	18%
10	The physical set-up of my classroom is an obstacle to using cooperative learning	22%	51%	8%	10%	9%

62% teachers deny that students create resistance in cooperative groups while working and 24% teachers support that statement.

Majority of the teachers i.e. 66% strongly agree or agree that great efforts are required in order to implement cooperative learning and only 17% teachers have opposite views.

Around 84% of the totals teachers strongly agree or agree that it takes too much class time in order to implementing cooperative learning and only 2% teachers have opposite views.

Results also show that 54% teachers strongly disagree or disagree that their classroom will be noisy if they use cooperative learning. 35% teachers strongly agree or agree with the statement while remaining 11% have neutral opinion.

It is found that 73% teachers strongly agree or agree that physical set-up of classroom is an obstacle in order to use cooperative learning method and 19% teachers have opposite views.

4 Discussion and Recommendation:

Majority of the participant teachers were of the opinion that if students work together so they can learn more than learning alone. According to them CL may be an effective teaching method to increase academic achievement rate of students. They were believing that CL could be a better teaching strategy that may be helpful in resolving conflicts among students along with academic excellence (Statkeviciene & Klimoviene, 2006; Govaris & Kaldi, 2008) Kagan cited in (Akhtar, Perveen, Kiran, Rashid, & Satti, 2012). They perceived that CL could increase students' motivation and participation in classroom activities.

Despite of the fact that CL is widely appreciated as an effective teaching method and having strong research based evidences regarding its effectiveness, teachers do not employ it frequently because of the issues related with its implementations. Teachers shared their concerns regarding classroom management, administrative support, lack of learning resources, Seating arrangement (Gillies, Ashman, Terwel, et al., 2008) time management method (Panitz, 1997; Herreid, 2007; Ferguson-Patrick, 2008) students' resistance to do work in group and lack of administrative support (Kagan, 2003; Ferguson-Patrick, 2008). Among all concerns, they were more uncomfortable with the fact that they were not quite equipped with the CL teaching skills, as they have never been exposed to such teaching strategy and didn't get any training about it as well (Algarfi, 2010), as cited in (Gillies et al., 2008). The teachers firmly believed that managing large classrooms during CL is too challenging. Since, keeping the classroom quite was their major concern, so they thought CL could influx noisy discussion (Panitz, 1997).

5 Conclusion and Recommendations

Based on above discussions it can be concluded that the teachers had positive insights about the use of CL approach in terms of academic achievement, social skills, motivation and participation in learning. However, teachers were having concerns for integrating CL in their regular teaching practices due to personal and administrative reasons.

The study recommends the implementation of CL along with other modern teaching methods and emerging trends in education in syllabus of pre-service teacher education programs but also engaging in-service teachers in continuous professional development programs to equip them with modern and interactive teaching methods. The study also recommends for Education Department, Government of Sindh to develop teachers' guides that facilitate teachers in implementing CL strategies with full spirit.

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Appendix

