

**The Effects of Cooperative Learning Strategies on Sixth Grade Bhutanese Students' Learning Achievement and Satisfaction in Social Studies Class**

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**Abstract**

This mixed method research was conducted focusing on the effects of cooperative learning (CL) strategies on grade six students' learning achievement and satisfaction in Social Studies. The sample consisting of 30 students from one of the schools in Bhutan were instructed through cooperative learning strategies twice a week for four weeks. Pretest and posttest were administered via 20 multiple choice questions to collect quantitative data. Qualitative data were gathered using students' reflective journal followed by a focus group discussion. The analysis of the test score through paired sample t-test revealed higher posttest ( $\bar{x}=15.50$ ) than the pretest ( $\bar{x}=7.37$ ). The significance value of .01 was an indication of increase in the posttest scores. Analysis of the qualitative data within the framework of principles of content analysis proved impactful on students "learning satisfaction." Hence, cooperative learning strategies are highly recommended for instructing social studies to improve students' achievement and learning satisfaction.

**Keywords:** cooperative learning strategies; social studies; learning achievement; learning satisfaction

**1. Introduction**

Social Studies plays a crucial role in grooming future citizens. Students need to be made productive through social studies education (Misco, 2014). With

modernization moral and ethics are threatened. Finding ways to instill a love for the subject is important to revive the status of what is about to lose in terms of culture and tradition. Research findings and recently embraced curriculum standards, continue gesticulating educators to switch the task of learning from educators to the learners (Wright, 2017). Taking the responsibility of one's own learning empowers academic success. Cooperative learning (CL) strategy is the current methodology that offers students active learning environment ensuring them high success rate in a classroom (Gurbuz, Simsek, & Berber, 2015). The prospect of working together for shared objectives ensure wholesome development (Devi, Musthafa, & Gustine, 2016; Gillies & Boyle, 2010). CL has bagged its place as a valued instructional methodology, one that has the potentiality to influence unquestionably learners' accomplishment, the inspiration for learning, interpersonal relations and a multitude of other well-investigated effects (Baloche & Brody, 2017).

Bhutanese Social Studies curriculum consists of an integration of history, geography and economics. It is being taught from grade four till six. From grade seven, Social Studies branches out into history and geography. Further, economics is taught from grade nine. In a way, teaching Social Studies in lower classes is laying the foundation for these three subjects. The Bhutanese education system has been dominated by a traditional approach which according to Tran (2014) is a root cause of every problem. However, the demand of 21<sup>st</sup> century education necessitates the transformation of pedagogy. CL structure has been familiarized nationwide to inspire teachers to concentrate on student-centered learning; consistent implementation is a challenge. Renandya and Jacobs (2017) account consumption of more curriculum time as a reason for teachers shying away from implementing CL that obstruct the completion of the syllabus on time. However, they bring us to the notice that if we really value quality over quantity of learning, curriculum time should be taken advantage to intensify the level of students' engagement in the learning process and not merely to cover the content. Sherab and Dorji (2013) highlight that teacher-centered learning normally materialize in the primary classroom with unfavorable students' learning outcome.

The role of teachers and students possess significant change in the 21<sup>st</sup> century. While teachers are obligated to be facilitators, students are required to realize their own learning (Gurbuz et al., 2015). CL can disentangle from traditional method and direct towards the 21<sup>st</sup> century education. Techniques to advance academic achievement lies in effective instructional approaches. One such strategy is CL where

students require not only the awareness of working for themselves, but also for their classmates. CL countenances learners to intensify their comprehension level and progresses the precision of their retention power and advances intellectual skills (Jack, 2015).

Low academic achievement and disruptive behavior weigh heavily on a teacher's ability to instruct (Vaaland, 2016). The key to improving students' learning and behavior may be concealed in a variety of instructional tactics. Knowles (2014) postulates that educators are mandated to handle educational outcomes and behavioral expectations which can be achieved through CL strategies.

As per the Bhutan Council for School Examination and Assessment (2015), the percentage of students who scored between 86-100% in history, geography and economics were comparatively low. This could be attributable to lack of proper understanding of social studies content in the lower classes because social studies is an integration of these three subjects. Disruptive behaviors decline instructional period and lower test scores (Oliver, Wehby, & Reschly, 2011). Tsay and Brady (2012) noted that students taught through CL strategy scored better in the exam. CL has its root in enabling students to learn not just academic but also values that are crucial in a society (Jack, 2015). McLeod (2012) recommended teachers to implement CL strategies for the development of weaker students through support from competent companions in the zone of proximal development (ZPD).

As cited by Abass (2008), there is convincing proof that cooperative groups result in advanced thought and retention power better than students who work independently. Thus the collective learning involvement offers students to partake in the discussion, take accountability for their individual learning and subsequently, become critical thinkers. Al-Yaseen (2011) states that CL allow students to demonstrate a sound understanding of the allocated assignment and heightens the pace of learning through partaking in a group. He also believes that it equips students with helping skills resulting in a good interpersonal relationship. Gonzales and Torres (2016) revealed that interaction and collaboration ignite a higher level of mental performance compared to independent learning. CL permit students to communicate and heighten their motivation to learn by themselves which is likely to uplift their academic achievement (Hosseini, Navkhasi & Shahsavari, 2017). CL empowers students to employ diverse learning styles to enhance the intellectual capacity of a subject matter.

Mohammadjani and Tonkaboni (2015) in their effort to examine the relationship between the outcome of cooperative learning strategy and lecture method on students' learning and satisfaction level found out that the cooperative learning strategy had a greater impact than the lecture method. Yapici's (2016) experimental research on the effect of jigsaw cooperative learning strategy on the achievement level of grade VII in social science revealed that the experimental group retention power was significantly higher than the control group. Korkmaz and Tay (2016) revealed in their finding that the group which was instructed through cooperative learning strategy was able to score more and retain more information in social studies lesson after the completion of the treatment. Juweto (2015) studied the effect of CL method on students' achievement and attitude towards biology in secondary schools in Delta State in the United States of America and concluded that CL method improved students' achievement and stimulated positive attitude towards biology.

An inspiration derived from previous studies fascinated the researcher to find out the effects of CL strategies on Bhutanese grade six students' learning achievement and learning satisfaction in Social Studies. There are abundant studies on the effect of the CL method on students' learning achievement and learning satisfaction. Nevertheless, no studies have yet been conducted in Social Studies in Bhutan. Consequently, this study strived to bridge the gap with the available information. The outcome of the study should encourage teachers to implement the strategies in enhancing the learning achievement and monitoring disruptive behavior of children in the classrooms.

## **2. Objectives**

1. To compare grade six Bhutanese students' learning achievement in social studies before and after employing cooperative learning strategies.
2. To determine grade six Bhutanese students' learning satisfaction in social studies after employing cooperative learning strategies.

## **3. Literature Review**

Cooperative learning (CL) is a teaching methodology enabling learners to take part in the group to maximize their learning as well as others (Johnson & Johnson, 2014). CL is an investigated instructional approach utilized in teaching space to advance student accomplishment in different subject areas (Pope, 2016). CL

is embedded in the notion that learning is at a peak when learners are enthusiastically occupied in sharing opinion and when they strive supportively as one to accomplish an academic undertaking with perceptiveness (Jack, 2015). CL is a method involving group work that lessens the unpleasant circumstances and gets the most out of the learning and satisfaction that result from working on a high-performance group. Also, it can be implemented when the enhancement of communication skills or problem-solving skills is the main areas of concern. The teacher assumes the role of a facilitator among vigilantly pre-assigned groups and students are in control of their learning. These features of the strategy fit into the learning environment of 21<sup>st</sup> century education.

### **3.1 Principles of Cooperative Learning**

#### **3.1.1 Positive Interdependence**

Positive interdependence is effectively regulated when group member understand that functioning in unison is independently and collectively advantageous for the group accomplishment in a given task (Jack, 2015). Positive interdependence stimulates better performance through the direction of collaboration and cooperation of everyone in a group (Renandya & Jacobs, 2017). It dampens the unhealthy competitive spirit and elevates the healthy ones. Establishment of positive interdependence ensures learning enjoyment which ultimately raises students' learning achievements (Farrell & Jacobs, 2016).

#### **3.1.2 Promotive Interaction**

Wyman (2018) would have us believe that working together and interacting with peers are equally vital elements for the learning progression. Students need to do real work together in which they promote each other's success by sharing resources and supporting each other's efforts to achieve the common goal. This aspect of CL instill in students the importance of interpersonal relationship. CL can nurture peer interaction which supports in the advancement of communicative language and the learning of ideas and concept. Renandya and Jacobs (2017) advocate the belief that the principle of promotive interactions can assist in overcoming the dominance of teacher talk by extending more talk time to students. Research suggests that peer interaction promotes meaningful learning.

### **3.1.3 Individual Accountability**

Students are responsible for their tasks and for helping the whole group in achieving the learning goals. This accountability is strengthened and obligated through student roles. Farmer (2017) stated that individual accountability makes each student in a group responsible and intensifies active participation and motivation to learn and do well. There should not be scroungers, who merely claim credit for doing nothing. Performance of the group, as well as each member, needs to be evaluated to uphold individual accountability (Renandya & Jacobs, 2017). The success of the group entirely depends upon the efforts of each individual. This realization promotes positive interdependence.

### **3.1.4 Social Skills**

Students need to be trained with social skills just as firmly and especially as academic skills to empower them to cope with both group work and individual undertaking fruitfully (Johnson & Johnson, 2014). Making use of collaborative skills enhance the probability of a group's success leading to enriching learning experiences (Jacobs & Seow, 2015). In addition, these skills will come into effective play in many aspects of their daily lives.

### **3.1.5 Group Processing**

Group processing exists when group members deliberate how well they are succeeding in their objectives and sustaining productive working association. The group needs to pronounce what member's behaviors are supportive and obstructive and accordingly make an adjustment for continual change. Once these actions are recognized, groups can choose what to carry on and what requires to modify so that all group members are contributing and learning at the same time (Johnson & Johnson, 2014). A continuous process of change results from a careful analysis of how members are working.

CL is a group work, but all group works are not CL unless it embodies all the above stated principles (Thomas & Kothari, 2015). Students tend to be more willing to contribute and exhibit more understanding during the discussion when above five principles of CL are well structured. The successful outcome of this study is

attributable to the embodiment of these principles of cooperative learning strategy in all the activities employed as a part of the treatment procedures.

#### **4. Methodology**

##### **4.1 Research Design**

In line with the research questions, this study utilized mixed methodology incorporating both aspects of qualitative and quantitative approaches with one group pretest-posttest design based on Kahlke (2014) who established the fact that the finest research methodology for a study is the one that can discover the best response to the research question. Creswell (2014) defines a mixed method as a process of integration and interpretation based on the combined strength of both qualitative and quantitative data to answer the research questions as best as possible. Mixed method strengthens the validity in the findings, contribute towards knowledge conception and broaden awareness of the occurrences than studies that do not make use of both a quantitative and qualitative method (McKim, 2017).

The group was instructed through four different CL strategies namely Rally Robin (RR), Rally Table (RT), Rally Coach (RC) and Jigsaw (JS) to identify its impact on students' learning achievement in Social Studies. Furthermore, the learning satisfaction was also determined through focus group discussion towards the end of the treatment and students' reflective journals after every lesson.

##### **4.2 Population and Sample**

The population consisted of 60 grade six students of one of the middle secondary schools in western Bhutan. A sample of 30 students was included through clustered random sampling.

##### **4.3 Research Instruments**

The key instruments used for data collection were lesson plans, achievement test, students' reflective journal and focus group discussion. Instruments were validated by the experts from Bhutan and Thailand using Item Objective Congruence Index. All instruments were rated +1 indicating that instruments were incongruent with the research objectives. A total of 4 lesson plans were used for this study. All the lessons were planned integrating different cooperative learning strategies for teaching

the sample group. Each lesson was taught for the duration of 100 minutes. The researcher taught two periods a week for the duration of 4 weeks. Learning achievement tests of 40 multiple choice questions were pilot tested to the other section of grade six students of the research school. After obtaining the Kuder-Richardson coefficient internal consistency of 0.92 for the achievement test, 20 items were used for the study.

#### **4.4 Data Collection Procedure**

According to Resnik (2008), ethics have come to be a keystone for conducting research that negligence in ethical considerations would considerably sabotage people, researcher and the community in general. An approval to carry out research was sought from the concerned authority before the commencement of data collection. Since research participants were below the legal age, a consent letter was signed by their parents to lessen the violation of rights of the research participants during the study.

### **5. Results and Findings**

A statistical analysis of the learning achievement test was carried out through a paired sample t-test to get the first research question answered. Data collected through students' reflective journals and focus group discussion were interpreted into responses to the second research question by deriving obvious themes apparent in the responses of the participants through content analysis.

#### **5.1 Analysis of Achievement Test Score**

It is apparent from Table 1 that the posttest ( $\bar{x} = 15.50$ ) of the group was higher than the pretest ( $\bar{x} = 7.37$ ) resulting to a mean difference of 8.13. Further the significance value of 0.01 indicated a significant increase in students' posttest scores. The standard deviation of the posttest was 0.268 higher than the standard deviation of pretest indicating that the posttest scores of the students were scattered away from the mean, which further showed variation in the degree of impact of the treatment on students. It should be noted that the pretest scores were commonly low which inferred the brevity of students' knowledge on the topic prior to the treatment. Improvement in posttest scores were noted for everyone as shown in chart 2 with the exception of one student. The number of students who made it through the posttest outnumbered pretest

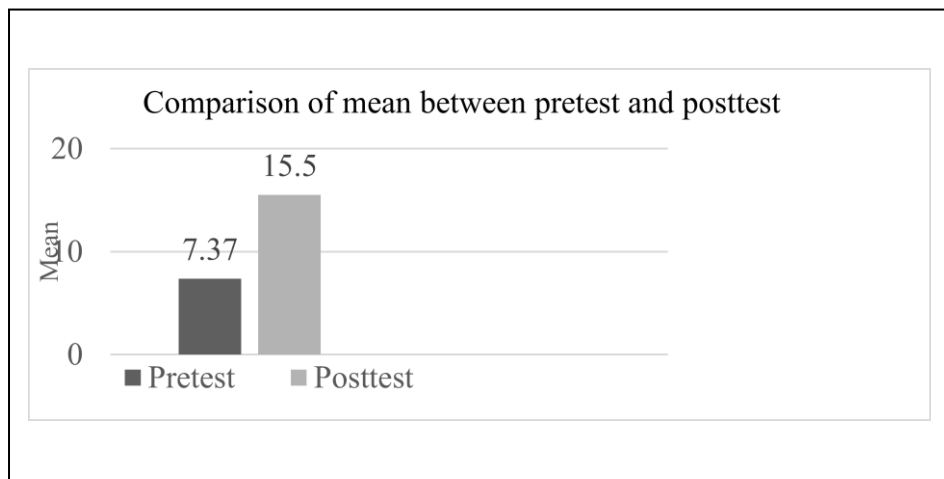


by 29 to 12. This outcome undoubtedly confirmed the effectiveness of CL strategies on students' learning achievement in Social Studies; thus providing a positive response to the first research question, ascertaining the research objective one and hypothesis one accordingly.

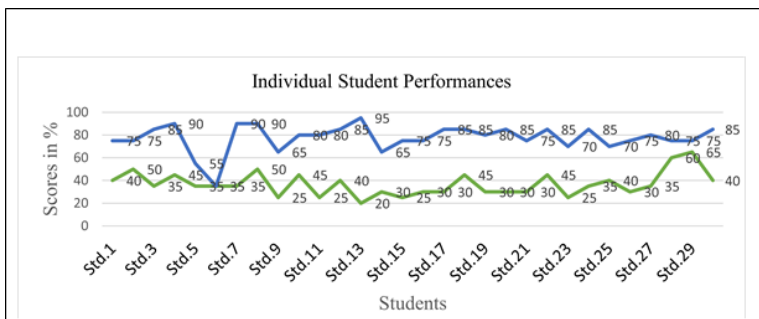
**Table 1 Comparison between pretest and posttest within the sample group**

Group	Pretest		Posttest		Mean Difference	t	P- value
	$\bar{x}$	SD	$\bar{x}$	SD			
Sample Group					15.50 - 7.37 = 8.13	- 14.724	0.01
	7.37	2.092	15.50	2.360			

Significance level (p): < 0.05- significant



**Chart 1 Illustrates the mean of the pretest and posttest scores of the sample group**



**Chart- 2 Line graph showing the comparison of pretest and posttest scores of individual student in percentage**

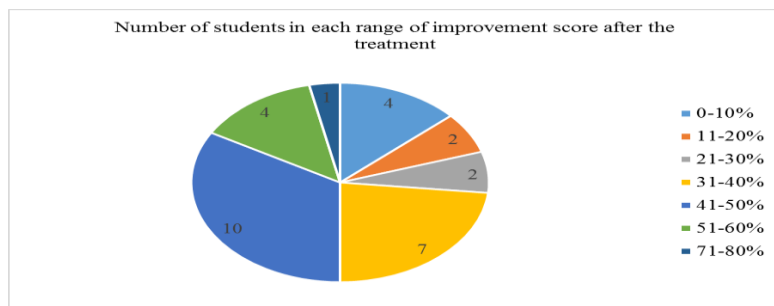
The green line represents the pretest score and the blue one denotes posttest score. The range of students’ scores varied from 20% to 65% in the pretest and 35% to 95% during the posttest test. The chart-2 clearly indicates the drastic improvement due to the treatment provided. Blue line for everyone lies above the green line with the exception of std. 6. Twenty-nine out of thirty students had their posttest scores improved. This is a strong indication of the positive impact of the intervention. Std. 13 made remarkable improvement by 75% while std. 6 showed no improvement.

**Table 2 Improvement Scores of Individual Students after the Treatment**

Students	Pretest Score (100%)	Posttest Score (100%)	Improvement scores (100%)
1	40	75	35
2	50	75	25
3	35	85	35
4	45	90	45
5	35	55	20
6	35	35	0
7	35	90	55
8	50	90	40
9	25	65	40
10	45	80	35
11	25	80	55
12	40	85	45
13	20	95	75

14	30	65	35
15	25	75	50
16	30	75	45
17	30	85	55
18	45	85	40
19	30	80	50
20	30	85	55
21	30	75	45
22	45	85	40
23	25	70	45
24	35	85	50
25	40	70	30
26	30	75	45
27	35	80	45
28	60	75	15
29	65	75	10
30	40	85	45
$\bar{x}$	36.8	77.5	40.2

Table 2 shows the individual improvement of each student. It shows that 97% of students showed improvement. The improvement scores ranged from the lowest being 10% and the highest being 75%. Std. 6 showed no improvement. The maximum improvement had been shown by std. 13 with 75%. The posttest mean of the sample group increased by more than twice of the pretest mean.



**Chart 3 Piechart displaying the number of students in a different range of improvement score after the treatment**

The maximum of 10 out of 30 students managed to improve their scores within the range of 41- 50% followed by 7 of them in 31-40% while the least of 1 in 71-80%. Another four each in 0-10% and 51-60% respectively. The rest of the two students managed to improve their scores in 11-20% and 21- 30% accordingly. Though there was a variation in the degree of improvement amongst students, but the overall intervention impacted everyone positively.

## **5.2 Analysis of Qualitative Data**

To meet the second objective, data were collected through students' reflective journals and focus group discussion which were subjected to content analysis.

### **5.2.1 Analysis of Students' Reflective Journal**

The overall data were organized and interpreted into the following themes:

#### **5.2.1.1 Enjoyment**

Students perceived CL strategies as some kind of games which ignited the spark of fun in learning. It prevented them from the boredom of monotonous learning. CL strategies entrusted them the teaching responsibility which gave them the feeling of satisfaction and enjoyment in learning Social Studies. Some stated that they got to learn twice when they taught their peers.

#### **5.2.1.2 Interest**

The brainstorming process and sharing opinion allowed them to develop a positive attitude towards the lesson. Discussion with friends enabled them to generate interest. Teaching and learning from peers boosted their level of interest in learning Social Studies. Further, exposure to different perceptions kept them fascinated throughout the lessons. Some students conveyed that CL activities involving teaching their friends triggered their curiosity to learn the Social Studies content seriously.

#### **5.2.1.3 Academic Gains**

CL stimulated students' thinking process and aided in concentrating on the given task. Students realized their worth through their contribution to the lessons; their confidence level rose and consequently enhanced their motivation to learn. CL strategies aided them in finding a solution to the problem without difficulty. Learners' doubts got clarified without having to consult the teacher. Their comfort level in clarifying their uncertainties with peers was much higher than a teacher. Sharing made learning easier. The value of interdependence was better understood through CL. Diverse perceptions raised their comprehension and retention power. Students commented that CL heightened their engagement by providing them a role in their learning.

#### **5.2.1.4 Motivation**

Learners desired CL strategies for every subject which signaled their learning satisfaction in Social Studies. They sensed the need to continue the strategies for learning Social Studies better. Their self-esteem was said to have lifted throughout CL pedagogical period. The escalation in their self-esteem appeared to have inspired them to enhance their involvement in the progression of their learning. Their learning contentment level was high because CL strategies not only provided an opportunity for everyone to share what they knew, but also were able to discover the unknown through interaction.

#### **5.2.1.5 Communication**

Intermingling with others refined their oral skills. Assigned tasks provided a platform to practice all the four strands in English. Their listening skills were enhanced by concentrating on sharing activities. RallyTable polished their writing skills. Intensive interaction empowered their confidence in public speaking. Guidance and compliments for resolving the problem made them feel good. Students were better aware of each other's thinking through rigorous interaction. Acceptance of their opinion made them feel good and inspired to learn more. Alrayah (2018) confirmed that students learned to teach one another and elucidated material in their own words, more likelihood of being queried and answered in a group setting which promoted positive interdependence.

### **5.2.2 Separate Analysis on Four Cooperative Learning Structures**

In addition to content analysis of overall cooperative learning structures based on students' reflective journals, separate analysis on each of the four cooperative learning structure is also carried out to strengthen the findings.

### **5.2.2.1 RallyRobin (RR)**

Students noted RallyRobin as interesting and fun way of enabling a space for humor in the process of learning. Some stated that it made them think critically on the given topic. Students recommended RR to be replicated across all the subjects that they learn because they feel their test scores will drastically be improved. Std. 1 reflected "I wish we can do RallyRobin every day." This clearly shows that RR had ignited the spark of motivation to learn. Students enjoyed RR because it facilitated interaction with their friends that prevented them from boredom and tiredness. Students took it as an opportunity to express their liking for Social Studies as a subject. They could derive the sense of the value of sharing and interdependence for the promotion of enriching learning experiences. Listening to others' perception aided them in generating their own ideas and rectifying the faulty perception. Use of RR boosted their confidence in verbalizing their thoughts and accordingly assisted in improving their speaking skill.

Students considered RR as a game rather than an instructional approach. It enabled active engagement. It is a fact that children of all ages love and enjoy the game as much as ever. Enjoyment is one parameter that speeds up the learning process to the best of one's ability. RR empowered students to exchange each other's thinking that led to a better conclusion. This is supported by what had been reflected by std.12, "RR is helpful because it gives the opportunity to know other's answers and at the same time share our answer." Most of their doubts got clarified through their partners without having to consult the teacher. Std. 20 revealed, "I wish we could practice RR for some more periods." This excerpt is an indication of the height of enjoyment of the lesson incorporating RR. RR prevented them from feeling drowsy in the class. Sharing their thoughts with partners helped them in reducing their inhibition which paved the way towards working in larger groups.

### **5.2.2.2 RoundTable (RT)**

Students found RT interesting because it gave them the opportunity to write and share their thoughts with their respective group and accordingly to the whole

class. The structure is said to have assisted them in improving their spellings, handwriting and writing speed as well. Students reflected that frequent use of RT would go a long way in improving their English language; sharing ideas resulted in the expansion of their understanding beyond the horizon leading to the development of creativity. Working in a small group gave them a feeling of comfort and security. They were said to have articulated their thoughts to the best of their abilities. Active engagement fostered the feeling of acceptance that heightened individual confidence.

This structure gave them chance to overcome their fear. This interpretation is supported by what had been mentioned by std.6 “Friends were compelling me to write fast. I was in fear but I could make it on time and that made me very happy”. However, std.13 had different opinion about the same statement, “I was slow in writing and my teammates were pressurising me to speed up. It was a tense moment. I don’t like RoundTable.” They had a mixed feeling regarding this cooperative learning structure. Students expressed that written responses allow them to retain information for a longer period of time. According to one of the students, RT taught her the importance of sharing with others for the benefit of everyone. Students aspire every teacher to make use of this structure. Going through others expression stimulated them to think differently. Students considered RT as an interesting way to exchange each other’s knowledge for the better understanding of task at hand. Just as RR, RT also did not give a room for boredom. Having able to contribute something to the group gave them the feeling of satisfaction.

### **5.2.2.3 RallyCoach**

This structure not only made them active learners, but also a responsible individual in enhancing their peer’s learning. Some students found RC more interesting than RR and RT because the opportunity to take up the role of a teacher excited them immensely. Solving problems under the guidance of friends kept them away from tension and were able to handle the task in a relaxed manner. This structure gave them a platform to practice what had been learned and a chance to rectify wrong concepts and procedures. Low achievers seemed to have benefited a lot from RC. Their partners willingly assisted them in clarifying what was incorrect. A value such as appreciation and gratitude are highlighted through this structure. Students started appreciating while their peers were able to perform the given task correctly and this was exhibited through compliments. One who received assistance from their peers started thanking them. Ability to teach others harbored a feeling of

importance in front of their teacher. This feeling of importance motivated them to try their best and enhanced their self-esteem as well.

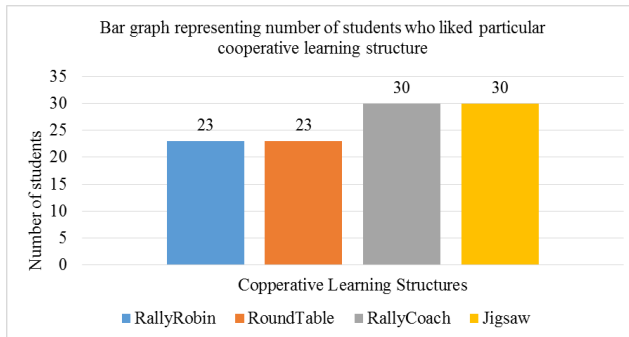
Std.13 mentioned that after being engaged in activities through RC, he felt that he was doing something good for the benefit of his friend. They stated that it was helpful in calculating time. They realized that RC is beneficial to one who guides as well as one who receives guidance. According to std.18, correcting their mistake in front of the whole class embarrasses them, but peer correction reduces their embarrassment. The content of the journal pointed out that they have realized that optimal learning can take place through working collaboratively.

### **5.2.2.4 Jigsaw(JS)**

Students realized that the achievement of the group depends upon the contribution of every member in a group. They commented that formation of expert group assisted them in understanding their respective topic to be taught to the rest of their group members. Just as RC, JS also gave them the feeling that interdependence is vital for living in harmony with others. Students pointed out that they were able to cover diverse topics within the stipulated time. Had it been done individually, it would have taken a long time, and the accuracy would also have been questionable. According to std. 5, “Everybody liked this structure.” This statement indicates that aftermath discussion must have taken place amongst themselves which was a sign of positive attitude towards this very structure. JS benefitted them in understanding Social Studies better. Mixing up with number partners to gain expertise in their areas was what they considered as powerful part of JS. Categorization of each student as an expert in particular area uplifted their spirit in giving best to what they were assigned to.

Std.11 commented, “Now, I know Social Studies.” This simple statement conveys the powerful impact of the structure in understanding the content of the Social Studies. This structure ignited the spark of teaching profession amongst children. One of the students mentioned that he can now calculate time without any doubt.





**Chart 4 Bar graph representing the number of students who liked a particular cooperative learning structure**

Based on the analysis of the reflective journals of each student right after the implementation of each cooperative learning structure revealed that every student enjoyed all the four cooperative learning structures. However, upon the completion of the treatment, 23% of the students differed their preferences from the initial observation. Chart 4 shows the students’ preference across four cooperative learning structures after the treatment. 77% of the students expressed positive attitudes towards all the four cooperative learning structures while 23% had mixed feeling. Rally Robin and Round Table structures are liked by 23 students while RallyCoach and Jigsaw structures are enjoyed by all the 30 students. Preferences for RallyCoach and Jigsaw were mainly because those two structures engaged everyone actively and required everyone to take up the responsibility of making their peers understand what they were learning. Fruitful learning was accompanied by positive interdependence, and that created an enjoyable learning atmosphere.

### 5.2.3 Analysis of Focus Group Discussion

Based on the focus group discussion questions and the kind of responses given by students, the overall responses of the students were categorized into three themes:

#### 5.2.3.1 Enjoyment

Mutual help within a group enabled them to absorb better and derived joy simultaneously. Discussion within the group empowered correction of errors and

stimulated appreciation of each other's contribution. Their confidence was said to have improved through the guidance of their peers when they seemed to lose track of the task at hand. They enjoyed the lesson when they realized that the success of the group depended on the learning and performance of every student. Students had taken it as an opportunity to learn through creating their own knowledge in consultation with their friends.

### **5.2.3.2 Understanding Social Studies**

Sharing activities facilitated meaningful learning. They were assertive about their performance. Everyone progressed drastically during the posttest. This certified their assurances. Discussion dispelled their reservations. Collaboration supported significant learning. They opined that working in a group gave everyone something to take back. They seemed to have enjoyed RC and JS CL strategies more than RR and RT because the former two gave them the opportunity not only to learn, but also to teach their peers. Explanation of concepts and ideas to one another strengthened their own learning. Teammates provided individual attention and assistance to one another. Such back-up drove each one of them to move ahead with the learning. Learning alone was a struggle but learning together in a group made so much easier for most of them.

### **5.2.3.3 Attitudes towards the Cooperative Learning Activities**

They stated that CL structures gave them an opportunity to answer questions and partake purposefully. They felt that the continuation of activities through CL would go a long way in realizing the dream of their school securing top ten positions in the country during the common examination. Involvement of everyone in the activities gave them the feeling of security and learned more. Teaching and getting taught by friends was what many viewed it as an essence of CL. Discussion provided the potentiality of getting many of their queries answered. They experienced more positive relationship and wider circle of friends through CL. To shape gratifying human relationships, children needed to acquire and have the prospect of practicing the required social skills. Development of social skills prepared children for a lifetime of healthier interactions in all phases of life. Social skills were essential part of functioning in society.

CL Strategies inculcated the value of diversity. Students' comprehending power of the concepts and ideas found to be easier when explanation came from peers.

Random reporter of the findings of the discussion alerted them about what was being discussed in a group that kept everyone prepared to report out. The strategies facilitated them to create knowledge through the use of their previous knowledge thus, supporting the theory of constructivism.

## **6. Discussion**

### **6.1 The Result of Test Score Analysis**

Pretest and Posttest with 20 multiple choice questions were administered to the sample group. The findings revealed that after four weeks of treatment, the students' posttest mean score was significantly higher ( $\bar{x} = 15.50$ ) than pretest mean scores ( $\bar{x} = 7.37$ ). The paired sample t-test showed a significant value of 0.01 which was an indication of a significant increase in scores of the students. Students with low pretest scores were profited the most from the treatment, as their posttest marks were apparently improved. Kagan & Kagan (2009) supposed that learners with poorer academic achievements accomplished better in the cooperative group because group accomplishment benefitted everyone and heightened their knowledge through exchange of ideas. Individual's contribution to the group confirmed active participation of all learners and resulted in greater academic performance.

Improvement scores in the posttest had been noted for everyone except std. 6 whose score remained unchanged. Interestingly, contrary to the lack of improvement in terms of score, the content of his reflective journal and focus group discussion clearly reflected the positive impact the intervention had on him. This was what he said, "I enjoyed cooperative learning because I could learn many things. Discussion with friends made answering difficult questions easier." This hints that he must have obtained the pretest score by mere chance of occurrence since the test item consisted of multiple choice questions. Multiple choice questions created space for students to get credit for an accurate answer with fortunate presumptions (Weimer, 2018). His pretest score could have been much lower or higher than what he actually scored.

However, the majority of the students had their score improved in the posttest. Thus, the CL strategies had a significant effect on Bhutanese grade six students' achievement in Social Studies. Consequently, the first research question and the first hypothesis (H1) which specified that there would be an improvement in students' learning achievement in Social Studies after employing CL strategies had been ascertained. This was supported by Chatila and Al Husseiny (2017) who found

out that cooperative learning had a substantial impact on students' learning achievement. This study also demonstrated that the teacher's methods of teaching had a profound bearing on students' learning outcomes. This finding validated the results of some earlier studies by Yangzom (2017), Yapici (2016), Tsay and Brady (2012) and Tran (2014) which signposted that cooperative learning strategies resulted in greater students' learning achievement. Wrong concepts and defective knowledge were eradicated in a group conversation (Jackson, 2017).

Students performed better in the cooperative group as everyone was able to profit from group accomplishment and advance their understanding in healthier settings by sharing thoughts with the other members of the group (Hosseini, Navkhasi & Shahsavari, 2017). Improvement in the posttest score could be attributed to the active participation of every student. CL provided the prospect of rectifying inaccuracies where the students scrutinized notions of identifying mistakes (Alshammari, 2015). CL made certain that the students grasped the right concept, an advantage that may not be understood by students who were taught through lecture method. The finding correlated with what has been said by Jack (2015) that student's performances surpass when CL strategies are executed.

## **6.2 The Result of Students' Reflective Journal on their Learning Satisfaction in Social Studies**

To determine the answer to the second research question, students were made to write a reflective journal for every CL structure used. Outcomes of the study substantiated Rabgay (2013) who inferred that the CL strategies strengthened both learning achievement and learning satisfaction. The incorporation of CL strategies uplifted students' interest and motivation to learn. Abass (2008) pointed out that interaction was requisite for motivating students to learn along with firm reassurance and supporting their learning efforts. The study was also in agreement with the research carried out by Yangzom (2017) who interpreted that CL enhanced learning satisfaction significantly in geography.

Learning satisfaction had been enhanced by the conducive learning environment. Students found CL strategies no different from a game which stimulated joy of learning. Specific individual role heightened their sense of belonging which motivated them to use their previous knowledge to build up something new and participate sincerely. Cooperative learning environment enhanced students' learning

since sharing through interaction was an acquisition skill that should be applied beyond the four walls of the classroom to strengthen learning (Khan & Akhtar, 2017). Theory of constructivism supported this finding where students' involvement in knowledge creation was of paramount importance. When many heads share information, each of the heads was deepened by their experiences.

### **6.3 Focus Group Discussion on Students' Learning Satisfaction in Social Studies**

The findings of the focus group discussion supplemented the outcomes of students' reflective journals in responding to the second research question. Students could get the opportunity not only to express their opinion, but also became aware of their friends' thoughts which resulted in developing their creativity. The very essence of CL was that it facilitated interaction amongst students (Jolliffe, 2010). Cooperative learning builds a less intimidating and more relaxed atmosphere for learners to voice out their thoughts (Baleghizadeh and Hossein, 2012). They realized their worth when they could contribute something to their group. Harris (2011) reported that when students contributed a solution to a problem, the critical thinking process involved, enabled them to develop a positive outlook towards the lesson.

The responsibility of making their peers to understand stimulated the students' interest and motivated them to take an active part in the learning process. The constant explanation of learning perceptions offered students who get the elucidation or the one who justify with a profound understanding and high rate of retention power (Trans, 2014). Further, high learning satisfaction could be owing to the pleasure and satisfaction derived from comprehending the concepts. These outcomes were coherent with the findings of the studies of Mohammadjani & Tonkaboni (2015) and Juweto (2015).

CL strategies resulted in the promotion of cooperation and interaction amongst peers which speeded up the learning process. Gillies (2014) noted that working accommodatingly geared students in the direction of a common goal and this aid upheld interpersonal relationships among themselves. It was indispensable to provide the prospect for students to network with another for understanding the deep concepts (Hosseini, Navkhasi & Shahsavari, 2017). CL was instrumental in sanctioning students to study and comprehend more through discussion and collaboration (Jack, 2015). Jurkowski and Hanze (2015) pointed out that interaction and group cooperation skills got enhanced when students explained on partners'

thoughts and when their philosophies were elaborated by their companions. Modaber and Far (2017) confirmed that CL not only enhanced self-esteem, but also developed social skills and responsibility of students. Farzaneh and Nejadansari's (2014) discovered that Iranian students, in general, held a positive outlook towards CL because they could gain confidence from the fact that they could depend on each other to tackle the issues. The results further confirmed Neo et al.'s (2012) assertion that learners' preference over CL was mainly because it improved their tolerance level and helped them to value each other's contributions.

There is a substantial body of research validating the efficacy of CL strategies (Zamani, 2016). Although certain studies have learned conflicting substantiation about the feats to be attained with CL, the general effectiveness of study signal CL as an effective teaching and learning method is unquestionable (Robinson, 2012). In conclusion, the researcher would like to affirm that CL strategies are positively impactful in uplifting both academic performance and learning satisfaction because it mandates the engagement of every student. CL is an effective technique by which social studies teachers can achieve both academic and socio-moral objectives as recommended by Korkmaz and Tay (2016).

## **7. Recommendations**

### **7.1 Recommendation for Practice**

The following recommendations have been made based on the findings of the study for the benefits of the teachers in Bhutan and other countries:

- Every teacher should make use of CL irrespective of subject and grade level to enhance students' academic achievement and learning satisfaction.
- RallyRobin can be utilized for the promotion of communication skills and social skills besides learning the content.
- RallyCoach is more applicable in solving mathematical problems and revising what had been taught.
- Jigsaw can be used for staging new materials.
- RoundTable is appropriate for activities involving multiple responses.
- Consistent training on CL strategies should be offered all the way through a career for the novice along with the veteran teachers.
- CL allows the teacher to become a guide and a stimulator rather than an information dispenser.

- Bhutanese teachers ought to make use of the CL method as an alternative to the traditional lecture method.
- Incorporation of CL should be made into teacher education programs.

## 8. Conclusion

With the advancement in technology and digital world, the focus and attention of today's generation are easily distracted. Stimulating and engaging strategies has become need of the hours to bring back their focus of attention. Cooperative learning strategies throughout the schooling period can be one of the ways to tackle such challenges. Integration of learning theories with an appropriate teaching strategy is of vital importance in meeting the demands of 21<sup>st</sup> century education. It all depends upon the teachers' abilities to make use of the appropriate instructional approach to smoothen the journey of learning as per the requirement of 21<sup>st</sup> century educational goal. Cooperative learning builds less intimidating and more relaxed setting for students to voice out their point of view. Furthermore, the data assembled from this study specified that students perceived cooperative learning strategies as a contributing factor to their learning engagement and performance.

This study demonstrated that this instructional practice contributes towards improving test scores, interpersonal skills and more effective peer collaboration. Therefore, educators should make use of cooperative learning strategies to a greater extent in a classroom to strengthen students to enable the smooth transaction to the kind of world they will enter. There are certain limitations in the implementation of cooperative learning strategy. It takes time to familiarize both teachers and learners. Designing and planning require a considerable amount of time that obstruct the coverage of syllabuses within the instructional time. If familiarization and implementation are carried out right from the elementary level, there would not be many problem by the time the learners reach primary and secondary levels. Despite limitations, it is a valuable teaching approach that is very much required in today's classrooms.

## 9. Recommendations for Further Research

- The study period can be extended to more than a month for better impact.
- Other CL approaches can be tried out for more authentic impact.

- Future studies should increase the sample size to embrace more schools and grade levels to produce additional proof to testify the effects of CL.
- Qualitative research on teachers' attitude towards CL can be conducted to identify what actually stands as a stumbling block in implementing this strategy.

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