

# A SUCCESS OF COOPERATIVE LEARNING ON STUDENT ACADEMIC ACHIVEMENT

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## Abstract

The review that follows is an investigation into the impact of cooperative learning strategies on understudies' achievement in the subject of Education. For this, a quasi-trial plan was used, involving a pre/post control trial and exploratory data gathering. A test of 63 female understudies in grade 12 at a public school was conducted. Understudies were divided into test and control groups based on their pre-test scores. With the test bunch, various cooperative learning exercises such as STAD, TGT, and Jigsaw II were practised for an extended period of time. Following that, a post-test was administered to the two groups to determine whether there was a difference in achievement. A free example t-test was used to determine the difference between two meetings prior to mediation, and then after the fact mediation. In the post-test, the results revealed a significant difference in scores between the control and test groups. To evaluate the impact of mediation on exploratory gathering achievement scores, a matched example t-test was used. The results revealed that there was a significant difference in trial bunch ratings before and after intercession ( $p=.000$ ). It is possible to conclude from the findings that cooperative learning exercises have a favourable impact on academic accomplishment of understudies studying Education.

**Keywords:** Cooperative Learning, Academic

## INTRODUCTION

**Cooperative learning** is a technique for helping that attempts to separate homeroom exercises into scholastic and social opportunities for growth. Agreeable learning is something other than placing understudies in gatherings; it has been portrayed as a "system of positive association." Students should work together in gatherings to finish tasks that will assist them with accomplishing their intellectual goals. Student learning cooperatives, in contrast to individual learning, which might be competitive, ask for information from each other's resources and talents (a second, to evaluate each other's ideas, to monitor each other's work, and so on). Furthermore, the teacher's function might range from presenting knowledge to supporting student learning. When the group succeeds, everyone succeeds as well. Successful cooperative learning tasks, according to Ross and Smyth (1995), are intellectually difficult, inventive, open-finished, and incorporate higher-request thinking assignments. Expanded degrees of understudy fulfillment have additionally been associated with helpful learning..

For the successful integration of cooperative learning in the classroom, five necessary characteristics have been identified.:

- group processing
- positive interdependence
- individual and group accountability
- promotional dialogue (face to face)

Developing crucial interpersonal and small-group abilities in students According to a meta-analysis by Johnson & Johnson, students in cooperative learning settings succeed more, have better reasoning, and have higher self-esteem, such as peers and learning partners, than students in individualist or competitive learning settings. Actions are receiving an increasing amount of social support. .

### **History**

Prior to World War II, social scholars Allport, Watson, Shaw, and Mead started developing helpful learning hypothesis after more successful quality and generally speaking usefulness and productivity than working alone. Be that as it may, it was not even 37 when researchers and Dob discovered that those who collaborate to achieve common goals and work together, since they are free to attain the same aims, are more successful in accomplishing outcomes than those who try. Furthermore, independent beneficiaries were found to be more inclined to engage in competitive behaviour. In the 1930s and 1940s, philosophers and psychologists including John Dewey, Kurt Levin, and Morten Deutsch impacted the agreeable learning hypothesis that is utilized today. Dewey felt that understudies ought to have data and interactive abilities that they can apply outside of the study hall and in a vote based society. Understudies portray data bunches as dynamic beneficiaries of data and messages, instead of detached collectors of data portrayed as being currently learning together (for instance, are educators discussing it). Understudies are focusing there). Levine's commitment to helpful learning was established on the idea of making connections between bunch individuals to seek after and acknowledge learning objectives. Positive social association, the possibility that the understudy bunch is responsible for adding to information, was Deutsch's commitment to helpful instruction.

David and Roger Johnson have been conspicuous supporters of helpful learning hypothesis since that time. In 1975, he saw that helpful instruction encouraged common decision, more noteworthy correspondence, high worthiness, and backing, as well as an expansion in different sorts of methodology thinking among the members in the gathering. (15) The understudies were more serious, had them draw in with others, and displayed an absence of passionate connection with different understudies. In 1994, Johnson and Johnson introduced the five key elements for viable gathering learning, accomplishment, and higher-request social, relational, and mental abilities (positive reliance, individual responsibility, eye to eye commitment, interactive abilities, and handling) (for example , critical thinking , thinking , direction , arranging , coordinating and reflecting ).

### **THEORETICAL BASIS**

Social Interdependence Theory: When individuals' results are influenced by their own and others' activities, they are said to be socially interdependent. Positive social association (when individuals' exercises support the accomplishment of joint objectives) and negative social reliance (when people's activities discourage the satisfaction of one another's objectives) are the two kinds of social relationship. There are three types of social dependence: social dependence, independence, and helplessness. When individual A's objective achievement is influenced by individual B's behaviour, social dependency occurs, but the opposite is not true. Person A's objective achievement is unaffected by individual B's activities, and vice versa, social freedom exists. When neither the individual nor the other goal can effect achievement, social helplessness emerges. Kurt Lewin stated that the essence of a group is the interdependence among its members, resulting in a dynamic totality in which a change in the status of one member or subgroup affects the status of others. By working toward a common goal, group members become more interdependent. As the members become more aware of their common objectives, a sense of tension develops, prompting movement toward the objectives.

Morton Deutsche may be linked to the stress systems of different persons, and Levin's concepts could be extended by check. He recognized great and negative types of social reliance. Positive reliance exists when there is a positive connection between persons' goal attainment; if one can feel that they are achieving their goals and only if the other person can feel that they are working together to achieve their goals. Interdependence that is positive leads to positive interactions. At the point when there is a negative connection between's singular objective victories, negative relationship emerges; the individual accepts they

can accomplish their objectives provided that and provided that others with whom they are seriously equivalent neglect to accomplish their objectives. Interactions that are hostile or material are the product of negative dependency. There is no reliance when there is no connection between people's objective achievement; people accept that their objectives don't have anything to do with the objectives of others. The principle idea of social relationship hypothesis is that players negotiate how to structure goals, which dictates how to decide the results of the pattern bargaining stance.

### **Type**

Formal agreeable learning is used to accomplish bunch objectives in work tasks and is organized, worked with, and directed by the educator after some time (eg finishing a unit). Any course satisfied or task can be altered for this sort of learning, and gatherings can go from 2 to 6 people, with talks enduring anything from a couple of moments to 60 minutes. Coming up next are instances of formal agreeable learning methodologies:

1. technology for jigsaw puzzles
2. Tasks that need collaborative decision-making and problem-solving
3. a lab or experiment project
4. Peer review assignments (such as editing writing assignments). Informal and fundamental learning are frequently facilitated by gaining the experience and abilities that come with this sort of learning. Jigsaw activities are fantastic because they allow students to take on the role of teacher for a specific topic and teach it to a classmate. The theory goes that if a pupil can teach something, they have already mastered it.

Informal cooperative learning combines group learning with passive learning by bringing attention to the topic in small groups throughout the session or through a discussion at the end of the course, and usually involves groups of two (eg. discussion with your partner). In contrast to formal schooling, when two students can be laboratory partners throughout the semester, contributing to each other's understanding of science, these groups are frequently transient and may vary from lesson to lesson.

General talks on four components with the goal of responding to teacher inquiries, sharing answers to a colleague's questions, including listening to a partner's responses to the same topic, and developing a new development north of Is. The student can process, consolidate, and retain more knowledge with this method of learning.

These peer groups convene over a lengthy period of time (such as a year or many years, as in high school or post-secondary education) to grow and contribute to each other's mastery of knowledge in group-based cooperative learning. Huh. Encourage each other and assist the academic and personal achievement of group members by discussing regular content on the topic.

Base group learning (for example, a long-term study group) is helpful for studying complicated concepts over the length of a semester or more, and it fosters caring, supportive peer connections, which encourage and strengthen the student's dedication to group learning. That is, while expanding one's self-awareness. Self-esteem and self-respect In the case that a student is missing for a lesson, the basic group approach holds pupils responsibility for educating their peers. It works effectively for both individual learning and social support.

### **Elements**

Five characteristics that mediate the efficiency of cooperation were described by Johnson & Johnson (2009). Siltala (2010) and Brown & Ciuffetelli Parker (2009) outline five basic and necessary aspects for cooperative learning:

1. positive interdependence

1. Students must work hard and participate fully in their groups.

2. Because each group member has a task, role, or obligation, they must assume accountability for their own and their group's learning. face-to-face promotional conversation

1. Members advance each other's prosperity

2. Students clear up for one another what they have or are learning and help each other comprehend and finish tasks

individual and gathering responsibility

1. Each understudy should exhibit dominance of the material being examined

2. Every understudy is responsible for their own learning and work , subsequently taking out " social contempt "

2. Social Skills

Interactive abilities that should be educated for fruitful helpful learning Skills incorporate successful correspondence , relational and bunch abilities.

1. Leadership

2. decision making

3. building trust

4. friendship development

5. Communications

6. conflict management skills

group processing:

7. Group handling happens when bunch individuals (a) ponder which part activities were useful and (b) conclude which activities to proceed or supplant.

8. The reason for bunch handling is to explain and work on the viability with which individuals do processes important to accomplish bunch objectives.

Significant improvement in student achievement requires two characteristics:

1. When planning helpful learning assignments and prize designs , individual obligation and responsibility should be distinguished. People should know the very thing their obligations are and that they are responsible to the gathering to arrive at their objectives.

2 All the individuals from the gathering should be involved for the gathering to get done with the responsibility. For this to occur, every part should have an assignment for which they are mindful , which no other individual from the gathering can achieve.

Cooperative learning strategies come in a variety of forms. Student pairs are used in some cooperative learning strategies, while little gatherings of four or five understudies are utilized in others. Many methods

have been fused into structures that can be applied to any material. Think-pair-share, think-pair-right, cooperative forms, and intelligent learning methodologies are generally straightforward constructions to apply. Jigsaw, Jigsaw II, and Reverse Jigsaw are three well-known cooperative learning techniques. To provide students pairs and work together, teachers could consider critical thinking, creative thinking, and compassionate thinking tasks.

**Think pair share**

Basically developed by Frank T. Laiman (1981), [30] Students can use Think-Pair-Share to focus silently on an issue or problem. The learner can either write down his or her ideas or simply brainstorm them in his or her head. The student engages with a partner and discusses their ideas before listening to their partner's ideas when encouraged. Following the pair dialogue, the teacher solicits feedback from the entire class. Teachers do not have to worry about not having volunteered to pupils when they utilise this strategy because each student's mind will already have an idea. As a result, the teacher can call anyone and the conversation will be more productive.

**jigsaw**

There are two groups of students: the home gathering and the master bunch. Understudies in a heterogeneous home gathering are doled out to various subjects. Understudies leave their home gathering and get an assemble with different understudies who are concentrating on their doled out subject once a point has been distinguished. Prior to getting back to their home gathering, understudies gain proficiency with the subject in another gathering. Every understudy is answerable for showing their designated subject once they return to their home gathering.

**Jigsaw II**

Jigsaw II is a minor departure from Robert Slavin's (1980) Jigsaw in which individuals from the home gathering are given a similar material yet are requested to zero in on different segments from it. Every part should turn into a "expert" in their allocated section and pass on their knowledge to the rest of the home group.

**Reverse saw**

Timothy Haydine(2003) produced this version, which differs from the original jigsaw during the teaching portion of the activity. Instead of returning to their home groups to teach pupils the material expert groups, use the reverse Jigsaw strategy and teach the entire class.

**Inside-out circle**

It's a cooperative learning approach in which students create two concentric circles and take turns facing new partners to answer questions or debate topics raised by the teacher. This technique can be used to gather a wide range of data, produce new ideas, and solve problems..

**Interactive learning**

Equal learning was created by Brown and Palisker (1982), and it includes a type of coordinated, helpful learning in a cooperative getting the hang of setting between the student chiefs and the crowd; master arranging by a grown-up instructor; and direct guidance, displaying, and practice in the utilization of basic procedures that work with discourse structure.

One such model allows you to participate in a discussion regarding the text. Students join hands, read each other in turn, and ask each other questions, receiving rapid feedback. Students can employ crucial

metacognitive processes including clarifying, questioning, anticipating, and summarising with this strategy. It promotes the idea that students may effectively learn from one another. In areas like mathematics, there are actual studies that illustrate the usefulness of interactive learning. For example, it was discovered that children who used this method had a higher level of accuracy in mathematical calculations than children who did not. Students learning in a range of contexts, including those with learning difficulties and those at risk of academic failure, have had similar results. These studies involved students from elementary school to college..

**Williams**

The goal of learning is for students to work together to answer a broader question. Each group has a variety of questions that enhance cognitive demands in order for students to advance and achieve their learning goals.

**STAD ( or student-team-achievement division)**

Small groups of students are formed (or teams). The full illustration is conveyed to the class, and the understudies are then surveyed on it. People are surveyed in view of their commitment to the group's prosperity. Regardless of the way that the evaluations are taken independently, understudies are encouraged to work together to support the gathering's general exhibition. [39]

**Rally table**

Another cooperative learning method is rally table. The class or students are separated into groups during this process. This is done to promote cooperative learning, teamwork, and group learning. The written version of Robin's Table can be found here.

***TGT (or Team Game Tournament)***

Students are divided into small groups to study and practise for general knowledge games. This motivates children to learn while also allowing them to have fun while doing so. Because this is a collective project, no single kid is to blame.

**Introduction****Objective**

TGT promotes student collaboration and friendly competition, allowing students of varying levels to work together and grasp the courses that have been assigned to them. Students are given the opportunity to interact with other students. This practise has the advantage of holding students accountable for the material they prepare.

**Profit**

1. Student participation in higher education.
2. Students are enthralled by their study.
3. The learner, not the teacher, is the source of knowledge.
4. Encourages kids to have positive attitudes such as cooperation and tolerance.
5. Instills in students the ability to communicate themselves or their thoughts.

**Damage**

1. It takes a lot of time for new teachers.
2. Adequate infrastructure and amenities are necessary.
3. It has the potential to produce confusion in the classroom.
4. does not belong in a collegiate setting where education is individualised
5. It provides dominating personality a stronger voice than individualistic research.
6. It makes the student sluggish
7. Constantly dominating it decreases the lower student's self-esteem.
8. This results in a subset of behavioural issues.
9. This allows for noise in the classroom, making attention difficult.
10. This creates a bad environment for the high achiever, who may receive low grades due to a lack of group work.
11. Without teaching group study, our world already operates in groups such as police forces, unions, and so on.

TGT is a successful technique for teaching mathematics because it allows students to gain skills and mastery through peer assistance and healthy competition. [7]

### **Research evidence**

For kagan formations, there is no research available. There are no companion explored investigations on the impacts of kagan structure learning. Helpful learning research delivered "extremely sure" results and affirmed that agreeable it are cross-curricular to learn modes. Agreeable learning is understudies taking part in bunch exercises that further develop learning and bring new points of view. Scholarly upgrades, further developed race relations, and higher individual and social growth are all positive consequences. who completely participate in student group activities, the partners' behaviour, constructive feedback, and collaboration with your groups, high test scores at the end of their semester courses to receive grades The chances are in your favour. Cooperative education is an active pedagogy that encourages students to reach higher academic goals. Attendance, time on the job, love of school and classes, motivation, and independence all improve with cooperative learning.

#### Cooperative Education's Benefits and Applicability:

- Cooperative learning approaches are often equally beneficial for pupils of all skill levels • Cooperative education is effective for all ethnic groups
- When students have the opportunity to work together, their perceptions of one other improve. • Cooperative learning improves self-esteem and self-concept. • Ethnic and physical/mentally challenged boundaries are broken down, which can lead to pleasant encounters and friendships.

#### Outcomes of Collaborative Learning:

- improved logic at a high level • increased development of new ideas and solutions • improved learning transfer between contexts

In business, cooperative education is critical:

- Cooperative education is a distinguishing feature of innovative businesses.
- A five-stage cooperative learning split provides a useful tool for analysing learning in innovative organisations.
- The innovation linked with cooperative learning allows for the creation of new ideas.

**Limitations / Problems**

Cooperative learning has a number of restrictions that make it more difficult than it used to be. Cooperative education's ongoing development, according to Sharan (2010), is a threat. Since helpful learning is continuously advancing, educators might become confounded and come up short on exhaustive comprehension of the cycle. Since helpful learning is a particularly powerful movement, it can't be utilized successfully in a wide scope of settings. Educators can likewise make it a training to utilize agreeable figuring out how to keep understudies propelled. While helpful learning takes time, the best utilization of agreeable learning depends on a connected with teacher. His group, who accept they are being kept down by their more slow companions or less sure understudies, and they accept they are being overlooked or embarrassed by them, may be stood up to with understudies' resistance and hostility to instructors to embrace agreeable learning.

Students frequently provide feedback on the success of teamwork experienced during cooperative learning activities in the form of evaluations or reviews. Due to perceived peer competitiveness, peer review and rating may not accurately reflect genuine experiences. Due of fear, students may feel compelled to provide an erroneous assessment. Confidential appraisal techniques can assist strengthen the evaluating ability to address such concerns..

**Group hate**

"A feeling of terror that comes when faced with the prospect of working in a group [49]" is how group hatred is defined. When pupils despise the group, their individual performance declines, and the group as a whole suffers as a result. Many variables contribute to students' feelings of group hatred, with the following being some of the most important:

- a traumatic past experience
- Group exhaustion (plenty of cooperative learning)
- similar to working alone

When students are given the choice to pick between learning activities (based on group or individual assignments), numerous factors that require students to work in groups or not are inspired to choose. The following are the three most frequently mentioned factors: "How likely am I to get a good grade?"

- "How hard will the job be?"
- "Amount of effort involved".

Most students prefer to work alone because they believe they can accomplish more independently than in a group.

What variables contribute to a student's inciting of group hatred? It's difficult to say that the hatred between groups A, B, and C stems solely from the fact that each group is distinct and everyone is different. However, there are other factors that contribute to pupils developing group animosity.

- Concerns about instructors' roles



- Concerns about students' roles
- Concerns about fairness and resource allocation

Teachers' roles are frequently questioned owing to a lack of communication from the teacher on what is expected of the class. Strikes a sweet spot teacher who is not a helicopter instructor and finds it difficult to participate in the project while not being too "loose Gusi." While a competent teacher may occasionally be able to achieve a balance, it is a difficult undertaking, and most teachers bow down in some form. This may cause students to get perplexed. Only when students are placed in groups and asked to finish a project with minimal guidance does this improve. The way a teacher chooses a project's framework, as well as how he views the entire student effort, may have an impact. Whether or not a pupil likes the teaching approach has an impact on whether or not they acquire group animosity.

The third point of concern is that the students' group leads to the development of hatred; he is concerned that students get sick from working with members of the same group on a regular basis. Cooperative learning has become so widespread that student groups are developing animosity as a result of too many group projects. Students say things like "so many group projects with the same folks" and "we're all in one other's business." While developing personal relationships is a beneficial part of cooperative learning, it may also be detrimental if you are continuously forced to work with people who disappoint you or are difficult to work with. It used to be like way. Unfortunately, group members frequently show evidence of movement inside the group.

### **Loafing**

"Students who do not accept responsibility for their role, even if it is the smallest role in the group," according to the definition of loafing. Students anticipate that group-based learning will be equitable to all members of the group. In order for cooperative learning to be equitable, the group's workload should be distributed evenly. Many students are concerned that this will not be the case. As a result, the students develop a sense of collective hostility.

"The fear of benefiting from group activity (typically a good grade) as a member of many social maverick groups of people impairs the group's efficacy. Some students use their intellect to build capital that no one unfairly benefits from. Ironically, some students are most irritated by "slackers" or "freeloaders," and they make snap judgments about their classmates and express themselves right once. Given that, in order to maintain control, they must take care of everything. Concerns about equity can skew a group's work in a variety of ways. As a result, in order to improve the effectiveness of groups, a trainer who To lessen student opposition to cooperative learning, the most important thing it can do is stress on the notion of "fairness." In order for pupils not to acquire group animosity, instructors must be aware of this process and take steps to guarantee that the project is "fair." This can be a challenging task. When a group of other students' difficulties aren't brought to the instructor's notice, it's tough to figure out who's in charge of the project.

### **CONCLUSION**

There are a variety of reasons why rivals achieve less than they would if they collaborated. Many research have concluded that cooperative learning is more effective than competitive learning or individualistic attempts. Competition and individualistic endeavours, on the other hand, have been shown in studies to be beneficial and should be promoted when framed properly.

1. The competition's terms and conditions
2. Winning isn't all that crucial.
3. Everyone has an equal chance of winning.

4. Winning is governed by clear and explicit rules, methods, and criteria.
5. Environments conducive to creative individualistic activities
6. Cooperation is prohibitively expensive, complex, or time-consuming due to a lack of efficient potential cooperatives or the resources required for cooperation.
7. The aim is seen as essential, relevant, and worthwhile.
8. Participants should be successful in reaching their objectives.
9. Because the directions for completing the activities are clear and detailed, no additional explanation of how the participants will progress and evaluate their work is required.
10. The information gathered will be put to good use later in the cooperation endeavour.