



Teamwork and Collaboration: Evidence for Learning

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Abstract: Collaboration and learning will cultivate social and academic relationships that extend well beyond the classroom and the course itself. It will create environments where students can hone their leadership skills. This will reduce anxiety in the classroom and on tests. This encourages students to assist one another in problem-solving and knowledge-sharing, which not only improves their collaboration skills but also leads to enhanced learning and comprehension. This will also encourage students to work together to maximize their own and one another's learning. Students will greatly benefit from this approach because it fosters an environment of active, engaged, exploratory learning, encourages diverse understanding, builds students' self-esteem, promotes positive race relations, and employs a team-based approach to problem solving while maintaining individual accountability. The intervention was implemented in small-group tutorial classes. Each cohort was given a specific assignment. With their unprecedented participation, the students' diverse approaches to solving a particular problem fostered a healthier environment for discussion. Based on the students' responses to this method, it was determined that they became very thrilled and enthusiastic about the course. The students' responses indicate that they were able to surmount their insecurities and actively participate in the entire teaching and learning process.

Keywords: Teamwork, Collaboration. Cooperation, Communication, Interaction.

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1. Introduction

Collaborative learning requires groups of students and instructors to collaborate on intellectual endeavors. Most of the time, students collaborate in groups of two or more to seek understanding, develop solutions, or produce something.

Collaborative learning is a method of education in which a group of students (two or more) work on group projects, assignments, etc. in an effort to learn something together. In this form of education, students have the chance to learn from the talents and resources of others.

Collaborative learning is a method of teaching and learning in which groups of students work together to solve problems, complete assignments, or create products. Collaborative learning thrives in an environment where students can converse with one another (Paul, R. W. (1992)).

Collaborative learning is a novel approach to education in which students study in groups to improve their learning outcomes. They gather to complete duties, work on projects, and learn new concepts.

Instead of relying on memorization techniques for studying, the concept of collaborative learning encourages students to actively participate in the assimilation of new information through group efforts. In this way, rather than working individually, students can defend their positions, reframe new ideas, comprehend the perspectives of others, and obtain a deeper understanding of a subject.

2. Important Aspects of Collaborative Learning

- Purpose of the Activity - Collaborative Learning contributes to the accomplishment of the activity's purpose by distributing equally the efforts of all team members.
- Individual Learning Objectives - It encourages students to embrace new challenges and collaborate with peers on various project components.
- Enhancing Friendships and Teamwork - This allows students with similar interests to make acquaintances across the institution and establish a network.
- Forming New Relationships - Assists students in meeting new peers, learning about their customs and cultures, and collaborating with them.
- Delegation of skills entails allocating work responsibilities to team members based on their experiences, expertise, and areas of interest. (David et al. (1991)).

3. Strategies of Collaborative Learning

- a. Defining the group's responsibilities: Prior to beginning the assignment, it is preferable to define everyone's objectives in the group, as this will help them assume responsibility for the tasks.
- b. Encourage Direct Communications: The members of the group will comprehend the concepts better and learn more comprehensively if they engage in frank and trustworthy dialogue and maintain a climate of trust (Randall, V(1993)).
- c. Administer A Pre-test and A Post-test: Before and after group learning sessions, instructors can evaluate students to determine the outcomes of collaborative learning.
- d. Evaluate the Learning Procedure: It is well known that students develop and learn through collaborative learning activities such as discussions and debates. As a result, they can be evaluated to promote high-quality discourse.
- e. Employ Strategies Like the Jigsaw Method: It involves sharing the information and knowledge gained during sessions with other teams. This enables one to become an expert in their field and assist others.
- f. Permit Group Activities To Alleviate Distress: Permit some humorous and entertaining activities in collaborative learning to reduce students' tension and anxiety. This will aid in fostering a pleasant atmosphere among the students.
- g. Utilize Real-World Challenges: Instead of creating fictitious scenarios and problems, students can discover solutions using real-world examples. This will enhance the students' project-based learning.
- h. Concentrate on developing problem-solving and critical-thinking skills: Students should be given assignments that allow for a variety of answers and perspectives.
- i. Form Diverse Communities: Groups comprised of individuals of various nationalities, sexes, and races foster the development of novel concepts, diverse abilities, and a variety of learning styles. Additionally, it helps students broaden their learning horizons.
- j. Utilize technology to improve learning outcomes: Integration of technology into education expands students' access to a variety of instructional methods and improves their productivity.

4. Benefits of Collaborative Learning

The foundation of collaborative learning is working on the same assignment in small groups. It refers to a method of instruction in which knowledge is constructed through interactions between students. Consequently, the learner is the primary focus of instruction. By collaborating towards a common objective, students exchange ideas and expand their knowledge. In addition, students attempt to arrive at a shared comprehension by engaging in meaningful conversations about the problem and providing

thorough explanations. Collaboration is comparable to cooperation, but in cooperative learning, each student is designated a portion of the task. Collaborative learning, on the other hand, involves students working together on the same endeavor to seek comprehension.

The eight fundamental principles of collaborative learning in the classroom are as follows (Jacobs, Power, & Loh, 2002, cited in Apple, 2006, p.279):

1. Cooperation is a core value
2. Heterogeneous classification
3. Positive interdependence
4. Individual responsibility
5. concurrent interaction
6. Equal participation
7. Collaborative abilities
8. Organizational autonomy

The value of cooperation is evident because it provides participants with mutual benefits. The second principle is based on the notion that as the backgrounds and experiences of a group's members become more diverse, learning opportunities increase, leading to greater achievement. Positive interdependence refers to the notion that group members require one another to complete a task. Individual responsibility derives from the notion that members of a group share ideas and information. Simultaneous interaction and equal participation are important principles because all participants must participate equally in order for them to benefit from the task. Collaborating will help students develop their collaborative abilities. Lastly, group labor provides opportunities for students to assume responsibilities.

Multiple researchers have discovered that collaborative learning approaches stimulate critical thinking (Bonk & Smith, 1998; Thayer-Bacon, 2000; Heyman, 2008). Proponents of collaborative learning stress that critical thinking enables students to evaluate arguments and make decisions (Paul, 1992; Willingham, 2007). Furthermore, it is argued that students with critical thinking skills contribute significantly to group projects (Bailin et al., 1999).

It is also believed that collaborative learning improves students' metacognition (Martinez, 2006; Schraw et al., 2006; Hennessey, 1999). Metacognition is defined as "the understanding of and control over one's own reasoning and learning" (Cross & Paris, 1998, p. 131). In addition, metacognitive skills enable learners to be conscious of their own thought processes, which can aid in the clarification of their beliefs and concepts. Yildiz (2017) argues that the status of participation in group activities is crucial for establishing close relationships with group members and for developing a sense of loyalty or ownership in the group. According to Bossert (1988), collaborative approaches enhance learner motivation.

During the implementation of collaborative learning, numerous issues may arise. Teachers may encounter difficulties in forming groups and devising appropriate tasks (Gillies & Boyle, 2010), but students may fail to communicate and collaborate effectively during tasks (Pauli et al., 2008). Moreover, students learn at varying rates. Fast learners may tend to dominate the group; consequently, sluggish learners may not feel at ease in the group.

5. The Intervention

My intervention emphasizes teamwork and collaboration to improve student learning experience satisfaction. We implemented this intervention in one of my tutorial classes, which consisted of 24 students divided into 6 groups of four (which we created). As scheduled, the class lasted 1 hour per week. During this one-hour period, I would disseminate a set of questions or problems related to the lecture's topic. Now, I assigned each group a particular query to investigate or analyze. Within 10 to 15 minutes, each group will discuss the problem, design a solution, and come up with alternative methods or strategies to solve it. At the conclusion of the allotted time, each group will describe their approach and problem-solving technique to the remaining students.

This promoted a healthier environment for discussion, and each student's participation is evident.

Student Feedback Evaluation

We evaluated this method using Peer Evaluation. Once the collaborative group work and learning session concluded, we distributed a feedback survey to each of my students and asked them to answer the following questions.

- Overall, how effectively did your group work together on this assignment? (Tick any one)

Not at all	Poorly	Adequately	Well	Extremely Well
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- I found the use of Collaborative group work and learning, enabled me to develop my communicating skills. (Tick any one)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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- Out of the five group members, how many participated actively most of the time?

None	One	Two	Three	All Four
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- Give one specific example of something you learned from the group that you probably would not have learned working alone.
- Suggest one change the group could make to improve its performance.

6. Outcomes and Conclusions

We learned from this feedback that students' reactions to collaborative group work and learning are varied. The following factors were evaluated based on this feedback:

- Students reacted positively to the group work, and they will continue to engage in such activity outside of the classroom, demonstrating the value they have acquired from it.
- Students value the opportunity to collaborate with others and meet students they have not met before in their course.
- Communication issues, including how to involve everyone and manage time to complete the mission.
- Initially, some students were resistant to it, but once they began working on it and gaining knowledge, they relished it.
- Positive and entertaining in general.

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