

The Influence of Employment of Cooperative Learning Techniques to Selected Freshmen in Pamantasan ng Lungsod ng Maynila

BERNARDO F. RAMOS

Pamantasan ng Lungsod ng Maynila

Abstract- *The purpose of this study was to find out how cooperative learning affected a subset of Pamantasan ng Lungsod ng Maynila first-year college students. This study's main goals are to assess the effectiveness of the teacher's cooperative learning strategies in various situations and identify any benefits, changes, or improvements in the participants' skills after participating in cooperative learning activities. The investigation was conducted using a phenomenological design. This design allowed the researcher to provide thorough explanations for a particular phenomenon by delving deeply into people's experiences and perceptions through the use of question sets and interviews. Purposive sampling was used by the researcher to select study participants. In this case, a total of eleven students were chosen from a single group. Following data analysis, the study's conclusions showed that the professor's ' use of cooperative learning techniques had a favorable impact on the participating students at Pamantasan ng Lungsod ng Maynila. The significance of these findings lies in highlighting the importance of utilizing cooperative learning strategies in the present-day educational environment. Moreover, cooperative learning can improve student engagement, critical thinking abilities, and general academic performance by encouraging teamwork, active participation, and shared responsibility. These findings could potentially influence teaching practices and curriculum development to prioritize cooperative learning as an effective andragogical approach.*

Indexed Terms- *Academic Performance, Andragogical Approach, Cooperative Learning, Critical Thinking, Student Engagement*

I. INTRODUCTION

Scholars such as philosophers, theorists, and psychologists have been influenced by the famous words of John Donne, "No man is an island." In order for humans to survive, cooperation and teamwork are necessary. Cooperative learning strategies are extensively employed in learning development, both

within and outside of educational institutions, to establish knowledge.

Johnson (1998) and Johnson (1999) advocate for cooperative learning, which involves small groups in the classroom for effective collaboration and communication. They identified five key elements for successful small-group learning: face-to-face interactions, social skills, group processing, positive interdependence, and individual accountability. These interactions foster commitment, facilitate oral explanations, and integrate prior knowledge.

In their explanations, the two emphasized the value of in-person interactions, stating that they increase each member's commitment to participating in order to accomplish the group's goals. In-person interactions involve the oral explanation of subjects, oral and face-to-face exchanges of ideas, and the synthesis of recent understanding with past knowledge.

In the field of education, cooperative learning is widely recognized as an effective teaching strategy for promoting learning and socialization in students from preschool through postsecondary education. At this point, students work together to complete group projects or achieve shared goals that would be difficult for them to complete if they completed them individually (Gilles, 2016). Because cooperative learning greatly promotes the development of interpersonal skills, students must recognize the value of this type of learning in all circumstances.

Furthermore, a number of concerns often frighten students, such as humiliating gaffes in front of the class, being called on when they don't know the answer, concerns regarding their command of the English language as a second language, and, for older students, the fear of appearing too or not smart enough, as well as the possibility of being shunned by their

peers. These worries can be alleviated by the interdependence and promotion of smaller groups cooperating (Willis, 2021).

According to Foster (2020), this approach, whether formal or informal, proves incredibly flexible in diverse educational settings and across academic disciplines. It was frequently guided by targeted instructor intervention. According to Barkley et al. (2005), informal groups place a high priority on active learning by incorporating peer interactions into lectures to encourage students to organize, defend, and participate in a variety of cognitive processes associated with learning.

In a structured cooperative learning environment, students work in groups of two or more to complete a task or assignment (Johnson et al., 2014). This approach promotes continuous cooperation, enabling students to work together to achieve a greater comprehension, a variety of perspectives, and a feeling of accomplishment when the task is finished.

Numerous academic researchers have also demonstrated that it is a successful teaching strategy for encouraging students to work cooperatively, share knowledge, and take responsibility for their actions. Numerous studies examining this method's effects on different facets of education attest to its benefits. For example, Chamisah (2013) highlights that cooperative learning extends beyond group assignment, enabling students to collaborate not only on tasks but also on information sharing and task completion.

Throughout the teaching-learning process, this method helps students transfer knowledge and develop writing ideas. According to Faryadi (2007), it also encourages individual accountability within groups, emphasizing the value of cooperative abilities to improve problem-solving and overall group performance.

As it is a common knowledge that the effectiveness of cooperative learning in classrooms is influenced by teachers' discretion and preferences, the present study focuses on integrating responsibility, independence, creativity, and critical reasoning in first-year college students. The researcher emphasizes the importance of conducting this study to understand the efficiency of these learning strategies in school activities and to

demonstrate their effectiveness in enhancing students' learning experiences.

OBJECTIVES OF THE STUDY

The study seeks to :

1. Identify the influence of implementing cooperative learning approaches regarding teaching the course *The Child and Adolescent Learner and Learning Principles*.
2. Identify the benefits, changes, or improvements in participants' skills after undergoing activities that employed cooperative learning strategies.
3. Recognize the suggestions and recommendations of the participants regarding the efficiency and impact of the said technique on students' social and cognitive aspects.

II. CONCEPTUAL FRAMEWORK

The conceptual framework of the study is shown below:

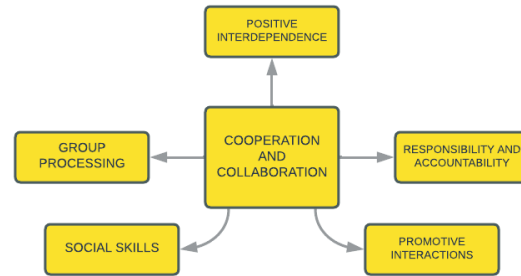


Figure 1. The Theoretical Framework of Employing Cooperative Learning Techniques

In this section, the researcher used the influence of using cooperative learning strategies with a subset of first-year college students at Pamantasan ng Lungsod ng Maynila to anchor the social interdependence theory. Kurt Koffka, a German psychologist, coined the term "social interdependence theory," which he defined as when people have similar aims and objectives and are impacted by each other's behavior within the dynamics of the group (Johnson and Johnson, 2018).

Furthermore, according to Koffka, it had two types: cooperative and competitive, where the former represented positive interdependence and the latter

represented negative interdependence (The Association for Educational Communications and Technology, 2001).

Positive interdependence, as it relates to the collection of activities, plans, rules, and various actions that require all members to contribute to fulfilling and delivering successful goals toward achievement, has reportedly been used in applying cooperative learning techniques, according to Butera and Buchs (2019). This was based on Morton Deutsch's theory of cooperation and competition, which held that the impact of the group's positive, dynamic relationship with one another was what made collaboration valuable in the concept of cooperation (The Association for Educational Communications and Technology, 2001). Meanwhile, because the competition concentrated on having a negative impact on another person, it was recognized as a negative interdependence.

In addition, Butera and Buchs (2019) have determined the essential components that add to the importance of cooperation in students' learning and development. They claimed that it was critical to foster positive interdependence because cooperative learning strategies were based on a student-centered approach and a progressivist perspective in education (Center for the Advancement of Digital Scholarship, n.d.). By inculcating positive interdependence in classroom settings, the learners can promote accountability and responsibility in accomplishing designated tasks. It was also found that the application of social skills, reflection on analytical reasoning and critical thinking, and fluidity in group processes had been encouraging relationships that were interactive and cooperative in group work.

III. RESEARCH PARADIGM

Below is the study's research paradigm.

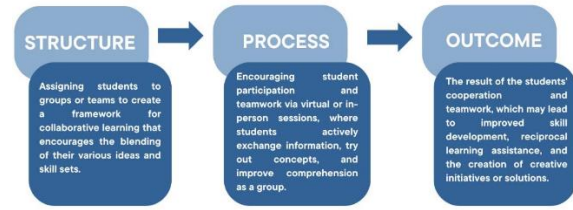


Figure 2. The Conceptual Framework of the Influence y of Cooperative Learning to the Students in Pamantasan ng Lungsod ng Maynila based on Structure Process Outcome (SPO model)

Donabedian's Structure Process Outcome (SPO) model was utilized by the researcher. Structure, Process, Outcome theory, or SPO model theory, was developed in the 1960s by Avedis Donabedian. The three parts of this model are interdependent, which makes it easier to gauge how much the study's cooperative learning participants' students have improved. The researcher used Donabedian's Structure Process Outcome (SPO) model to analyze and use the structures and processes that can result in a successful cooperative learning outcome. Educators and lecturers can use this SPO model to identify areas that require improvement, evaluate the outcomes of their cooperative learning initiatives, and develop successful initiatives.

As the first component makes clear, the structure stands for the method or plan used to persuade students to engage in cooperative learning activities. Drawing on the individual experiences of the students, group activities are designed to foster each student's social, emotional, mental, and cognitive abilities.

The actions and activities required for the successful implementation of cooperative learning are then found in the second component, also known as the process. Group members must converse in person or virtually about ideas, knowledge, and opinions in order to promote cooperative learning. Face-to-face setups for discussions are crucial because they provide a chance for more candid communication amongst team members.

In the last section, the findings demonstrate whether or not Filipino majors in Pamantasan ng Lungsod ng Maynila's Bachelor of Secondary Education program were competent in conducting cooperative learning.

Debulking on the influence of cooperative learning, the study highlighted the positive effects that it can have on students' academic performance, personal development, and overall learning experience.

IV. REVIEW OF RELATED LITERATURE AND STUDIES

The term "cooperative learning approach" originates from the abstract noun "cooperation," meaning helpful actions. It is synonymous with the verb "collaboration," meaning joint work, especially in intellectual endeavors. Philosophers have emphasized the importance of collaboration and cooperation in children's learning development.

John Dewey's ideas on education emphasize the importance of collaboration and cooperation in children's learning process. He believes that social interaction in schools significantly influences learning, as it fosters relationships and experiences that enhance the development of ideas and perspectives (Hargraves, 2021).

In addition, Dewey's recommendations constituted the core of his theory, which came to be known as progressivism. To put it simply, progressivism emphasizes the importance of social interactions and interpersonal communication in the production, creation, and completion of group activities through collaborative efforts (Indeed Career Guide, 2023). Furthermore, progressivism holds that students should learn by carrying out the tasks themselves as opposed to receiving verbal instruction because Dewey thought that group projects were crucial to encouraging each student's active engagement and learning (Lumen Learning, n.d.).

From there, it can be inferred that these concepts led to the development of learning strategies, among which is cooperative learning methods or strategies, to meet the needs of each and every student. A cooperative learning approach is described as entails organizing small groups that work and collaborate their efforts, energies, and creativity that are necessary towards success since the success of the group in academic settings was profoundly dependent on the performance of every member, according to Tedd et

al. (n.d.) in their article published in a module from Carleton Education.

Rigacci (2020) revealed that while students were still under the supervision and guidance of their professors, teachers, or educators, they were also responsible for working out the problem-solving activities. This gave them the chance to demonstrate and hone their critical and analytical thinking abilities.

Additionally, with evidence from actual classroom research, cooperative learning primarily supports the motivational perspective, which emphasizes the use of individual accountability and group goals for success (Psicologia, 2014). This is because it allows students to understand the material both individually and as a group in the context of the classroom.

Cooperative learning is a concept promoted by interdependence and personal accountability. Interdependence means every individual contributes knowledge and skills to the group. Individual accountability involves fulfilling team duties and taking responsibility for group actions. It determines group success and individual success. Lewis (2019) suggests that face-to-face communication can optimize and collaboratively achieve equal and fair distribution of responsibility, attributed to equal participation.

On the other hand, traditional teaching methods often make classes teacher-centered, limiting student improvement and social engagement (Yassin & Razak, 2017). Cooperative learning, on the other hand, focuses on student-centered learning by dividing students into small groups. This approach allows teachers to design activities, monitor students, and provide guidance (Machado & Coimbra, 2015). The main goal of cooperative learning is to increase benefit among all students through cooperation, with higher-level students helping their classmates (Johnson et al., 1993).

Ideally, teachers apply the aforementioned approach in the classroom in a variety of unique and varied ways. One instance of this approach is the "Think-Partner-Exchange," in which students consider a question on their own, work together to clarify their answers, then pair up to brainstorm or share ideas as a group before

presenting to the class as a whole. This dynamic process promotes varied viewpoints and a richer exchange of ideas (Brame & Biel, 2015).

In a structured cooperative learning environment, students work in groups of two or more to complete a task or assignment (Johnson et al., 2014). This approach promotes continuous cooperation, enabling students to work together to achieve a greater comprehension, a variety of perspectives, and a feeling of accomplishment when the task is finished.

Rigacci (2020) highlights various methods for promoting cooperative learning in classrooms. Finnish schools use "schools on the move" to engage students, while circle-the-sage and timed-pair-share methods help students lead and tutor. Jig-saw, round robin, numbered heads, team-pair-solo, and three-step review are popular cooperative learning techniques that promote successful classroom experiences.

Slavin (1989) concluded that there is potential for success when utilizing cooperative learning to increase student achievement. This emphasizes the benefits of a sense of group membership for students' social skills, communication skills, resilience, and empathy. Fostering interactive and interdependent elements through cooperative learning strengthens judgment, critical analysis, emotional awareness, flexible perspective-taking, creative problem-solving, creativity, and goal-directed behavior through interpersonal and emotional experiences (Willis, 2021).

Cooperative learning is an effective learning approach that promotes collaborative knowledge sharing and responsibility among students. Studies show that it enhances the learning environment and contributes to the growth of critical thinking skills. In 2018, Sijali's research showed a significant improvement in English language proficiency among learners using cooperative learning compared to traditional lecture methods, demonstrating its effectiveness in improving learners' proficiency levels.

According to Molla and Muche's (2018) study, group learning enhanced students' performance in cooperative learning in biology. Academic performance is greatly impacted by cooperative

learning strategies, especially in classes where English is being taught as a foreign language. Students who used this strategy scored higher, according to Demirel (2019), and Alrayah (2018) observed that oral communication had improved. According to Er and Atac (2014), students who are more motivated, creative, and productive thrive in cooperative learning environments.

Interpersonal skills and student involvement in the classroom are enhanced by cooperative learning. Mendo-Lázaro et al.'s research from 2021 demonstrates that it inspires students to create learning objectives. In Pakistani schools with limited resources, Hoorani (2014) discovered a positive correlation between academic achievement and cooperative learning, underscoring the potential of this approach to enhance cognitive capacities and academic results.

Meanwhile, Reinhard (2021) claims that cooperative learning has been demonstrated to support academic success, motivation, engagement, positive attitudes, and social-emotional development when used appropriately. Beyond its structural features, cooperative learning offers students numerous advantages. It not only hones communication and interpersonal skills but also nurtures critical thinking, fostering a profound grasp of the subject matter. Pupils leave with polished leadership and teamwork abilities, ready to handle the rigors of the classroom and real-world situations. Additionally, cooperative learning helps to create a supportive classroom environment by encouraging students to support one another and feel like members of a community.

Despite its well-known ability to foster collaboration, cooperative learning is not without its drawbacks. Despite the many benefits of using a cooperative learning strategy, many teachers find it challenging to incorporate the individualistic approach into their lessons, and some even think it is impossible to do so (Keramati & Gillies, 2021). The difficulties include students' lack of cooperation skills, a lack of time in the curriculum, and depending on others for answers. Students who grow to hate their group may experience some drawbacks; both the group's overall performance and each member's performance individually suffer.

Regarding the preceding passage, from Glavin's point of view, the various concerns that give rise to this hatred include worries about the roles played by teachers and students as well as worries about equity and resource utilization. The teacher's role is constantly in question when there is a lack of clear communication about the expectations of the group. Students' aversion to group work can also be attributed to the monotonous nature of working with the same group members over time. Lastly, there is a need for fairness in group-based learning, which is characterized by the occurrence of student failure to assume accountability for their designated roles, no matter how small (Glavin, n.d.).

Additionally, parents of high achievers express dissatisfaction with the educational system, worried that their child feels taken advantage of, spending a lot of time helping their less fortunate classmates in the class, and having their attention diverted from understanding core curriculum material.

Given the pros and cons of utilizing cooperative learning, its advantages and disadvantages must carefully be weighed in in such a manner that optimizing its benefits and reducing its drawbacks will turn the table to the students' useful advantage.

V. METHODOLOGY

• RESEARCH DESIGN

This a qualitative research focuses on in-depth analysis of participants' observations and experiences, and employs a phenomenological design to provide an explanation of the narratives about the cooperative learning approach (Bhandari, 2020)..

Phenomenology is described as an approach used in qualitative research to obtain details, narratives, and data that explain and justify a particular phenomenon in relation to the previously mentioned research design (Hoover, 2021). Additionally, the primary goal of a phenomenological research design is to examine the participants' common experiences in a particular situation (McKoy, 2022). Consequently, the researcher noted that the study's application of phenomenological research design is appropriate given that its goal is to address the perceptions of the chosen students regarding the influence of

implementing cooperative learning strategies in educational environments. The selected participants are students who are directly interacting with the mentioned learning approach, which makes the research design feasible.

• PARTICIPANTS AND SAMPLE SIZE OF THE STUDY

Eleven out of 44 students from Pamantasan ng Lungsod ng Maynila who are currently at the first-year level and taking the Bachelor of Secondary Education major in Filipino under the supervision of the professor of the course *The Child and Adolescent Learner and Learning Principles* in the school year 2023-2024, are chosen purposively as the participants of the study. These students comprised group number 1 who were assigned to evaluate the influence of the professor's cooperative teaching strategy in the class's conduct in their particular group.

Concerning the recommended participant count, a few specialists and writers defended the figure by citing the effectiveness of qualitative research findings. As stated by Deakin University (2023), Creswell and Creswell (2018) estimate that between 10 and 50 participants is the ideal number that is sufficient for conducting qualitative research. Furthermore, Renwick (2019) referenced Crouch and McKenzie (2006), who confirmed that less than 20 participants is the ideal number for interview-based qualitative research, particularly in small groups.

• DATA COLLECTION METHODS AND INSTRUMENTS

For the period of one semester, students were taught using the cooperative learning technique in every activity that served as a class requirement. Throughout this period, the students who were the participants of this study were observed by the researcher. This was considered a crucial part of the process of conducting the study since it is interconnected with the interview portion of the study. The researcher utilized the method of interviewing participants through a series of questions because it is more applicable when conducting qualitative research. With the use of interview questions, the researcher was able to provide explanations for a certain phenomenon based on the answers given by the respondents. Along with these questions, the researchers used structured interview

questionnaires due to their straightforward nature and considering that the time spent performing this study was limited (George, 2022).

On the tenth week of the conduct of the class, the group was asked to honestly answer the four interview questions, which are:

1. What cooperative learning technique did the professor employ in the conduct of the course *The Child and Adolescent Learner and Learning Principles*?
2. How was the technique executed?
3. What changes or improvements in your skills did you notice after the use of the cooperative learning technique by the professor during the entire semester?
4. What suggestions can you give to further improve the ways in which the cooperative learning technique can be better executed for the welfare of the student recipients?

Moreover, the researcher utilized online software applications and platforms in conducting the interview sessions, which comprised open-ended questions that would allow the participants to share and express their experiences without limitation.

• DATA ANALYSIS METHODS AND TECHNIQUES

The answers to the interview questions were subjected to a thematic analysis. Thematic analysis is a data analysis approach used in various qualitative research studies, wherein similar ideas, thoughts, and information gathered from interviews and other qualitative research instruments are combined and categorized with each other (Villegas, 2023). In this strategy, the researcher carefully examined the answers of the participants from the given questionnaires and group the following responses according to the themes that were extracted from the statements.

• PRESENTATION OF THE RESULTS

The participant's perspective on how they categorized each response was sought out by the researcher, who also used their responses to visualize the themes that were related to each response.

The Different Cooperative Learning Techniques Employed by the Professor

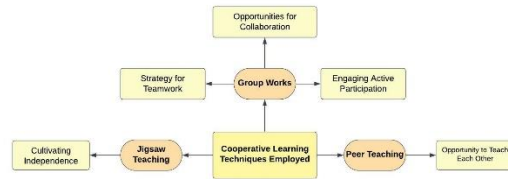


Figure 3. The Different Cooperative Learning Techniques Employed by the Professor

Participants shared their experiences with various cooperative learning strategies used by their professor in response to the first question. Initially, a few of them mentioned that the lecturer assigned assignments that required group work or formation. They stated that in order to complete a range of assignments for the course, the professor allowed them to select the groups they wanted to work in. The following participant claims demonstrated these concepts:

“The cooperative learning technique that the professor executed is mainly focused on group tasks including several activities to assess our knowledge gained from our class sessions, and abilities to gather more information from other sources. Furthermore, we were also tasked as a group to create lesson plans, perform topic discussions, and write IMRaD.” - Participant 1

*“My observations indicate that Dr. Ramos employs a cooperative learning strategy known as group work, whereby students can collaborate to complete a variety of tasks in order to simply apply the conduct of the course, *The Child and Adolescent Learner and Learning Principles*, in the class.” - Participant 3*

Second, while completing the assignments provided by the professor, a few participants emphasized the value of peer teaching in their educational process. They have observed that peer teaching—a technique used in group projects where participants instruct one another so as to easily understand the directions—was used through the opportunity provided by their professor in terms of finishing activities and outputs. The specific statement made by the participant about peer teaching is shown below.

“The technique our professor practiced was remarkably different from what we had experienced before becoming college students. First, he performed

the jigsaw technique, which I can consider a major requirement that we did in this subject because one of the things we need to learn is how to have the correct mannerisms and actions of a teacher. Second, he gave us the opportunity to teach each other what we know about each topic in order to have collaborative efforts in the group work we do." - Participant 4

Third, as another technique under the umbrella of cooperative learning, the participants saw that the professor had also used the jigsaw teaching method. They claimed that it was an interactive method that allowed students to cooperate to complete specific assignments and activities. The statement that introduces the jigsaw teaching strategy is below.

"The technique our professor practiced was remarkably different from what we had experienced before becoming college students. First, he performed the jigsaw technique, which I can consider a major requirement that we did in this subject because one of the things we need to learn is how to have the correct mannerisms and actions of a teacher. Second, he gave us the opportunity to teach each other what we know about each topic in order to have collaborative efforts in the group work we do." - Participant 4

The Execution of Cooperative Learning Techniques Employed by Professor

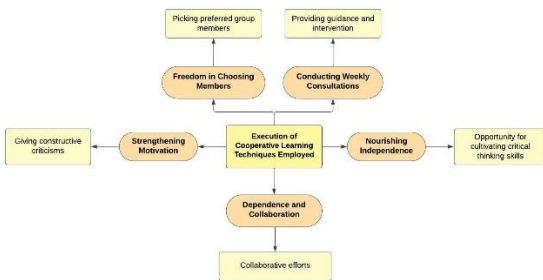


Figure 4. The Execution of Cooperative Learning Techniques Employed by the Professor

In the second question, the participants answered all the queries pertaining to how the cooperative learning techniques were employed by the professor. In this part, it can be seen that they have different perspectives on how the different approaches were manifested in classroom activities.

Initially, the participants mentioned that the professor allowed them to select the members of their group that

they wanted to be in their group. Their confidence and fluidity in the workplace, which come from having that freedom, are crucial for successfully completing the tasks that have been assigned. This also highlighted each participant's teamwork abilities, which were essential to finishing the activities. The following interview responses from the participants provided specific examples of these ideas:

"In our academic journey, we had the distinct opportunity to form our own groups at the beginning of the semester, which prepared us for working together. The emphasis placed on teamwork allowed us to develop as a group as we progressed through the different activities." - Participant 8

"These techniques are accomplished by giving us the freedom and ample opportunity to choose who we want to work with in group activities. Because of this freedom, the jobs we are given become easier, and it becomes easier to complete them." - Participant 4

Second, the professor has continuously demonstrated his support for encouraging students to push their abilities and capacities toward excellence and producing high-caliber work, according to the participants' accounts. The participants shared that their professor would provide constructive criticism, which was crucial for encouraging the students to think critically about their performances and actions. This served to inspire the students' goals and resolve. The statements that highlight the notion of the professor's unique approach to boosting participants' motivation are listed below.

"Our professor was crucial in this development because he purposefully pushed us beyond our comfort zones. The way the instructor taught went beyond traditional techniques. There was a purpose behind using words that might have seemed offensive at first. These words weren't meant to weaken us; instead, they were purposefully used as inspiration. This unusual method sought to both question our viewpoints and motivate us to focus our energies in a more creative and beautiful way." - Participant 8

"Also, when he used words that we thought would hurt us, he used it to motivate us to do what we really should do in a more beautiful and creative way." - Participant 9

Third, the participants' feelings regarding the professor allowing them to select the members of the group they wanted to be in were linked to encouraging independence in the students' morals and conduct. The

participants have observed that their professor has allowed them to develop as a group through the formation of groups, leading to success in completing assignments and activities. The participants observed that encouraging students' critical thinking abilities would also benefit from incorporating their degree of independence into these kinds of group activities. The statements that suggest the students' independence in completing various tasks are listed below.

“Also, by integrating independence, it gives us, as students, social and emotional learning opportunities that improve our critical thinking, judgment, emotional intelligence, flexible perspective-taking, creative problem-solving, inventiveness, and goal-directed behavior.” - Participant 3

“Independence might contribute to the student’s critical thinking, active participation and contribution in a group that influences or strengthens their capabilities to adjust working with other people.” - Participant 5

“At the beginning of the classes, we had the chance to pick our preferred group, and throughout the semester, we were assigned to complete nearly all activities collaboratively and independently as a team.” - Participant 1

Fourth, the participants shared their thoughts regarding their professor's weekly consultation sessions in their responses. The participants get the opportunity to voice urgent and significant concerns about conflicts within the groups that may impact the working environment and the simplicity of task delegation, as well as ask questions about the intricacies of the instructions during these consultations. They said that by listening to and incorporating the professor's advice and intervention, the groups would be able to produce more organized and imaginative outputs. The quotes that highlight the participants' opinions about the weekly consultations are listed below.

“In addition, his guidance in every work is not lost due to the weekly consultation conducted, where he gives his harsh but constructive criticism that can help us improve our work.” - Participant 4

“Also, as his techniques, he gives the students an idea of giving examples by doing consultation sessions on his time and giving concise and precise instructions on how we do the activities and how to improve them, as it would be an advantage to our future as well as being a teacher.” - Participant 7

Fifth, the participants expressed how they see themselves as dependent on one another within the group, which also suggests that they work together to complete tasks. They contend that since their professor has granted them freedom, it is their responsibility to determine how things could be done, particularly with regard to the assigned tasks. Because of these experiences, they were able to comprehend the instructions and carry them out in a practical way by working cooperatively. The participant comments regarding mutual reliance and dependence are listed below.

“At this point, by collaborating with ourselves in our group, we are able to show it by giving our own ideas and working on them.” - Participant 7

“Our professor helped us understand how to be dependent and independent. By being dependent, I am considering the qualities and characteristics of an individual, especially when we are working for an output. These techniques are executed by teaching us to be dependent, especially when the main goal is to work together and not compete with each other.” - Participant 6

Changes or Improvements Experienced by the Participants After the Use of Cooperative Learning Techniques

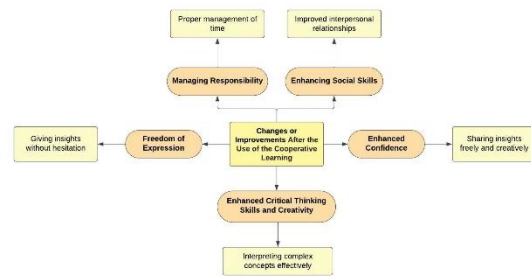


Figure 5. Changes or Improvements Experienced by the Participants After the Use of Cooperative Learning Techniques

The third question asked the participants to share their observations about how they felt using cooperative learning strategies in the classroom had improved or changed them. First, they have shared about how these experiences helped them manage their responsibilities, especially since they also have tasks outside of the said subject. These experiences also aided in the development of their time management abilities, particularly with regard to juggling organizational

duties, personal errands, and academic assignments. The statements that show the participants' opinions regarding how these learning strategies helped them balance their responsibilities are listed below.

“The improvements and changes in my skill are that I am actively working on the activities that I need to do and working on them on time, as well as working on the instructions of the professor and his wants in our output.” - Participant 7

“I can say that I've been more accountable for my actions by meeting deadlines consistently, accepting responsibility for my mistakes, and actively seeking feedback to improve.” - Participant 6

“Embracing responsibility for my learning not only improved my time management but also deepened my comprehension of the course material.” - Participant 8

“Some of the improvements that I have encountered after using these cooperative learning techniques are my ability to take responsibility for doing my part so that I can help my group members.” - Participant 10

Second, the participants noticed that their social skills had changed significantly. Based on their interactions, they felt that having the chance to collaborate as a team strengthened their bond, especially considering how little they knew one another. Working as a team improved their ability to collaborate and apply the virtue of teamwork in a variety of contexts. Through the use of these learning strategies, they were also able to enhance their communication abilities, which was crucial, particularly during brainstorming and discussion sessions. The following assertions provide concrete form to the theories about how children's social skills are impacted by cooperative learning methods.

“Furthermore, group activities expanded my social circle. I get to interact with people outside my circle of friends and it has enhanced my social skills, an essential aspect for a future educator.” - Participant 1

“I've been able to improve my skills in collaboration and accountability through practice and reflection, which has led to more successful group outcomes and stronger relationships with other students. Overall, I am pleased with my progress in these essential skills for successful teamwork.” - Participant 6

Thirdly, the participants stressed how much they valued having the opportunity to express themselves freely during brainstorming and group discussions.

They said they were given the chance to express their opinions and ideas about how the group could enhance the product or project they are working on. They have additionally stated that they are not coerced or hesitated to voice their opinions regarding the activity's advancement. The participant's perspective on the right to free speech during group activities is expressed in the remarks that follow.

“Additionally, collaborative tasks have helped me reduce my hesitation when it comes to asking questions. Having a group to turn to for clarification or information has made me more confident in seeking help when needed.” - Participant 1

“By learning the importance of cooperative learning for students, it improves our cooperation skills and allows us to express our views with others without hesitating in order to analyze and accomplish different activities as a whole group.” - Participant 3

“I have observed that one of the skills I have improved after engaging in cooperative learning teaching was validating the other group members' thoughts and opinions at the same time, and also sharing my own opinion to have a quality work.” - Participant 4

Fourth, the participants have observed that there is a critical link between their experiences with cooperative learning techniques and students' improved ability to think critically, analytically, and abstractly. Through the application of each member's cognitive skills, these experiences have created opportunities for them to perform and accomplish tasks both independently and dependently, and vice versa. The insights that the participants shared have demonstrated the importance of critical thinking skills in carrying out duties and succeeding in achieving goals. The following statements suggest how participants' learning styles are affected by improved critical thinking and creative skills.

“These learning techniques also taught me to deepen my critical thinking skills, which are important to being a more creative and efficient leader and group member, especially during times of brainstorming and when I make important decisions for group welfare.” - Participant 4

“Peer teaching sharpened my capacity to express complex concepts effectively. In essence, the cooperative approach positively influenced both my academic proficiency and interpersonal capabilities. This approach not only reinforces understanding but

also offers constructive feedback, enhancing our skills as future educators.” - Participant 8

Finally, the participants mentioned how the students' degree of confidence in their academic abilities has been impacted by these learning strategies. It was also stressed that by allowing students to work with one another in groups and freely share any ideas they may have, these interactions gradually impacted the students' self-confidence, especially when it came to expressing themselves and developing their own critical thinking abilities. This is the statement about how the cooperative learning approach affects participants' confidence levels.

“The cooperative learning techniques greatly enhance things. I have learned to boost my confidence to share some ideas that our group can use for our project, and we are learning to go outside our boxes to explore our critical thinking not only in our studies but also in our daily decision-making and socializing with others.” - Participant 9

Suggestions Given by the Participants for Improving Cooperative Learning Techniques

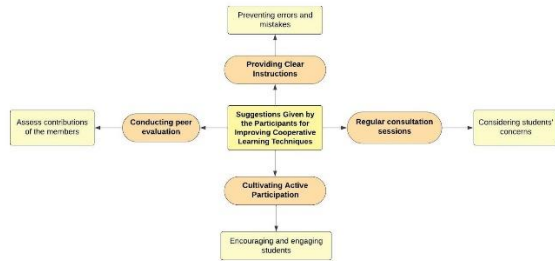


Figure 6. Suggestions Given by the Participants for Improving Cooperative Learning Techniques

In response to the final question, participants shared a variety of ideas and recommendations for improving the effectiveness and efficiency of the aforementioned cooperative learning strategies. Following the group activities, the participants first discussed the significance of carrying out peer evaluation. They saw it as a chance for people to consider the abilities, attitudes, and behaviors that have a significant impact on how they contribute to different aspects of an activity. The statements outlining their opinions on peer review are listed below.

“For me, having effective cooperative learning is observing whether each member of the group is actively participating and contributing. I suggest that each member should have a fair evaluation based on

their work contribution to be fair with others.” - Participant 5

“Working with different people allows us to strengthen our skills, such as interpersonal communication and problem solving. With that in mind, one of my suggestions for improving the ways in which the cooperative learning technique might be effectively implemented is to assign equal work to each member and to focus on accountability of each member through peer evaluation. By conducting peer evaluations, I feel that a member will improve when they see the comments of their fellow members about how they work and cooperate.” - Participant 6

Second, the participants discussed how to design exercises that would motivate and involve students in contributing actively to group projects. The participants thought that a lack of encouragement could have an impact on how well groups work, particularly on how confidently and creatively students express their ideas. According to the opinions of the participants, one of the contributing factors or reasons for improving the various cooperative learning strategies can also be realized through full execution. The statements that follow highlight how important it is to foster active participation in order to improve cooperative learning strategies.

“To assist students, particularly those who lack cooperative and public speaking skills, active sharing of knowledge can be a tool in a way that allows them to feel comfortable in their surroundings and unable to judge them immediately just because they lack skills. It sometimes causes them anxiety, causing them to be uncooperative. That's why we encourage them to participate in ways that make them feel like they are part of a group.” - Participant 3

“I suggest that you be more actively involved, cooperate, and do your best to be able to improve the learning technique as a student and also to develop the skills and acknowledgment about the course to be able to apply this in the future and as a future teacher.” - Participant 7

Third, as was mentioned in the preceding paragraphs, the participants stressed how important it is to give students clear instructions so they can understand and follow the professor's instructions. To them, it was crucial to provide precise, unambiguous, and succinct instructions on how to carry out a particular task so

that they could carefully and accurately complete the assigned tasks. The participants' answers to the question and recommendations for future developments are listed below.

“My suggestion to improve the implementation of cooperative learning techniques is to have clear directions about the tasks that need to be completed.”

- Participant 4

“To prevent learners from repeating what they did, I propose that all activities have explicit directions.”

- Participant 2

Finally, the participants expressed the importance of holding consultation sessions on a regular basis rather than a weekly basis. They contend that feedback, direction, and oversight from their professor or other educators are essential to the growth and advancement of their learning. Participants perceived these options as a chance to resolve conflicts and worries raised by students among themselves and their group members as soon as possible. This presented an additional chance to avoid any problems from emerging within the group that had been discussed and encountered by earlier groups. The quotes that emphasize the importance of consultations in making group activities successful are listed below.

“It is also important to pay attention to the importance of consultations so that they can be easily communicated and the teachers know earlier what is happening within the groups. Because of this, any problems faced by each group can be prevented or solved.”

- Participant 4

“For me, to further improve the ways of executing the cooperative learning techniques, they should have regular monitoring and feedback so that the teacher or professor can know what's happening in each group. This will help in solving the problems that the group is facing, like having someone who isn't cooperating.”

- Participant 10

CONCLUSION

In conclusion, the participants stressed the value of using cooperative learning strategies in the classroom through their responses. According to their accounts, it was discovered that putting cooperative learning strategies into practice was genuinely effective in raising students' general skills and abilities, which were essential in fostering cooperation and collaboration in the classroom. The study has

emphasized the importance of cooperative learning techniques in significant aspects by elaborating on the ideas where the participants noted the effectiveness of these said learning approaches.

First, the study has demonstrated that, despite the use of various cooperative learning strategies, the primary goal of teaching students the value of cooperation and collaboration in the classroom has not changed. Based on the participant statements, it can be inferred that the use of cooperative learning strategies has helped students focus on developing critical personal skills like creativity autonomy and mutual interdependence. Furthermore, a number of studies provided evidence that implementing these learning strategies helped students develop a variety of skills that would later be useful for both academic and professional endeavors. Second, by employing various approaches, cooperative learning strategies opened the door to improved abilities, which are critical to the advancement or accomplishment of students' academic goals. The study came to the conclusion that students had received more guidance on the issues they needed to resolve as a group thanks to the professors' prerogatives and methods. According to the participants' accounts, holding weekly consultations and offering constructive criticism have been found to be very important in boosting students' motivation to improve their performances and the quality of their outputs. This finding aligns with the debate over the relationship between these activities and students' academic success. Furthermore, these critiques from the instructor and the autonomy that the students have gained in selecting their members have also shown that it has opened opportunities for the students to enhance their collaborative and crucial skills.

Third, in terms of efficacy, the study came to the conclusion that using cooperative learning strategies was effective in helping students develop and nurture critical skills that allow them to operate in a group setting for a variety of reasons. The results of using those strategies have demonstrated that the participants' skills and abilities have significantly changed and improved. These include increased critical thinking and creative skills, enhanced communicative and social skills, better time management skills, and increased speaking

confidence. These participant-experienced improvements are highlighted in the study's findings, which indicate that cooperative learning strategies were crucial in helping students reach their full potential when using a student-centered learning approach. Also, these modifications have benefited them.

According to the study's overall findings, using cooperative learning strategies has been shown to be successful and advantageous for both teachers and students. It was viewed as a successful substitute for conventional teacher-centered learning, which assumed that students would be the information consumers. According to the study, interactive group discussions and a collaborative environment that involved modeling both independence and dependence as well as the other way around were more effective than lecturing without involving any activities that would pique students' interest and zeal. In order to make sure that students' knowledge and skills are tracked and developed with the right guidance and interventions, cooperative learning strategies should generally be used in conjunction with other conventional learning approaches.

RECOMMENDATIONS

1. Keep an eye out for the impact of group dynamics. The general effectiveness of cooperative efforts and each member's specific academic accomplishments are influenced by the dynamics of the student groups during cooperative learning.
2. Evaluate students' perceptions and preferences. It contains elements that may affect their motivation, attitudes, and engagement in group activities. Acknowledging the viewpoints of students can aid in maximizing cooperative learning opportunities.
3. Employ conflict resolution techniques in case disagreements surface during group discussions. Students who want to become better at solving conflicts need to concentrate on finding common ground and appreciating opposing viewpoints. Group cohesion is enhanced through constructive conflict resolution.
4. Make sure that roles are distributed fairly and impartially among the groups so that each student can actively participate. This ensures that every student makes a significant contribution to the

process of learning. Additionally, giving all students the same roles within groups would give them the opportunity to develop the leadership and teamwork skills they need.

5. Take into account the different skills and personalities of the students when creating groups. Aim for evenly distributed teams to maximize the efficiency of teamwork. Establishing well-rounded groups would create chances to foster active engagement in educational environments.
6. Hold consultation meetings with the groups to give the students direction and moral support. An environment that is conducive to learning is enhanced by prompt dispute resolution and the promotion of constructive interactions. Furthermore, students who receive constructive criticism are more motivated and willing to try new things.
7. Plan, coordinate, and develop group activities that will undoubtedly make use of the ideas of cooperation and teamwork within the groups. Planning exercises like this would be a good way to help students develop their critical thinking and creative thinking abilities. Furthermore, it would facilitate improvements in the students' social and communication skills, which are essential components of effective learning.

REFERENCES

- [1] Abdullah, M. Y., Bakar, N. R. A., & Mahbob, M. H. (2012). *Student's participation in classroom: What motivates them to speak up?*. *Procedia-Social and Behavioral Sciences*, 51, 516-522. <https://doi.org/10.1016/j.sbspro.2012.08.199>
- [2] Al-Mhdawi, M.K. S. (2021). *Re: How many respondents do i need for a qualitative research that aims to gain opinions about a specific topic?*. Research Gate. Retrieved November 19, 2023 from https://www.researchgate.net/post/How_many_respondents_do_i_need_for_a_qualitative_research_that_aims_to_gain_opinions_about_a_specific_topic/
- [3] Alshalawi, A. S. (2019). *Impact of Effective Collaboration and Consultation: Insights for Educators*. *Global Journal of Education and Training*. <https://www.gjetonline.com/wp->

- content/uploads/2020/04/Volume2Issue9Paper1.pdf
- [4] Alyssa. (2018). *Disadvantages of cooperative learning*. Teaching in the Fast Lane. Retrieved November 16, 2023 from: <https://teachinginthefastlane.com/2018/05/disadvantages-of-cooperative-learning.html>
- [5] Anderson, N. J. (2020). *The Impact of Cooperative Learning Methods Grades 6-12* [Master's thesis, Bethel University]. Spark Repository. <https://spark.bethel.edu/etd/29>
- [6] Andreev, I. (2023). Cooperative Learning. Valamis. <https://www.valamis.com/hub/cooperative-learning>
- [7] Aslam, R., Khan, N. & Joseph, V. (2021). *Impact of Learning Motivation on Students' Academic Achievement: Mediating Role of Constructive Feedback*. Research Gate. https://www.researchgate.net/publication/354116219_Impact_of_Learning_Motivation_on_Students'_Academic_Achievement_Mediating_Role_of_Constructive_Feedback
- [8] Asoodeh, M. H., Asoodeh, M. B. & Zarepour, M. (2012). *The Impact of Student - Centered Learning on Academic Achievement and Social Skills*. Science Direct. <https://www.sciencedirect.com/science/article/pii/S187704281201289X>
- [9] Aytaç, T., & Kula, S. S. (2020). *The effect of student-centered approaches on students' creative thinking skills: A meta-analysis study*. International Journal of Contemporary Educational Research, 7(2), 62-80. <https://files.eric.ed.gov/fulltext/EJ1285436.pdf>
- [10] Backer, J. M., Miller, Jaymeson L., and Timmer, S. M. (2018). *The Effects of Collaborative Grouping on Student Engagement in Middle School Students*. Retrieved from Sophia, the St. Catherine University repository website: <https://sophia.stkate.edu/maed/280>
- [11] Bahat, B., Ovsenik, M. & Lipic, N. (2021). *Teacher's Effective Guidance of Students*. Research Gate. https://www.researchgate.net/publication/362878734_Teacher's_Effective_Guidance_of_Students
- [12] Bansal, S., Mahendiratta, S., Kumar, S., Sarma, P., Prakash, A., & Medhi, B. (2019). *Collaborative research in modern era: Need and challenges*. Indian journal of pharmacology, 51(3), 137-139. https://doi.org/10.4103/ijp.IJP_394_19
- [13] Barile, N. (2020). *A Guide to Giving Clear Instructions to Students (That They Will Actually Follow)*. Hey Teach! <https://www.wgu.edu/heyteach/article/guide-giving-clear-instructions-that-they-will-actually-follow2001.html>
- [14] Bedekar, S. (2019). *Should 'Freedom of expression' have limits? ~ Group Discussion Ideas*. Group Discussion Ideas. <https://www.groupdiscussionideas.com/should-freedom-of-expression-have-limits/>
- [15] Bhandari, R. (2020). *What Is Qualitative Research? | Methods & Examples*. Scribbr. Retrieved November 19, 2023 from <https://www.scribbr.com/methodology/qualitative-research/>
- [16] Cadosales, M. (2017). *STUDENTS' EXPERIENCES WITH ACADEMIC CONSULTATION*. International Journal of Advanced Research, 5(5), 2092-2097. <https://doi.org/10.21474/ijar01/4354>
- [17] Caitriona, M. (2023). *Peer Learning: Benefits and Best Practices*. TPR Teaching. <https://www.tprteaching.com/peer-learning/>
- [18] Campbell, A. (2023). *10 powerful ways to cultivate student engagement for academic success*. Www.turnitin.com. <https://www.turnitin.com/blog/10-powerful-ways-to-cultivate-student-engagement-for-academic-success>
- [19] Cao, Y. (2017). *Peer and Self Evaluation for Cooperative Learning in Interpreting Course*. 3rd International Conference on Social Science and Higher Education (ICSSHE-17), 99, p.245-247. <https://www.atlantispress.com/article/25884328.pdf>
- [20] Catarino, P., Vasco, P., Lopes, J., Helena, S., & Morais, E. (2018). *Cooperative Learning on Promoting Creative Thinking and Mathematical Creativity in Higher Education*. Cooperative Learning on Promoting Creative Thinking and

- Mathematical Creativity in Higher Education. REICE. <https://www.redalyc.org/journal/551/55166997001/html/>
- [21] Chris Drew. (2011). *6 Benefits of Group Work / SkillsYouNeed*. Skillsyouneed.com. <https://www.skillsyouneed.com/rhubarb/group-work-benefits.html>
- [22] Cornell University. (2019). *Peer Assessment / Center for Teaching Innovation*. Cornell.edu. <https://teaching.cornell.edu/teaching-resources/assessment-evaluation/peer-assessment>
- [23] Cornell University. (2023). *Collaborative learning / Center for Teaching Innovation*. Teaching.cornell.edu; Cornell University. <https://teaching.cornell.edu/teaching-resources/active-collaborative-learning/collaborative-learning>
- [24] Craemer, M. (2012). *Group Accountability for Effective Teamwork*. Craemer Consulting. <https://craemerconsulting.com/group-accountability-for-effective-teamwork/>
- [25] Dong, Y., Wu, S. X., Wang, W. & Peng, S. (2019). *Is the Student-Centered Learning Style More Effective Than the Teacher-Student Double-Centered Learning Style in Improving Reading Performance?*. Frontiers. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.02630/full>
- [26] Drakeford, W. (2012). *The Effects of Cooperative Learning on the Classroom Participation of Students Placed at Risk for Societal Failure*. Psychology Research, Vol. 2, No. 4, 239-246. <https://files.eric.ed.gov/fulltext/ED535720.pdf>
- [27] Edthena (2020). *Why Student-Centered, Independent Learning is Important When Distance Teaching*. <https://www.edthena.com/student-centered-independent-learning/>
- [28] Enlightio (2023). *Why Is Collaboration Important? (25 Reasons)*. Enlightio. <https://enlightio.com/why-is-collaboration-important>
- [29] Erdogan, F. (2019). *Effect of Cooperative Learning Supported by Reflective Thinking Activities on Students' Critical Thinking Skills*. Eurasian Journal of Educational Research, n80 p89-112. <https://eric.ed.gov/?id=EJ1211625>
- [30] Etnika, H. S. A. & Ling, Y. (2019). *The Importance of Immediate Constructive Feedback on Students' Instrumental Motivation in Speaking in English*. Britain International of Linguistics, Arts and Education (BIO LAE) Journal; Vol.1, No. 2. <https://biarjournal.com/index.php/biolae/article/download/58/53/>
- [31] Feldman, E. S., & Kratochwill, T. R. (2003). *Problem solving consultation in schools: Past, present, and future directions*. The Behavior Analyst Today, 4(3), 318-330. <https://doi.org/10.1037/h0100022>
- [32] Fong, C. J., Schallert, D. L., Williams, K. M., Williamson, Z. H., Warner, J. R., Lin, S., & Kim, Y. W. (2018). *When feedback signals failure but offers hope for improvement: A process model of constructive criticism*. Thinking Skills and Creativity, 30, 42-53. <https://doi.org/10.1016/j.tsc.2018.02.014>
- [33] Fowler, A. (2009). *The Importance of Giving Clear and Concise Instructions*. The Think Tank. <https://thethoughtavenue.wordpress.com/2009/10/14/the-importance-of-giving-clear-and-concise-instructions/>
- [34] Ghavifekr, S. (2020). *COLLABORATIVE LEARNING: A KEY TO ENHANCE STUDENTS'SOCIAL INTERACTION SKILLS*. MOJES: Malaysian Online Journal of Educational Sciences, 8(4), 9-21. <https://ojie.um.edu.my/index.php/MOJES/article/view/26394>
- [35] Gillies, R. M. (2003). *The behaviors, interactions, and perceptions of junior high school students during small-group learning*. Journal of Educational Psychology, 95(1), 137-147. <https://psycnet.apa.org/record/2003-01605-012>
- [36] Gillies, R. M. (2016). *Cooperative Learning: Review of Research and Practice*. Australian Journal of Teacher Education, 41(3). Retrieved November 16, 2023 from <http://dx.doi.org/10.14221/ajte.2016v41n3.3>

- [37] Glavin, C. (n.d.). *Limitations / Problems with Cooperative Learning* | K12 Academics. Retrieved November 17, 2023 from: <https://www.k12academics.com/Educational%20Practices/Cooperative%20Learning/limitations-problems-cooperative-learning>
- [38] Gul, F., & Shehzard, S. (2015). *Effects of Cooperative Learning on Students' Academic Achievement*. *Journal of Education and Learning (EduLearn)* 9(3):246-255. https://www.researchgate.net/publication/281102103_Effects_of_Cooperative_Learning_on_Students'_Academic_Achievement
- [39] Gunawan, Harjono, A., Sahidu, H., & Nisrina (2018). *Improving students' creativity using cooperative learning with virtual media on static fluida concept*. *International Conference on Science Education*. <https://iopscience.iop.org/article/10.1088/1742-6596/1006/1/012016/pdf>
- [40] Han, S. L. & Son, H. S. (2020). *Effects on cooperative learning on the improvement of interpersonal competence among students in classroom environments*. *International Online Journal of Education and Teaching (IOJET)*, 7(1). 17-28. <http://iojet.org/index.php/IOJET/article/view/717>
- [41] Hargraves, V. (2021, January 18). *Dewey's educational philosophy*. THE EDUCATION HUB. <https://theeducationhub.org.nz/deweys-educational-philosophy/>
- [42] Hinds, P. J., Carley, K. M., Krackhardt, D. & Wholey, D. (2000). *Choosing Work Group Members: Balancing Similarity, Competence, and Familiarity*. *Organizational Behavior and Human Decision Processes*, 81(2), 226–251. <https://www.sciencedirect.com/science/article/abs/pii/S0749597899928753>
- [43] Hoover, L. (2021). *5 Qualitative Research Designs and Research Methods*. Doctoral Journey. Retrieved November 19, 2023 from <https://www.gcu.edu/blog/doctoral-journey/5-qualitative-research-designs-and-research-methods>
- [44] Hub, L. and T. (2023). *Jigsaw (Active Learning Strategy)*. Learning and Teaching Hub. <https://lth.engineering.asu.edu/2023/11/jigsaw-active-learning-strategy/>
- [45] Hulu, A. (2020). *The Impact of Teachers' Guidance on Students' Learning Motivation*. Research Gate. https://www.researchgate.net/publication/340305353_The_Impact_of_Teachers'_Guidance_on_Students'_Learning_Motivation
- [46] Human Rights Guide (n.d.). *Freedom of expression & Media*. <https://www.cilvektiesibugids.lv/en/themes/freedom-of-expression-media>
- [47] Indeed Editorial Team. (2022). *12 Common Teaching Philosophies (With Definitions)*. Indeed Career Guide. <https://www.indeed.com/career-advice/career-development/teaching-philosophies>
- [48] Isik, D., & Tarim, K. (2009). *The effects of the cooperative learning method supported by multiple intelligence theory on Turkish elementary students' mathematics achievement*. Research Gate. https://www.researchgate.net/publication/225561727_The_effects_of_the_cooperative_learning_method_supported_by_multiple_intelligence_theory_on_Turkish_elementary_students'_matematics_achievement
- [49] IT Learning and Development. (2017). *Benefits of cooperative learning*. iStudy for Success. https://pennstatelearning.psu.edu/istudy_tutorial/s/cooperativelarning/cooperativelarning6.html
- [50] Jiya, J. (2022). *Effect of Adolescent Peer and Teacher Consultation on Academic Performance of Secondary School Students in Minna Town, Niger State, Nigeria*. *International Journal of Multidisciplinary and Current Educational Research (IJM CER)*, 4(4), 38-43. https://www.ijmcer.com/wp-content/uploads/2022/07/IJM CER_E04403843.pdf
- [51] Juliantine, T., Rismanugraha, A., & Budiana, D. (2019). *The Influence of Peer Teaching and Cooperative Learning Models towards Students' Self-Confidence and Cooperation in Learning Volleyball*. *Advances in Health Sciences Research*. <https://www.atlantipress.com/proceedings/icsshpe-18/125917809>

- [52] Kagan, S. (1999). *Cooperative Learning: Seventeen Pros and Seventeen Cons plus Ten Tips for Success*. Retrieved November 16, 2023 from:
https://www.kaganonline.com/free_articles/dr_spencer_kagan/ASK06.php
- [53] Kasim, U. (2015). *IMPLEMENTATION OF GROUP WORK IN THE CLASSROOM*. LINGUA, Vol. 12, No. 1.
<https://lingua.solocls.org/index.php/lingua/article/view/74/81>
- [54] Kemp, A. (1960). *Freedom of Choice*. The Journal of the American Medical Association.
<https://fee.org/articles/freedom-of-choice/>
- [55] Keramati, M. R., & Gillies, R. M. (2021). *Advantages and challenges of cooperative learning in two different cultures*. Education Sciences, 12(1), 3.
<https://doi.org/10.3390/educsci12010003>
- [56] Kibirige, I., & Lehong, M. J. (2016). *The Effect of Cooperative Learning on Grade 12 Learners' Performance in Projectile Motions, South Africa*. Eurasia Journal of Mathematics, Science & Technology Education, 12(9), 2543-2556.
<https://www.ejmste.com/download/the-effect-of-cooperative-learning-on-grade-12-learners-performance-in-projectile-motions-south-4617.pdf>
- [57] Kifle, T. & Bonner, S. (2023). *Successful group work is all in the selection process*. Times Higher Education.
<https://www.timeshighereducation.com/campus/successful-group-work-all-selection-process>
- [58] Lee, E. (2021). *Encouraging Active Participation*. CPD Online College.
<https://cpdonline.co.uk/knowledge-base/care/encouraging-active-participation/>
- [59] Leeuwen, V., Janssen & Jeroen. (2019). *A systematic review of teacher guidance during collaborative learning in primary and secondary education*. Educational Research Review.
<https://learningportal.iiep.unesco.org/en/library/a-systematic-review-of-teacher-guidance-during-collaborative-learning-in-primary-and>
- [60] Lei, H., Cui, Y. & Chiu, M. M. (2018). *The Relationship between Teacher Support and Students' Academic Emotions: A Meta-Analysis*. Frontiers.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2017.02288/full>
- [61] Lewis, B. (2019). *How to Use Cooperative Learning in the Classroom*. ThoughtCo.
<https://www.thoughtco.com/what-is-cooperative-learning-2081641>
- [62] Librarians, H. L. (n.d.). *LibGuides: Qualitative study design: Sampling*. Deakin.libguides.com. Retrieved November 21, 2023, from
<https://deakin.libguides.com/qualitative-study-designs/sampling>
- [63] LinkedIn Community. (2023). *How can cooperative learning foster innovation and creativity in students?* www.linkedin.com.
<https://www.linkedin.com/advice/0/how-can-cooperative-learning-foster-innovation>
- [64] Lo, K. W. K., Ngai, G., Chan, S. C. F., & Kwan, K. (2022). *How Students' Motivation and Learning Experience Affect Their Service-Learning Outcomes: A Structural Equation Modeling Analysis*. Frontiers.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2022.825902/full>
- [65] Loes, C. N. (2022). *The Effect of Collaborative Learning on Academic Motivation*. Teaching & Learning Inquiry 10.
<https://files.eric.ed.gov/fulltext/EJ1340445.pdf>
- [66] Mckoy, S. (2022). *Phenomenological Research: Approach, Model & Methods*. Study.com. Retrieved November 19, 2023 from
<https://study.com/learn/lesson/phenomenological-research-model-examples-design.html>
- [67] Mentzer, N., Laux, D., Zissimopoulos, A., & Richards, K.A.R. (2016). *Peer Evaluation of Team Member Effectiveness as a Formative Educational Intervention*. Journal of Technology Education.
<https://docs.lib.purdue.edu/cgi/viewcontent.cgi?article=1005&context=impactpubs>
- [68] Merriam-Webster. (2019). *Definition of COLLABORATION*. Merriam-Webster.com.
<https://www.merriam-webster.com/dictionary/collaboration>
- [69] Merriam-Webster. (2023). *Definition of COOPERATION*. Wwww.merriam-Webster.com.

- <https://www.merriam-webster.com/dictionary/cooperation>
- [70] Modaber, H., & Far, F. B. (2017). *The Effects of Cooperative Learning on Students' Self-Esteem*. European Journal of Social Sciences Studies. https://www.academia.edu/33147106/THE_EFFECTS_OF_COOPERATIVE_LEARNING_ON_STUDENTS_SELF_ESTEEM
- [71] Munawaroh, M., Ratnawati, E., Ningsih, T. Z., & Nuryana (2022). *Enhancing Students' Communication Skills in Social Studies Learning Through Cooperative Learning*. Research Gate. https://www.researchgate.net/publication/362972491_Enhancing_Students'_Communication_Skills_in_Social_Studies_Learning_Through_Cooperative_Learning
- [72] Muttaqin, T. (2016). *Cooperative Learning and Students' Self-esteem*. Research Gate. https://www.researchgate.net/publication/292996268_Cooperative_Learning_and_Students'_Self-esteem
- [73] Nikolopoulou, K. (2022). *What Is Purposive Sampling? | Definition & Examples*. Scribbr. Retrieved November 20, 2023 from <https://www.scribbr.com/methodology/purposive-sampling/>
- [74] Park, A. (2009). *COOPERATIVE LEARNING*. Developed by the California Adult Literacy Professional Development Project (CALPRO), under contract with the California Department of Education. <https://www.calpro-online.org/documents/cooperativelarningfinal.pdf>
- [75] Pope, M., & Pace, M. (2019). *Importance of Consultation*. National Youth-At-Risk Conference. https://digitalcommons.georgiasouthern.edu/nyar_savannah/2019/2019/85/
- [76] Psicologia, A. (2014). *Cooperative Learning and Academic Achievement: Why Does Groupwork Work?*. Research Gate. Retrieved November 19, 2023 from https://www.researchgate.net/publication/268235484_Cooperative_Learning_and_Academic_Achievement_Why_Does_Groupwork_Work
- [77] Rees, C. (n.d.). *What Type Of Student Are You? Active Participant vs. Passive Observer*. Student Life Network. <https://blog.studentlifenet.com/2019/02/28/type-of-student-active-participant-passive-observer/>
- [78] Rigacci, A. (2020). *What Is Cooperative Learning? 5 Strategies for your Classroom*. Europass Teacher Academy. <https://www.teacheracademy.eu/blog/cooperativel-learning-strategies/>
- [79] Saeed, S. & Zyngier, D. (2012). *How Motivation Influences Student Engagement: A Qualitative Case Study*. Journal of Education and Learning; Vol. 1, No. 2. <https://files.eric.ed.gov/fulltext/EJ1081372.pdf>
- [80] Sampsel, A. (2013). *Finding the Effects of Think-Pair-Share on Student Confidence and Participation*. Honors Projects. 28. <https://scholarworks.bgsu.edu/honorsprojects/28>
- [81] Scager, K., Boonstra, J., Peeters, T., Vulperhorst, J. P., & Wiegant, F. a. C. (2016). *Collaborative learning in Higher Education: Evoking positive interdependence*. CBE- Life Sciences Education, 15(4), ar69. <https://doi.org/10.1187/cbe.16-07-0219>
- [82] Selby. (2023). *Building Social Skills through Group Work Lesson Plans*. Everyday Speech. <https://everydayspeech.com/self-implementation/building-social-skills-through-group-work-lesson-plans/>
- [83] Shetty, S. (2018). *Determining Sample Size for Qualitative Research: What is the Magical Number?* | InterQ Research. InterQ Research. Retrieved November 19, 2023 from <https://interq-research.com/determining-sample-size-for-qualitative-research-what-is-the-magical-number/>
- [84] Shier, M. (2020). *4.4 Team and Group Work*. Opentextbc.ca. <https://opentextbc.ca/studentsuccess/chapter/team-and-group-work/>
- [85] Steinmayr, R., Weidinger, A. F., Schwinger, M., & Spinath, B. (2019). *The Importance of Students' Motivation for Their Academic Achievement – Replicating and Extending Previous Findings*. Frontiers. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01730/full>

- [86] Teed, R., McDaris, J., & Roseth, C. (2018, May 7). *Cooperative Learning*. Cooperative Learning. <https://serc.carleton.edu/sp/library/cooperative/index.html>
- [87] Thomson, S. B. (2011). *Sample Size and Grounded Theory*. Research Gate. Retrieved in November 19, 2023 from https://www.researchgate.net/publication/228513695_Sample_Size_and_Grounded_Theory
- [88] Tomaswick, L. (2017). *Active Learning – Jigsaw*. Kent State University Center for Teaching and Learning. <http://www.kent.edu/ctl/educational-resources/active-learning-jigsaw/>
- [89] Toy Industry Association, Inc. (n.d.). *The Genius of Play | Enhance social Skills*. The Genius of Play. <https://thegeniusofplay.org/genius/benefits-of-play/enhance-social-skills.aspx#>
- [90] University of Wisconsin La Crosse. (n.d.). *Peer Evaluation and Peer Review - CATL Teaching Improvement Guide*. UW-La Crosse. <https://www.uwlax.edu/catl/guides/teaching-improvement-guide/how-can-i-improve/peer-evaluation/>
- [91] Valencerina, M. A. B. (2014). *Effect of Cooperative Learning Method Anchored on Multiple Intelligence Theory on Students' Achievement in Mathematics*. JPAIR Institutional Research. Research Gate. https://www.researchgate.net/publication/280326395_Effect_of_Cooperative_Learning_Method_Anchored_on_Multiple_Intelligence_Theory_on_Students'_Achievement_in_Mathematics
- [92] Velez, J. J., Cano, J., Whittington, M. S., & Wolf, K. J. (2011). *Cultivating Change Through Peer Teaching*. Journal of Agricultural Education Volume 52, Number 1, pp. 40–49. <https://files.eric.ed.gov/fulltext/EJ955665.pdf>
- [93] Villegas, F. (2022). *Thematic Analysis: What it is and How to Do It*. QuestionPro. Retrieved November 20, 2023 from <https://www.questionpro.com/blog/thematic-analysis/>
- [94] Warsah, I., Morganna, R., Uyun, M., Hamengkubuwono & Afandi, M. (2021). *The Impact of Collaborative Learning on Learners' Critical Thinking Skills*. International Journal of Instruction, v14 n2 p443-460. <https://eric.ed.gov/?id=EJ1290961>
- [95] Willis, J. (2021). *How Cooperative Learning Can Benefit Students This Year*. Edutopia. Retrieved November 16, 2023 from <https://www.edutopia.org/article/how-cooperative-learning-can-benefit-students-year>
- [96] Wulandari, A. P. S. & Anugerahwati, M. (2021). *The power of constructive criticism and its effect on students' learning motivation*. Journal of English Educators Society. <https://jees.umsida.ac.id/index.php/jees/article/view/1408>
- [97] Yaghmour, K. S., & Obaidat, L. T. (2022). *The effectiveness of using direct instruction in teaching comprehension skills of third-grade students*. International Journal of Instruction. <https://eric.ed.gov/?id=EJ1341587>