

TLE Teachers' Collaborative Learning Method in Building Relationship and Students' Engagement

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Abstract—The study aimed to examine the relationship between the Collaborative Learning Method practiced by Technology and Livelihood Education (TLE) teachers and its effect on building relationship and students' engagement. Specifically, it aimed to determine the level of collaborative learning in terms of learning objectives, structured tasks, monitoring activities, and reflection. Furthermore, it evaluates the level of building relationship regarding trust, respect, commitment and open communication while investigating the level of student engagement in its behavioral, emotional, cognitive and social aspect. Lastly, it identified whether there was a significant correlation between the TLE teachers' collaborative learning method and building relationship, as well as between the TLE teachers' collaborative learning method and students' engagement. The study used a validated self-made questionnaire to collect the necessary data to identify and describe the relationship between the collaborative learning method, building relationship, and students' engagement. A total of 135 TLE teachers from different public secondary schools in the Division of Laguna were purposively selected as respondents. Based on the data gathered, the level of collaborative learning is very high in terms of learning objectives, while structured tasks, monitoring activities, and reflection are rated high. Building relationship in terms of trust and commitment are very high, whereas respect and open communication are rated high. Meanwhile, the level of students' engagement in terms of behavioral, emotional, cognitive and social engagement is generally high. Thus, there is no significant correlation between TLE teachers' collaborative learning method and building relationship, while in terms of students' engagement only behavioral and emotional engagement shows significant correlation. No significant correlation was identified between TLE teachers' collaborative learning method and building relationship resulting to acceptance of hypothesis, while students' engagement shows significant correlation only on behavioral and emotional engagement thus the hypothesis was rejected. This means that educators might have to introduce some additional methods or participatory facilitation to enhance the power of learners and develop students' engagement. It is recommended that the teachers need to use more deliberate strategies, such as structured peer interaction, team-building activities, guided reflection, and meaningful feedback, to improve collaborative learning. Engaging tasks, regular monitoring, and proper facilitation are also important in promoting active student participation. In addition, professional development, adequate resources, and clear guidelines can help strengthen its implementation in TLE classes.

Keywords— Collaborative Learning Method, Building Relationship, Student Engagement, Structured Tasks, Learning Objectives.

I. INTRODUCTION

In education today, an apparent change in the old traditional teacher centered method of education to more student centered

is evident. This is a new learning style focusing on teamwork and participation as well as critical thinking. An ever-changing world of globalization and technologies demanded and made the application of more engaging approaches to students rather than memorization as well as the promotion of learners as more active, independent and flexible learners. Collaborative learning is one of the approaches that favor this objective as it not only enhances academic achievement but also develops social competency, confidence, and working with others.

Through a collaborative approach to learning, an emphasis is placed on team work and shared responsibility in the classroom. It provides learners with the opportunity to share ideas, collaboratively solve problems and to practice what they learn in real-world situations. At school, there is a collaborative style of learning where the focus is on assisting each other and how each individual is accountable to the work of another. It allowed students to communicate with one another, collaboratively solve problems, and apply whatever they are taught in practice.

In Technology and Livelihood Education (TLE), groupwork is vital since it influences the learning and growth of the students, as well as their achievement. In the process of conducting common activities, there is an involuntary development of profound relations between teachers and students, as well as among peers. Learners develop a sense of trust and belonging when they feel connected to their teachers, which encourages greater involvement.

According to Davidson and Major (2016), collaborative learning is an educational approach where students assume a role in knowledge building. They stressed that to have a viable collaboration, there must be a shared responsibility, respect and good-structured taskings that encourage meaningful participation among the learners.

Collaborative learning methods are more effective in student interaction. The interactive style of this type of pedagogy approach makes certain that learners present their ideas, engage and take an active role in the pedagogy process in totality. They remain concentrated and inspired working in the team, feel more responsible and are taught the value of accomplishing their duties. On this aspect, synergistic learning in TLE does not only enhance transfer of technical skills but also a relationship among them resulting in the further involvement of students.

At the same time, student engagement is an important factor in the learning process, as it reflects the degree of students' active participation, emotional involvement, cognitive investment, and social interaction in classroom

activities. Rojas-Drummond and Mercer (2016) indicate that collaboration is a culturally constructed process in which students can learn together by taking on common tasks, solving problems cooperatively, and helping each other. Their work confirms that cooperative learning provides conditions under which students can discuss ideas-based learning, acquire social abilities, and participate in reasoning.

This research paper on “TLE Teachers’ Collaborative Learning Method in Building Relationship and Students’ Engagement” emphasizes the reality of how collaborative working can actually revolutionize how students learn and improve their engagement. Students get more engaged with the classroom in allowing them to contribute, share ideas and motivate each other actively. This method reflects the researcher’s perspective, can be of great help to teachers and students since it would lead to collaboration, enhanced engagement and positive academic results.

1.1 Statement of the Problem

Problem/s which were addressed by the research

The study aimed to assess the level of collaborative learning method practiced by T.L.E teachers on building relationship and students’ engagement.

1. What is the level of TLE Teachers’ Collaborative Learning Method in terms of?
 - 1.1 Learning Objectives;
 - 1.2 Structured Task;
 - 1.3 Monitoring activities; and
 - 1.4 Reflection?
2. What is the level of Building Relationship in terms of?
 - 2.1 Trust;
 - 2.2 Respect;
 - 2.3 Commitment; and
 - 2.4 Open communication?
3. What is the level of Students’ Engagement in terms of?
 - 3.1 Behavioral Engagement;
 - 3.2 Emotional Engagement;
 - 3.3 Cognitive Engagement; and
 - 3.4 Social Engagement?
4. Is there a significant correlation between TLE teachers’ collaborative learning method and building relationship?
5. Is there a significant correlation between TLE teachers’ collaborative learning method and students’ engagement?

II. METHODOLOGY

The study used a validated self-made questionnaire to collect the necessary data to identify and describe the relationship between the collaborative learning method, building relationship, and students’ engagement. A total of 135 TLE teachers from different public secondary schools in the Division of Laguna were purposively selected as respondents.

III. RESULTS AND DISCUSSION

This chapter discusses the results that were yielded from the treatment of the data that was gathered in this study. The following tabular presentations and discussions assess the level of collaborative learning method practiced by TLE

teachers relative to building relationship and students’ engagement. It also assessed whether there is a significant correlation between TLE teachers’ collaborative learning method and building relationship, as well as between collaborative learning method and students’ engagement.

The findings are presented in the order of the research problems to facilitate a systematic analysis. The study examines the level of TLE teachers’ collaborative learning method in terms of learning objectives, structured tasks, monitoring activities, and reflection. It also presents the levels of building relationship and students’ engagement, focusing on their influence on cooperation and participation.

Finally, the chapter examines whether a significant correlation exists between TLE teachers’ collaborative learning method and student outcomes, providing insights into its impact on social interaction and academic engagement. It also presents interpretations that connect the results to practical implications in creating a supportive and engaging learning environment.

Level of TLE Teachers’ Collaborative Learning Method

In this study, the collaborative learning method, defined as the use of group activities where students work together to achieve shared learning goals, was described in terms of learning objectives, structured task, monitoring activities, and reflection and was determined by mean and standard deviation.

The following table discussed how collaborative learning is being practiced by TLE teachers in their instruction.

Table 1. Level of TLE Teachers’ Collaborative Learning Method in terms of Learning Objectives

Statements	Mean	SD	Remarks
Clear learning objectives in every lesson...			
...are communicated to students before collaborative activities begin to ensure understanding of lesson goals and expectations.	4.61	0.52	Strongly Agree
...guide students’ roles and tasks during group work by providing clear direction and purpose for collaboration.	4.32	0.89	Strongly Agree
...help students understand the skills or competencies they are expected to develop.	4.24	0.95	Strongly Agree
...make students aware of the expected outcomes of activities so they can focus their efforts toward achieving lesson objectives.	4.34	0.93	Strongly Agree
...ensure students understand how their participation contributes directly to achieving the lesson objectives.	4.25	0.96	Strongly Agree
Weighted Mean	4.35		
SD	0.88		
Verbal Interpretation	Very High		

Table 1 presents the level of TLE teachers’ collaborative learning method as perceived by the respondents in terms of learning objectives.

Teachers strongly agree that clear learning objectives are communicated to students before collaborative activities begin to ensure understanding of lesson goals and expectations. This makes students aware of the expected outcomes of activities so they can focus their efforts toward achieving lesson objectives and guide students’ roles and tasks during group

work by providing clear direction and purpose for collaboration. Similarly, it helps students understand how participation contributes to lesson objectives and the skills they are expected to develop.

The level of TLE teachers' collaborative learning method in terms of learning objectives attained the overall weighted mean of 4.35 with a standard deviation of 0.88, verbally interpreted as Very High. This indicates that the learning objectives is clearly presented during collaborative learning activities to ensure clarity of the target goals and outcomes to achieve.

In conclusion, clear learning objectives serve as significant features that can be used to inform the participation of students and to make sure that the collaborative activities are aimed at producing the desired learning outcomes. They help guide students in understanding their roles and responsibilities during group tasks, which promotes more focused and meaningful participation.

Table 2. Level of TLE Teachers' Collaborative Learning Method in terms Structured Tasks.

Statements	Mean	SD	Remarks
Structured tasks in every activity are efficiently...			
...organized and manageable steps that easy to follow and reduce student confusion.	4.29	0.82	Strongly Agree
...include clear instructions that help students complete group activities effectively.	4.25	0.96	Strongly Agree
...help students work together smoothly by promoting cooperation and coordination within groups.	4.15	1.04	Agree
...help students understand their specific roles during activities to ensure shared responsibility and equal participation.	3.93	0.98	Agree
...help students stay focused and engaged during TLE lessons.	4.25	0.82	Agree
Weighted Mean	4.17		
SD	0.94		
Verbal Interpretation			High

Table 2 displays the level of TLE teachers' collaborative learning method in terms of structured tasks.

An effective use of structured tasks in collaborative learning activities is generally agreed upon by the teachers. The highest-rated indicator shows that tasks are organized into manageable steps, making them easier for students to follow and reducing confusion. Teachers also confirm that tasks assist students in knowing their specific roles, which guarantee shared responsibility and involvement.

The level of TLE teachers collaborative learning method in terms of structured tasks reached a total weighted mean of 4.17 with a standard deviation of 0.94, that can be verbally interpreted as High. It means that teachers can establish structured tasks in the case of collaborative learning successfully, offering a clear organization and structure, but it can be improved, making roles more outlined and coordinating groups.

In conclusion, it shows that structured tasks play a significant role in collaborative learning since they aid the teachers to implement a meaningful, focused and organized group work that contributes to the achievement of the learning goals.

Table 3. Level of TLE Teachers' Collaborative Learning Method in terms of Monitoring Activities

Statements	Mean	SD	Remarks
Monitoring activities purposefully...			
...include regular checking of students' progress while they work in groups to ensure learning goals are being met.	4.19	0.84	Agree
...involve providing immediate, constructive feedback during tasks to enhance learning.	4.24	0.99	Strongly Agree
...help students stay on task, refine their skills, and improve overall performance.	3.99	1.03	Agree
...involve observing how students interact and support one another during group work.	3.96	0.97	Agree
...allow identification and addressing of learning difficulties, keeping students on track toward lesson objectives.	4.22	0.96	Strongly Agree
Weighted Mean	4.12		
SD	0.97		
Verbal Interpretation			High

Table 3 shows the level of TLE teachers' collaborative learning method in terms of monitoring activities.

The effective implementation of monitoring is evident during collaborative learning, as teachers strongly agree that providing immediate and constructive feedback enhances students' learning and helps identify and address learning difficulties, keeping them on track toward lesson objectives. Teachers also agree that regular checking of students' progress ensures that learning goals are being met.

The level of TLE teachers collaborative learning method in terms of monitoring activities attained an overall weighted mean of 4.12 with a standard deviation of 0.97, verbally interpreted as High. This implies that the strategy of monitoring used by the teachers in collaborative learning is effective, but there is opportunity concerning its continued observation of the interrelations between students and the improvement of skills development. It also emphasizes the necessity to incorporate more monitoring practices to guarantee the continuity of the student engagements and better learning results. The practices also aid the teachers to see where they carry out the same action and readjust their actions in order to serve the student learning better.

Table 4. Level of TLE Teachers Collaborative Learning Method in terms of Reflection

Statements	Mean	SD	Remarks
Reflection after activity constructively...			
...encourages students to think about their experiences during the activity, allowing them to evaluate what strategies worked.	4.14	0.89	Agree
...provides rich opportunities for students to discuss what they learned, share insights with peers, and clarify misunderstandings.	4.07	1.00	Agree
...helps students recognize their strengths and areas for improvement promoting self-awareness.	3.52	1.02	Agree
... guides students in connecting their learning to real-life skills application.	3.96	1.10	Agree
...reinforces students' understanding and encourages applying new knowledge in future tasks.	4.17	0.94	Agree
Weighted Mean	3.97		
SD	1.02		
Verbal Interpretation			High

Table 4 shows the level of TLE teachers' collaborative learning method in terms of reflection.

The consistent practice of reflection every after of the activities is essential during collaborative learning, as teachers generally agree that encouraging students to think about their experiences during activities enables them to evaluate their strategies and techniques to improve their performance. It also provides opportunities for students to share what they have learned, share lessons with peers, and clarify misunderstandings. Moreover, reflection helps students recognize their strengths and areas for improvement.

The level of TLE teachers' collaborative learning method with regards to reflection reached the overall weighted mean 3.97 with the standard deviation of 1.02 this is verbally interpreted as High. It means that reflection is usually incorporated into collaborative learning though the enhancement of self-awareness and practical learning in the real-life context can be considered.

In a nutshell, reflection has continued to be a significant aspect of collaborative learning since it aids learners to increase their level of understanding, facilitate critical thinking, and promote ongoing learning transformations in the process of learning among students. It also increases the capability of the students to relate their study with real life context and use their knowledge in a more efficient way.

Level of Building Relationship

In this study, building relationship which refers to the degree to which students display positive interpersonal behaviors during collaborative learning activities includes variables in terms of trust, respect, commitment, and open communication, and these were measured statistically using mean and standard deviation.

The following table shows how students practice building relationship in collaborative tasks.

Table 5. Level of Building Relationship in terms of Trust

Statements	Mean	SD	Remarks
Trust between teachers and students...			
...allows them to feel comfortable asking questions during collaborative activities.	4.31	0.84	Strongly Agree
...creates a classroom environment where they feel safe to share ideas.	4.44	0.85	Strongly Agree
...ensures they rely on my guidance during group learning tasks helping them work effectively and confidently.	4.28	0.86	Strongly Agree
...is evident during collaborative activities when they communicate respectfully, cooperate willingly, and support each other's learning.	4.16	1.00	Agree
...encourages them to participate more actively in class, promoting collaboration and shared responsibility.	4.44	0.82	Strongly Agree
Weighted Mean	4.32		
SD	0.88		
Verbal Interpretation			Very High

Table 5 reveals the level of building relationship in terms of trust.

These interpersonal relations ensure that there is a great deal of trust between students and teachers within a collaborative learning setting. The teachers are extremely convinced that trust enables the students to feel most at ease,

posing questions and provide them with a secure environment within, which they can express themselves freely. It also makes certain that students are dependent on the guidance of the teacher, then the students will be able to work efficiently and feel confident in case of a group work.

The level of building relationship in terms of trust attained an overall weighted mean of 4.32 with a standard deviation of 0.88, which can be translated as a verbally explained Very High. This means that a good level of trust is created between teachers and students and this leads to positive and encouraging learning environment and learners are not afraid to share their ideas.

Trust is basically important in establishing good relationships since it encourages effective communication, engagement and confidence among students when learning together in a group. It also strengthens collaboration and creates a classroom environment where students feel valued and motivated to learn.

Table 6. Level of Students Building Relationship in terms of Respect

Statements	Mean	SD	Remarks
Genuinely respecting one another...			
...is evident when students' ideas are value each other idea, creating an environment where every opinion is heard and appreciated.	4.47	0.74	Strongly Agree
...is demonstrated when students listen to one another during collaborative tasks, promoting effective teamwork.	4.05	1.11	Agree
...is consistently practiced, guiding students to behave courteously, follow rules, and maintain a positive learning atmosphere.	4.20	0.90	Agree
...supports students in understanding and valuing differing viewpoints.	4.08	0.99	Agree
...helps improve, interactions, strengthening collaboration, trust, and overall group performance.	4.19	0.91	Agree
Weighted Mean	4.20		
SD	0.95		
Verbal Interpretation			High

Table 6 displays the level of building relationship in terms of respect.

Teachers rated respect highly, noting that it is demonstrated when students appreciate one another's thoughts, creating a classroom where ideas are listened to and respected. They also concur that respect is also presented when students are able to listen to each other as they undertake collaborative tasks to facilitate effective teamwork.

The level of students' building relationship in terms of respect had an overall weighted mean of 4.20 with a standard deviation of 0.95, verbally interpreted as High. This implies that respect is mostly observed among learners in the context of studying together thus helping in establishing a good and cooperative classroom atmosphere.

Essentially, respect is a significant factor in the creation of positive relationships between people, and it encourages understanding, cooperation, and positive interaction among students. It also assists in building a conducive learning atmosphere where students feel accepted and motivated to engage fully. Moreover, it improves the cooperation capabilities of students with others and brings about the

meaningful and productive collaborative learning experiences.

to students’ feedback and perspectives, ensuring their ideas are acknowledged and considered.

Table 7. Level of Building Relationship in terms of Commitment

Statements	Mean	SD	Remarks
Commitment of every student in class...			
...is observed when I support students during, activities ensuring that they remain engaged and accountable for their roles within the group.	4.37	0.71	Strongly Agree
...is demonstrated when students take responsibility for completing their tasks on time and contribute actively.	4.33	0.88	Strongly Agree
...is encouraged through well-structured activities that promote responsibility and a sense of ownership over group learning outcomes.	3.90	0.99	Agree
...is evident when planned activities are consistently implemented, reinforcing students’ responsibility and sustained engagement in group tasks.	4.18	1.00	Agree
...combined with the teacher’s active support, strengthens learning outcomes by fostering consistent participation	4.28	0.92	Strongly Agree
Weighted Mean	4.21		
SD	0.92		
Verbal Interpretation			Very High

Table 8. Level of Building Relationship in terms of Open Communication

Statements	Mean	SD	Remarks
Open communication inside the classroom...			
...encourages meaningful dialogue during activities and exchanging of ideas.	4.15	1.04	Agree
...allows students to freely express their thoughts, concerns, and suggestions.	3.93	1.03	Agree
...involves carefully listening to their feedback and perspectives, ensuring their ideas are acknowledged and considered in decision-making.	4.03	1.06	Agree
...helps resolve misunderstandings during group work.	4.07	1.02	Agree
...strengthens relationships between teacher and students.	4.11	0.96	Agree
Weighted Mean	4.06		
SD	1.03		
Verbal Interpretation			High

Table 7 shows the level of building relationship in terms of commitment.

Commitment in collaborative learning is strongly agreed upon by teachers and is evident when they support students during activities, ensuring that students remain engaged and accountable for their roles. It is also demonstrated when students take responsibility for completing tasks on time and contribute actively to group work.

The level of students’ building relationship in terms of commitment attained an overall weighted mean of 4.21 with a standard deviation of 0.92, verbally interpreted as Very High. This indicates that students show a strong sense of responsibility and accountability during collaborative learning activities, supported by effective teacher guidance. It also indicates the willingness of the students to be engaged in group work and take their roles in groups.

In conclusion, commitment is an important element to build relationship because it enhances responsibility, active involvement, and regular interactions in the group work. It also assists in ensuring the students play meaningful roles in group work as well as in meeting common learning objectives. Moreover, it enhances accountability among the students and initiates them to their own learning which creates productive and efficient teamwork.

Table 8 presents the level of building relationship in terms of open communication.

Teachers agree that open communication is generally evident in the classroom during collaborative learning activities, as it encourages meaningful dialogue and the exchange of ideas among students. It also allows students to freely express their thoughts, concerns, and suggestions, although this aspect received a slightly lower rating. Additionally, open communication involves actively listening

The level of building relationship in terms of open communication achieved the overall weighted mean of 4.06 with a standard deviation of 1.03, verbally interpreted as High. It means that open communication is used at the classroom level that facilitates interaction and cooperation between the students.

Specifically, during this movement of forming relations, a clear communication is indispensable, since it encourages proving comprehension, keen involvement and efficient cooperation. It also establishes a classroom atmosphere where students feel that they have been heard, respected and motivated to express their ideas without fear. Students learn to listen carefully, respect different opinions, and respond in a positive way, leading to better cooperation. They also start to trust one another, which makes group activities easier and more enjoyable.

Level of Students’ Engagement

In this study, students’ engagement, viewed as the level of students’ active participation and involvement in learning activities, was described in terms of behavioral, emotional, cognitive, and social engagement and was determined using mean and standard deviation.

The following table illustrates how TLE teachers enhance students’ engagement in their instruction.

Table 9 presents the level of students’ engagement in terms of behavioral engagement during activities.

The process of behavioral engagement among students can be well illustrated when it comes to the collaborative learning process, as it is unanimously accepted by the teachers that students are active contributors to group work, contribute, and are cooperative among others. Responsibility is also manifested by the students when they accomplish the tasks and make the group successful.

The level of students’ engagement in terms of behavioral engagement attained an overall weighted mean of 3.99 with a standard deviation of 1.05, respectively, had a verbally rated overall mean of High. This has shown that students are in most cases active and engaged in collaborative learning activities with regular participation and responsibility.

Table 9. Level of Students Engagement in terms of Behavioral Engagement

Statements	Mean	SD	Remarks
Behavioral Engagement of students in group activities...			
...is shown when they actively participate in collaborative activities, sharing ideas and working cooperatively with their peers.	4.19	0.85	Agree
...is shown when they complete assigned group tasks on time, demonstrating responsibility and commitment to the team's success.	3.91	1.02	Agree
...is demonstrated when they follow instructions during TLE activities, applying skills and knowledge effectively.	3.94	1.11	Agree
...is evident when they remain focused and attentive during group work, contributing consistently to the progress of the activity.	4.09	1.04	Agree
...is demonstrated when students contribute effort to group tasks.	3.81	1.15	Agree
Weighted Mean	3.99		
SD	1.05		
Verbal Interpretation	High		

In conclusion, behavioral engagement is significant during the learning process, which indicates the active participation, collaboration and determination of the students to do group work. It also helps in the exegesis of discipline and teamwork which are the main pillars of effective collaborative learning. This further contributes to the development of students' responsibility and commitment toward achieving group goals.

Table 10. Level of Students Engagement in terms of Emotional Engagement

Statements	Mean	SD	Remarks
Through collaborative learning, emotional engagement of students...			
...is shown when students display interest during collaborative learning activities.	4.17	0.94	Agree
...is evident when students enjoy participating in group work.	3.87	1.09	Agree
is demonstrated when students display positive attitudes toward TLE lessons.	4.07	1.09	Agree
...is shown when students appear motivated during collaborative tasks.	4.15	1.02	Agree
...is evident when students feel confident when working with peers.	4.27	0.90	Strongly Agree
Weighted Mean	4.11		
SD	1.02		
Verbal Interpretation	High		

Table 10 presents the level of students' engagement in terms of emotional engagement during collaborative learning activities.

All these can be seen in emotional engagement among the students during the joint learning activities because the teachers have noted that students express interest and can enjoy in the group work and this was the indicator with the best rating. They demonstrate favorable intentions to TLE lessons, as well as, seem to be motivated when working on collaborative tasks. This also implies that not all students find collaborative activities appealing due to differences in group dynamics or individual preferences.

The level of students' engagement in terms of emotional engagement achieved an overall weighted mean of 4.11 with a standard deviation of 1.02, which could be verbally translated as being High. This shows that students are engaged emotionally in collaborative learning due to interest,

motivation and confidence during tasks. It is also an indication that students grow to have a healthy relationship with the learning process which helps them participate in the classes in general.

Based on the findings of this, emotional engagement plays a crucial role in learning process as it boosts students' interests, confidence and positive attitudes towards learning. It can also make learning a more enjoyable and meaningful experience that will motivate students to engage actively in group activities. Moreover, it contributes to keeping the students motivated and provides the student with a learning atmosphere that allows them to feel emboldened to talk.

Table 11. Level of Students Engagement in terms of Cognitive Engagement

Statements	Mean	SD	Remarks
Cognitive engagement of students in group learning tasks...			
...is demonstrated when they think critically during collaborative activities.	4.17	0.92	Agree
...is shown when they apply problem-solving skills in group tasks.	4.20	0.99	Agree
...is evident when they make connections between lessons and real-life situations.	3.92	1.09	Agree
...is demonstrated when they ask meaningful questions during activities.	4.37	0.87	Strongly Agree
...is shown when they persist when tasks become challenging.	4.19	1.09	Agree
Weighted Mean	4.17		
SD	1.01		
Verbal Interpretation	High		

Table 11 indicates the level of students' engagement in terms of cognitive engagement during collaborative learning activities.

The teachers confirm that the cognitive engagement of students is usually observable under the conditions of collaborative learning, as they tend to think critically and use their problem-solving skills in relating to group learning. They also show poise in cases, where tasks prove difficult to accomplish and take an active part in purposeful questioning which scored the highest among the indicators.

The level of students' engagement in terms of cognitive engagement was concerned had an overall weighted mean of 4.17 with a standard deviation of 1.01, verbal interpretation of which is High. It means that students are analyzed as thinking in cooperation with other students, demonstrating an active mind, solutions to the problems, and perseverance during work.

In brief, cognitive engagement is critical in the learning process since it contributes to critical thinking, more profound learning, and meaningful learning.

It challenges students to make them more independent learners who would be able to use their knowledge in a range of situations.

Table 12 shows the level of students' engagement in terms of social engagement during collaborative learning activities.

Students are usually observed to be socially engaged when undertaking collaborative learning. Teachers strongly agree that students are cooperative in work with their group mates and assist each other in working. The positive relationships are also formed as a result of group activities which achieved one

of the highest ratings. Besides, students can communicate successfully in their group and appreciate the ideas of others in the course of collaboration, yet their means were a little lower than others.

Table 12. Level of Students Engagement in terms of Social Engagement

Statements	Mean	SD	Remarks
In socially engaged learning settings, social engagement of students.			
...is shown when they cooperate well with their group members.	4.24	0.91	Strongly Agree
...is evident when they help and support one another during tasks.	4.34	0.99	Strongly Agree
...is demonstrated when they communicate effectively within their groups.	4.03	1.10	Agree
...is shown when students respect others' ideas during collaboration.	4.02	0.98	Agree
...is evident when they build positive relationships through group activities.	4.33	0.84	Strongly Agree
Weighted Mean	4.19		
SD	0.98		
Verbal Interpretation	High		

The level of students' engagement in terms of social engagement was met with a total weighted mean of 4.19 with a standard deviation of 0.98, which was verbally understood as High. It implies that socially, students are engaged in collaborative learning where they show cooperation, support and acceptance among themselves.

To sum up, social engagement has a significant factor in collaborative learning activities since it fosters teamwork, respect, and good relations among the students. It also aids in development of conducive classroom atmosphere that makes the learners feel part of it and will be interested in getting involved in group activities.

Significant Correlation between TLE Teachers Collaborative Learning Method and Building Relationship

In this study, the significant correlation between TLE teachers' collaborative learning method and student building relationship were analyzed applying Pearson Correlation Coefficient using Minitab 14.

Table 13. Significant Correlation between TLE Teachers Collaborative Learning Method and Building Relationship

Collaborative Learning Method	Trust		Building Relationship		
	Commitment	Open Communication	Respect		
Learning Objectives	Pearson Correlation	0.055	0.062	0.115	0.026
	Sig. (2-tailed)	.528	.477	.185	.766
	N	135	135	135	135
Structured Task	Pearson Correlation	0.024	0.040	0.103	0.101
	Sig. (2-tailed)	.779	.645	.233	.242
	N	135	135	135	135
Monitoring activities	Pearson Correlation	0.087	0.067	0.006	0.083
	Sig. (2-tailed)	.317	.443	.946	.341
	N	135	135	135	135
Reflection	Pearson Correlation	0.024	0.057	0.090	0.078
	Sig. (2-tailed)	.785	.512	.301	.367
	N	135	135	135	135

Table 13 presents the correlation between TLE teachers' collaborative learning method and student building

relationship. The results include Pearson correlation coefficients (r-values), p-values, and sample size (N=135) for each relationship.

As shown, no significant correlation was found between collaborative learning method and students' building relationship in terms of trust, respect, commitment, and open communication. This is evident as all the obtained p-values are greater than the 0.05 level of significance, indicating that the relationships are not statistically significant.

The findings implies that learning objectives, structured task, monitoring activities, and reflection are not significantly associated with students' ability to build relationships in terms of trust, respect, commitment, and open communication. Although collaborative learning strategies are commonly expected to enhance interpersonal relationship among students, the results imply that these specific components of collaborative learning may not directly influence the development of building relationship among the respondents in this study.

Significant Correlation between TLE Teachers Collaborative Learning Method and Students' Engagement

In this study, the significant correlation between TLE teachers' collaborative learning method and students' engagement were analyzed applying Pearson Correlation Coefficient using Minitab 14. The results provide insights into how collaborative learning strategies influence behavioral, emotional, cognitive, and social engagement.

Table 14. Significant Correlation between TLE Teachers Collaborative Learning Method and Students' Engagement

Collaborative Learning Method	Students' Engagement			
		Behavioral	Emotional	
Cognitive				
	Social			
	Learning Objectives	Pearson Correlation	0.174*	0.053
	Sig. (2-tailed)	.043	.538	.597 .657
	N	135	135	135 135
Structured Task	Pearson Correlation	0.009	0.189*	0.129 0.010
	Sig. (2-tailed)	.920	.028	.137 .954
	N	135	135	135 135
Monitoring activities	Pearson Correlation	0.041	0.046	0.012 0.021
	Sig. (2-tailed)	.634	.594	.891 .808
	N	135	135	135 135
Reflection	Pearson Correlation	0.015	0.086	0.107 0.089
	Sig. (2-tailed)	.865	.320	.216 .302
	N	135	135	135 135

Note * p < .05

Table 14 presents the significant correlation between components of the TLE teachers' collaborative learning method and students' engagement across behavioral, emotional, cognitive, and social engagement. The results include Pearson correlation coefficients, p-values, and a sample size of 135 for each relationship.

As the table indicates, only limited factors of TLE teachers collaborative learning method portray significant correlation with the engagement of students. In particular, behavioral engagement of students has a strong correlation with learning goals (r=0.174, p=.043), and the teaching in question is

closely associated with emotional engagement of students ($r=0.189$, $p=.028$). These findings shows that clear learning objectives can be utilized to encourage active learning, and appropriately designed tasks can make group activities more interesting and enjoyable to students.

The other variables, however, do not depict any significant relationships, as majority of the p-values obtained are above the level of 0.05 level of significance. Both monitoring activities and reflection are not significantly associated with any of the aspects of the engagement of the students, such as their behavioral, emotional, cognitive, and social aspects. On the same note, learning objectives and structured tasks fail to provide significant relationships when it comes to cognitive engagement and social engagement.

These findings imply that while certain components of collaborative learning, such as clear objectives and structured tasks, may influence specific areas of student engagement, other components like monitoring and reflection may not have a direct or measurable impact on engagement.

IV. CONCLUSION AND RECOMMENDATIONS

There is no significant correlation between TLE teachers' collaborative learning method and building relationship. Thus, the null hypothesis is accepted. It also means that educators might have to introduce some additional methods or participatory facilitation to enhance the power of learners to develop relationships in the course of group work actions.

There is significant correlation between TLE teachers' collaborative learning method and students' engagement. However, significant relationships were found in terms of behavioral and emotional engagement. Thus, the null hypothesis is rejected. Meaning, in order to develop students' engagement, more interventions like a purposeful task design,

act of facilitation and contemplations might be required to make students engage actively and relevantly in the classroom.

As per the above conclusions made, the following is recommended.

TLE teacher may discuss plans in collaborative work, including systematic interaction of peers, teamwork, and guided contemplation, should be used to strengthen building relationship among students. Students should be out to think, act, feel and socialize in such tasks, and there should be chances of reflection and feedback, and collaborative practices must be monitored to achieve meaningful participation.

The school administrators must offer professional development and training to increase the integration of learning methods and encourage student to be engaged, as well as resources, organized rules and models that can assist the teachers to establish active learning and development of interpersonal skills of the students.

Future researchers may conduct studies to explore additional factors that influence students' engagement and building relationship in collaborative settings and investigate the effectiveness of specific interventions aimed at strengthening social skills and multi-dimensional engagement during collaborative learning activities.

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