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STRATEGIES ON FACILITATING LEARNING AND ADEQUACY OF INSTRUCTIONAL MATERIALS IN TECHNOLOGY AND LIVELIHOOD EDUCATION TO STUDENT ENGAGEMENT

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ABSTRACT

The study aimed to identify the strategies for facilitating learning and the adequacy of instructional materials in Technology and Livelihood Education for student engagement. Specifically, it aimed to identify the level of teachers' strategies for facilitating learning, the extent of adequate instructional materials used by teachers to facilitate learning, the level of student engagement, the significant relationship between the teacher strategies for facilitating learning and student engagement, and the significant relationship between using instructional materials and student engagement.

This study used a quantitative research design, particularly the descriptive method. One hundred fifty Technology and Livelihood Education teachers in Calauan sub-office, Calauan, Laguna who were selected through purposive sampling were the respondents. The descriptive portion of the statistical data treatment used weighted mean and standard deviation, while the inferential portion of the study used the Pearson product-moment correlation.

The level of teacher strategies for facilitating learning in terms of setting clear learning objectives, using multiple teaching methods, encouraging critical thinking, understanding students' concerns, and incorporating real-life applications was all evaluated "Very great extent" by the respondents. The extent of the usage of instructional materials in facilitating learning in terms of e-learning, supplementary materials, and laboratory materials received consistently high mean scores, indicating a "Very Great Extent." The level of student engagement in terms of interest in subject matter, active interaction, and involvement in activities revealed had "Very Great Extent." Furthermore, results indicated that the teachers' strategies for facilitating learning and the students' engagement had a significant relationship. Results also indicated that the instructional materials and the student engagement had a significant relationship, too. In conclusion, strategies for facilitating learning and adequate instructional materials in Technology and Livelihood Education play a crucial role in boosting students' engagement.

According to the preceding findings and conclusion, the following recommendations are advanced: The teachers teaching Technology and Livelihood Education may develop interactive e-learning modules that stimulate real-world scenarios to engage students and reinforce practical skills. Peer collaboration and digital literacy skills enhancement of the teachers to improve curriculum delivery and student engagement is also recommended.

KEYWORDS: *facilitating learning; adequacy; instructional materials*

1. INTRODUCTION

Education is a vocation that demands professionals evolve year to year to adapt to new and various settings. There are numerous ways teachers can construct exciting lesson plans that accommodate learners of different grade levels as well as learning styles to benefit the students effectively. It is important for teachers to continuously assess the effectiveness of their teaching methods and make necessary adjustments because what works well in one class might not work well in another. Making your lessons to your students' requirements is the most effective way to implement teaching strategies. Teachers may employ various tactics to keep their pupils engaged throughout the school year and test their knowledge more thoroughly. Other teachers employ one or two tactics to guide the preparation of their lessons and ensure that each student comprehends the material being taught. (Kapur R. 2018)

To create an enhanced learning experience for students, maximize their potential, and pique interest using different materials, teachers use facilitating learning to engage them and help them understand complex contexts better. Educators have always aimed to pique the pupils' interest and help them grow a deeper understanding of a topic to develop their minds, learn more about their subject, and go beyond the fundamentals of how, who, what, where, and when. Facilitating learning requires a hands-on activity that evaluates students' knowledge and skills in the subject, whether in a classroom or a place perfect for the learners. However, with such a diverse student body, a teacher must always find ways to encourage them, as well as the appropriate approach and teaching materials on a topic that would improve students' knowledge and memory of the subject matter. (Kelly 2020)

The adequacy of learning materials can greatly affect the engagement of a whole class, especially in technology and livelihood education. TLE is the most interactive, practical, and skill-based learning course available early on a student's school journey. It introduces the children to hands-on skills they can develop that will help them in their daily activities and chores. As stated by Jacolbia R. (2016), to be an effective worker in the modern workforce, one must be knowledgeable in technology and livelihood education. To increase one's chances of success in a career effort, picking a career route and studying the technologies associated with that field or industry can be pretty beneficial.

The researcher developed the study entitled strategies on facilitating learning and adequacy of instructional materials in technology and livelihood education to student engagement.

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1.1 Statement of the Problem

Specifically, it sought answers to the following questions:

1. What is the level of teacher strategies on facilitating learning to students in terms of:
   - 1.1 Setting clear learning objective
   - 1.2 Using multiple teaching methods
   - 1.3 Encouraging critical thinking
   - 1.4 Understanding Students Concern, and
   - 1.5 Incorporate real-life applications?
2. What is the extent of the usage of instructional materials by teachers to facilitate learning in terms of:
   - 2.1 E-learnings
   - 2.2 Supplementary materials
   - 2.3 Laboratory materials?
3. What is the level of student engagement in terms of:
   - 3.1 Interest in subject matter
   - 3.2 Active interaction, and
   - 3.3 Involvement in activities?
4. is there a significant relationship between teachers' strategies for facilitating learning and the student's engagement?
5. is there a significant relationship between using instructional materials and the student's engagement?

2. METHODOLOGY

This study used a quantitative research design, particularly the descriptive method that aims to identify the relationship between strategies on facilitating learning and adequacy of instructional materials in technology and livelihood education to student engagement of technology and livelihood education teachers in selected schools in Calauan sub-office, Calauan, Laguna.

This research method was descriptive since it involved collecting data and interpretation to determine the study's desired results. Sharma (2019) outlined the descriptive research method as an approach that deals with the study's variables. This study dealt with the students' struggle as a causal factor in developing a conducive learning environment.

3. RESULTS AND DISCUSSION

This chapter lists the various outcomes and presents the conclusions drawn from analyzing the data used in the investigation.

The following remarks and tabular presentations have further defined the connection between strategies for facilitating learning and the adequacy of instructional materials in technology and livelihood education for student engagement. Student engagement is essential in learning, which now tends to be one of the reasons why educators struggle to teach effectively. Indeed, student engagement is a critical factor in the learning process, and its importance cannot be overstated.

Level of Teacher Strategies in Facilitating Learning to Students

This study determined the level of teacher strategies in facilitating learning to student engagement by the weighted mean and standard deviation.

These tables expressed the relevance of teacher strategies in facilitating learning in terms of setting learning objectives, using multiple teaching methods, encouraging critical thinking, understanding student's concerns, and incorporating real-life applications in a lesson to student engagement.

These tables also represent the active involvement of teachers in nurturing students' educational success and the methods used in different strategies in facilitating learning.

Table 1

Level of Teacher Strategies in Facilitating Learning to Students in terms of Setting Clear Learning Objective

STATEMENTS	*MEAN*	*SD*	*REMARKS*
1. Explaining the main goal of your current lesson	3.57	0.50	Strongly Agree
2 2 Using learning materials to clear the objective	3.69	0.46	Strongly Agree
3. Understanding the relevance of the objective.	3.66	0.48	Strongly Agree
4. Involvement in attaining the learning objective.	3.59	0.49	Strongly Agree
5. Fulfilling the objective promptly.	3.59	0.49	Strongly Agree
Weighted Mean		*3.62*	
SD		*0.24*	
Verbal Interpretation		*Very Great Extent*	

Table 1 illustrates the level of teacher strategies in facilitating students' learning by using the strategy of Setting a clear learning objective.

Students strongly agree that their teachers effectively employ strategies to facilitate learning by utilizing learning materials to achieve set objectives (M=3.69, SD=0.46). Additionally, teachers are adept at clearly articulating the main goals of the current lesson (M=3.57, SD=0.54). Moreover, the teachers are also proficient in helping the students understand the relevance of the objective and its function in the learning process (M=3.66, SD=0.48).

The overall mean of 3.62 and a standard deviation of 0.24 signify a very great extent among the respondents. This means that teachers help the students engage with the lesson to attain certain objectives. This also means that students who understand the goal of the lesson tend to be more engaged. As a result this will lead to the student's educational success. Moreover, the related studies used reinforced the results from this table.

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Table 2

Level of Teacher Strategies in Facilitating Learning to Students in terms of Using Multiple Teaching Methods

STATEMENTS	MEAN	SD	REMARKS
1. Participating on recitations.	3.83	0.38	Strongly Agree
2. Asking questions after a short lesson.	3.74	0.44	Strongly Agree
3. Involving in group sessions and studies.	3.61	0.49	Strongly Agree
4. Completing of projects and assignments	3.59	0.51	Strongly Agree
5. Partaking in educational games and challenges.	3.59	0.51	Strongly Agree
Weighted Mean		*3.67*	
SD		*0.24*	
Verbal Interpretation		*Very Great Extent*	

Table 2 illustrates the level of student engagement in the period of using the strategy of Using multiple teaching methods.

The students strongly agree that teachers utilizing the strategy of facilitating learning by making them join in recitations significantly improve their engagement during a lesson (M=3.83, SD=0.38). Furthermore, the teacher strategy of letting the students ask questions after a lesson is strongly favored by the students (M=3.74, SD=0.44). Additionally, educators that involve students in collaborations with another student also proved to be effective in enhancing the student's school experience (M=3.61, SD=0.49). The results from this table accentuate the importance of utilizing various ways to educate in a classroom to enhance the student's participation during lessons further.

The overall mean of 3.62 and a standard deviation of 0.24 signify a very great extent among the respondents. This means that teachers using multiple teaching methods effectively engage the students and improve their interaction during classes.

Moreover, this also means that various teaching methods have different levels of engaging factors, and by identifying the best method for the students, educators can tailor their teaching strategies to match the needs and preferences of their students.

Table 3

Level of Teacher Strategies in Facilitating Learning to Students in terms of Encouraging Critical Thinking

STATEMENTS	MEAN	SD	REMARKS
1. Identifying a problem or issue.	3.74	0.44	Strongly Agree
2. Collecting data by doing research.	3.61	0.53	Strongly Agree
3. Developing solutions based on available data and resources.	3.59	0.49	Strongly Agree
4. Involving in decision making during group studies.	3.58	0.50	Strongly Agree
5. Presenting of outcomes and analysis.	3.66	0.48	Strongly Agree
Weighted Mean		*3.64*	
SD		*0.27*	
Verbal Interpretation		*Very Great Extent*	

Table 3 illustrates the level of student engagement in the period of using the strategy of Encouraging critical thinking.

Students strongly agreed that teachers facilitating by letting them identify a problem or issue greatly enhances their engagement (M=3.74, SD=0.44). Additionally, teachers who let the students get involved in decision making during group activities result in active student engagement, as strongly agreed by the students (M=3.58, SD=0.50). Furthermore, teachers are also proficient in guiding the students to analyze and present conclusions of problems related to a lesson (M=3.66, SD=0.48).

The overall mean of 3.64 and a standard deviation of 0.27 signify a very great extent among the respondents. This means that teachers using the strategy of encouraging critical thinking is advantageous for the students in terms of developing their engagement and improving interest in the subject. This result was further reinforced by the related studies used in this variable.

Table 4

Level of Teacher Strategies in Facilitating Learning to Students in terms of Understanding Students' Concern

STATEMENTS	MEAN	SD	REMARKS
1. Engaging in visual learning during classes (pictures, movies, diagrams).	3.82	0.39	Strongly Agree
2. Engaging in auditory learning during classes (music, discussion, lectures).	3.67	0.47	Strongly Agree
3. Engaging in reading and writing during classes (making lists, reading textbooks, taking notes).	3.57	0.51	Strongly Agree
Engaging in kinesthetic learning during classes (movement, experiments, hands-on activities).	3.61	0.50	Strongly Agree
5. Engaging during online classes.	3.50	0.53	Strongly Agree

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Weighted Mean	*3.63*
SD	*0.24*
Verbal Interpretation	*Very Great Extent*

Table 4 illustrates the level of student engagement in the period of using the strategy of Understanding student's concerns.

The teacher's strategy of engaging students with visual learning during classes is considered the most effective by the students (M=3.82, SD=0.39). Additionally, teachers that urge students to engage in online learning are strongly agreed by the students to be adequate (M=3.50, SD=0.50). Furthermore, teachers who engage students in hands-on activities are also considered by the students to be proficient and helpful to their learning process (M=3.61, SD=0.50)

The overall mean of 3.63 and a standard deviation of 0.24 signify a very great extent among the respondents. This means that teachers using the strategy of understanding student concerns is very effective for the students. This result also proved that educators understand what makes the students engage in class and improves how the students interact during lessons. Moreover, the result from this table was reinforced by the related studies used for this variable.

Table 5

Level of Teacher Strategies in Facilitating Learning to Students in terms of Incorporating Real Life Applications.

STATEMENTS	*MEAN*	*SD*	*REMARKS*
1. Awareness of real-world events that are happening.	3.74	0.44	Strongly Agree
2. Collaborating with other students to better understand the real world.	3.61	0.49	Strongly Agree
3. Using electronic and cellular devices to access knowledge from real-life scenarios.	3.59	0.49	Strongly Agree
4 Participating in field trips and events outside the school.	3.61	0.54	Strongly Agree
5. Comparison of real-life problems with the lesson.	3.50	0.48	Strongly Agree
Weighted Mean		*3.63*	
SD		*0.24*	
Verbal Interpretation		*Very Great Extent*	

Table 5 illustrates the level of student engagement in the period of using the strategy of Incorporating real-life applications. Students strongly agreed that teachers who use the strategy in facilitating learning by letting them recognize and be aware of the real-world even are happening are the most effective in enhancing their engagement (M=3.74, SD=0.44). Furthermore, students also strongly agreed that teachers that let them collaborate with other students enhance their engagement (M=3.61, SD=0.49). Furthermore, students recognized that educators give them a chance to partake in events outside the learning environment to be proficient. (M=3.61, SD=0.54)

The overall mean of 3.63 and a standard deviation of 0.24 signify a very great extent among the respondents. This means that teachers using the strategy of incorporating real-life applications is very effective for the students. This also proved that students should be conscious of the topic's significance and how it will benefit them within and outside of the classroom in their future academic endeavors. Moreover, the result from this table is further reinforced by the related studies for this variable.

Extent of the Usage of Instructional Materials of Teachers on Facilitating Learning

The following table revealed how frequently teachers use their teaching resources to facilitate learning in terms of e-learning, supplementary materials, and laboratory materials. These tables show the statements' corresponding mean score, standard deviation, and verbal interpretation. The tables also show how the students perceive the effectiveness of the different learning materials if they are utilized to their extent, and the amount of accessibility that they can utilize inside the learning environment. Moreover, this table also describes the interest of students in utilizing these materials.

Table 6

Extent of Usage of Instructional Materials in terms of E-Learnings

STATEMENTS	*MEAN*	*SD*	*REMARKS*
1. Accessibility to computers and learning devices.	3.59	0.56	Strongly Agree
2. Using and accessing an internet connection.	3.45	0.56	Strongly Agree
3. Utilizing online platforms to gain knowledge.	3.53	0.54	Strongly Agree
4. Participating in online classes.	3.43	0.56	Strongly Agree
5. Completing projects with the use of computers and devices.	3.54	0.54	Strongly Agree
Weighted Mean		*3.51*	
SD		*0.35*	
Verbal Interpretation		*Very Great Extent*	

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Table 6 illustrates the level of student engagement in using E-learning as instructional materials.

Students strongly agreed that extensive accessibility to computers and other learning devices greatly enhances their engagement (M=3.59, SD=0.56). Additionally, students also strongly agreed that having access to an internet connection significantly improves their engagement (M=3.45, SD=0.56). Furthermore, students perceive that the availability of computers and other devices enhances their proficiency in completing projects (M=3.54, SD=0.54).

The respondents' overall mean of 3.51 and standard deviation of 0.35 indicate a very high degree of agreement. This means that extensive and adequate accessibility to e-learning materials and facilities affects the students' engagement to a great extent.

Table 7

Extent of Usage of Instructional Materials in terms of Supplementary Materials

STATEMENTS	*MEAN*	*SD*	*REMARKS*
1. Interest in reading books and journals to aid your study.	3.79	0.41	Strongly Agree
2. Using online forum and discussions to improve learning.	3.54	0.53	Strongly Agree
3. Participating during demonstrations and activities.	3.56	0.50	Strongly Agree
4. Utilizing materials to improve hands-on skills	3.59	0.49	Strongly Agree
5. Creating supplementary materials to help other students.	3.57	0.50	Strongly Agree
Weighted Mean		*3.61*	
SD		*0.25*	
Verbal Interpretation		*Very Great Extent*	

Table 7 illustrates the level of student engagement in the extent of using Supplementary materials as instructional materials.

Students strongly agreed that having available books and journals to aid their study greatly enhances their engagement (M=3.79, SD=0.41). Moreover, the students also strongly agreed that the adequacy of materials that can be utilized to improve their hands-on skills also greatly affects their engagement (M=3.59, SD=0.49). Students also agreed on the importance of creating additional supplementary materials to improve their learning and help other students (M=3.57, SD=0.50).

The overall mean of 3.61 and a standard deviation of 0.25 signify a very great extent among the respondents. This means that extensive and adequate accessibility to supplementary materials and facilities affects the students' engagement to a great extent. Moreover, this variable will use related studies to reinforce these results.

Table 8

Extent of Usage of Instructional Materials in terms of Laboratory Materials

STATEMENTS	*MEAN*	*SD*	*REMARKS*
1. Understanding the importance of laboratory materials	3.77	0.45	Strongly Agree
2. Active use of materials during laboratory.	3.57	0.54	Strongly Agree
3. Using one's own allowance to buy ingredients during laboratory and experiments.	3.46	0.54	Strongly Agree
4. Cleaning and maintenance of laboratory materials.	3.57	0.52	Strongly Agree
5. Creating DIY tools to aid the laboratory discussions.	3.55	0.53	Strongly Agree
Weighted Mean	*3.59*		
SD	*0.31*		
Verbal Interpretation	*Very Great Extent*		

Table 8 illustrates the level of student engagement in the extent of using Laboratory materials as instructional materials.

Students strongly agreed that the availability of guides to understanding the importance of different laboratory materials greatly enhances their engagement during laboratory learning (M=3.77, SD=0.45). Students also strongly agreed that the availability of materials for active use in the laboratory increases their engagement (M=3.57, SD=0.54). Moreover, students are also willing to help with the cleaning of the laboratory, understanding the importance of its maintenance to their laboratory learning (M=3.55, SD=0.53).

The overall mean of 3.59 and a standard deviation of 0.31 signify a very great extent among the respondents. This means that extensive and adequate accessibility to laboratory materials and facilities affects the students' engagement to a great extent. This also means that the students understand the importance of laboratory materials, especially for a performance-based subject like TLE.

Level of Student Engagement

The following table, which displays the statement, mean, standard deviation, and verbal interpretation, reveals the degree of student engagement in terms of interest in the subject matter, active interaction, and involvement in activities. These tables illustrate the relationship between the variables and how they impact student involvement.

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Table 9

Level of Student Engagement in terms of Interest in Subject Matter

STATEMENTS	***MEAN***	***SD***	***REMARKS***
1. Participating in constructing written tasks (essay, journal, reaction paper, etc.).	3.71	0.47	Strongly Agree
2. Analyzing stories and articles during lessons.	3.64	0.50	Strongly Agree
3. Engaging when conducting quizzes and examinations.	3.55	0.50	Strongly Agree
4. Enhancing own writing ability.	3.59	0.49	Strongly Agree
5. Engaging with organizations and competitions focused on enhancing writing skills. (school publication, spelling bee, etc.).	3.63	0.50	Strongly Agree
Weighted Mean	*3.62*		
SD	*0.29*		
Verbal Interpretation	*Very Great Extent*		

Table 9 illustrates the level of student engagement in the extent of interest in the subject matter.

Students strongly agreed that they are extremely engaged when teachers allow them to participate in making essays and other written tasks (M=3.71, SD=0.47). Furthermore, students strongly agreed that they are most engaged when analyzing literature and articles during lessons (M=3.64, SD=0.50). Additionally, students are engaged when they are associated with school organizations and competitions, which significantly enhances their involvement (M=3.63, SD=0.50).

The overall mean of 3.62 and a standard deviation of 0.29 signify a very great extent among the respondents. This means the student's interest in the subject matter affects the student's engagement to a great extent. This table also shows the influence of school administrations and organizations to promote student involvement.

Table 10

Level of Student Engagement in terms of Active Interaction

STATEMENTS	***MEAN***	***SD***	***REMARKS***
1. Participating in discussions and demonstrations.	3.87	0.34	Strongly Agree
2.Incorporating acquired knowledge into a hands-on activity.	3.64	0.48	Strongly Agree
3.Involvement during problem-solving activities.	3.54	0.50	Strongly Agree
4. Engaging in doing presentations in front of class.	3.69	0.47	Strongly Agree
5. Creating educational projects and exhibits.	3.72	0.45	Strongly Agree
Weighted Mean		*3.69*	
SD		*0.26*	
Verbal Interpretation		*Very Great Extent*	

Table 10 illustrates the level of student engagement in terms of Active interaction.

Students strongly agreed that they are very much engaged when participating in discussions and demonstrations during classes (M=3.87, SD=0.34). Moreover, the student's engagement is enhanced when creating educational projects and exhibits held in schools (M=3.72, SD=0.45). Furthermore, the students also agreed that doing presentations in class would help them be actively engaged during lessons. This also enhances their self-esteem and confidence in facing other people.

The overall mean of 3.69 and a standard deviation of 0.26 signify a very great extent among the respondents. This means the student's active interaction in schoolwork and activities affects the student's engagement to a very great extent for the students.

This also means that events and activities organized by the school is vital in enhancing the students' engagement and interest in attending classes and will affect their motivation in learning. Achieving their goals during these activities also gives them a sense of accomplishment and will improve their insight into joining in activities.

Table 11

Level of Student Engagement in terms of Involvement in Activities

STATEMENTS	***MEAN***	***SD***	***REMARKS***
1. Engaging in examination reviews.	3.73	0.44	Strongly Agree
2. Participating in quarterly examinationss.	3.69	0.46	Strongly Agree
3. Seeking clarifications and asking questions throughout the examination.	3.64	0.50	Strongly Agree
4. Giving feedback and suggestions.	3.65	0.49	Strongly Agree
5. Competing on examination achievements.	3.74	0.44	Strongly Agree
Weighted Mean		*3.69*	
SD		*0.26*	
Verbal Interpretation		*Very Great Extent*	

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Table 11 illustrates the level of student engagement in terms of Involvement in activities.
Students strongly agreed that they are most engaged when there is competition present during examinations (M=3.74, SD=0.44). Additionally, academic review after examinations also improves the student's engagement as perceived by the students (M=3.73, SD=0.444). Moreover, students' perceptions of quarterly exams as a useful tool for improving engagement are based on a score of (M=3.69, SD= 0.46). On the other hand, students have the lowest mean response score (M=3.64, SD=0.50) when it involves asking questions and requesting explanations throughout the exam.

The overall mean of 3.69 and a standard deviation of 0.26 signify a very great extent among the respondents. This means the student's involvement in school-related activities affects the student's engagement to a great extent. This also shows that competitions inside a classroom greatly improve the student's engagement, especially during examinations.

Significant Relationship between Teacher's Strategies on Facilitating Learning and Student Engagement

The Significant Relationship between teacher's strategies for facilitating learning and student engagement was revealed in the following table, which shows the correlation coefficient (r) measures the strength and direction of the connection between instructional practices used by teachers to support learning in terms of setting clear learning objectives, using multiple teaching methods, encouraging critical thinking, understanding students concern, and incorporate real-life application, while the p-value assesses the statistical significance of these relationships.

Table 12

Significant Relationship Between the Strategies of Facilitating Learning and the Student's Engagement

		STUDENT ENGAGEMENT		
Teacher Strategies in Facilitating Learning		**Interest in the subject matter**	**Active interaction**	**Involvement in activities**
Setting clear learning objective	Pearson Correlation	*0.229*	*0.231*	*0.209*
	Sig. (2-tailed)	*0.922*	*0.006*	*0.007*
	N	*149*	*149*	*149*
	Analysis	*Not Significant*	*Significant*	*Significant*
Using multiple teaching methods	Pearson Correlation	*0.343*	*0.428*	*0.349*
	Sig. (2-tailed)	*0.05*	*0.391*	*0.421*
	N	*149*	*149*	*149*
	Analysis	*Significant*	*Not Significant*	*Not Significant*
Encouraging critical thinking	Pearson Correlation	*0.463*	*0.371*	*0.25*
	Sig. (2-tailed)	*0.536*	*0.028*	*0.044*
	N	*149*	*149*	*149*
	Analysis	*Not Significant*	*Significant*	*Significant*
Understanding students concern	Pearson Correlation	*0.266*	*0.45*	*0.226*
	Sig. (2-tailed)	*0.686*	*0.008*	*0.024*
	N	*149*	*149*	*149*
	Analysis	*Not Significant*	*Significant*	*Significant*
Incorporate real life applications.	Pearson Correlation	*0.384*	*0.407*	*0.449*
	Sig. (2-tailed)	*0.744*	*0.008*	*0.006*
	N	*149*	*149*	*149*
	Analysis	*Not Significant*	*Significant*	*Significant*

Table 12 presents the significant relationship between the strategies of facilitating learning and the student's engagement. Setting a clear learning objective, using multiple teaching methods, encouraging critical thinking, understanding students' concerns, and incorporating real-life applications of facilitating learning strategies were found to be significantly correlated with students' active participation and interaction in events. This is stated based on results from experiments showing a weak to moderate link. There is significance since the obtained p-values were lower than the significance alpha of 0.05.

The use of multiple teaching methods is significant to the student's engagement as it ensures that the students can understand the lesson in different ways and makes them more interested in the subject matter. Setting clear learning objectives, encouraging critical thinking, understanding student concerns, and incorporating real life applications show a significant relationship with student engagement in terms of active interaction and involvement in the activity. These strategies in facilitating learning help the student to have a more focused learning process and more chances to interact with others.

On the other hand, other methods did not significantly affect the student's active interaction and student involvement in activities. Furthermore, teacher strategies such as setting clear learning objectives, encouraging critical thinking, understanding student concerns, and incorporating real-life

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applications do not significantly increase student interest in a subject matter. Teacher strategies that encourage the student to develop advanced learning skills, and understanding of a topic are not significant for the student's interest.

Significant Relationship between using Instructional Materials and the Student Engagement

The Significant Relationship between using instructional materials and the student engagement was revealed in the following table, which shows the correlation coefficient (r) measures the strength and direction of the relationship between adequacy of instructional materials in terms of e-learning, supplementary materials, and laboratory materials. At the same time, the p-value assesses the statistical significance of these relationships.

Table 13

Significant Relationship Between the Instructional Materials and the Student's Engagement

		STUDENT ENGAGEMENT		
Adequacy of Instructional Materials		**Interest in the subject matter**	**Active interaction**	**Involvement in activities**
E-learnings	Pearson Correlation	*0.43*	*0.342*	*0.263*
	Sig. (2-tailed)	*.000*	*.000*	*.000*
	N	*149*	*149*	*149*
	Analysis	*Significant*	*Significant*	*Significant*
Supplementary materials	Pearson Correlation	*0.508*	*0.507*	*0.408*
	Sig. (2-tailed)	*0.589*	*.000*	*.000*
	N	*149*	*149*	*149*
	Analysis	*Not Significant*	*Significant*	*Significant*
Laboratory materials	Pearson Correlation	*0.578*	*0.338*	*0.252*
	Sig. (2-tailed)	*0.103*	*.000*	*.000*
	N	*149*	*149*	*149*
	Analysis	*Not Significant*	*Significant*	*Significant*

Table 13 presents the significant relationship between the instructional materials and the student's engagement.
The E-learnings, Supplementary materials and Laboratory materials of the instructional materials were significantly correlated with students' active participation and involvement in activities. The computed r values from the tests with weak to moderate relationships served as the basis for this. Additionally, there is significance because the p-values obtained were lower than the significance alpha 0.05.

The adequacy of e-learning materials had a huge significance on the students' overall engagement in terms of interest, active interaction, and involvement, especially during online classes. This result revealed that the extent of using proper e-learning materials significantly affects how students perceive and interact with classes. Additionally, the use of adequate supplementary and laboratory materials proved to have a significant relationship to the students' active interaction and involvement in activities. Supplementary and laboratory materials enable the students to learn using advanced or technological materials that are most effective for the new generation.

On the other hand, the students perceive that the adequacy of supplementary materials and laboratory materials is not significant in enhancing their interest in the subject matter. This suggests that educators can use a different pedagogical approach regarding how well-suited the teaching resources are to raise students' interest in the content.

Based on the statistical data gathered and analyzed, the results of the study demonstrated the importance of the relationship between student involvement and the use of appropriate educational materials.

4. CONCLUSION AND RECOMMENDATIONS

Relying on the study's results, the subsequent conclusion is made:
A significant relationship exists between strategies for facilitating learning and student engagement, resulting in the hypothesis's rejection. This study result offers decisive proof that there is, in fact, a substantial correlation between the educational strategies employed and the degree of student engagement.

The hypothesis is rejected since there is a strong correlation between student participation and the quality of instructional resources. The study's findings provide compelling evidence that the sufficiency of teaching materials and student involvement does have a substantial relationship. This rejection highlights the need to have adequate teaching materials.

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In light of the study's findings, the researcher would like to suggest the following:

1. Instructors can encourage student participation by implementing more effective teaching strategies and objectives.
2. The teachers dealing with the subject of Technology and Livelihood Education may develop interactive e-learning modules that stimulate real-world scenarios relevant to TLE subjects to engage students and reinforce practical skills.
3. Teachers may encourage peer collaboration and knowledge sharing. Through online discussion forums, group projects, and collaborative document editing. This promotes collaborative problem-solving skills.

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