

# Instructional Practices of Technology Livelihood and Education Teachers to the Students' Satisfaction and Academic Performance

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## Abstract

The field of Technology and Livelihood Education is critical to achieving the goals and objectives of the new improved curriculum. The purpose of this study was to compare the Instructional Practices of TLE Teachers to the student satisfaction and academic performance of selected Laguna Senior High Schools. The descriptive survey design was utilized in this study, and the respondents were 30 teachers and 100 students from several Laguna schools using purposive sampling. It also used a self-created questionnaire with a 5-point Likert-scale that was expert validated. Before distributing the questionnaire to the respondents, field specialists review it. The researcher used the mean, standard deviation, and Pearson Product Moment Correlation Analysis to treat the data (Pearson  $r$ ). The findings indicated that the selected senior high school's degree of satisfaction in terms of interpersonal relationships, academic assistance, and learning possibilities is extremely high. Meanwhile, academic achievement is excellent. In terms of active learning, mastery of learning, peer instruction, collaboration, and differentiation, the instructional techniques of chosen TLE instructors have no significant link to student happiness, as do interpersonal relationships, academic support, and learning opportunities. There is a substantial association in academic achievement. Based on the findings, the following recommendations were made: TLE teachers should continue using a variety of active learning strategies when teaching TLE subjects to students, maintain the teaching strategies used to achieve mastery of learning, implement on different subjects and investigate the impact of peer instruction method on different levels, continue working better in cooperation with other TLE teachers, and differentiation in TLE subjects.

Keywords: instructional practices; student's satisfaction; academic performance; senior high school; technology and livelihood education teachers

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## 1. Introduction

The subject of Technology and Livelihood Education is critical to achieving the desired goals of the new improved curriculum. Technology and Livelihood Education disciplines draw many learners due to its admirable value, however the opposite has proven true. It is most likely owing to people's misconceptions that it will not demand specialist expertise. Similarly, the reforms with in educational process have made this academic year a major challenge for all instructors. The K to 12 Basic Education Program is intended to overhaul the Philippine educational system (Sergio, 2012). It seeks to strengthen each person to keep improving his or her standard of living by providing adequate period for concept mastery, developing life-long learners, preparing graduates for tertiary education, mid-level developing skills, organizations, and entrepreneurship, and avoiding abuse and other associated problems. Learners gain relevant work experience during studying thanks to the improved curriculum. Each student will have knowledge about the content, communication, and technology, as well as abilities in research and improvement, good communication, and social and job skills (Sarker et al. 2019). The system's aims looked to have been poorly executed, as teachers

are still trying to discover methods to adapt to it from a lengthy educational process.

Given the difficulties, developments, and advances in the educational system, education is a necessary for individuals (Morales et al., 2019). Taking into account the global context, people see education as a means of not only increasing people's talents as well as of preparing our learners to be able to compete globally. If indeed the institutions can create excellent graduates, the standard of product they will give in their individual workplaces would improve. The academic track offers a progression toward further postsecondary education as well as skills development credentials for National Certificates I and II (NC I and NC II) (Gregorio, 2016). While government partnerships have long existed, industry-academe connections and collaborations are often poor, if not non-existent, in many of our academic institutions and must be developed and integrated into local socioeconomic development. Teachers have an important role in students' academic careers. To address the requirements of their students, new instructors must employ appropriate methods. Proper teaching techniques play an important role mostly in learning process, and they have an impact on student achievement. As a result, teaching approaches should be tailored to the type of pupils in the classroom; otherwise, they do need to be modified (Knapp, 2013).

Furthermore, learners are among the important and competent providers in judging the extent to which learning environments are gratifying. Despite student opinions are not precise assessments of a teacher's efficacy or teaching procedures, they do give valid indicators of students' educational success and happiness. Various studies have been conducted that link learner happiness to various successful teaching strategies (Long, Ibrahim, & Kowang, 2013).

Teacher Quality illustrated as a common term but have various meanings in different context (Goldhaber, 2012). In this way, the teachers develop their approaches in content and pedagogy (Dash et al., 2012). On the other, teacher quality and quality teaching are presently receiving global attention and are considered complicated subjects for discussion (du Plessis, 2015).

Instructional strategies which defined as a way to differentiate instructions (Gregory & Chapman, 2012). Specific techniques and tactics that foster the environment for learning objectives to be met are critical aspects impacting online learning and learning experiences. Most university education faculty members have even less official teaching experience as well as prefer to teach people in the manner in which they were educated. As a result, the study's purpose was to concentrate on instructional approaches that aid in the creation of creative and innovative education (Seechaliao, 2017).

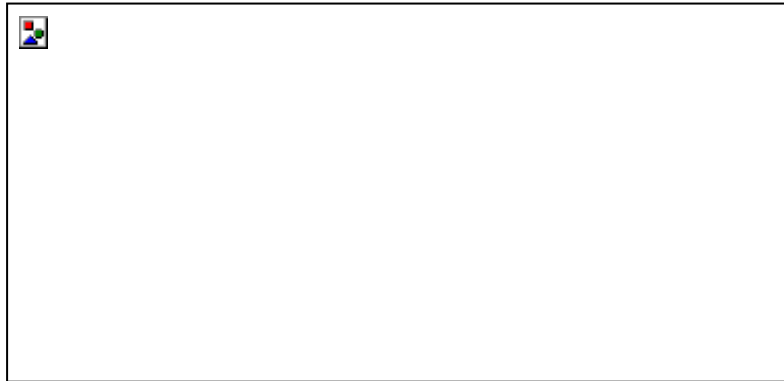
A teaching strategy is a broad plan for a lesson that comprises organization, learning goals, and an explanation of planned methods that will be used to carry out the approaches (Senthamaria, 2018). Teaching, instruction, and curriculum are necessary to provide varied learners with a learning experience. In today's classroom as much as outside of it, students have a fighting chance. Furthermore, Amir et al. (2016) says that teaching tactics also include teacher's behaviors in the lecture, such as developing teaching strategies, giving adequate stimulus for timely answers, practicing learnt responses, and improving responses through extracurricular activities.

In this work, we use the term strategy to mean deliberate planning to achieve something. If we say method, we mean an ordered approach of doing anything. As a result, researchers use the words method and process interchangeably to refer to a systematic procedure used to implement any broad model utilized in the classroom. Each of these characteristics stems from a larger and more comprehensive model (Mollaei et al., 2017).

Students' satisfaction as a narrow mindset arising from an assessment of their academic experience It is a favorable predictor of student loyalty and the result of an educational system (Weerangsinghe, 2017). Students' satisfaction is described as participants' attitudes based on anecdotal evaluations of academic achievement and experiences. As a result, student satisfaction may be described as a function of their relative degree of experience and perception of quality regarding educational services over the study time. Taking everything into account, student satisfaction may be described as a short-term attitude coming from an assessment of students' academic opportunity, services, and resources.

### 1.1. Conceptual Framework

The conceptual framework of the study was depicted in the form of a paradigm of the IV-DV Model. The frames show the correlation and the actual pattern used in the study. Consequently, the conceptual framework posits the instructional practices of TLE Teachers to the student's satisfaction and academic performance. Instructional practices of the TLE teachers are examined in relation to students' satisfaction and academic performance. The first frame shows the independent variables consisting of the instructional practices of TLE teachers in terms of active learning, mastery learning, peer instruction, collaboration, and differentiation and the second frame consists of the dependent variables of the study, which contains the student's satisfaction in terms of interpersonal relationship, academic support and learning opportunities another is the student's performance measuring their 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarter grades.



### 1.2. Statement of the Problem

The researcher aimed to measure the Instructional Practices of TLE Teachers to the student's satisfaction and academic performance of selected Senior High School in Laguna.

Specifically, it sought answer to the following questions.

1. What is the level of instructional practices of TLE teachers in terms of
  - 1.1 active learning;
  - 1.2. mastery learning;
  - 1.3 peer instruction;
  - 1.4 collaboration;
  - 1.5 differentiation?
2. What is the level of student' satisfaction in terms of:
  - 2.1 interpersonal relationship;
  - 2.2. academic support; and
  - 2.3 learning opportunities?
3. What is the level of academic performance of the selected senior high school students in terms of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarter grades?
4. Do the instructional practices of TLE teachers has significant relationship to the student's satisfaction of selected Senior High School students?
5. Do the Instructional practices of TLE Teachers has significant effect to the student's satisfaction and academic performance of selected Senior High School students in Laguna?

## 2. RESEARCH METHODOLOGY

### 2.1. Research Design

The descriptive survey designed was used to conduct this study. Descriptive research is a means of accurately depicting the features of persons, circumstances, or organizations, as well as the frequency with which particular occurrences occur (Ivey, 2016). This method is more than just data collection because it shows precise means of gathering information to ensure an accurate measure of the data and protect it from the influence of bias.

Self-made type questionnaire was the source of data in this study, which focused on the TLE teachers and students to identify the practices of TLE teachers in the satisfaction and academic performance of students in selected senior high school in Laguna.

### 2.2. Population and Sampling Techniques

Purposive sampling was used to establish sample size in this investigation. The study's participants were 30 TLE teachers and 100 students from senior high school in province of Laguna.

### 2.3. Research Instrument

In order to gauge the TLE teachers practices in instructions and students, the researcher constructed a questionnaire, which was distributed to the senior high school teachers and students.

The questionnaire of the study composes of two parts. Part I of the questionnaire shows the degree of Instructional Practices, in terms of active learning, mastery learning, peer instruction, collaboration, and differentiation. Part II is the degree of students' satisfaction and performance in terms of interpersonal relationship, academic support, learning opportunities and their 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> quarter grades in the school year 2020-2021.

The respondents were asked to choose from the five (5) scales given below.

Scale	Range	Description
5	4.21-5.00	Always
4	3.41-4.20	Often
3	2.61-3.40	Sometimes
2	1.81-2.60	Seldom
1	1.00-1.80	Never

The questionnaire was validated by the expert before use to gather the data. The researcher distributed the questionnaire to the TLE teachers and students in the selected senior high school in Laguna. After the activity, the results were tabulated, analyzed, and statistically interpreted.

### 2.4. Statistical Treatment of Data

The gathered data from the questionnaire was analyzed by the following statistical tools:

To measure the level of practices in instructions of the TLE Teachers to the satisfaction of students and academic performance, mean and standard deviation were used. A dataset's mean represents the average value. The mean is significant because it indicates where the center value in a dataset is situated and it also significant since it contains information from each observation in a dataset. On the other hand, the standard deviation to comprehend that variability, which is especially significant in research because, while the other

metrics stated earlier are beneficial, the standard deviation offers a more precise picture of the distribution of observations.

Pearson Product Moment Correlation Analysis (Pearson  $r$ ) was used to examine the relationship between TLE teachers' Instructional Practices and students' satisfaction and performance. Pearson  $r$  is a bivariate statistical model that looks at two variables at once. If both variables are quantifiable, Pearson's correlation will always be employed to test an associative study hypothesis.

### 3. Results and Discussion

This chapter addresses the collection, evaluation, and interpretation of data acquired to address a subproblem related to the core topic of this research. This section covers the results of a study in line with the research objectives.

Table 1. Level of Instructional Practices of selected TLE teachers

<b>Active Learning</b>	Mean	S.D.	Remark
1. I plan a task that is authentic and informative.	5.00	0.00	Always
2. I have ground rules before executing the task. I allow them to create the rules and assign roles	5.00	0.00	Always
3. I give a clear and safe briefing about the task.	5.00	0.00	Always
4. I Inform learners of what and how they are going to be assessed.	5.00	0.00	Always
5. I Have a safe and fun setting and make sure we understand the background of our learners.	5.00	0.00	Always
Weighted mean	5.00		
Standard Deviation	0.00		
Interpretation	Very High		

The data in table 1 showed the level of instructional practices of selected TLE teachers in terms of Active Learning which is very high. It is indicated that all the given statement about Active Learning has a mean ( $M=5.00$ ,  $S.D.=0.00$ ) which is, the respondents plan a task that is authentic and informative; have ground rules before executing the task. They allow them to create the rules and assign roles; gave a clear and safe briefing about the task; they inform learners of what and how they are going to be assessed; and they have a safe and fun setting and make sure we understand the background of our learners, with a remark of always respectively.

Active learning, as described by Konyushkova et al. (2017), is a type of learning that is based on multiple activities undertaken by a student as ending in activity based upon his/her successful positive participation in the academic setting. The student is at the heart of the educational process. Active learning provides learners with numerous possibilities to absorb and evaluate anything is around them. In order to perceive their surroundings and master communication and negotiating skills, the students use repetition, imitation, try and error. Furthermore, an noteworthy point is that not all records are equally relevant in terms of labeling. Some records, for example, may be noisy and contain no valuable characteristics important to categorization. Similarly, records that clearly belong to one class or another may be useful, but not as much as records that are closer to the class separation borders (Aggarwal et al., 2014).

Table 2. Level of Instructional Practices of selected TLE teachers

<b>Mastery of Learning</b>	Mean	S.D.	Remark
1. I encourage my students to stretch the learning on the day.	4.93	0.25	Always
2.. I integrate growth mindset activities to help students better embrace the idea that they are capable of learning.	4.83	0.37	Always
3.. I provided consistent feedback from the students.	4.90	0.30	Always
4. I acquired a component skill, practice integrating them, and know when to apply	4.80	0.40	Always

what they have learned.

5. I allow my students to share their insights or views regarding the lesson.	5.00	0.00	Always
Weighted mean	4.89		
Standard Deviation	0.31		
Interpretation	Very High		

Table 2 presents the practices level in instructions in terms of Mastery of Learning with weighted mean of 4.89 and 0.31 as standard deviation which indicates that is very high. The results shows that statement 5 has the highest mean ( $M=5.00$ ,  $S.D.=0.00$ ) which is, I allow my students to share their insights or views regarding the lesson, while statement 4 has the lowest mean ( $M=4.80$ ,  $S.D.=0.40$ ) which is, I acquired a component skill, practice integrating them, and know when to apply what they have learned, with a remark of Always respectively.

Ihendinihu (2013) discovered that the mastery learning teaching approach outperforms the traditional teaching method in terms of student accomplishment. Mastery learning accounted for the high cognitive learning outcome of the students in the mastery learning group. The excellent cognitive learning result of the learners in the knowledge learning group was accounted for by mastery learning.

Table 3. Level of Instructional Practices of selected TLE Teachers

Peer Instruction	Mean	S.D.	Remark
1. I teach my students to adapt to the learning styles and other needs of each learner.	5.00	0.00	Always
2. I actively engage my learners in the learning process using peer instruction.	5.00	0.00	Always
3. I help my learners to learn the task with the help of each other.	4.97	0.18	Always
4. I support my learners in reaching their objectives with their peers.	5.00	0.00	Always
5. I prepare my learners to transition to their goal with their fellow students.	4.80	0.40	Always
Weighted mean	4.95		
Standard Deviation	0.21		
Interpretation	Very High		

Table 3 displays the level of instructional practices in terms of peer instruction is very high ( $M=4.95$ ,  $S.D.=0.21$ ). It shows that statement 1,2 and 4 has the highest mean ( $M=5.00$ ,  $S.D.=0.00$ ) which indicates that the teachers teach students to adjust to each learner's learning styles and other requirements; teachers actively involves in learners in the learning process through peer education; and assist the learners in accomplishing their goals with their peers, with remark of always respectively. On the other hand, the least mean ( $M=4.80$ ,  $S.D.=0.40$ ) of statement 5 which showed that the teachers prepare the learners to transition to their goal with their fellow students, also has a remark of always.

It explored how feedback from instructors after peer instruction might help students develop their performances and clarify misunderstandings, that should promote learning outcomes (Rivers, 2021; Tullis & Goldstone, 2020; Tullis & Maddox, 2020).

Table 4. Level of Instructional Practices of selected TLE teachers

Collaboration	Mean	S.D.	Remark
1. I give structure or direction for problem-solving activities.	4.97	0.18	Always
2. I provide a presentation that specifically addresses any misunderstandings or gaps in knowledge shown by the tests.	5.00	0.00	Always
3. I have online group for students and have them discuss their activities with group members.	4.97	0.18	Always
4. I debrief by asking a few groups to summarize the outcome of their product.	4.77	0.42	Always
5. During a follow-up discussion, I encourage students to share their thoughts in bigger groups or with the full class.	5.00	0.00	Always
Weighted mean	4.94		
Standard Deviation	0.24		
Interpretation	Very High		

The level of practices in terms of collaboration is Very High with a weighted mean ( $M=4.94$ ,  $S.D.=0.2$ ). Statement 2 and 5 has the highest mean ( $M=5.00$ ,  $S.D.=0.00$ ) which is, teachers give a lecture that specifically addresses any misunderstandings or gaps in knowledge shown by the exams and urge students to share their comments within bigger groups or with the full class during a follow-up discussion, with a remark of Always respectively. On the other hand, statement 4 has the lowest mean ( $M=4.47$ ,  $S.D.=0.42$ ) which is, teachers evaluate by asking a few teams to synthesize the outcome of their output, also has a remark of always.

Dobao (2012) discussed that students who collaborate create more accurate and well-written replies, according to the findings. The study and current studies show that collaborative learning leads to higher levels of academic self-efficacy.

Table 5. Level of Instructional Practices of selected TLE teachers

<b>Differentiation</b>	<b>Mean</b>	<b>S.D.</b>	<b>Remark</b>
1. The educational tactics and exercises take into account students' past knowledge and prejudices.	4.80	0.40	Always
2. The lesson was created to get students involved as members of a learning environment.	4.83	0.37	Always
3. The lessons teach students to seek out and respect alternate approaches of inquiry or problem resolution.	5.00	0.00	Always
4. Ideas generated by students frequently decide the emphasis and direction of the class.	4.87	0.34	Always
5. To make instructional judgments, student accomplishment statistics and work samples are evaluated.	5.00	0.00	Always
Weighted mean	4.94		
Standard Deviation	0.24		
Interpretation	Very High		

Table 5 illustrated the level of instructional practices in terms of differentiation is Very High with a weighted mean ( $M=4.90$ ,  $S.D.=0.30$ ). Statements 3 and 5 have the highest mean ( $M=5.00$ ,  $S.D.=0.00$ ), indicating that the lessons encourage students to seek and value alternative modes of investigation or problem solving; and Student achievement data and student work samples are analyzed to make instructional decisions, with a remark of Always. Statement 1 has the lowest mean ( $M=4.80$ ,  $S.D.=0.40$ ), as it usually does.

Boling et al. (2012) while instructors were enthused and satisfied with the developments and awareness knowledge in varied instructional teaching styles, they indicated a need for more communication and involvement with other teachers. Furthermore, they were interested in various levels of administration; they are expanding in their practice and just doing their finest for their students' development.

Table 6. Level of Satisfaction as rated by Senior High School

<b>Interpersonal Relationship</b>	<b>Mean</b>	<b>S.D.</b>	<b>Remark</b>
1. The instructor makes an attempt to hear what the students have to say.	4.80	0.51	Always
2. The instructor allows learners to have a say in matters and choices that impact them.	4.75	0.54	Always
3. The teacher shows enjoyment while working with her students	4.79	0.52	Always
4. The teacher explains why regulations are established and enforced.	4.77	0.61	Always
5. The teacher sets high but reasonable goals for students.	4.70	0.69	Always
Weighted mean	4.76		
Standard Deviation	0.58		
Interpretation	Very High		

It is shown in table 6 the level of satisfaction as rated by the selected Senior High School in terms of Interpersonal Relationship. It shows that statement 1 has the highest mean ( $M=4.80$ ,  $S.D.=0.51$ ) which is, the teacher makes an effort to listen to the student's views, while statement 5 has the lowest mean ( $M=4.70$ ,  $S.D.=0.69$ ) which is, the teacher shows positive but attainable expectations for students. Both have a remark



of Always.

The level of satisfaction as rated by the selected Senior High School in terms of Interpersonal Relationship has a weighted mean ( $M=4.76$ ,  $S.D.=0.58$ ) is very High.

The emphasis of Healy's (2013) study was on knowledge, abilities, and attitudes. Additionally, performance simulations and competency were used. The survey results indicated that faculty, objectives, course content, material, and structure received the highest mean scores.

Table 7. Level of Satisfaction as rated by the Senior High School

<b>Academic Support</b>	<b>Mean</b>	<b>S.D.</b>	<b>Remark</b>
1. Students have a lot of control over how much they can get out of a textbook or other reference materials.	4.88	0.35	Always
2. Students are provided with the reference materials needed in their course	4.76	0.72	Always
3. Students are provided by the tools and equipment needed for the course	5	0.00	Always
4. Students are well informed of the flow of the course curriculum	5	0.00	Always
5. Students are aware of the NC II program related to their course	5	0.00	Always
Weighted mean	4.93		
Standard Deviation	0.37		
Interpretation	Very High		

Table 7 displays the level of satisfaction as rated by the selected senior high School in terms of academic support is very high with a weighted mean ( $M=4.93$ ,  $S.D.=0.37$ ). It is indicated that statement 3,4 and 5 has the highest mean ( $M=5.00$ ,  $S.D.=0.00$ ) which is; Students are provided by the tools and equipment needed for the course; Students are well informed of the flow of the course curriculum; and Students are aware of the NC II program related to their course. While statement 2 has the lowest mean ( $M=4.76$ ,  $S.D.=0.00$ ) which is, Students are provided with the reference materials needed in their course, with remark of Always respectively.

Maimane (2016) They even feel that the anxiety that they have been experiencing when they want to join the college is minimized by the conducive atmosphere they encounter. Students also indicated that there are academic opportunities afforded them because they can access information from the libraries, and student centers and thus become part of the college by surfing the internet for their own development.

Table 8. Level of Satisfaction as rated by the Senior High School

<b>Learning Opportunities</b>	<b>Mean</b>	<b>S.D.</b>	<b>Remark</b>
1. Students are used to perform an activity in TLE subject.	5.00	0.00	Always
2. Students are used to practice video tutorials as an alternative learning device.	5.00	0.00	Always
3. Students are used to apply self-study.	5.00	0.00	Always
4. Students are willing to attend in the trainings and seminar for the enhancement of their skills.	5.00	0.00	Always
5. Students are willing to be mentored by others.	5.00	0.00	Always
Weighted mean	5.00		
Standard Deviation	0.00		
Interpretation	Very High		

Table 8 presents the level of satisfaction as rated by the selected senior high school in terms of learning opportunities with a weighted mean of 5.00 and 0.00 standard deviation. It shows that all the given statement about Learning Opportunities has a mean ( $M=5.00$ ,  $S.D.=0.00$ ) which is; Students are used to perform an activity in TLE subject; Students are used to practice video tutorials as an alternative learning device; Students are used to apply self-study; Students are willing to attend in the trainings and seminar for the enhancement of their skills; and Students are willing to be mentored by others. Remarkd as Always.

Students that actively participate in and interact in their study develop these skills and build greater connections between subjects. As a result, teachers must educate in the manner that will have the most impact



on their students' learning, and technology provides the opportunity and freedom to do so (Francis, 2017).

Table 9. The level of Academic Performance of the Selected Senior High School

Quarter	Mean	S.D.	Grand mean	S.D.	Interpretation
First	88.44	4.07			
Second	92.35	3.58	89.72	4.17	High
Third	88.36	3.51			
Scale	Range	Interpretation			
5	95-100	Very high			
4	89-94	High			
3	83-88	Moderately high			
2	77-82	Low			
1	70-76	Very Low			

table 9 revealed the level of academic performance of the selected senior high school with a mean (M= 88.44, S.D.=4.07), (M=92.35, S.D.=92.35, S.D.=3.58), (M= 88.36, S.D.=3.51) for first, second and third Quarter Mark respectively.

The Grand mean (M=89.72, S.D.=4.17) indicates that the level of Academic Performance of the selected Senior high School is High.

Whitmer (2013) discovered the links between student academic progress and LMS usage, revealing a highly systematic correlation (p.0000) in relation to every variable. These factors explained 12 percent and 23% of the difference in final course marks, indicating that learners who used the LMS more often had higher grades than others.

Table 10. Relationship between Instructional Practice of TLE teachers and Student Satisfaction

Active Learning	df	F	level of sig.	Significance F /p-value	Analysis
Interpersonal Relationship		2.7642		0.0996	not significant
Academic Support	(1,98)	2.3279	0.05	0.1303	not significant
Learning Opportunities		1.9270		0.1682	not significant

It is shown in table 10 the relationship between Instructional Practices of Selected TLE teachers in terms of Active Learning and Students Satisfaction such as Interpersonal Relationship, Academic Support, and Learning Opportunities.

It shows that in terms of Active Learning and Interpersonal Relationship the p-value (p=0.0996) obtained is greater than the level of significance 0.05, it means only that there is no significant relationship between the two variables, while for Active Learning and Academic Support the p-value (p=0.1303) obtained is greater than the level of significance 0.05, it indicates that there is no significant relationship between the two variables, on the other hand ,Active Learning and Learning Opportunities obtained a p-value (p=0.1682) which is greater than 0.05 level of significance showing no relationship between the variables.

It is indicated in table 10 that the practices teachers in terms of Active Learning has no significant relationship to Students Satisfaction such as Interpersonal Relationship, Academic Support, and Learning opportunities, with F values (F= 2.7642, F=2.3279, F= 1.9270) respectively and degrees of freedom (df= 1,98) at 0.05 level of significance.

Siming (2015) found that general skills and learning experiences are quite high, indicating that students

were highly happy. She stated that the more teachers are passionate about giving information, the more satisfied students are.

Table 11. Relationship between Instructional Practices of TLE teachers and Student Satisfaction

Mastery of Learning	df	F	level of sig.	Significance F /p-value	Analysis
Interpersonal Relationship	(1,98)	2.8040	0.05	0.0972	not significant
Academic support		2.3030		0.1323	not significant
Learning Opportunities		2.0729		0.1531	not significant

It is shown in table 11 the relationship between Instructional Practices of Selected TLE teachers in terms of Mastery of Learning and Students Satisfaction such as Interpersonal Relationship, Academic Support, and Learning Opportunities.

It shows that in terms of Mastery of Learning and Interpersonal Relationship the p-value ( $p=0.0972$ ) obtained is greater than the level of significance 0.05, it means only that there is no significant relationship between the two variables, while for Mastery of Learning and Academic Support the p-value ( $p=0.1323$ ) obtained is greater than the level of significance 0.05, it indicates that there is no significant relationship between the two variables, on the other hand ,Mastery of Learning and Learning Opportunities obtained a p-value ( $p=0.1531$ ) which is greater than 0.05 level of significance showing no relationship between the variables.

It is indicated in table 11 that Instructional Practices of selected TLE teachers in terms of Mastery of Learning has no significant relationship to Students Satisfaction such as Interpersonal Relationship, Academic Support, and Learning opportunities, with F values ( $F=2.8040$ ,  $F=2.3030$ ,  $F=2.0729$ ) respectively and degrees of freedom ( $df=1,98$ ) at 0.05 level of significance

Austin (2020) presumed that determining the relationship between student satisfaction and assessment performance was important because it drew a lot of attention, particularly among teaching practitioners and academics, because it could underpin powerful collaborations at work in students' educational experiences. Meanwhile, another study is looking into the relationship between students' happiness with five aspects of blended learning and their performance. Course content satisfaction, course design, course manual, online discussion, and evaluation are the five elements. According to the findings, the three input components had minimal influence on the grades (Sokalingam, 2013).

Table 12. Relationship between Instructional Practices of TLE teachers and Student Satisfaction

Peer Instruction	df	F	level of sig.	Significance F /p-value	Analysis
Interpersonal Relationship	(1,98)	2.8347	0.05	0.0954	not significant
Academic support		2.3546		0.1281	not significant
Learning Opportunities		1.9794		0.1626	not significant

It is shown in table 12 the relationship between Instructional Practices of Selected TLE teachers in terms of Peer Instruction and Students Satisfaction such as Interpersonal Relationship, Academic Support, and Learning Opportunities.

It shows that in terms of Peer Instruction and Interpersonal Relationship the p-value ( $p=0.0954$ ) obtained is greater than the level of significance 0.05, it means only that there is no significant relationship between the two variables, while for Peer Instruction and Academic Support the p-value ( $p=0.1281$ ) obtained is greater than the level of significance 0.05, it indicates that there is no significant relationship between the two variables, on the other hand ,Peer Instruction and Learning Opportunities obtained a p-value ( $p=0.1626$ ) which is greater than 0.05 level of significance showing no relationship between the variables.

It is indicated in table 12 that Instructional Practices of selected TLE teachers in terms of Peer Instruction has no significant relationship to Students Satisfaction such as Interpersonal Relationship, Academic Support, and Learning opportunities, with F values ( $F=2.8347$ ,  $F=2.3546$ ,  $F=1.9794$ ) respectively and degrees of freedom ( $df=1,98$ ) at 0.05 level of significance

Elliot and Healy (2012) shared that the one of the characteristics of student happiness is enlightening experience, and the greater the learners' interactions, the higher their fulfillment.

Table 13. Relationship between Instructional Practices of TLE teachers and Student Satisfaction

Collaboration	df	F	level of sig.	Significance F /p-value	Analysis
Interpersonal Relationship	(1,98)	2.7862	0.05	0.0983	not significant
Academic support		2.2767		0.1345	not significant
Learning Opportunities		1.9945		0.1610	not significant

It is shown in table 13 the relationship between Instructional Practices of Selected TLE teachers in terms of Collaboration and Students Satisfaction such as Interpersonal Relationship, Academic Support, and Learning Opportunities.

It shows that in terms of Collaboration and Interpersonal Relationship the p-value ( $p=0.0983$ ) obtained is greater than the level of significance 0.05, it means only that there is no significant relationship between the two variables, while for Collaboration and Academic Support the p-value ( $p=0.1345$ ) obtained is greater than the level of significance 0.05, it indicates that there is no significant relationship between the two variables, on the other hand, Collaboration and Learning Opportunities obtained a p-value ( $p=0.1610$ ) which is greater than 0.05 level of significance showing no relationship between the variables.

It is indicated in table 13 that it has no significant relationship to students satisfaction such as interpersonal relationship, academic support, and learning opportunities, with F values ( $F=2.7862$ ,  $F=2.2767$ ,  $F=1.9945$ ) respectively and degrees of freedom ( $df=1,98$ ) at 0.05 level of significance.

Mudaly and Naidoo (2015) said that instructors should be encouraged to adopt instructional tactics in whatever manner possible since they make learning more real and meaningful.

Table 14. Relationship between Instructional Practices of TLE teachers and Student Satisfaction

Differentiation	df	F	level of sig.	Significance F /p-value	Analysis
Interpersonal Relationship	(1,98)	2.8552	0.05	0.0943	not significant
Academic support		2.2753		0.1347	not significant
Learning Opportunities		2.0648		0.1539	not significant

It is shown in table 14 the relationship between Instructional Practices of Selected TLE teachers in terms of Differentiation and Students Satisfaction such as Interpersonal Relationship, Academic Support, and Learning Opportunities.

It shows that in terms of Differentiation and Interpersonal Relationship the p-value ( $p=0.0943$ ) obtained is greater than the level of significance 0.05, it means only that there is no significant relationship between the two variables, while for Differentiation and Academic Support the p-value ( $p=0.1347$ ) obtained is greater than the level of significance 0.05, it indicates that there is no significant relationship between the two variables, on the other hand, Differentiation and Learning Opportunities obtained a p-value ( $p=0.1539$ ) which is greater than 0.05 level of significance showing no relationship between the variables.

It is indicated in table 14 that Instructional Practices of selected TLE teachers in terms of differentiation has no significant relationship to students satisfaction such as interpersonal relationship, academic support, and learning opportunities, with F values ( $F=2.8552$ ,  $F=2.2753$ ,  $F=2.0648$ ) respectively.

Zerihun et al. (2012) discussed that a more accurate teaching assessment questionnaire based on students' learning experiences as well as specific teacher traits recognized as markers of teaching quality.

Table 15. Relationship between Instructional Practices of TLE teachers and Academic Performance of the respondents

Academic Performance	df	F	Level of sig.	Significance F /p-value	Analysis
Active Learning	(1,98)	18.674	0.05	3.72405E-05	Significant
Mastery of Learning		18.893		3.3817E-05	Significant
Peer Instruction		18.627		3.80241E-05	Significant
Collaboration		18.611		3.82948E-05	Significant
Differentiation		18.242		4.50665E-05	Significant

It is shown in table 15 the relationship between instructional practices of selected tle teachers and academic performance of the respondents

It shows that in terms of Active Learning and Academic performance the p-value ( $p=3.72405E-05$ ) obtained is less than the level of significance 0.05, it means only that there is a significant relationship between the two variables, for Mastery of Learning and Academic performance the p-value ( $p=3.3817E-05$ ) obtained is less than the level of significance 0.05, it indicates that there is a significant relationship between the two variables, while for Peer Instruction and Academic performance the obtained p-value ( $p=3.80241E-05$ ) is less than 0.05 level of significance showing a relationship between the variables, and for Collaboration and Academic performance the p-value ( $p=3.82948E-05$ ) obtained is less than the level of significance 0.05, it means that the two variables has significant relationship, on the other hand, Differentiation and Academic performance has a p-value ( $p=4.50665E-05$ ) obtained which is less than the level of significance 0.05 indicting a significant relationship between the two variables.

It is indicated in table 15 that instructional practices of selected TLE teachers in terms of active learning, mastery of learning, peer instruction, collaboration and differentiation has a significant relationship to the academic performance of the respondents with F values ( $F=18.674$ ,  $F=18.893$ ,  $F=18.627$ ,  $F=18.611$ ,  $F=18.242$ ) respectively and degrees of freedom ( $df=1,98$ ) at 0.05 level of significance.

Long, et al. (2013) explained that the lecturer's competencies are an important factor in determining student satisfaction. Furthermore, it reveals that the lower the lecturer's competencies the lower the student satisfaction.

#### 4. Conclusion and Recommendation

The following conclusions were reached based on the results of a study. The level of instructional practices of selected TLE teachers in terms of active learning, mastery of learning, peer instruction, collaboration and differentiation are all very high. Consequently, the level of satisfaction as rated by the selected senior high school in terms of interpersonal relationship, academic support and learning opportunities are all very high. The level of academic performance of the selected senior high school is high.

The instructional practices of selected TLE teachers in terms of active learning, mastery of learning, peer instruction, collaboration and differentiation have no significant relationship to the student's satisfaction such as interpersonal relationship, academic support, and learning opportunities. In terms of active learning, mastery of learning, peer instruction, collaboration and differentiation have a significant relationship to the academic performance of the selected Senior High School in Laguna

We can understand the concept as all the actions performed by the teacher to create and maintain a learning environment that enables successful instruction (Jimenez, 2020; Blazar & Kraft, 2017). In addition, approaches that encourage active learning emphasize skill development rather than information transmission and urge students to perform something that demands higher-order thinking (Brame, 2016; Hartikainen, 2019). Grincewicz (2015) reported that the goal of Mastery Learning is success for the student, in both

achievement and motivation. Meanwhile, Bulut (2019) ascertained the influence of the peer instruction approach on students' academic performance and creative thinking skills.

Moreover, the following recommendations are made in light of the study's results and conclusions. TLE teachers may continue applying varieties of active learning strategies when teaching TLE subjects to students. TLE teachers can maintain the teaching strategies employed to have a mastery learning in TLE subjects, employ on different subjects and the impact of peer instruction method on different levels may be investigated, continue performing better in collaboration with other TLE teachers, use differentiation in TLE subjects can continuously apply in dealing with the laboratory time to have a mastery learning of the students. For future studies, this researcher may use qualitative research design to explore the instructional practices of TLE Teachers, other variables and localities may also be considered of future researchers.

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