

Facilitating Learning and Academic Performance of Students in TLE under K to 12 Curriculums

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Abstract:- The study aimed to determine the extent of facilitating learning practices of TLE teachers and the level of academic performances of students in TLE subject under K to 12 Curriculum. It also delved into the presence or absence of significant difference among the ratings of TLE Teachers on their practices in facilitating learning and the academic performance of the students, and tested the existence of significant relationship between the ratings of the TLE Teachers on their practices in facilitating learning and academic performance of students.

A descriptive-inferential design was adopted in the study using the self-designed instrument as primary source of data using the 17 teachers and 356 students in TLE subjects. It utilized the researcher-made instrument to gather data and the student records in TLE. The descriptive and inferential statistics were used in data analysis. The pursued null hypothesis was tested at 5% margin of error.

The findings revealed that the teachers were satisfied with their practices in facilitating learning to students in terms of technical skills, assessing learning, classroom management, stakeholder linkages, recording and interpreting learning outcomes of students. On the other hand, the students were not fully satisfied with their said practices. The students were not also performing well in written works and quarterly examinations, but they performed better in practical works. The practices of TLE teachers in facilitating learning to the students were balanced in all aspects but what the students learned significantly differed. Moreover, the extent to which teachers practice their skills in facilitating learning were significantly relate to the performances of students.

Conclusive of the study is the notion that TLE teachers are resistant to get out from their comfort zones on practices in facilitating learning of students. On the other hand, the students are still wanting for improvement of their written and quarterly examination performances. In addition, the teaching-learning practices of teachers are pillars for better student learning outcomes.

The TLE teachers have to undergo further trainings and workshops on the methods and strategies in facilitating and assessing learning of students.

Keywords:- TLE Teachers, Kto12 Curriculum, Academic Performance of Students, Facilitating Learning of Students, Teaching-Learning Practices of Teachers.

I. INTRODUCTION

The Republic Act No.10533 known as “Enhanced Basic Education Act of 2013” The K to 12 Program is an act enhancing the Philippines Basic Education System by strengthening its curriculum and increasing the number of years for basic education. The K to 12 Basic Education Program is designed to reform the system of education in the Philippines. It aims to empower every individual to improve his quality of life, to provide sufficient time for mastery of concepts, develop life-long learners, prepares graduates for tertiary education, mid-level skills development, employers and entrepreneurship and to avoid child exploitation and other related problems. The enhanced curriculum allows students to gain work experience while studying. Every graduate will be equipped with information, media and technology skills, learning and innovation skills, effective communication skills and life and career skills.

Technology and Livelihood Education subject plays a vital role in attaining the goals and objectives of the new enhanced curriculum. Technology and Livelihood Education subjects attract many students because of its laudable importance but reverse has been the case. The reason for this probably is due to perceptions of the people that it does not require specialized kind of training. The students have the feeling that even if one is at home at the requisite skills needs to learn have to cook, farm; etc. can be acquired without formal training. People are ignorant of the importance of the vocational subjects which could help males and female students receive formation and are able to work solution to problems. Also, it enables the students to acquire skills, abilities essential for independent life met up with personal and family needs more especially in this economic difficulties (Azubuike, 2011).

Observably, the objectives of the program appeared to have been haphazardly implemented as the teachers are still to find ways in adopting to it from a long standing educational system. Thus, the researcher is motivated to determine how the teachers facilitated the learning and how they rate the academic performances of their students in Technical and Livelihood Education Subjects.

II. RELATED LITERATURES

The new enhanced education curriculum and syllabus were designed to practice vertical integration including performance targets and the outline of teaching materials. The key competencies of learning areas can incorporate with other learning field precipitously and eloquent curriculum in elementary and Senior High School horizontally. The development of national key competencies through school curriculum will be efficient under the alliance of institutions at central, local and school levels (Fang & Chan, 2013).

In crafting a curriculum issues and concerns of vulnerable students; high-stakes testing provisions of No Child Left Behind with attention to the variables of time, alignment, grouping for instruction, professional development, and teacher quality; and ethical issue will be considered. The ability of current federal accountability and related state policy to support the curriculum or the qualities of teachers needed by today's public school students are concerns to be reinforced. To be successful, a locally implemented innovation must achieve an unlikely confluence of policy compliance, administrative support, and a common vision at least at the campus level (Harris, 2014).

➤ *Facilitating Learning*

One of the main roles that teachers should fulfill is to facilitate learning. In other words, teachers are task to make the process of learning easier for students to accomplish. This does not mean that the curriculum should be watered down or the standards should be lowered. Neither does it mean that teachers will spoon feed information to the students. Instead, they need to make it easier for students to learn how to think critically and understand how the learning process works (Kelly, M., 2016).

Facilitating learning always comprise a practical activity regardless of whether it takes place in an educational institution or in effective environment of the students. Teachers must understand the diversity of people as learners. They must have the capacity to act in accordance with the expertise or skills of the learners and to respond the needs of diverse learners (Gregorio, Ed. D, 2016).

➤ *Technical Skills*

Technical skills comprise the knowledge and capabilities to perform specialized tasks related to a specific field. For instance in the field of computer programming, and technical skills it may include aspects like knowledge of computer

languages, knowledge of advanced algorithms, or knowledge of assembly languages related to the basic functions of a computer. Someone with exceptional abilities in any of these technical areas has the potential to secure a career in an associated field. A person with technical writing abilities may get a job creating instruction manuals for complicated products and equipment. A data expert may get a specialized job in database management. A person with crafting abilities may get a job in handicraft institutions or in any job related to assembling fabrics and other products (Calma, 2012).

Hard skills are the technical expertise and knowledge needed for a job. Soft skills are interpersonal qualities, also known as people skills, and personal attributes that one possesses. Business executives consider soft skills a very important attribute in job applicants. Employers want new employees to have strong soft skills, as well as hard skills. The top 10 soft skills as perceived the most important by business executives: integrity, communication, courtesy, responsibility, social skills, positive attitude, professionalism, flexibility, teamwork, and work ethic (Robles, 2012).

➤ *Assessment of Learning*

Assessment of learning is part of effective planning, focuses on how students learn, fosters motivation, help learners know how to improve, develops the capacity for self-assessment, and promotes understanding of goals and criteria for central classroom practice (Gardner, J. 2012).

Every assessment gives a message to students about what they should be learning and how they should go about it. Assessment is the most prompt for learning. One of the most important outcomes of research on students learning is the recognition that learning must fundamentally be seen relational. Teaching and the context in which it occurs are both function of learning. It is not a matter of learners engaging with a body of knowledge to what they have been introduced, but of how this is interpreted (Atkins, M. 2012).

According to Black, P. and William, D. (2011) assessment in education must first and foremost serve the purpose of supporting learning. Teachers need to plan the learning environment and activities that the students need to engage in the assessment of their learning.

The adverse impact of assessment on learning had a considerable potential to enhance learning. The formative assessment and assessment for learning focuses on the extent to which instructional decisions are supported by evidence. The impact of assessment on learning requires a broader focus than the feedback intervention itself, specifically the student's responses to the feedback, and the learning environment in which the feedback works (Wiliam, 2011).

There are many methods or ways that can be used to assess learning outcomes. The appropriateness of the tools in assessing learning varies or depends on the purpose of the

assessor so there is no permanent or exact tool to be used in assessing learning it varies on the usability and appropriateness of its goals and objectives.

➤ *Stakeholder Linkages*

Organizations, if publicly listed, not for profit, or administration forms must convey those methodologies and necessities characterized done by their mission and vision, contract or articles of joining. Accomplishment may be not so much or universally on the corporate, legal, authoritative alternately social responsibilities, furthermore necessities of the association. Success is bound up in how well the organization conducts its activities, whether strategic, operational or tactical, to meet these requirements. Success is measured in part by reports of financial compliance, and in part by other less tangible aspects such as meeting expectations of stakeholders (Bourne, L., 2016).

Identifying and classifying stakeholders are necessary to ensure success of an organization that must respond to needs and expectations its clients. Moreover, knowing stakeholder linkages can contribute to increase organizational worth (Reyes-Alcázar, et al. 2012).

The progress and development of school depends of the support of its stakeholders knowing the minimal amount of budget of our government for maintenance and miscellaneous repair and expenses the school is trying to find some means how to meet the needs of the school and this is possible because of the financial and moral support of the parents, municipal and barangay officials.

➤ *Classroom Management*

Classroom management is the process by which teachers and schools create and maintain appropriate behavior of students in classroom settings. The purpose of implementing classroom management strategies is to enhance pre-social behavior and increase student academic engagement (Niculescu & Franț, 2016).

To keep students organized, orderly, focused, attentive, on task, and academically productive during a class an effective and varied classroom management techniques and strategies will be applied. When classroom-management strategies are executed effectively, teachers minimize the behaviors that impede learning for both individual students and groups of students, while maximizing the behaviors that facilitate or enhance learning. Generally speaking, effective teachers tend to display strong classroom-management skills, while the inexperienced or less effective teacher is a disorderly classroom filled with students who are not working or paying attention Delceva–Dizdarevik, J. (2014).

➤ *Recording & Interpreting Learning Outcomes*

Grading infuses everything that happens in the classroom. It needs to be acknowledged and managed from the first moment that a Teacher begins planning a class. Trying to

keep students from caring about grades is pointless or useless. Trying to pretend that grades are not important is unrealistic. Trying to establish an institutional assessment program unconnected to the grading process is wasteful. Grades are the elephant in the classroom. Instead of ignoring the elephant, we want to use its power for students learning (Walvoord, B. and Anderson, V., 2011).

Recording and Reporting of student achievement serves a number of purposes, for the students, parents, teachers, other schools and employers as potential audiences. Schools can use student achievement information at a number of levels including individual, class, grade or school. This information helps identify students for targeted intervention and can inform school improvement programs. The form of the report must clearly serve its intended purpose and audience. Effective and informative reporting acknowledges that students can be demonstrating progress and achievement of syllabus outcomes across stages, not just within stages. Good reporting practice takes into account the expectations of the school community and system requirements, particularly the need for information about standards that will enable parents to know how their children are progressing (NSW Department of Education, updated 10, May 2012).

Blended learning is an effective approach to instruction that combines features of face-to-face learning and computer-mediated learning. Students perceived interaction as important to their learning experiences and were moderately satisfied in their blended learning course. Student personality was found to be essential factor for interaction and satisfaction in this type of learning design. Students who reported having an extroverted personality noted more interaction and a higher level of student satisfaction than those who self-reported as introverted (Kuo, et al., 2015).

➤ *Academic Performance*

In educational institutions, success is measured by academic performance, or how well a student meets standards set out by local government and the institution itself. As career competition grows ever fiercer in the working world, the importance of students doing well in school has caught the attention of parents, legislators and government education departments. Although education is not the only road to success in the working world, much effort is made to identify, evaluate, track and encourage the progress of students in schools. Parents care about the academic performance of their children because they believe that good academic results will provide more career choices and job security. Schools, though invested in fostering good academic habits for the same reason, are also often influenced by concerns about the school's reputation and the possibility of monetary aid from government institutions, which can be a turning point on the overall academic performance of the school (Bell, M. updated 2016).

A study conducted by Alimi, et.al (2012) emphasized the difference between the academic performance of students in private and public school. It was found out that school facilities have a great influence in the academic performance of the students in the private school. Thus Suggestions for the procurement of more facilities in public secondary schools were made in order to enhance the academic performance of the students.

One crucial variable that directly impacts the quality of learning acquisition among learners is the adequacy or lack of school facilities that aid in the reinforcement of knowledge and skills (Limon, M., 2016).

➤ *Written Works, Work Performance and Quarterly Examination*

Teachers use tests to evaluate knowledge acquisition of the students. Students received multiple-choice quizzes (with feedback); in the quizzes, some target content that would be included on the class summative assessments was tested, and some of the target content was not tested. Review quizzing produced the greatest increases in exam performance, and these increases were only slightly augmented when the items had appeared on previous quizzes. The benefits of quizzing (relative to not quizzing) persisted on cumulative semester and end-of-year exams (McDaniel & Coyne, 2016).

The quality and efficiency of the students in doing the work depends on the availability of the shop/laboratory room. A study was made to establish the relationship between the quality of school facilities and student performance and achievement, in relation to the field of Technology and Livelihood Education (TLE). It was found out that insufficient school facilities were negatively impacting student performance and achievement, and the administrators concerned take no significant action in addressing this educational issue. Since the lack of educational facilities was proven to pose serious consequence on student performance and achievement, stakeholders should closely look into procedures that focus on facility support and management in the field of TLE (Limon, 2016).

➤ *Technology and Livelihood Education*

Technology and Livelihood Education subject can give students a source of money to earn a decent living. An example of this is Dressmaking Course. With this course graduates can apply as sewer in a factory or they can even build their own business if they want. Electrical Installation and Maintenance can assure graduates to get job to support their needs in a business entity as an electrician or even a simple electrician in their barangay. Commercial Cooking can

build the confidence of the graduates in engaging into small scale business like carinderia and restaurant in the future. With Housekeeping, students can know basic techniques in keeping houses spic-and-span. In consumer Electronics Servicing, learners can repair domestic appliances like electric fan, washing machine, and flat iron. In Computer Hardware Servicing, graduates can be a computer technician in an office or even at school. With Food Processing and Fish Processing, students can engage into selling processed fish like bagoong, tinapa, and daing Na isda in their community. They can also deliver processed foods like strawberry jam and dried mango. With these livelihoods, graduates can be confident in facing the future, TLE is very essential in our daily life. Without it, life can be very frustrating. TLE is everywhere. Life revolves around technology and livelihood to support existence. Every single act is accompanied by such invention and work. People should know how to use technology as an advantage to facilitate work and livelihood to sustain life and health (Tomaro, 2018)

➤ *Synthesis*

The Philippine educational system has been enhanced to ensure quality, globally competitive and holistically developed learners. The technical skills of the facilitators, the assessment of learning, stakeholder linkages, classroom management, recording and interpreting the learning outcomes are the key factors that could affect the academic performance of the students. The present study deals on the facilitating learning and academic performance of students in TLE under the K to 12 Curriculum.

➤ *Conceptual Framework*

The study anchored on the Republic Act No. 10533 the K to 12 Curriculum which states that this curriculum allows students to gain work experiences while studying. Every graduate will be equipped with information, media and technology skills, learning and innovation skills, effective communication skills and life and career skills. The K to 12 program will produce globally competitive graduates, students will learn more easily, students will be free to pursue their passion, there will be savings on college tuition fees and it will reduce unemployment rate and improve the economy (Republic Act No. 10533, 2013).

Figure 1 presents the paradigm of the study. First box presents the effects of the new curriculum in facilitating learning in terms of; technical skills, assessing Learning, stakeholder Linkages, classroom management and recording & Interpreting Learning Outcomes. These factors were used to gather data in determining the impact of the new enhanced curriculum.

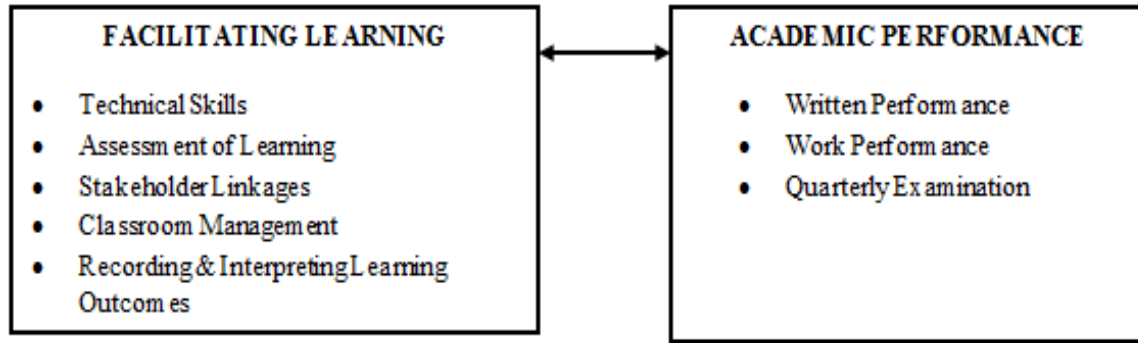


Fig 1

➤ *Research Paradigm*

Second box presents the performances of students in written works, work performance and quarterly examination. These factors were used to gather relevant data of the students in Technical Livelihood Education on their academic achievement. The double arrow head connecting the two boxes stands for the possibilities where the strategies in facilitating learning employed by the teachers has the strong connection with the ratings of the students got in the subject.

➤ *Statement of the Problem*

The study determined the facilitating learning and academic performance of students in TLE Subject under the K to 12 Curriculum, answered the following questions: **First**, what extent do respondents facilitate learning in TLE Subject under the K to 12 Curriculum in terms of technical skills, assessment of learning, stakeholder linkages, classroom management, and recording and interpreting learning outcomes? **Second**, at what level the academic performance in TLE in terms of written performance, work performance, and quarterly examination? **Third**, is there a significant difference among the ratings in facilitating learning and in the academic performance of students in TLE? **Fourth**, is there a significant relationship between the facilitating learning and academic of students in TLE subject?

➤ *Hypothesis*

This study pursued in testing at 5% margin error the following null hypothesis:

Ho₁, There is no significant difference among the ratings in facilitating learning and in the academic performance of students in TLE.

Ho₂, There is no significant relationship between the facilitating learning and academic performance in TLE of students.

➤ *Significance of the Study*

The study contributed knowledge in Technology and livelihood Education which redound to benefit the following individuals or groups:

➤ *School Principals.*

Result of the study may provide information and guidance to the school principals and administrators regarding the performance of Grade 9 and Grade 10 students in TLE. They may be guided in the crafting of technical and vocational curricular programs that improve the teaching and learning process which develop the skills of students in TLE.

➤ *Technology and Livelihood Teachers.*

The findings of the study may help the teachers assess the strength and weaknesses of the students in TLE. They would be challenged to employ an effective teaching strategy that develops the ability of students in experiential, contextualized, and authentic teaching-learning process.

➤ *Technology and Livelihood Students.*

Result of the study may give information to the students regarding their performance in TLE. They may be encouraged to study diligently in TLE subject to improve their performance. Their interest in studying TLE may develop their study habits and remove their negative thoughts in TLE.

➤ *Parents.*

This study may enlighten them that technology and livelihood education help their children develop skills that would be very useful on their day to day work and in getting job after finishing their studies.

➤ *Researchers.*

This study may benefit researchers because it would give them additional knowledge and information specifically on how the new curriculum affects the performance of the facilitators and the TLE students.

III. MATERIALS AND METHODS

➤ *Methods*

The chapter introduces the concepts and mechanics in answering the problems of the study. It covers the research design, environment, respondents, instrument, and data analysis.

➤ *Research Design*

The study adopted a combination of descriptive and inferential designs. It employed the differential and correlation method of data analysis. The descriptive design was used to set the present state of the technical skill of teachers, assessing learning, stakeholder linkages, classroom management, and recording and interpreting learning outcomes. Moreover, the inferential was utilized to draw generalization from the samples.

The differential method of data analysis was used to determine the presence or absence of significant difference among the ratings of the respondents on the factors measured. On the other hand, the correlation was adopted to secure the presence or absence of the significant relationship between the independent data and dependent measurements. The latter method was to address the ultimate focus of the study on the teaching learning approaches of teachers and the performances of the students in Technology and Livelihood Education subjects.

➤ *Research Environment*

The study was conducted in the two districts in Mainit. Mainit is a fourth class municipality in the province of Surigao del Norte, Philippines, as shown in Figure 1. It is situated on the north shore of Lake Mainit in the north-eastern part of Mindanao. The word "mainit" literally means "hot". By land, this town can be reached for more or less 50 minutes from the heart of Surigao City, and about 2 and a half hours from Butuan City.

This municipality is surrounded by high mountains of the province at its north-east and the lake at the west. These mountain ranges contained flat lands for rice fields and the lake for fishing at the opposite. It has approximately 5,000 households and has the estimated 4 million annual income. People in this municipality speak similar dialect though differ in intonation.

Mainit is a fourth class municipality and is politically subdivided into twenty-one barangays. It has also six secondary schools; five public schools (Mainit, National High School, Matin-ao National High School, Magpayang, National High School, Paco National High School and Hacienda National High school) and one private school (San Nicolas Academy) See Figure 2.

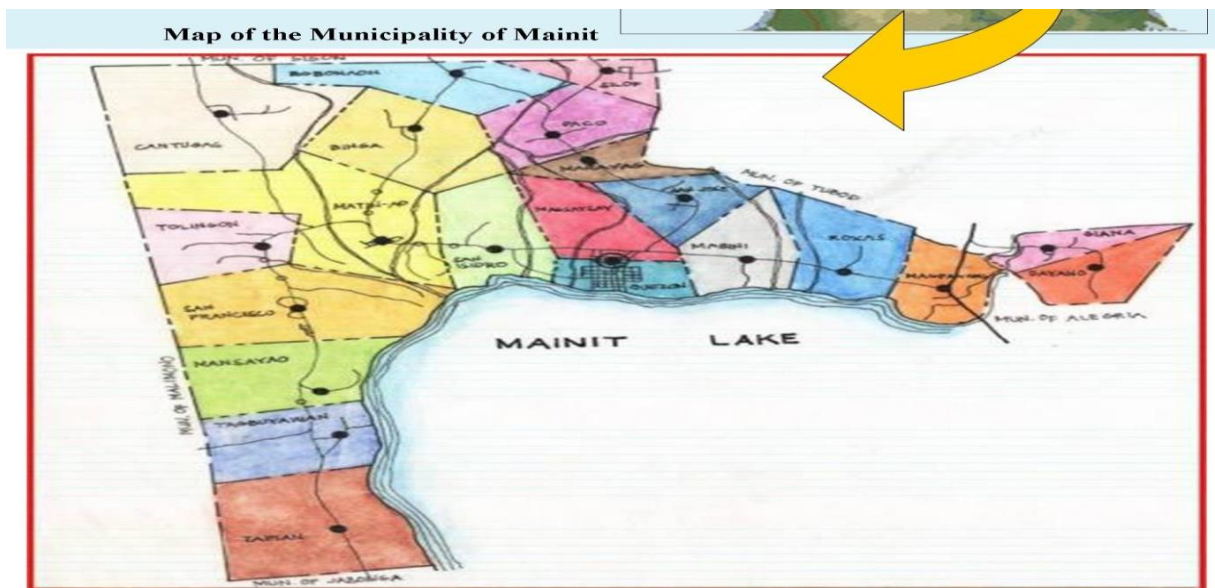


Fig 2:- Location Map of the Municipality of Mainit, Surigao del Norte

Taking into account all these conditions present and accessible in the place of study, the researcher is triggered to look into how learning of students are facilitated amidst these conditions, and to determine the connection in processing of learning to the performances of the students in the Technology and Livelihood Education subject.

➤ *Research Instrument*

The investigation used the self-designed instrument that contained two (2) major parts (Appendix A). The first part focused on the five components on facilitating learning. Its items dealt on the technical skills, assessing learning, stakeholder linkages, classroom management and recording and interpreting learning outputs.

The second part centered on the performances of the TLE students on their written works, work performance, and quarterly examination. The data shall be based on the secondary data in the class records of the TLE teachers.

- *Validity.*

A draft of the research instrument was prepared by the researcher. Its contents are based on the desired data to answer the problems of the study. The draft was presented to the thesis adviser, for comments and suggestions. The suggestions for improvements were included and presented to the panel of researchers during the proposal. Revision of the instrument was made upon suggestions of the panel and the revised copy was again presented for further improvement. The items underwent trial conduct to find out if the respondents could clearly understand what were measured. Comments and reactions from the respondents were noted for revision of the instrument prior to establishing the reliability.

- *Reliability.*

The reliability of the instrument was ascertained through run-rerun method using 20 non-respondents at Matin-ao National High School. The first run was conducted in the morning and the re-run in the afternoon. The scores in both runs were analyzed by Pearson Product Moment Correlation Coefficient (Appendix B). Evaluation of the result was interpreted on the basis of the standard parameters of reliability coefficients and these coefficients ranged from 0.57 to 0.80 to suffice the appropriateness of instrument for the study.

- *Respondents*

The respondents in the study were Grades 9 and 10 TLE teachers and students only. They were the subject of the study because track specialization started from Grade 9 to Grade 12. The distribution of the population of the teachers and students in every school and specialization is reflected in Table 1.

Item No.	<i>Technology Livelihood Education</i>	<i>School</i>	<i>Teacher</i>	<i>Students per Grade Level</i>			
	<i>(area of specialization)</i>		<i>(f)</i>	<i>Grade 9</i>		<i>Grade 10</i>	
				<i>N</i>	<i>n</i>	<i>N</i>	<i>N</i>
1	<i>Agriculture</i>	<i>Matin-ao NHS</i>	1	35	11	27	12
2	<i>Cookery</i>		1	19	7	35	13
3	<i>Electronics</i>		1	0		13	5
4	<i>ICT</i>		1	40	14	16	10
5	<i>SMAW</i>		1	57	20	55	18
6	<i>Carpentry & Masonry</i>	<i>Hacienda NHS</i>	1	66	25	72	25
7	<i>Beauty Care</i>	<i>Paco NHS</i>	1	16	8	16	7
8	<i>Agri. Crops</i>		1	25	12	27	7
9	<i>Cookery</i>	<i>Magpayang NHS</i>	1	20	8	16	3
10	<i>Industrial Arts (civil Tech.)</i>		2	50	20	49	20
11	<i>ICT</i>		2	41	13	35	12
12	<i>Cookery</i>		1	38	16	38	14
13	<i>Drafting</i>	<i>Mainit NHS</i>	1	42	15	29	12
14	<i>Wellness Massage/beauty and nail carecare</i>		2	31	12	52	17
TOTAL			17	<i>n = 356</i>			

Table 1:- Distribution of Teacher and Student Respondents

The Table shows the distribution of Technology and Livelihood Education teachers and students in five (5) Secondary Schools in Mainit 1 and 2 Districts. The sample size was based on the conventional method of 50% plus 1 of the populations. The stratified sampling was employed in setting the minimum sample size per stratum. Purposive sampling was used for teachers using the criterion of the subject or specialization they were teaching. The selection of the respondents per specialization stratum was through odd-even systematic sampling based on the master list of students.

➤ *Ethics and Data Gathering Procedure*

A letter request was sent to the Chair of the Graduate School (Appendix C) another letter request to the Schools Division Superintendent (Appendix D) asking permission for the conduct of study. Upon approval, another letter (appendix E) was sent to the School Principal asking permission to administer the survey instrument. The researcher immediately distributed copies of the research instrument to the respondents after granted the permit. Before the distribution of the questionnaire, the researcher explained first to the respondents the purpose of the study. The answered copies of the instruments were retrieved, and the responses were tallied, tabulated, analyzed, and interpreted.

Confidentiality of the respondents was maintained by not identifying their names of the concerned teachers and students in the discussion. Only the data for the study based on the factors and variables were gathered without necessarily giving some clues or identifiers of the persons involved.

➤ *Data Analysis*

The researcher employed the following statistical approaches based on the purpose of the study.

- *Frequency Count.*

This tool was used to count the number of respondents used for the study. This was used as preliminary tool to set the occurrence of similar data either in simple or relative frequencies.

- *Mean.*

This descriptive tool was used to set the central measure of all the data obtained in answering the Problems 1 and 2 of the investigation. The weighted mean was used as preliminary data in answering the inference leading problems on the presence or absence of significant difference or relationship between or among measured variables.

- *Ordinal Rank.*

This tool was used to show a comparative order of the data on the extent facilitating learning to TLE students. The ranks were applied to the means for the extent of the intended

measures. This tool aided in the analysis and interpretation of data in Problems 1 and 2.

- *Analysis of Variance (One-Way).*

This tool was adopted for the *correlated variance analysis* to determine the presence of significant difference among the factorial data or measurements cited in Problems 1 and 2.

- *Scheffé.*

This is a post-hoc data analysis used to specifically locate the presence of the significant difference among contrasted variables. This was used when the null hypothesis was rejected in Problem 3.

- *Pearson Coefficient of Correlation.*

The correlational tool was used to determine the relationship between two sets of correlated measures in the study. This was initially be used to determine the reliability of the research instrument.

IV. RESULTS AND DISCUSSION

The Chapter presents the answers to the problems posited in the study on the correlates of student performances in Technology and Livelihood Education. The presentation observes the sequence of how the problems are stated in Chapter 1.

➤ *Practices of Facilitating Learning in Technology and Livelihood Education*

The answer to the problem on the extent of practices the TLE teachers facilitate learning as rated by their students and by themselves is presented in this segment.

➤ *Student Ratings*

The ratings of the students on how their TLE teachers facilitate learning in terms of technical skills, assessing learning, stakeholder linkages, classroom management, and recording and interpreting learning outcomes, are found in this portion. The data are shown in Tables 2 to 7 for analysis and interpretation.

➤ *Technical Skills*

The data in Table 2 show that their Technology and Livelihood Education subject teachers were rated the highest in “segregating and preparing materials and tools required in the work” with the mean of 3.61, and practiced “all the time”, and was followed by the item “demonstrating the skills in safety practices and housekeeping while doing the work” with the mean of 3.60, and found practiced “all the time”. The lowest in rank was on “carrying out mensuration, calculation, and design accurately” as marked by the mean of 3.24 and was practiced “most of the time”.

<i>As TLE student, my teacher practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Demonstrating the skills in safety practices and housekeeping while doing the work	3.60	All the Time	2
2. Segregating and preparing materials and tools required in the work.	3.61	All the Time	1
3. Using the tools, machines and equipment according to its manual instruction, specification and standard operating procedure.	3.42	Most of the Time	3
4. Exhibiting skill in various processes in the work.	3.36	Most of the Time	4
5. Carrying out mensuration, calculation, and design accurately.	3.24	Most of the Time	5
Overall Mean	3.45	Most of the Time	-

Table 2:- Student Ratings on Practices of TLE Teachers in Facilitating Learning on Technical Skills

The rating of the students on the practices of their Technology and Livelihood Education subject teachers in facilitating learning on technical skills was described “most of the time” as evidenced by the gotten overall mean of 3.45. This finding suggests the idea that the students were not completely satisfied with the practices of their Technology subject teachers, specifically on matters that help them learn the practical use of tools and equipment, letting them see how things or projects are done, and applying mensuration.

According to Woyo (2013) instructional materials that are used to aid in the transfer of information from one to another must be available or must be taught properly specially the standard operating procedure in handling tools and equipment because the absence of these standard operation

would result to half hazards training of students and may not meet the desired production of technical skills.

➤ *Assessing Learning.*

The data in Table 3 show that their Technology and Livelihood Education subject teachers were rated the highest in “having regular assessment procedure to tracks students’ level of learning” with the mean of 3.39, and practiced “most of the time”, and was followed by the item “providing appropriate and timely feedback for the students to help them monitor their own learning” with the mean of 3.35, and found practiced “most of the time”. The lowest in rank was on “conducting regular meetings with learners and parents to update learners’ performance” as marked by the mean of 2.91 and was practiced “most of the time”.

<i>As TLE student, my teacher practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Conducting regular meetings with learners and parents to update learners’ performance.	2.91	Most of the Time	4
2. Having regular assessment procedure to tracks student’s level of learning.	3.39	Most of the Time	1
3. Providing appropriate and timely feedback for the students to help them monitor their own learning.	3.35	Most of the Time	2
4. Developing and using a variety of appropriate assessment strategies to monitor and evaluate learning.	3.29	Most of the Time	5
5. Monitoring regularly and providing feedback on the learners’ understanding on content.	3.33	Most of the Time	3
Overall Mean	3.25	Most of the Time	-

Table 3:- Student Ratings on Practices of TLE Teachers in Facilitating Learning on Assessing Learning

The rating of the students on the practices of their Technology and Livelihood Education subject teachers in facilitating learning on assessing learning was described “most of the time” as evidenced by the gotten overall mean of 2.91 This finding suggests the idea that the students were not completely satisfied with the practices of their Technology subject teachers, specifically on matters that help them tracks the level of learning, providing appropriate and timely feedbacks and updating learners performance through regular meetings with their parents.

According to Atkins (2012) assessment gives a message to students about what they should be learning and how they should go about it. One of the most important outcomes of research on students learning is the recognition that learning must fundamentally be seen relational. Teaching and the context in which it occurs are both function of learning. It is not a matter of learners engaging with a body of knowledge to what they have been introduced, but of how this is interpreted.

➤ *Stakeholder Linkages.*

The data in Table 4 show that their Technology and Livelihood Education subject teachers were rated the highest in “relating school activities to the values and aspirations in

their homes and communities” with the mean of 3.44, and practiced “most of the time”, and was followed by the item “implementing the goals and characteristics of the teaching-learning activities relevant to the experiences values and aspirations of the students in the community” with the mean of

3.43, and found practiced “most of the time”. The lowest in rank was on “participating in the Barangay and Municipal activities” as marked by the mean of 2.70 and was practiced “most of the time”.

<i>As TLE student, my teacher practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Involving stakeholder in sharing accountability for learner’s achievement.	3.04	Most of the Time	4
2. Participating in the Barangay and Municipal activities.	2.70	Most of the Time	5
3. Relating school activities to the values and aspirations in their homes and communities.	3.44	Most of the Time	1
4. Implementing the goals and characteristics of the teaching-learning activities relevant to the experiences, values and aspirations of the students in the community.	3.43	Most of the Time	2
5. Drawing resources, ideas, and activities from the communities in teaching learning activities.	3.28	Most of the Time	3
Overall Mean	3.18	Most of the Time	

Table 4:- Student Ratings on Practices of TLE Teachers in Facilitating Learning on Stakeholder Linkages

The rating of the students on the practices of their Technology and Livelihood Education subject teachers in facilitating learning on stakeholder linkages was described “most of the time” as evidenced by the gotten overall mean of 3.18 This finding suggests the idea that the students were not completely satisfied with the practices of their Technology subject teachers, specifically on matters that help them relates schools activities to the values and aspirations in their respective homes and community, implements the goal and characteristics of the teaching-learning activities and participates in Barangay and Municipal activities.

According to Reyes-Alcazar (2012) Identifying and classifying stakeholders are necessary to ensure success of an organization that must respond to needs and expectations its clients. Moreover, knowing stakeholder linkages can contribute to increase organizational worth. The progress and development of school depends of the support of its

stakeholders knowing the minimal amount of budget of our government for maintenance and miscellaneous repair and expenses the school is trying to find some means how to meet the needs of the school and this is possible because of the financial and moral support of the parents, municipal and barangay officials.

➤ *Classroom Management.*

The data in Table 5 show that their Technology and Livelihood Education subject teachers were rated the highest in “organizing classroom safe and conducive for learning” with the mean of 3.59, and practiced “most of the time”, and was followed by the item “setting up rules with our involvement that will be followed the whole year” with the mean of 3.44, and found practiced “most of the time”. The lowest in rank was on “implementing daily routine activities regularly” as marked by the mean of 3.25 and was practiced “most of the time”.

<i>As TLE student, my teacher practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Implementing daily routine activities regularly	3.25	Most of the Time	5
2. Enforcing the rule consistently and follow through the criteria that were established.	3.37	Most of the Time	3
3. Setting up rules with our involvement that will be followed the whole year.	3.44	Most of the Time	2
4. Recognizing and rewarding of appropriate behavior and action.	3.31	Most of the Time	4
5. Organizing classroom safe and conducive for learning.	3.59	Most of the Time	1
Overall Mean	3.39	Most of the Time	-

Table 5:- Student Ratings on Practices of TLE Teachers in Facilitating Learning on Classroom Management

The rating of the students on the practices of their Technology and Livelihood Education subject teachers in facilitating learning on classroom management was described “most of the time” as evidenced by the gotten overall mean of 3.39 This finding suggests the idea that the students were not completely

satisfied with the practices of their Technology subject teachers, specifically on matters that help classroom safe and conducive for learning, setting up rules and in implementing daily routines regularly.

According to Premkumar & Coupal, (2008) organized and orderly classroom keep the students, focused, attentive, on task, and academically productive during classroom discussion. When classroom-management strategies are executed effectively, teachers minimize the behaviors that impede learning for both individual students and groups of students, while maximizing the behaviors that enhance learning.

➤ *Recording and Interpreting Learning Outcomes.*

The data in Table 6 show that their Technology and Livelihood Education subject teachers were rated the highest in “giving importance to student reaction concerning test results” with the mean of 3.53, and practiced “most of the time”, and was followed by the item “checking and recording the test results timely” with the mean of 3.47, and found practiced “most of the time”. The lowest in rank was on “recording data using information and communication technologies” as marked by the mean of 3.21 and was practiced “most of the time”.

<i>As TLE student, my teacher practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Recording data using information and communication technologies	3.21	Most of the Time	5
2. Interprets test results and provides feedback to students.	3.36	Most of the Time	3
3. Giving importance to student reaction concerning test results.	3.53	Most of the Time	1
4. Checking and recording the test results timely.	3.47	Most of the Time	2
5. Rewarding achievements and positive behavior of learners.	3.25	Most of the Time	4
Overall Mean	3.37	Most of the Time	-

Table 6:- Student Ratings on Practices of TLE Teachers in Facilitating Learning on Recording and Interpreting Learning Outcomes

The rating of the students on the practices of their Technology and Livelihood Education subject teachers in facilitating learning on recording and interpreting learning outcomes was described “most of the time” as evidenced by the gotten overall mean of 3.37 This finding suggests the idea that the students were not completely satisfied with the practices of their Technology subject teachers, specifically on matters in giving importance on students reaction on test results, checking and recording timely and the use of information and communication technologies in recording data.

According to NSW (updated May 2012) recording and reporting of student achievement helps identify students targeted interventions and for school improvement programs. Good reporting practice takes into account the expectations of the school community and system requirements, particularly the need for information about standards that will enable parents to know how their children are progressing.

➤ *Summary.*

The data in Table 7 show the summary how the students rated their Technology and Livelihood Education subject teachers in facilitating learning.

<i>As TLE student, my teacher practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Technical Skills Development	3.45	Most of the Time	1
2. Assessing Student Learning	3.25	Most of the Time	4
3. Stakeholder Linkages	3.18	Most of the Time	5
4. Classroom Management	3.39	Most of the Time	2
5. Recording and Interpreting Learning Outcomes	3.37	Most of the Time	3
Overall Mean	3.33	Most of the Time	-

Table 7:- Summary of Student Ratings on Practices of TLE Teachers in Facilitating Learning

They rated their teachers the highest in “technical skills development” with the mean of 3.45, and practiced “most of the time”, and was followed by the item “classroom management” with the mean of 3.39, and found practiced “most of the time”. The lowest in rank was on “stakeholder linkages” as marked by the mean of 3.18 and was practiced “most of the time”.

The rating of the students on the practices of their Technology and Livelihood Education subject teachers in facilitating learning was described “most of the time” as evidenced by the gotten overall mean of 3.33 This finding suggests the idea that the students were not completely satisfied with the practices of their Technology subject teachers, specifically on matters that help them develop their technical skills, ensuring safe and conducive learning

environment and involvement in Barangay and Municipal activities and also in asking support from stakeholders.

According to Rodríguez-Gómez, Quesada-Serra, & Ibarra-Sáiz, (2016) facilitating learning always comprise a practical activity regardless of whether it takes place in an educational institution or in effective environment of the students. Teachers must understand the diversity of people as learners. They must have the capacity to act in accordance with the expertise or skills of the learners and to respond the needs of diverse learners.

➤ *Teacher Ratings*

The data on how the teachers rate their practices in facilitating learning to their TLE students in terms of technical skills, assessing learning, stakeholder linkages, classroom management, and recording and interpreting learning outcomes, are found in this portion. The data are shown in Tables 8 to 13 for analysis and interpretation.

➤ *Technical Skills.*

The data in Table 8 show that Technology and Livelihood Education subject teachers rated the highest in “demonstrating the skills in safety practices and housekeeping while doing the work” with the mean of 4.00, and practiced “all the time”, and was followed by the item “segregating and preparing materials and tools required in the work” with the mean of 3.85, and found practiced “all the time”. The lowest in rank was on “using the tools, machines and equipment according to its manual instruction, specification and standard operating procedure” as marked by the mean of 3.67 and was practiced “all the time”.

The rating of the teachers on their practices in Technology and Livelihood Education subject in facilitating learning on technical skills was described “all the time” as evidenced by the gotten overall mean of 3.79 This finding suggests the idea that the teachers were completely satisfied with their practices as Technology subject teachers, specifically on matters that help them demonstrate the safety practices and housekeeping, segregate and prepare materials needed and proper use of machines and equipment following the standard operating procedure.

<i>As TLE teacher, I practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Demonstrating the skills in safety practices and housekeeping while doing the work	4.00	All the Time	1
2. Segregating and preparing materials and tools required in the work.	3.85	All the Time	2
3. Using the tools, machines and equipment according to its manual instruction, specification and standard operating procedure.	3.67	All the Time	5
4. Exhibiting skill in various processes in the work.	3.70	All the Time	3.5
5. Carrying out mensuration, calculation, and design accurately,	3.70	All the Time	3.5
Overall Mean	3.79	All the Time	

Table 8:- Teacher Ratings on Their Practices in Facilitating Learning on Technical Skills

According to Calma (2012) Technical skills comprise the knowledge and capabilities to perform specialized tasks related to a specific field. Someone with exceptional abilities in any of these technical areas has the potential to secure a career in an associated field and could deliver or handle his or her job well.

➤ *Assessing Learning.*

The data in Table 9 show the self-ratings of teachers.

<i>As TLE teacher, I practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Conducting regular meetings with learners and parents to update learners’ performance.	3.19	Most of the Time	5
2. Having regular assessment procedure to tracks student’s level of learning.	3.89	All the Time	1.5
3. Providing appropriate and timely feedback for the students to help them monitor their own learning.	3.89	All the Time	1.5
4. Developing and using a variety of appropriate assessment strategies to monitor and evaluate learning.	3.74	All the Time	3
5. Monitoring regularly and providing feedback on the learners’ understanding on content.	3.63	All the Time	4
Overall Mean	3.67	All the Time	

Table 9:- Teacher Ratings on Their Practices in Facilitating Learning on Assessing Learning

The Table disclosed that they rated the highest in “having regular assessment procedure to tracks student’s level of learning and providing appropriate and timely feedback for the students to help them monitor their own learning” with the mean of 3.89, and practiced “all the time”, and was followed by the item “developing and using a variety of appropriate assessment strategies to monitor and evaluate learning” with the mean of 3.74, and found practiced “all the time”. The lowest in rank was on “conducting regular meetings with learners and parents to update learners’ performance” as marked by the mean of 3.19 and was practiced “most of the time”.

The rating of the teachers on their practices in Technology and Livelihood Education subject in facilitating learning on assessing learning was described “all the time” as

➤ *Stakeholder Linkages.*

The data in Table 10 show the ratings of the Technology and Livelihood Education subject teachers in this aspect.

<i>As TLE teacher, I practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Involving stakeholder in sharing accountability for learner’s achievement.	3.33	Most of the Time	5
2. Participating in the Barangay and Municipal activities.	3.48	Most of the Time	4
3. Relating school activities to the values and aspirations in their homes and communities.	3.96	All the Time	1
4. Implementing the goals and characteristics of the teaching-learning activities relevant to the experiences, values and aspirations of the students in the community.	3.85	All the Time	2
5. Drawing resources, ideas, and activities from the communities in teaching learning activities.	3.63	All the Time	3
Overall Mean	3.65	All the Time	

Table 10:- Teacher Ratings on Their Practices in Facilitating Learning on Stakeholder Linkages

They rated the highest in “relating school activities to the values and aspirations in their homes and communities” with the mean of 3.96, and practiced “all the time”, and was followed by the item “implementing the goals and characteristics of the teaching-learning activities relevant to the experiences, values and aspirations of the students in the community” with the mean of 3.85, and found practiced “all the time”. The lowest in rank was on “involving stakeholder in sharing accountability for learner’s achievement” as marked by the mean of 3.33 and was practiced “most of the time”.

The rating of the teachers on their practices in Technology and Livelihood Education subject in facilitating learning on stakeholder linkages was described “all the time” as evidenced by the gotten overall mean of 3.65 This finding suggests the idea that the teachers were completely satisfied with their practices as Technology subject teachers, specifically on matters that help them relates school activities to the values and aspirations in their respective homes and communities, implement the goals and characteristics of the

evidenced by the gotten overall mean of 3.67 This finding suggests the idea that the teachers were completely satisfied with their practices as Technology subject teachers, specifically on matters that help them tracks students level of learning, develops and use varied assessment strategies and conducts regular meeting with parents to update learners performance.

According to Black & William (2011) teachers need to plan the learning environment and activities that the students need to engage in the assessment of their learning. NSW (2012) mentioned that Assessment provides opportunities to gather evidence with regards to student accomplishment, it enable students to perform what they learn and can do, clarifies student understanding of concepts and promotes deeper understanding.

teaching-learning activities and involve stakeholders in learners achievement.

According to Reyes-Alcazar, et.al (2012) identifying and classifying stakeholders are fundamental in ensuring the success of an organization that must respond to the needs and expectations of the institution. Moreover, knowing stakeholder linkages can contribute to increase organizational worth.

➤ *Classroom Management.*

The data in Table 11 show that Technology and Livelihood Education subject teachers rated the highest in “implementing daily routine activities regularly” with the mean of 3.81, and practiced “all the time”, and was followed by the item “enforcing the rule consistently and follow through the criteria that were established and Organizing classroom safe and conducive for learning” with the mean of 3.78, and found practiced “all the time”. The lowest in rank was on “setting up rules with our involvement that will be followed the whole year” as marked by the mean of 3.67 and was practiced “all the time”.

As TLE teacher, I practiced/performed the following:	\bar{X}	Evaluation	Rank
Implementing daily routine activities regularly.	3.81	All the Time	1
Enforcing the rule consistently and follow through the criteria that were established.	3.78	All the Time	2.5
Setting up rules with our involvement that will be followed the whole year.	3.67	All the Time	5
Recognizing and rewarding of appropriate behavior and action.	3.70	All the Time	4
Organizing classroom safe and conducive for learning.	3.78	All the Time	2.5
Overall Mean	3.75	All the Time	-

Table 11:- Teacher Ratings on Their Practices in Facilitating Learning on Classroom Management

The rating of the teachers on their practices in Technology and Livelihood Education subject in facilitating learning on classroom management was described “all the time” as evidenced by the gotten overall mean of 3.75 This finding suggests the idea that the teachers were completely satisfied with their practices as Technology subject teachers, specifically on matters that help them implement the daily routine activities regularly, enforce the rule consistently and provide conducive and safe learning environment.

According to Delceva–Dizdarevik, J. (2014), to be an efficient teacher means to know with what and how to motivate learners. Teacher as an efficient classroom manager needs to have skills to plan and prepare the education process, know how to organize the teaching and how to guide the class.

An efficient teacher moreover needs to establish a positive classroom climate and working discipline.

➤ *Recording and Interpreting Learning Outcomes.*

The data in Table 12 show that Technology and Livelihood Education subject teachers rated the highest in “checking and recording the test results timely and rewarding achievements and positive behavior of learners” with the mean of 3.89, and practiced “all the time”, and was followed by the item “giving importance to student reaction concerning test results” with the mean of 3.85, and found practiced “all the time”. The lowest in rank was on “recording data using information and communication technologies” as marked by the mean of 3.78 and was practiced “all the time”.

<i>As TLE teacher, I practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Recording data using information and communication technologies	3.78	All the Time	5
2. Interprets test results and provides feedback to students.	3.81	All the Time	4
3. Giving importance to student reaction concerning test results.	3.85	All the Time	3
4. Checking and recording the test results timely.	3.89	All the Time	1.5
5. Rewarding achievements and positive behavior of learners.	3.89	All the Time	1.5
Overall Mean	3.84	All the Time	-

Table 12:- Teacher Ratings on Their Practices in Facilitating Learning on Recording and Interpreting Learning Outcomes

The rating of the teachers on their practices in Technology and Livelihood Education subject in facilitating learning on recording and interpreting learning outcomes was described “all the time” as evidenced by the gotten overall mean of 3.84 This finding suggests the idea that the teachers were completely satisfied with their practices as Technology subject teachers, specifically on matters that help them check and record the test results timely, reward achievements and positive behaviors of learners.

According to Headingtong (2012). Recording enables teachers to keep track of areas identified by monitoring and assessment including students’ strengths and weaknesses and their learning achievement.

➤ *Summary.*

The data in Table 13 show the summary how the Technology and Livelihood Education subject teachers rated

their selves in facilitating learning, the highest rating is in “recording and interpreting learning outcomes” with the mean of 3.84, and practiced “all the time”, and was followed by the item “technical skills” with the mean of 3.79, and found practiced “all time”. The lowest in rank was on “stakeholder linkages” as marked by the mean of 3.65 and was practiced “all the time”.

The rating of Technology and Livelihood Education subject teachers on their practices in facilitating learning was described “all the time” as evidenced by the gotten overall mean of 3.74 This finding suggests the idea that the teachers were completely satisfied with their practices as technology and livelihood subject teachers, specifically on matters that help them develop their record and interpret learning outcomes, develop technical skills and , in connecting with the stakeholders as partners in the development of the learners.

<i>As TLE teacher, I practiced/performed the following:</i>	\bar{X}	Evaluation	Rank
1. Technical Skills Development	3.79	All the Time	2
2. Assessing Student Learning	3.67	All the Time	4
3. Stakeholder Linkages	3.65	All the Time	5
4. Classroom Management	3.75	All the Time	3
5. Recording and Interpreting Learning Outcomes	3.84	All the Time	1
Overall Mean	3.74	All the Time	-

Table 13:- Summary of Teacher Ratings on Their TLE Practices of Facilitating Learning

According to Rodríguez-Gómez, Quesada-Serra & Ibarra-Sáiz, (2016). Facilitating learning always comprises a useful activity regardless of whether it takes place in school, student's workplace or in practical environments. This means that the teacher must have the ability to adapt the guidance activities to the resources available and this requires the teacher's awareness of learning from the theoretical and philosophical perspective, diversity of learners, ability and willingness to account for the individual characteristics of the students in the planning and implementation of teaching and in the guidance and assessment of learning and his or her capacity to engage in positive interaction with different learners and skills to develop and renew teaching and learning environments in cooperation with other parties, and skills and motivation to utilize the opportunities provided by new technologies in the development of learning environments and the ability to develop its use in learning, teaching and facilitating learning in a pedagogically sound manner.

➤ *Academic Performance of Students in Technology and Livelihood Education*

The researcher presents the analysis and discussion of the data to answer the second problem on the level of academic performances of the students along written works, practical work, and quarterly examination. On account that the given weight for each criterion differs from the other criteria, the ratings were converted in percentile measure to keep the balance among measures in interest. The data these purposes are shown in Table 14.

The Table yielded the highest rating given to the academic performance of students on practical works that recorded an 87.02%. This was followed by the quarterly examination with 86.21% and the last was on written work with 85.74%. Although all of these criteria settled to "very satisfactory" performances, the finding suggests that the teachers have given more importance in giving more weight in the practical work performance among others. This further marks the concept that the TLE subject requires the practical skills more than the written accomplishments and which the students are more focused on applying their knowledge to the various projects they are required to accomplish in time.

Academic Performances	\bar{X}	%	Evaluation	Rank
1. Written Works Performance	17.15	85.74	Very Satisfactory	3
2. Practical Work Performance	52.21	87.02	Very Satisfactory	1
3. Quarterly Examination Performance	17.24	86.21	Very Satisfactory	2
Overall Mean	-	86.39	Very Satisfactory	-

Table 14:- Academic Performances of Students in the Technology and Livelihood Education

As Tomaro, (2018) pointed out, life revolves around technology and livelihood to support existence. Every single act is accompanied by such invention and work. Students should be trained and should know how to use technology as an advantage to facilitate work and livelihood to sustain life and health.

➤ *Difference among the Teacher Ratings on TLE Practices and among the TLE Student Performances*

This section presents the data and interpretation that answer the third question on whether or not there exists the significant difference among the ratings of the teachers on their TLE practices in facilitating learning, and among the academic performances of the TLE students. The ANOVA data in Table 15 are shown for analysis and discussion.

Difference among the:	F-value	Df	F.05-value	Decision on Ho	Conclusion
1. Ratings of Teachers	1.47	4/64	2.51	Accepted	Not Significant
2. Student Performances	20.58	2/710	3.01	Rejected	Significant

Table 14:- ANOVA Data on Difference among the Ratings of Teachers and among the Student Performances

➤ Among TLE Teacher Ratings on Practices.

The data in Table 15 shows that the ratings of the teachers did not make any significant difference as revealed by the arrived F-value of 1.47 that did not reach the required level at F.05-value of 2.51 at 4/64 degrees of freedom. Hence, the corresponding null hypothesis was accepted.

The study advanced the concept that the TLE teachers are giving equal values and attention to how the students shall be facilitated learning in the subject. All of the aspects of learning that the student should achieve in their lesson were given equal importance and practice. It further suggests that the TLE teachers are likely keeping the balance in facilitating learning through knowledge, skills, assessment, community linkages, and recording and interpreting learning outcomes.

As accentuated by Lin, Shein & Yang, (2012). Teachers should go beyond their traditional practices as knowledge provider to help students to become resourceful, effective, and

efficient learners. They need to equip students through instruction with appropriate learning strategies. The meta-cognitive strategies and cognitive strategies will allow students to take more responsibility for their own learning by enhancing their efficiency, autonomy, independence, and self-direction.

➤ Among TLE Student Performances.

The data showed significant difference among the TLE Teacher ratings in all the criteria set in giving academic performances of the students. This is grounded on the gotten F-value of 20.58 that went beyond the required critical F.05-value of 3.01 at 2/710 degrees of freedom. This led to the rejection of the null hypothesis.

The researcher employed the Scheffé posteriori analysis and the data are shown in Table 16 for deeper analysis where the significant analysis exist.

Contrasted Variables		F-value	Decision on Ho	Conclusion
Written Work Performance ($\bar{X} = 85.74$)	Practical Work Performance ($\bar{X} = 87.02$)	40.18	Rejected	Significant
	Quarterly Exam Performance ($\bar{X} = 86.21$)	5.37	Accepted	Not Significant
Practical Work Performance ($\bar{X} = 87.02$)	Quarterly Exam Performance ($\bar{X} = 86.21$)	16.18	Rejected	Significant

Table 16:- Scheffé Data on Significant Difference among the Performances of Students in TLE ($F'.05 = 6.02$)

The significant difference in the performances of students were recorded between the written work and practical work with corresponding means of $\bar{X} = 85.74$ and $\bar{X} = 87.02$ where the student performance in practical work came out as significantly higher than the written works. The significant difference in their TLE performances was also spotted between the practical work and quarterly exam with their respective means of $\bar{X} = 87.02$ and $\bar{X} = 86.21$. The established null hypotheses for each of these paired variables were rejected based on the computed F-value of 40.18 and 16.18 that exceeded the critical estimated $F'.05$ -value of 6.02.

The study implies that the students are trained more on the skills development at a remarkable level beyond the written works and quarterly examination. This also indicates that the students are convinced that the purpose of the TLE subject is to harness their technical skills and apply the same to their practical living in the community.

As invoked by Ezeani and Urama (2014) that Educational institutions will not only develop the cognitive, moral and physical attributes of the students, but also encourage them to expand their skills in technology, including computer literacy, which is useful in modern-day economic undertakings. TLE plays a vital role in molding and honing the students to become a productive member of world workforce.

➤ Relationship between the Teacher Ratings on TLE Practices in Facilitating Learning and the TLE Student Academic Performances

The fourth problem of the study on determining the presence or absence of significant relationship between the ratings of the TLE teachers on their practices in facilitating learning and the student academic performances is answered in this portion. Table 17 shows the data for this purpose.

Relationship between:		t-value	Decision on Ho	Conclusion
Technical Skill	Written Work Performance	1.85	Accepted	Not Significant
	Practical Work Performance	2.14	<i>Rejected</i>	<i>Significant</i>
	Quarterly Exam Performance	2.15	<i>Rejected</i>	<i>Significant</i>
Assessing Student Learning	Written Work Performance	-2.64	<i>Rejected</i>	<i>Significant</i>
	Practical Work Performance	-3.16	<i>Rejected</i>	<i>Significant</i>
	Quarterly Exam Performance	-2.84	<i>Rejected</i>	<i>Significant</i>
Stakeholder Linkages	Written Work Performance	0.74	Accepted	Not Significant
	Practical Work Performance	-4.60	<i>Rejected</i>	<i>Significant</i>
	Quarterly Exam Performance	-0.69	Accepted	Not Significant
Classroom Management	Written Work Performance	0.52	Accepted	Not Significant
	Practical Work Performance	-2.73	<i>Rejected</i>	<i>Significant</i>
	Quarterly Exam Performance	-0.24	Accepted	Not Significant
Recording and Interpreting Learning Outcomes	Written Work Performance	-1.99	<i>Rejected</i>	<i>Significant</i>
	Practical Work Performance	-5.89	<i>Rejected</i>	<i>Significant</i>
	Quarterly Exam Performance	0.56	Accepted	Not Significant

Table 17:- Relationship between the Teacher Ratings on Facilitating Learning in TLE and Performances of Students in TLE df = 354 & t.05 = 1.96

Analysis of the data indicates the existence of a number of significant relationships between the extents the TLE teachers facilitated learning and the performances of the students. This finding was based on the obtained t-values that exceeded the required critical t.05-value of 1.96 at 354 degrees of freedom. In specific terms, the Table displayed the following results on significant relationships:

➤ *On Technical Skill.*

The extent to which the TLE teachers facilitated learning on this aspect was significantly related to the academic performances of the students in practical work and quarterly examination. The corresponding null hypotheses were rejected. On the other hand, this aspect did not make any relationship with written examination.

This finding is suggestive that the higher emphasis of teachers in teaching the students on technical skills the more learning the students get in performing actual tasks in project-making. It also helped the students mastered the steps and when examination comes, they are likely to immediately recall what they practically performed.

➤ *On Assessing Student Learning.*

The extent to which the TLE teachers conduct assessment of student learning outcomes proved significant relationship with student performances in written works, practical work, and quarterly examination.

The study underscores that assessing of student learning outcomes greatly enhances the performances of students. The students are challenged to make good marks in both written and practical examinations. Hence, the assessment is also a

motivating factor for the students to learn more the TLE subjects. However, with the negative relationship established, the findings may lead to the notion that the more stiff rules and intensive emphasis in this aspect lead to the less performance of the students. Or there are intervening factors that the study failed to include.

➤ *On Stakeholder Linkages.*

The data yielded the existence of significant relationship between the extent the TLE teachers establish community or stakeholder connections and the performance of teachers in practical works, and not in written and quarterly examination.

The finding explains that exposing the students to the outside world of work will help them learn various skills and techniques how things shall be accomplished. This is emphatic that they learn from the outside world and apply the same as in the school for practical application, beyond cognition. The negative value of relationship further advances that when the students are exhibiting higher performance in their practical works the teachers tend not to help them explore in the external world of work.

➤ *On Classroom Management.*

This aspect of facilitating learning posited significant relationship with the performance of students in practical work. It did not bear significance when contrasted with the written and quarterly examinations.

The finding advances the concept that the way TLE teachers imposes classroom policies have an effect to the development of the practical skills of students. Their stern discipline hold negative impact to the development of learning

to the students on practical work. On the other hand, it also suggests that when the students acquired higher practical skills, the teachers do not impose stricter rules and regulations in the classroom. They are likely to emphasize independent learning of the students.

➤ *On Recording and Interpreting Learning Outcomes.*

This aspect was found significantly related to the performances of the students in written and practical works. Thus the corresponding null hypotheses were rejected. It did not hold significance on the account of their quarterly examinations.

This findings underscores the idea that the extent which the teachers give premium to the learning outcomes of the students by recording and interpreting marks a negative remarkable effect to the way students give focus on their written and practical works. This also suggests that there are unravelled criteria or practices teachers have in facilitating learning which the study failed to determine.

V. CONCLUSION

Extrapolated from the findings of the study generally concludes that extent the TLE teachers practices in facilitating learning result to the kind of quality learning the students hold. Specifically, the study generated the following conclusions:

- The students were not completely satisfied with the practices of their TLE Teacher in facilitating learning on technical skills, assessing learning, stakeholder linkages, classroom management, recording and interpreting learning outcomes.
- The TLE teachers, though satisfied with their present practices, are still to be upgraded with the advanced methodologies and approaches in helping the students learn better under the K to 12 curriculum.
- They are likely keeping the balance in facilitating learning through knowledge, skills, assessment, community linkages, and recording and interpreting learning outcomes.
- The students are trained more on the skills development at a remarkable level beyond written works and quarterly examination.
- The ratings of teachers on facilitating the learning is connected to the academic performance of the TLE students.

RECOMMENDATIONS

The results of the study strongly recommend further trainings and workshops for TLE teachers on the methods and strategies in facilitating learning of students in TLE. Asserted from the foregoing conclusions, the following recommendations are addressed to:

➤ *School Principals.*

They are urged to continue to monitor regularly the performance of the teachers and the activities of the students in Technology and Livelihood Education subject. They likely give priority in providing instructional facilities and equipping the tools and equipment needed in crafting the skills of the students.

➤ *Technology and Livelihood Teachers.*

They are encouraged to may prepare and upgrade themselves in facilitating learning and in initiating alternative solution in providing the tools and equipment's needed for workshop activities of the students. They should also find time to help their students in completing the projects on time and employ effective strategies that will develop their abilities in experiential, contextualized and authentic teaching-learning process. They are urged to welcome changes and innovations in facilitating learning of students.

➤ *Researchers.*

They are challenged to attend more trainings and workshops to find effective strategies in facilitating learning and for the improvement of the academic performances of the students.

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