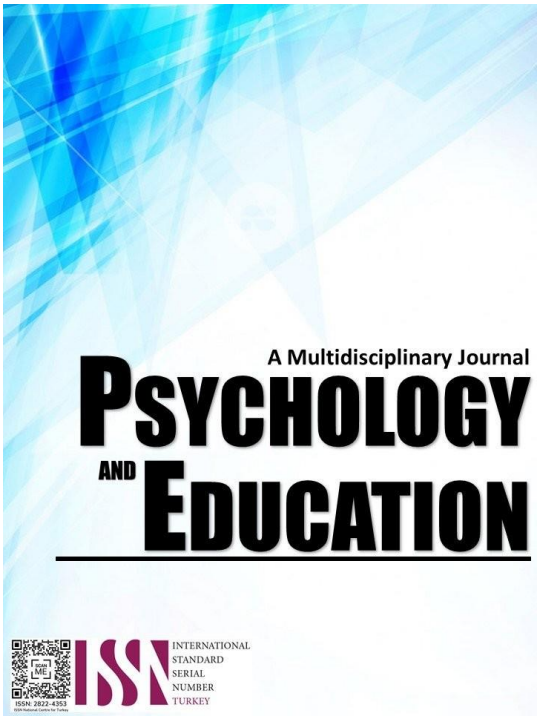
RELATIONSHIP OF TEACHING STRATEGIES OF TECHNOLOGY AND LIVELIHOOD EDUCATION (TLE) TEACHERS IN THE NEW NORMAL AND LEARNING PERFORMANCE OF THE SENIOR HIGH SCHOOL STUDENTS IN SELECTED HIGH SCHOOLS IN THE DIVISION OF VALENZUELA



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Research Article

Relationship of Teaching Strategies of Technology and Livelihood Education (TLE) Teachers in the New Normal and Learning Performance of the Senior High School Students in Selected High Schools in the Division of Valenzuela

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Abstract

This study examines the relationship between the teaching strategies employed by Technology and Livelihood Education (TLE) teachers and the learning performance of Senior High School students in the Division of Valenzuela under the "New Normal" context. With the educational shifts due to the pandemic, this research aimed to identify the impact of different teaching methods such as entrepreneurial, contextualized, experiential, constructivist, and authentic approaches on student learning outcomes, including deep understanding, reasoning, skills, and product creation. The study utilized a quantitative research design, employing questionnaires distributed to 181 students and 24 teachers from selected high schools. Statistical tools, including Pearson's correlation and ANOVA, were used to determine the relationships and differences among the variables. The findings revealed a significant relationship between the teaching strategies of TLE teachers and the students' learning performance. However, no significant differences were found when the teaching strategies were grouped according to teachers' demographic profiles. Recommendations for enhancing TLE teaching strategies and addressing challenges like inadequate training and internet access were provided, emphasizing the need for continuous professional development and support for teachers.

Keywords: *teaching strategies, technology and livelihood education (tle), new normal education, learning performance, senior high school*

Introduction

What is new normal? Before knowing its meaning, let's first recall our life before the pandemic. Our life was normal before like going to the mall with our family, eating in restaurants, going to school meeting our friends and relatives and travelling to places we love. These are just the things we did before which we really missed. But when the Covid-19 came, our lives have changed even our educational system. Many sectors were much affected by the pandemic. Among these are the Learning and Education, Economics and Business, Health and Wellness, Science and Technology, Spirituality and Religion, Infrastructure and Resources (PressReader.com - Your favorite newspapers and magazines., 2021).

The COVID-19 pandemic has profoundly disrupted our education system, changing what classrooms and learning look like on a day-to-day basis. Educators are navigating a constantly shifting landscape, with the health of students, teachers, and the community at large at stake. The current COVID-19 pandemic has disrupted the education system, creating a new environment for learners, parents, and teachers alike. The normal school setup—face-to-face interactions with students and gatherings with fellow teachers—is something we can't have at the moment.

As educators gear with the "new normal" set-up in this Covid-19 pandemic, this is the appropriate time to use our discomfort to forge a new paradigm. This is now the time for schools to ensure that teachers do not just translate what they do inside the classroom into their online teachings. Teacher-driven discussions and lengthy lectures are no longer norms in this situation. In online learning, students are almost always divided on their focus—that of their classes and their attention to their mobile gadgets (Gamiao, 2020).

While home school and online learning are among the proposed solutions, access to technology and the internet, especially in remote areas, remains a challenge. In the public education system, it is not uncommon for students to lack internet connection at home or be unable to afford to "load" their phones regularly. Some do not even have computers or phones at all. As this is a reality that many schools, students, and communities will face, the Department of Education (DepEd) proposes a combination of different learning modalities and will be using the Blended Learning approach.

While home school and online learning are among the proposed solutions, access to technology and the internet, especially in remote areas, remains a challenge. In the public education system, it is not uncommon for students to lack internet connection at home or be unable to afford to "load" their phones regularly. Some do not even have computers or phones at all. As this is a reality that many schools, students, and communities will face, the DepEd proposes a combination of different learning modalities and will be using the Blended Learning approach (Jorge, 2020).

The TLE subject in K-12 curriculum aimed to equip the students with the necessary skills that will be acquired through training, and hands -on activities especially the Technical-Vocational courses. Since, we have no face-to-face classes, most of these training and activities will not be delivered. The major challenge in the field of TLE teachers is how can we upgrade the knowledge, necessary skills and services needed so that our students will become globally competitive. TLE is career oriented, the career path of the students. Although there are available materials in print and non-print media, still no one can deny the fact that "experience is the best teacher"

(Yabut, 2020).

According to Sen. Sonny Angara "Education is key for generations of Filipinos to become full-fledged, productive members of society." As for this statement, the challenge for TLE teachers is really getting closer. Blended learning will be offered to our students, which means we will need to call the support of our parents and guardians. The Department of Education is really determined to offer these changes in education because according to Sec. Leonor Briones "Education must continue".

Teaching strategies, also known as instructional strategies, are methods that teachers use to deliver course material in ways that keep students engaged and practicing different skill sets. An instructor may select different teaching strategies according to unit topic, grade level, class size, and classroom resources. Many kinds of instructional strategies are employed to achieve teaching and learning goals and support different kinds of students (Teaching Strategies, 2021).

The Department of Education (DepEd) emphasized that education will continue under a new normal set-up amid the Covid-19 pandemic. The DepEd various strategies and projects of schools and division offices to improve the quality of teaching and learning while ensuring the health and safety of the learners and teachers.

Educators must be open to being learners as well. This means having to "unlearn to learn," meaning unlearning old methodologies to make way for new ones that will prepare us for education's new normal. This is why we are proactive in attending the Department of Education's (DepEd) virtual trainings and upskilling programs. The DepEd's webinars enable us to learn strategies, techniques, methodologies, and approaches for online and modular teaching. They also hone our technological skills, encourage physical wellness, and provide emotional and mental health support (Razalan, 2020).

Discussion and sharing provide learners with opportunities to "react to the ideas, experience, insights, and knowledge of the teacher or of peer learners and to generate alternative way of thinking and feeling". Students can learn from peers and teachers to develop social skills and abilities, to organize their thoughts, and to develop rational arguments (Belino, 2015).

Institutions of higher learning across the nation are responding to political, economic, social and technological pressures to be more responsive to students' needs and more concerned about how well students are prepared to assume future societal roles. Faculty are already feeling the pressure to lecture less, to make learning environments more interactive, to integrate technology into the learning experience, and to use collaborative learning strategies when appropriate (Teaching Strategies, 2021).

A reflective teacher takes a positive approach to communicate with learners. A proactive approach to teaching considers learners to be active participants in the learning process and not passive receivers of knowledge. He/she is an information creator. He/she builds his / her sense based on prior knowledge and personal intent. Problem-solving requires the continuous adaptation of learning activities to the background, interests, and needs of the learners. To promote quality education, reflective teacher practices good reasoning, creativity, and versatility. Summing up, a reflective teacher is a constructive partner in the decision-making of wise teaching activities that have an effect on himself, the learners, and the classroom. Reflective instruction is a consistent and comprehensive analysis of one's instructional practices and issues to promote the development of self, students, and the system (Valdez, 2020).

In modern education systems learners are expected to possess an increased degree of autonomy and show initiative in learning processes, inspecting learning materials and understanding contents. An efficient growth of knowledge inside and outside of school is only possible if students have skills which initiate, guide and control the search for information and later on its processing and storage. In learning and teaching research those techniques are called learning strategies (Wegner, Minnaert and Strehlke, 2013).

To help senior high school students fit better into a university setting, new students are encouraged to engage in a positive transformation as a strategy. They are taught to focus on developing their emotional intelligence, creativity, understanding their own personalities, their strengths and weaknesses, and developing a long-term vision and mission. (The Star Online, 2020)

There is no teacher preparation program that could have prepared you for this. With the uncertainty around the 2021-2022 school year, it is perhaps even more important to ensure that teachers are prepared to take on the challenges that await them. We need to take a hard look at what we teach, how we teach it, and our own prevailing ideas about education.

Teaching Technology and Livelihood Education requires various knowledge and skill competencies to prepare the students for a better life. Teachers in this field are expected to have integrated information in teaching the subjects and its content. This requires competence both in subject matters and skills. The teachers are expected not only to be knowledgeable in its content but also to have dexterity of skills. But in actual situation, there seems to be a big gap between theory and practice (Elli & Ricafort, 2020).

Teaching strategies plays a central role in education because of its impact on students' performance. Previous reviews of teacher strategies have focused on individual variables and indicators. However, it is also important to understand the other variables on teaching strategies specifically for the Technology and Livelihood Education (TLE) because these highlight the context that the TLE teacher is a part of. Assessment is one of them, it reveals how well students have learned what we want them to learn while instruction ensures that they learned it. For this to occur, assessments, learning objectives, and instructional strategies need to be closely aligned so that they reinforce one another.

This issue on academic achievement is particularly true in the case of the Philippine basic education. In time of pandemic, students'

performance and capabilities was not fully reflected in the overall grade performance of the senior high school students. Results of the attendance and academic performance among public high schools all over the country had been declining. The question is: what more must be done and taken into greater account to be able to improve the academic performance of high school students in TLE in time of pandemics and new normal?

Therefore, it will be a significant endeavor to conduct a research study that would highlight teachers' teaching strategies as a predictor on the learning performance of the Senior High School students. Specifically, this study hoped to heighten the level of awareness on the best practices on teaching strategies of the TLE teachers in the Division of City Schools of Valenzuela.

Research Questions

This study aimed to determine the relationship between the teaching strategies of the Technology and Livelihood education (TLE) of teachers and the learning performance of the Senior High School students from the selected schools of Division of City Schools of Valenzuela. The study specifically sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
    1.1. Teachers
        1.1.1. Age;
        1.1.2. Gender;
        1.1.3. Civil Status; and,
        1.1.4. Highest Educational Attainment?
    1.2. Students
        1.2.1. Age; and
        1.2.2. Gender?
2. What is the extent of the teaching strategies of the TLE teachers in the new normal in terms of:
    2.1. Entrepreneurial;
    2.2. Contextualized;
    2.3. Experiential;
    2.4. Constructivist; and,
    2.5. Authentic?
3. What is the level of the learning performance of the students in the new normal in terms of:
    3.1. Deep Understanding;
    3.2. Reasoning;
    3.3. Skills; and,
    3.4. Products?
4. Is there a significant relationship between the teaching strategies of the TLE teachers and the learning performance of the students?
5. Is there a significant difference on the teaching strategies of the TLE teachers when grouped according to their demographic profile?
6. Is there a significant difference in the teaching strategies of the TLE teachers as assessed by the two (2) groups of respondents?
7. What are the problems encountered by the teacher respondents in relation to their teaching strategies in the new normal?
8. What are the suggested solutions to the problems encountered by the teacher respondents in relation to their teaching strategies in the new normal?

Methodology

Research Design

The researcher made use of the quantitative correlation method of research with survey as the main activity answering the questions in connection with the relationship between the teaching strategies of the Technology and Livelihood Education (TLE) of teachers and the learning performance of the Senior High School students from the selected schools of Division of City Schools of Valenzuela.

The correlation research aimed to describe the nature of a situation as it exists at the time of study, and to explore the causes of the phenomenon under analysis. It described the survey method as involving the gathering of data in order to test hypotheses or to answer question on the current status of the subject of the study. It determines the ways things are and measures what already exist.

Respondents

The respondents were the one hundred eighty-one (181) Senior High School students and thirty (30) teachers from selected high schools from the Division of City Schools of Valenzuela. The following schools, Valenzuela City School of Mathematics and Science, Parada High School, Dalandanan National High School, Caruhatan National High School, and General Tiburcio De Leon National High School were considered because of accessibility proximity and the presence of associates teaching from the mentioned schools. The student-respondents of this study was based on the computation of sampling through the application Slovin formula with 0.07 margin of error.

Table 1. *Respondents of the Study*

	Schools	*Population*	*Sample*	*Teachers*
1.	Valenzuela City School of Mathematics and Science	231	25	4
2.	Dalandanan National High School	396	43	12
3.	Caruhatan National High School	214	23	8
4.	Gen. Tiburcio De Leon National High School	824	90	6
	Total	1665	181	30

The purposive sampling method is a sampling technique in which researcher relies on his or her own judgment when choosing members of population to participate in the study. Purposive sampling is a non-probability sampling method and it occurs when "elements selected for the sample are chosen by the judgment of the researcher. Researchers often believe that they can obtain a representative sample by using a sound judgment, which will result in saving time and money".

The study was conducted on the academic year 2021-2022 in the Division of City Schools of Valenzuela, the researcher used a questionnaire answered by the selected Technology and Livelihood education (TLE) teachers.

Instrument

In this study, the researcher used a self-made questionnaire. The instruments helped to determine the extent of the teaching strategies of the Technology and Livelihood education (TLE) of teachers and the level of learning performance of the Senior High School students. There was one questionnaire set for the following: (1) teaching strategies of the Technology and Livelihood education (TLE) of teachers; (2) Level of learning performance of the Senior High School students; (3) problems encountered by the respondents' in relation to their teaching strategies/practices during the new normal; and, (4) suggested solutions to the problems encountered by the respondents, in relation to their teaching strategies/practices during the new normal.

The researcher used a self-made questionnaire. The instruments helped to determine the extent of the teaching strategies of the Technology and Livelihood Education (TLE) of teachers and the level of learning performance of the Senior High School students. The questionnaire was validated through a dry-run. The result of the dry-run was used as basis for its improvement and refinement. The instruments were validated by the statistician for reliability and by the researcher's adviser and other experts. Substantial copies were then reproduce for the target number of respondents through google forms.

Procedure

Letter of request for the permission to conduct a research was sent to the Schools Division Superintendent of the Division of Valenzuela City. Another letter request was given to the principals of the four schools, the letter content included the persons involved in the study, the objectives of the study and the benefit of the institution and the respondents gained from the research. The Dean of the Graduate Studies, and the research adviser endorsed the letter.

Data Analysis

Percentage (%) was used to present the demographic profile of the respondents in terms age, sex, civil status, and highest educational attainment.

Weighted Mean utilized to determine the assessment of the extent of the teaching strategies of the TLE teachers and the level of the learning performance of the students in the new normal. This is computed by adding all the weights per item and dividing the sum by the number of items. The overall weighted mean is computed by adding all the products in multiplying the frequency to the corresponding weights and dividing the sum by the total number of respondents.

Chi-square test was used to attempt in finding out the significant relationship between the significant relationship between the teaching strategies of the TLE teachers and their demographic profiles.

Pearson-Product Moment Correlation was used to determine if there is a significant relationship between the teaching strategies of the Technology and Livelihood education (TLE) of teachers and the learning performance of the Senior High School students from the selected schools of Division of City Schools of Valenzuela.

Results and Discussion

This section presented, analyzed and interpreted the results of the study. The findings of the study were organized in six parts, based on the problems posed in Chapter 1.

The first part described the profiles of the teacher respondents in terms of age, sex, civil status, and highest educational attainment. In terms of student-respondents it also described their profiles in terms of age and sex. Part two is an assessment of the extent of the teaching strategies of the TLE teachers in the new normal in terms of the following: Entrepreneurial, Contextualized, Experiential, Constructivist, and Authentic. The third part determined the level of the learning performance of the students in the new normal in terms of Deep Understanding, Reasoning, Skills, and Products. Part four differentiated the teaching strategies of the TLE teachers according to their demographic profiles. The fifth part of this chapter evaluated the relationship between the teaching strategies of the

TLE teachers and the learning performance of the students. Finally, part six determined difference in the teaching strategies of the TLE teachers as rated by the students and the TLE teachers themselves.

Question No.1 What is the profile of the respondents in terms of: Teachers, Age, Gender,Civil Status, and, Highest Educational Attainment? Students, Age, and Gender?

Table 1.1.1. *Distribution of Teacher-Respondents According to Age*

Indicators	*Frequency*	*Percentage*	*Rank*
30 & below	7	23.33%	2
31 – 40	12	40.00%	1
41 – 50	6	20.00%	3
51 & above	5	16.67%	4
Total	30	100%	

The table 1.1.1 exhibited the distribution of the teacher-respondents' profile in terms of age. The 31-40 years old group dominated the distribution by sharing twelve (12) respondents or 40.00% of the total research participants. It was followed by the age bracket of 30 and below which have seven (7) teachers or 23.33% of the total distribution. Third from the list was the age group of 41-50 years old group with six (6) or 20.00% teachers' respondents. The group of 51-above years old has a share of five (5) participants out of one thirty total respondents or 16.67% of the distribution.

Table 1.1.2. *Distribution of Teacher-Respondents According to Gender*

Indicators	*Frequency*	*Percentage*	*Rank*
Female	18	60.00%	1
Male	12	40.00%	2
Total	30	100%	

The table 1.1.2 exhibited the distribution of the teacher-respondents' profile in terms of gender. The female dominated the distribution by sharing eighteen (18) or 60.00% of the total research participants. It was followed by twelve (12) or 40.00%.

Table 1.1.3. *Distribution of Teacher-Respondents According to Civil Status*

Indicators	*Frequency*	*Percentage*	*Rank*
Single	6	20.00%	2
Married	23	76.67%	1
Widowed/Legally Separated	1	3.33%	3
Total	30	100%	

The table 1.1.3 exhibited the distribution of the teacher-respondents' profile in terms of civil status. Teachers who are married dominated the distribution by sharing twenty-three (23) or 76.67% of the total research participants. It was followed by single which have six (6) teachers or 20.00% of the total distribution. Third from widowed/Legally separated with one (1) or 3.33% teachers' respondents.

Table 1.1.4. *Distribution of Teacher-Respondents According to Highest Educational Attainment*

Indicators	*Frequency*	*Percentage*	*Rank*
Bachelor Degree	10	33.33%	2
With MA/MS Units	15	50.00%	1
MA/MS Degree	5	16.67%	3
Total	30	100%	

The table 1.1.4 exhibited the distribution of the teachers-respondents' profile in terms of Highest Educational attainment. Teachers with MA/MS Degree dominated the distribution by sharing fifteen (15) or 50.00% of the total research participants. It was followed by the Bachelor Degree which have ten (10) teachers or 33.33% of the total distribution. Third from the list was the MA/MS Degree with five (5) or 16.67% teachers' respondents. For the fourth place teachers with PhD/EdD units and PhD/EdD Degree tied with zero (0) respondents or 0.00% of the distribution.

The table 1.2.1 exhibited the distribution of the students-respondents' profile in terms of age. The 18-19 years old group dominated the distribution by sharing seventy-six (76) or 41.08% of the total research participants. It was followed by the age bracket of 16 – 17 which have seventy – three (73) students or 39.46% of the total distribution. Third from the list was the age group of 20 and above years old group with thirty - six (36) or 19.46% students' respondents.

Table 1.2.1. *Distribution of Student-Respondents According to Age*

Indicators	*Frequency*	*Percentage*	*Rank*
16 - 17	73	39.46%	2
18 - 19	76	41.08%	1
20 & above	36	19.46%	3

Total	185	100%

The table 1.2.2 exhibited the distribution of the students-respondents' profile in terms of gender. Female students dominated the distribution by sharing one hundred fifteen (115) or 62.16% of the total research participants. It was followed by the male students with seventy (70) students or 37.84% of the total distribution.

Table 1.2.2. *Distribution of Student-Respondents According to Gender*

Indicators	*Frequency*	*Percentage*	*Rank*
Female	115	62.16%	1
Male	70	37.84%	2
Total	185	100%	

Question No. 2 What is the extent of the teaching strategies of the TLE teachers in the new normal in terms of: entrepreneurial, contextualized, experiential, constructivist, and, authentic?

Table 2.1. *Teaching Strategies of TLE Teachers in the New Normal As Assessed by the Respondents In Terms of Entrepreneurial*

Indicators	*Teachers*			*Students*			*Mean Difference*
	WM	VI	R	WM	VI	R	
1. Introduce the students on business concept so as to develop their business sense and open their mind on business opportunities.	4.33	HP	10	4.37	HP	5.5	0.04
2. Equip the students with knowledge on solving business problems and turned problems into opportunities.	4.37	HP	9	4.26	HP	10	0.11
3. Develop the students self-confidence and resiliency to prepare them on facing problems, risks and even failure.	4.50	HP	6.5	4.43	HP	1	0.07
4. Inculcate the spirit of hard work to the students to lead them to give their best shot on every endeavors, projects, and products.	4.60	HP	3.5	4.38	HP	4	0.22
5. Provide the students with basic knowledge on costing, pricing, purchasing, profiting and resourcing of materials and/or ingredients to prepare them for a business opportunity.	4.40	HP	8	4.42	HP	2.5	0.02
6. Develop their skills on baking/masonry/electrical/electronics to uplift their confidence on their work output.	4.50	HP	6.5	4.27	HP	9	0.23
7. Inspire the students to be creative so as to maximize available materials and able to find ways on resolving missing ingredients and/or absence of materials	4.60	HP	3.5	4.35	HP	7	0.25
8. Develop students' understanding on Technological and Livelihood Education concepts.	4.77	HP	1	4.42	HP	2.5	0.35
9. Motivate students to explore business opportunities based on their TLE learnings.	4.73	HP	2	4.37	HP	5.5	0.36
10. Prepare students on the actual world of business by providing them real training exercises even in the new normal	4.57	HP	5	4.31	HP	8	0.26
Average Weighted Mean	4.54	HP		4.36	HP		0.18

Legend: 4.20-5.00, Highly Practiced (HP); 3.40-4.19, Practiced (P); 2.60-3.39, Moderately Practiced (MP); 1.80-2.59, Less Practiced (LP); 1.00-1.79, Not Practiced (NP); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

The assessment of teaching strategies of TLE teachers in new normal in terms of entrepreneurial is presented in Table 2.1, which was computed with 4.54 weighted mean for teacher-respondents, indicating that it is occasionally practiced. Ranked first was indicator number 8, "Develop students' understanding on Technological and Livelihood Education concepts," with 4.77 mean score from the respondents. It was followed by indicator number 9, "Motivate students to explore business opportunities based on their TLE learnings", for a second place with 4.73 mean score. Positioned at third spot was indicator number 4, "Inculcate the spirit of hard work to the students to lead them to give their best shot on every endeavors, projects, and products", and indicator number 7, "Inspire the students to be creative so as to maximize available materials and able to find ways on resolving missing ingredients and/or absence of materials," which received 4.35 weighted grade from the respondents. At the fifth is indicator number 10, "Prepare students on the actual world of business by providing them real training exercises even in the new normal", which gained 4.57 average score. Tied at sixth and seventh positions are indicator number 3, "Develop the students' self-confidence and resiliency to prepare them on facing problems, risks and even failure", and indicator number 6, "Develop their skills on baking/masonry/electrical/electronics to uplift their confidence on their work output", which has a 4.50 weighted mean. Indicator number 5, "Provide the students with basic knowledge on costing, pricing, purchasing, profiting and resourcing of materials and/or ingredients to prepare them for a business opportunity," was placed at eighth spot with 4.40 average points. At ninth spot was indicator number 2, "Equip the students with knowledge on solving business problems and turned problems into opportunities," was assessed with 4.37 mean grade. Completing the list, indicator number 1, "Introduce the students on business concept so as to develop their business sense and open their mind on business opportunities," accumulating 4.43 average points.

Table 2.1 also illustrated the assessment of teaching strategies of TLE teachers in new normal in terms of entrepreneurial as assessed by student-respondents. Topping the list of indicators was indicator number 3, "Develop the students' self-confidence and resiliency

to prepare them on facing problems, risks and even failure," which gained 4.43 weighted mean from the students. Indicator number 5, "Provide the students with basic knowledge on costing, pricing, purchasing, profiting and resourcing of materials and/or ingredients to prepare them for a business opportunity," and indicator number 8, "Develop students' understanding on Technological and Livelihood Education concepts," tied at the second and third spot with an average score of 4.42. At the fourth is indicator number 4 itself, "Inculcate the spirit of hard work to the students to lead them to give their best shot on every endeavors, projects, and products," which gained 4.38 average score. It was closely followed by indicator number 1, "Introduce the students on business concept so as to develop their business sense and open their mind on business opportunities," and indicator number 9, "Motivate students to explore business opportunities based on their TLE learnings," with 4.37 weighted score. Indicator number 7, "Inspire the students to be creative so as to maximize available materials and able to find ways on resolving missing ingredients and/or absence of materials," was placed on the seventh rank itself with 4.35 weighted mean. It is followed by indicator number 10, "Prepare students on the actual world of business by providing them real training exercises even in the new normal," in the eight spot accumulating 4.31 mean grade. Indicator number 6, "Develop their skills on baking/masonry/electrical/electronics to uplift their confidence on their work output," was at ninth spot with an average score of 4.27 while indicator number 2, "Equip the students with knowledge on solving business problems and turned problems into opportunities," placed at the last rank with an accumulated grade point of 4.26 from the respondents.

Table 2.2. *Teaching Strategies of TLE Teachers in the New Normal As Assessed by the Respondents In Terms of Contextualized*

Indicators	*Teachers*			*Students*			*Mean Difference*
	WM	*VI*	*R*	*WM*	*VI*	*R*	
1. Consider the students with different racial and ethnic origin to serve as a source of first-hand information on the topic related to their culture	4.53	HP	8	3.95	P	9	0.58
2. Consider students' diversity in bringing their different point of view and varied approaches to the learning process	4.47	HP	9	4.05	P	8	0.42
3. Encouraged students to share their personal experiences and background to interact and collaborate with their classmates during the group activity	4.67	HP	2	4.34	HP	2	0.33
4. Motivate learners to perform independently about proper maintenance of electrical tools and equipment, kitchen wares and utensils, computer accessories and the like	4.67	HP	2	4.31	HP	5	0.36
5. Learners were asked to internalize the health and safety procedures through safety measures	4.67	HP	2	4.41	HP	1	0.26
6. Require the students to prepare a sketch and layout of their own kitchen at home, electrical wiring diagram, or computer specifications design	4.43	HP	10	3.94	P	10	0.49
7. Teach learners to use appropriate tools, utensils and the likes, for the job required	4.63	HP	4.5	4.33	HP	3	0.3
8. Teach learners to perform correct methods of calculations to get accuracy on measurement	4.60	HP	6.5	4.29	HP	6	0.31
9. Perform correct methods of calculations to get accuracy of measurement	4.63	HP	4.5	4.32	HP	4	0.31
10. Take into account students' prior knowledge when planning class program for TLE lessons	4.60	HP	6.5	4.21	HP	7	0.39
Average Weighted Mean	4.59	HP		4.22	HP		0.37

Legend: 4.20-5.00, Highly Practiced (HP); 3.40-4.19, Practiced (P); 2.60-3.39, Moderately Practiced (MP); 1.80-2.59, Less Practiced (LP); 1.00-1.79, Not Practiced (NP); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

Table 2.2 displayed teaching strategies of TLE teachers in new normal in terms of contextualized. Indicator number 3, "Encouraged students to share their personal experiences and background to interact and collaborate with their classmates during the group activity", indicator number 4, "Motivate learners to perform independently about proper maintenance of electrical tools and equipment, kitchen wares and utensils, computer accessories and the like," and indicator number 5, "Learners were asked to internalize the health and safety procedures through safety measures," triple tied on the topped of the list with a computed value of 4.67. It was followed by indicator number 7, "Teach learners to use appropriate tools, utensils and the likes, for the job required", and indicator number 9, "Perform correct methods of calculations to get accuracy of measurement," as tied on the fourth and fifth position with 4.63 mean grade. Tied on sixth and seventh was indicator number 8, "Teach learners to perform correct methods of calculations to get accuracy on measurement", and indicator number 10, "Take into account students' prior knowledge when planning class program for TLE lessons," with mean grade of 4.21 from the teachers. Placed at eighth position was indicator number 1, "Consider the students with different racial and ethnic origin to serve as a source of first-hand information on the topic related to their culture", with closed 4.53 mean score. It is closely followed by the ninth rank which is indicator number 2, "Consider students' diversity in bringing their different point of view and varied approaches to the learning process", with collected 4.47 average score from the respondents. Lastly, completing the list was indicator number 6, "Require the students to prepare a sketch and layout of their own kitchen at home, electrical wiring diagram, or computer specifications design", gathered an average score of 4.43.

Table 2.2 also revealed teaching strategies of TLE teachers in new normal in terms of contextualized. Based from the students' feedback, all indicators under the mentioned variable gathered 4.42 weighted mean. Topped the survey, indicator number 5, "Learners

were asked to internalize the health and safety procedures through safety measures", gained a weighted mean of 4.41. This is followed by indicator 3, "Encouraged students to share their personal experiences and background to interact and collaborate with their classmates during the group activity", placing at second spot with average point of 4.34. Indicator number 7, "Teach learners to use appropriate tools, utensils and the likes, for the job required", gathered a weighted mean of 4.33 for third spot. It was closely followed by Indicator number 9, "Perform correct methods of calculations to get accuracy of measurement", which placed fourth spot with 4.32 mean score from the students while closely followed by indicator number 4, "Motivate learners to perform independently about proper maintenance of electrical tools and equipment, kitchen wares and utensils, computer accessories and the like", at fifth spot with 4.31 mean score. Positioned at sixth position was indicator number 8, "Teach learners to perform correct methods of calculations to get accuracy on measurement", with 4.29 weighted mean. For seventh place, indicator number 10, "Take into account students' prior knowledge when planning class program for TLE lessons," gathered 4.21 mean grade. Indicator number 2, "Consider students' diversity in bringing their different point of view and varied approaches to the learning process," placed eighth with 4.05 average score. For the ninth place, indicator number 1, "Consider the students with different racial and ethnic origin to serve as a source of first-hand information on the topic related to their culture," gained 3.95 weighted mean. Completing the indicators was indicator number 6, "Require the students to prepare a sketch and layout of their own kitchen at home, electrical wiring diagram, or computer specifications design", was good for the tenth and last spot with 3.94 mean score based from the response of the student-respondents.

Table 2.3. *Teaching Strategies of TLE Teachers in the New Normal As Assessed by the Respondents In Terms of Experiential*

Indicators	*Teachers*			*Students*			*Mean*
	WM	*VI*	*R*	*WM*	*VI*	*R*	*Difference*
1. Let the students learn by doing mostly in workplace like kitchen laboratory, welding/electronic facilities, and/or computer laboratory.	4.27	HP	10	4.30	HP	6	0.03
2. Wearing personal protective equipment and considering Japanese 5 S Productivity Philosophy	4.63	HP	4	4.45	HP	1	0.18
3. Listen and ask questions to the students in order to gauge their level of understanding	4.70	HP	2	4.42	HP	2	0.28
4. Utilize video lessons and activities	4.73	HP	1	4.41	HP	3	0.32
5. Expose the class to the use of investigative strategies	4.40	HP	8	4.28	HP	8	0.12
6. Use indigenous materials in teaching TLE	4.57	HP	5	4.12	P	10	0.45
7. Give students hands-on experience in choosing equipment/tools/utensils appropriately	4.67	HP	3	4.34	HP	4	0.33
8. Develop the students' motor skills in using scientific, industrial tools or creative media	4.37	HP	9	4.15	P	9	0.22
9. Enable students to design and create objects or equipment in different physical media	4.43	HP	7	4.29	HP	7	0.14
10. Applied a combination of synchronous tools such as web conferencing, asynchronous tools such as discussion forms and/or social media for group work, e-portfolio's and multimedia for reporting and remote labs for experimental works	4.53	HP	6	4.31	HP	5	0.22
Average Weighted Mean	4.53	HP		4.31	HP		0.22

Legend: 4.20-5.00, Highly Practiced (HP); 3.40-4.19, Practiced (P); 2.60-3.39, Moderately Practiced (MP); 1.80-2.59, Less Practiced (LP); 1.00-1.79, Not Practiced (NP); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

The teaching strategies of TLE teachers in new normal in terms of experiential was presented in Table 2.3, which was computed with 4.53 weighted mean from teacher-respondents and 4.31 for student-respondents. Ranked first was indicator number 4, "Utilize video lessons and activities", with 4.73 mean score from the teacher-respondents. It was followed by indicator number 3, "Listen and ask questions to the students in order to gauge their level of understanding", for a second place with 4.70 mean score. Positioned at third spot was indicator number 7, "Give students hands-on experience in choosing equipment/tools/utensils appropriately", which received 4.67 weighted grade from the respondents. At the fourth is indicator number 2, "Wearing personal protective equipment and considering Japanese 5 S Productivity Philosophy", which gained 4.63 average score. The fifth rank is indicator number 6, "Use indigenous materials in teaching TLE," which has a 4.57 weighted mean. Indicator number 10, "Applied a combination of synchronous tools such as web conferencing, asynchronous tools such as discussion forms and/or social media for group work, e-portfolio's and multimedia for reporting and remote labs for experimental works", gathered 4.53 mean grade for the sixth position. Indicator number 9, "Enable students to design and create objects or equipment in different physical media", was placed at seventh spot with 4.43 average points. At eighth spot was indicator number 5, "Expose the class to the use of investigative strategies," was assessed with 4.40 mean grade. For ninth place was indicator number 8, "Develop the students' motor skills in using scientific, industrial tools or creative media," with a mean grade of 4.37. Completing the list, indicator number 1, "Let the students learn by doing mostly in workplace like kitchen laboratory, welding/electronic facilities, and/or computer laboratory", accumulating 4.27 average points.

Table 2.3 also illustrated the teaching strategies of TLE teachers in new normal in terms of experiential as assessed by student-respondents. Topping the list of indicators was indicator number 2, "Wearing personal protective equipment and considering Japanese 5 S Productivity Philosophy", which gained 4.45 weighted mean from the students. Indicator number 3, "Listen and ask questions to

the students in order to gauge their level of understanding", was at second spot with an average score of 4.42. At the third is indicator number 4, "Utilize video lessons and activities", which gained 4.41 average score. It was closely followed by indicator number 7, "Give students hands-on experience in choosing equipment/tools/utensils appropriately", with 4.34 weighted score for the fourth spot. Indicator number 10, "Applied a combination of synchronous tools such as web conferencing, asynchronous tools such as discussion forms and/or social media for group work, e-portfolio's and multimedia for reporting and remote labs for experimental works", was placed on the fifth rank with 4.31 weighted mean. It is followed by indicator number 1, "Let the students learn by doing mostly in workplace like kitchen laboratory, welding/electronic facilities, and/or computer laboratory", in the sixth spot accumulating 4.30 mean grade. Indicator number 9, "Enable students to design and create objects or equipment in different physical media", was at seventh spot with an average score of 4.29 while closely followed by indicator number 5, "Expose the class to the use of investigative strategies", placed at eighth spot with computed 4.28 mean score. Placed at ninth spot was indicator number 8, "Develop the students' motor skills in using scientific, industrial tools or creative media" with mean score of 4.15. Lastly, indicator number 6, "Use indigenous materials in teaching TLE", placed at the last rank with an accumulated grade point of 4.12 from the respondents.

Table 2.4. *Teaching Strategies of TLE Teachers in the New Normal As Assessed by the Respondent In Terms of Constructivist*

Indicators	*Teachers*			*Students*			*Mean Difference*
	WM	*VI*	*R*	*WM*	*VI*	*R*	
1. Motivate the students to create scenarios of their learning experiences by writing reflective journals or creating personal blogs through digital portfolios (cooking books, recipe blogs, food plating videos, demo videos).	4.37	HP	7	4.25	HP	5	0.12
2. Provide real world case based learning environments rather than pre-determined instructional events	4.33	HP	9	4.18	P	6	0.15
3. Use technology to come up with something new and unique through product innovation considering proper nutrition and availability of ingredients or raw materials needed for production	4.37	HP	7	4.12	P	9	0.25
4. Allow students to work in group	4.57	HP	4	4.31	HP	2	0.26
5. Motivate the students to use instructional tool as a primary source rather than a textbook	4.53	HP	5	4.29	HP	3.5	0.24
6. Allow the students or the team to do the task entirely on their own, the teacher's provide help and assistance as needed	4.60	HP	2.5	4.34	HP	1	0.26
7. Encourage students to use appropriate local materials as substitute for listed materials that are not available	4.67	HP	1	4.17	P	7	0.5
8. Diagnose and troubleshoot computer system. Able to diagnose and configure computer system and network. Able to adjust flavors on baking and cooking. Able to detect wiring problems	4.20	HP	10	4.02	P	10	0.18
9. The students relate what they have learned in TLE class to their life outside of school	4.60	HP	2.5	4.29	HP	3.5	0.31
10. The students able to work at the speed which suits their ability and adjust depending on the activity needs	4.37	HP	7	4.16	P	8	0.21
Average Weighted Mean	4.46	HP		4.21	HP		0.25

Legend: 4.20-5.00, Highly Practiced (HP); 3.40-4.19, Practiced (P); 2.60-3.39, Moderately Practiced (MP); 1.80-2.59, Less Practiced (LP); 1.00-1.79, Not Practiced (NP); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

The assessment of teaching strategies of TLE teachers in new normal in terms of constructivist is presented in Table 2.4, which was computed with 4.46 weighted mean for teacher-respondents. Ranked first was indicator number 7, " Encourage students to use appropriate local materials as substitute for listed materials that are not available," with 4.67 mean score from the respondents. It was followed by indicator number 6, "Allow the students or the team to do the task entirely on their own, the teacher's provide help and assistance as needed", and indicator number 9, "The students relate what they have learned in TLE class to their life outside of school," tied for second and third place with 4.60 mean score. Ranked fourth was indicator number 4 itself, "Allow students to work in group", which received 4.57 weighted grade from the respondents. At the fifth is indicator number 5 itself, "Motivate the students to use instructional tool as a primary source rather than a textbook", which gained 4.53 average score. Triple tied on the list at sixth, seventh and eight positions are indicator number 1, "Motivate the students to create scenarios of their learning experiences by writing reflective journals or creating personal blogs through digital portfolios (cooking books, recipe blogs, food plating videos, demo videos)", indicator number 3, "Use technology to come up with something new and unique through product innovation considering proper nutrition and availability of ingredients or raw materials needed for production", and indicator number 10, "The students able to work at the speed which suits their ability and adjust depending on the activity needs", which has a 4.37 weighted mean. Indicator number 2, "Provide real world case based learning environments rather than pre-determined instructional events," was placed at ninth spot with 4.33 average points. Completing the list, indicator number 8, "Diagnose and troubleshoot computer system. Able to diagnose and configure computer system and network. Able to adjust flavors on baking and cooking. Able to detect wiring problems," accumulating 4.20 average points.

Table 2.4 also illustrated the assessment of teaching strategies of TLE teachers in new normal in terms of constructivist as assessed by

student-respondents. Topping the list of indicators was indicator number 6, "Allow the students or the team to do the task entirely on their own, the teacher's provide help and assistance as needed," which gained 4.34 weighted mean from the students. Indicator number 4, "Allow students to work in group," was placed in the second spot with an average score of 4.31. Tied at the third and fourth placed was indicator number 5, "Motivate the students to use instructional tool as a primary source rather than a textbook," and indicator number 9, "The students relate what they have learned in TLE class to their life outside of school," which gained 4.29 average score. It was closely followed by indicator number 1, " Motivate the students to create scenarios of their learning experiences by writing reflective journals or creating personal blogs through digital portfolios (cooking books, recipe blogs, food plating videos, demo videos)," with 4.25 weighted score for fifth spot. Indicator number 2, "Provide real world case based learning environments rather than pre-determined instructional events," was placed on the sixth rank with 4.18 weighted mean. It is followed by indicator number 7, "Encourage students to use appropriate local materials as substitute for listed materials that are not available," in the seventh spot itself accumulating 4.17 mean grade. Indicator number 10, "The students able to work at the speed which suits their ability and adjust depending on the activity needs," was at eighth spot with an average score of 4.16 while indicator number 3, "Use technology to come up with something new and unique through product innovation considering proper nutrition and availability of ingredients or raw materials needed for production," placed at the ninth rank with an accumulated grade point of 4.12 from the respondents. Lastly, completing the list was indicator number 8, "Diagnose and troubleshoot computer system. Able to diagnose and configure computer system and network. Able to adjust flavors on baking and cooking. Able to detect wiring problems", with an average score of 4.02.

Table 2.5. *Teaching Strategies of TLE Teachers in the New Normal As Assessed by the Respondents In Terms of Authentic*

Indicators	*Teachers*			*Students*			*Mean Difference*
	WM	*VI*	*R*	*WM*	*VI*	*R*	
1. Students' tasks focus on contextualizing rather than abstracting	4.50	HP	6	4.24	HP	6.5	0.26
2. Students rate their works by comparing their output with the evaluation sample or based on the rubric for scoring	4.47	HP	7	4.24	HP	6.5	0.23
3. Relate the concept of TLE to other disciplines like Science, Mathematics and Languages	4.53	HP	5	4.18	P	10	0.35
4. Relate TLE to current technology	4.67	HP	1	4.41	HP	1	0.26
5. Guide students in applying technology in launching business/livelihood program	4.40	HP	8.5	4.38	HP	2	0.02
6. Allow the use of calculator/computers/LCD projector for drills and practices and to collect and analyze data	4.37	HP	10	4.19	P	9	0.18
7. Encourage students to practice working if they have the materials/equipment/tools/utensils at home	4.63	HP	2	4.34	HP	4	0.29
8. Develop skills and confidence by encouraging them to present demo presentation	4.57	HP	3.5	4.31	HP	5	0.26
9. Engage in a role play of a particular TLE activity. Described what might happen if one element of the activity missing. Be able to present solution	4.57	HP	3.5	4.22	HP	8	0.35
10.Develop a business/marketing/ sales plan for an imaginary or real company in a student area of interest	4.40	HP	8.5	4.35	HP	3	0.05
Average Weighted Mean	4.51	HP		4.29	HP		0.22

Legend: 4.20-5.00, Highly Practiced (HP); 3.40-4.19, Practiced (P); 2.60-3.39, Moderately Practiced (MP); 1.80-2.59, Less Practiced (LP); 1.00-1.79, Not Practiced (NP); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

Table 2.5 displayed teaching strategies of TLE teachers in new normal in terms of authentic. Indicator number 4, "Relate TLE to current technology", topped of the list with a computed value of 4.67. It was followed by indicator number 7, "Encourage students to practice working if they have the materials/equipment/tools/utensils at home", and placed second with 4.63 mean grade. Tied on third and fourth spot was indicator number 8, "Develop skills and confidence by encouraging them to present demo presentation", and indicator number 9, "Engage in a role play of a particular TLE activity. Described what might happen if one element of the activity missing. Be able to present solution," with mean grade of 4.57 from the teachers. Placed at fifth position was indicator number 3, "Relate the concept of TLE to other disciplines like Science, Mathematics and Languages", with closed 4.53 mean score. It is closely followed by the sixth rank which is indicator number 1, "Students' tasks focus on contextualizing rather than abstracting", with collected 4.50 average score from the respondents. Followed by indicator number 2, "Students rate their works by comparing their output with the evaluation sample or based on the rubric for scoring," which gained 4.47 for the seventh spot. Tied on eighth and ninth spot was indicator number 5, "Guide students in applying technology in launching business/livelihood program," and indicator number 10, "Develop a business/marketing/ sales plan for an imaginary or real company in a student area of interest," with 4.40 mean score. Lastly, completing the list was indicator number 6, "Allow the use of calculator/computers/LCD projector for drills and practices and to collect and analyze data", gathered an average score of 4.37.

Table 2.5 also revealed teaching strategies of TLE teachers in new normal in terms of authentic. Based from the students' feedback, all indicators under the mentioned variable gathered 4.29 weighted mean. Topped the survey, indicator number 4, "Relate TLE to current technology", gained a weighted mean of 4.41. This is followed by indicator 5, "Guide students in applying technology in launching

business/livelihood program", placing at second spot with average point of 4.38. Indicator number 10, "Develop a business/marketing/ sales plan for an imaginary or real company in a student area of interest", gathered a weighted mean of 4.35 for third spot. It was closely followed by Indicator number 7, "Encourage students to practice working if they have the materials/equipment/tools/utensils at home", which placed fourth spot with 4.34 mean score from the students while closely followed by indicator number 8, "Develop skills and confidence by encouraging them to present demo presentation", at fifth spot with 4.31 mean score. Tied in the position of sixth and seventh was indicator number 1, "Students' tasks focus on contextualizing rather than abstracting", and indicator number 2, "Students rate their works by comparing their output with the evaluation sample or based on the rubric for scoring", with 4.24 weighted mean. Indicator number 9, "Engage in a role play of a particular TLE activity. Described what might happen if one element of the activity missing. Be able to present solution," placed eighth with 4.22 average score. For the ninth place, indicator number 6, "Allow the use of calculator/computers/LCD projector for drills and practices and to collect and analyze data," gained 4.19 weighted mean. Completing the indicators was indicator number 3, "Relate the concept of TLE to other disciplines like Science, Mathematics and Languages", was good for the tenth and last spot with 4.18 mean score based from the response of the student-respondents.

Table 2.6. *Summary on Teaching Strategies of TLE Teachers in the New Normal As Assessed by the Respondents*

Indicators	*Teachers*			*Students*			*Mean Difference*
	AWM	*VI*	*R*	*AWM*	*VI*	*R*	
2.1. Entrepreneurial	4.54	HP	2	4.36	HP	1	0.18
2.2. Contextualized	4.59	HP	1	4.22	HP	4	0.37
2.3. Experiential	4.53	HP	3	4.31	HP	2	0.22
2.4. Constructivist	4.46	HP	5	4.21	HP	5	0.25
2.5. Authentic	4.51	HP	4	4.29	HP	3	0.22
Composite Weighted Mean	4.53	HP		4.28	HP		0.51

Legend: 4.20-5.00, Highly Practiced (HP); 3.40-4.19, Practiced (P); 2.60-3.39, Moderately Practiced (MP); 1.80-2.59, Less Practiced (LP); 1.00-1.79, Not Practiced (NP); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

Table 2.6 showed the summary on teaching strategies of TLE teachers in the new normal as assessed by the respondents. The teacher-respondents lean on contextualized and entrepreneurial based on their feedback with computed weighted mean of 4.59 and 4.54 respectively. Then, closely followed by experiential which was positioned at third with 4.53 mean score, and was followed by authentic with 4.51 mean rating. Lastly, it was constructivist with 4.46 average score. Finally, the teaching strategies of TLE teachers in the new normal gained a composite weighted mean of 3.77 from teacher-respondents.

On the other hand, table 2.6 also illustrated the summary on teaching strategies of TLE teachers in the new normal as assessed by the student-respondents. Topped on the list was entrepreneurial which gathered an average score of 4.36. Followed by experiential with 4.31 mean score while authentic was at the third spot with 4.29 weighted mean. Ranked fourth was contextualized with 4.22 average score and was closely followed by the last rank, constructivist, with 4.21 mean grade. Lastly, the teaching strategies of TLE teachers in the new normal had a composite weighted mean of 4.28.

Question No. 3 What is the level of the learning performance of the students in the new normal in terms of: deep understanding, reasoning, skills, and products?

The assessment of learning performance in the new normal in terms of deep understanding was presented in Table 3.1, which was computed with 4.39 weighted mean for respondents. Ranked first was indicator number 6, "The students able to apply their knowledge on cooking practices, tasting and plating," with 4.57 mean score from the respondents. It was followed by indicator number 3, "The students learned to identify the usage of different kitchen utensils and equipment", and indicator number 8, "The students able to create sweet and other dessert that can be a source of income," tied for second and third place with 4.50 mean score. Ranked fourth and fifth was indicator number 9, "The students able to make or prepare food from scratch", and indicator number 10, "The students understand the concepts of TLE lessons and manifest on their asynchronous activity through video presentation", which both received 4.40 weighted grade from the respondents.

At the sixth spot was indicator number 2, "The students learned the process of cooking viands and other foods through TLE", which gained 4.37 average score. Triple tied on the list at seventh, eight, and ninth positions are indicator number 1, "The students have a hands-on activities every week", indicator number 4, "The students learned to identify computer parts and accessories and understand their usage and functions", and indicator number 7, "The students able to adjust on actual problem situations like measurement adjustments during cooking activities and taste adjustments, wiring adjustments and computer manipulations", which has a 4.30 weighted mean.

Completing the list was indicator number 5, "The students recognize the hardware and understand the software," accumulating 4.23 average points.

Table 3.1. *Learning Performance of the Students in the New Normal As Assessed by the Respondents In Terms of Deep Understanding*

Indicators	*Frequency*					WM	VI	R
	5	*4*	*3*	*2*	*1*			

1. The students have a hands-on activities every week	15	11	3		1	4.30	O	8
2. The students learned the process of cooking viands and other foods through TLE	15	13	1		1	4.37	O	6
3. The students learned to identify the usage of different kitchen utensils and equipment	20	7	2		1	4.50	O	2.5
4. The students learned to identify computer parts and accessories and understand their usage and functions	17	7	5		1	4.30	O	8
5. The students recognize the hardware and understand the software	14	11	4		1	4.23	O	10
6. The students able to apply their knowledge on cooking practices, tasting and plating	20	9			1	4.57	O	1
7. The students able to adjust on actual problem situations like measurement adjustments during cooking activities and taste adjustments, wiring adjustments and computer manipulations	15	12	1	1	1	4.30	O	8
8. The students able to create sweet and other dessert that can be a source of income	20	8		1	1	4.50	O	2.5
9. The students able to make or prepare food from scratch	17	11		1	1	4.40	O	4.5
10. The students understand the concepts of TLE lessons and manifest on their asynchronous activity through video presentation	17	10	2		1	4.40	O	4.5
Average Weighted Mean						4.39	O	

Legend: 4.20-5.00, Outstanding (O); 3.40-4.19, Very Satisfactory (VS); 2.60-3.39, Satisfactory (S); 1.80-2.59, Fair (F); 1.00-1.79, Poor (P); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

Table 3.2. *Learning Performance of the Students in the New Normal As Assessed by the Respondents In Terms of Reasoning*

Indicators	*Frequency*					WM	VI	R
	5	*4*	*3*	*2*	*1*			
1. The students can express themselves and effectively reasoned out on some issues on TLE and during activity application	17	12			1	4.47	O	1.5
2. The students can set-up meetings with their groupmates and review their progress	12	15	2		1	4.23	O	9
3. The students can easily understand and interpret verbal questions from their TLE teachers	15	14	1			4.47	O	1.5
4. The students can set-up short term objectives in relation to TLE projects	14	15	1			4.43	O	3.5
5. The students can do brain storming for project planning	15	13	2			4.43	O	3.5
6. The students can directly inform their groupmates if there is too much careless on their working project	12	14	3		1	4.20	O	10
7. The students can establish foundation plan for an effective outcome of project proposal on TLE subject	13	15	2			4.37	O	6.5
8. The students can take responsibility for their tasks and defend their works or projects	14	13	3			4.37	O	6.5
9. The students can work with their TLE teams, express their thoughts for the development of their project even in the new normal	13	14	3			4.33	O	8
10. The students can express their thoughts and ideas based on information on hand through letters or memos, manifesting preparedness on formal transaction	15	12	3			4.40	O	5
Average Weighted Mean						4.37	O	

Legend: 4.20-5.00, Outstanding (O); 3.40-4.19, Very Satisfactory (VS); 2.60-3.39, Satisfactory (S); 1.80-2.59, Fair (F); 1.00-1.79, Poor (P); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

Table 3.2 displayed the assessment of learning performance in the new normal in terms of reasoning. Indicator number 1, "The students can express themselves and effectively reasoned out on some issues on TLE and during activity application", with indicator number 3, "The students can easily understand and interpret verbal questions from their TLE teachers," topped the list with computed value of 4.47. It was followed by indicator number 4, "The students can set-up short term objectives in relation to TLE projects", and indicator number 5, "The students can do brain storming for project planning ", tied on third and fourth place with 4.43 mean grade. At fifth spot was indicator number 10, "The students can express their thoughts and ideas based on information on hand through letters or memos, manifesting preparedness on formal transaction," with 4.40 gathered average score. Tied on sixth and seventh spot was indicator number 7, "The students can establish foundation plan for an effective outcome of project proposal on TLE subject", and indicator number 8, "The students can take responsibility for their tasks and defend their works or projects," with mean grade of 4.37 from the respondents. Placed at eighth position was indicator number 9, "The students can work with their TLE teams, express their thoughts for the development of their project even in the new normal", with closed 4.33 mean score. It was followed by the ninth rank which is indicator number 2, "The students can set-up meetings with their groupmates and review their progress", with collected 4.23 average score from the respondents.

Lastly, completing the list was indicator number 6, "The students can directly inform their groupmates if there is too much careless on their working project", gathered an average score of 4.20.

Table 3.3. *Learning Performance of the Students in the New Normal As Assessed by the Respondents In Terms of Skills*

Indicators	*Frequency*					WM	VI	R
	5	*4*	*3*	*2*	*1*			

1. Gain livelihood experience through training	21	8	1	4.67	O	1
2. Acquire working knowledge of the materials, tools, equipment used in the TLE subject	21	7	2	4.63	O	2
3. Understand the processes and products of production	18	9	3	4.50	O	7
4. Explore various business opportunities and make intelligent choice of entrepreneurial activity	18	10	2	4.53	O	5
5. Demonstrate knowledge and skills in selecting materials/ingredients and applying art principles in recycling, plating, cooking and the likes	18	10	2	4.53	O	5
6. Demonstrate managerial and manipulative skills on the principles, practice and techniques in growing crops	16	12	2	4.47	O	8
7. Understanding of the basic life skills in lettering	15	13	2	4.43	O	9.5
8. Develop safety working habits	19	10	1	4.60	O	3
9. Do the task entirely on their own	14	15	1	4.43	O	9.5
10. Use appropriate local materials as substitute for listed materials that are not available	17	12	1	4.53	O	5
Average Weighted Mean				4.53	O	

Legend: 4.20-5.00, Outstanding (O); 3.40-4.19, Very Satisfactory (VS); 2.60-3.39, Satisfactory (S); 1.80-2.59, Fair (F); 1.00-1.79, Poor (P); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

The learning performance in the new normal in terms of skills as assessed by the respondents is presented in Table 3.3, which was computed with 4.53 weighted mean from the respondent. Ranked first was indicator number 1 itself, "Gain livelihood experience through training", with 4.67 mean score from the respondents. Indicator number 2, "Acquire working knowledge of the materials, tools, equipment used in the TLE subject", also stayed on its position with an average of 4.63 score. It was closely followed by indicator number 8, "Develop safety working habits", for a third place with 4.60 mean score. Tied at fourth, fifth and sixth spot was indicator number 4, "Explore various business opportunities and make intelligent choice of entrepreneurial activity", indicator number 5, "Demonstrate knowledge and skills in selecting materials/ingredients and applying art principles in recycling, plating, cooking and the likes," and indicator number 10, "Use appropriate local materials as substitute for listed materials that are not available," which received 4.53 weighted grade from the respondents. At the seventh position is indicator number 3, "Understand the processes and products of production", which gained 4.50 average score. The eighth rank is indicator number 6, "Demonstrate managerial and manipulative skills on the principles, practice and techniques in growing crops," which has a 4.47 weighted mean. Tied in completing the list was indicator number 7, "Understanding of the basic life skills in lettering", and indicator number 9, "Do the task entirely on their own," accumulating 4.43 average points.

Table 3.4. *Learning Performance of the Students in the New Normal As Assessed by the Respondents In Terms of Products*

Indicators	*Frequency*					WM	VI	R
	5	*4*	*3*	*2*	*1*			
1. The students are aware of the methodology used for managing projects or products	15	11	4			4.37	O	6.5
2. The students decide the projects or products that have to be developed	15	12	3			4.40	O	3.5
3. The students are frequently informed about the progress of projects or products	14	15	1			4.43	O	1.5
4. The students project or product management processes are well documented and controlled	15	11	4			4.37	O	6.5
5. All projects are using a projects or products management plan	13	15	2			4.37	O	6.5
6. The students are requested to document lessons learned and apply them to future projects or products	14	15	1			4.43	O	1.5
7. The students have to ensure compliance with Japanese 5 S Productivity Philosophy, school and teacher's policies and any regulatory requirements	14	12	4			4.33	O	9
8. Projects meet their schedule objectives	12	15	3			4.30	O	10
9. The students able to design and create objects, equipment and/or plans	13	15	2			4.37	O	6.5
10. The students are requested to presents their work output and allow them to answer questions from critiques	13	16	1			4.40	O	3.5
Average Weighted Mean	138	137	25	0	0	4.38	O	

Legend: 4.20-5.00, Outstanding (O); 3.40-4.19, Very Satisfactory (VS); 2.60-3.39, Satisfactory (S); 1.80-2.59, Fair (F); 1.00-1.79, Poor (P); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

The assessment of learning performance in the new normal in terms of products was presented in Table 3.4, which was computed with 4.38 weighted mean from respondents. Ranked first was indicator number 3, " The students are frequently informed about the progress of projects or products," and indicator number 6, "The students are requested to document lessons learned and apply them to future projects or products," with both 4.43 mean score from the respondents. It was followed by indicator number 2, "The students decide the projects or products that have to be developed", and indicator number 10, "The students are requested to presents their work output and allow them to answer questions from critiques," for third and fourth place with both 4.40 mean score.

Ranked fifth, sixth, seventh and eighth which all gathered 4.37 weighted mean were indicator number 1, "The students are aware of

the methodology used for managing projects or products", indicator number 4, "The students project or product management processes are well documented and controlled", indicator number 5, "All projects are using a projects or products management plan", and indicator number 9, "The students able to design and create objects, equipment and/or plans". At the ninth spot was indicator number 7, "The students have to ensure compliance with Japanese 5 S Productivity Philosophy, school and teacher's policies and any regulatory requirements", which gained 4.33 average score. Completing the list was indicator number 8, "Projects meet their schedule objectives," accumulating 4.30 average points.

Table 3.5. *Summary on Learning Performance of the Students in the New Normal As Assessed by the Respondents*

Indicators	*Frequency*					*AWM*	*VI*	*R*
	5	*4*	*3*	*2*	*1*			
3.1 Deep Understanding	170	99	18	3	10	4.39	O	2
3.2 Reasoning	140	137	20	0	3	4.37	O	4
3.3 Skills	177	106	17	0	0	4.53	O	1
3.4 Products	138	137	25	0	0	4.38	O	3
Composite Weighted Mean	625	479	80	3	13	4.42	O	0

Legend: 4.20-5.00, Outstanding (O); 3.40-4.19, Very Satisfactory (VS); 2.60-3.39, Satisfactory (S); 1.80-2.59, Fair (F); 1.00-1.79, Poor (P); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

Table 3.5 displayed the summary on learning performance of the students in the new normal as assessed by the respondents. Topped on the list was skills which gained an average score of 4.53. Followed by deep understanding with 4.39 mean score. On the third spot was products with 4.38 average score. Completing the list was reasoning with 4.37 mean grade. Thus, the summary on learning performance of the students in the new normal had a composite weighted mean of 4.42.

Question No. 4 Is there a significant relationship between the teaching strategies of the TLE teachers and the learning performance of the students?

Table 4. *Significant Relationship Between the Teaching Strategies of TLE Teachers and Learning Performance of the Students*

Indicators	*Mean*	*Pearson r*	*Computed t- Value*	*Decision*	*Remarks*
Teaching Strategies of TLE Teachers	4.53	0.75	1.738	Accept Null Hypothesis (Ho)	Not Significant
Learning Performance of the Students	4.42	High Relationship			
F-Critical/Tabular Value at 0.05 Level of Significance (α)= ±2.045					

Note: ± 1, Perfectly Relationship; ± 0.81 to ± 0.99, Very High Relationship; ± 0.71 to ± 0.80, High Relationship; ± 0.41 to ± 0.70, Moderate Relationship; ± 0.21 to ± 0.40, Low Relationship; ± 0.01 to ± 0.20, Slight Relationship; 0, No Relationship

Table 4 revealed the relationship between the teaching strategies of TLE teachers and learning performance of the students. The perception of the TLE teachers on their teaching strategies was computed with weighted mean of 4.53, whereas, the mean score of the teacher-respondents on their learning performance of the students was computed with 4.42 weighted mean.

The Pearson correlation between the teaching strategies of TLE teachers and learning performance of the students based on the teacher-respondent perception was computed at 0.75 which indicates that there is a high correlation between the teaching strategies of TLE teachers and learning performance of the students.

The relationship between the two mentioned variables connotes positive relationship which indicates that, as the extent of teaching strategies of TLE teachers' increases, the level of learning performance of the students' increase. The teaching strategies of TLE teachers' is reflected on the learning performance of the students.

Question No. 5 Is there a significant difference on the teaching strategies of the TLE teachers in the new normal when grouped according to demographic profile?

Table 5.1 revealed the significant difference on the extent of teaching strategies of TLE Teachers in the New Normal when grouped according to age. Wherein, the grouped of respondents under the age bracket of 30 years old and below obtained a mean grade of 4.58 for the extent of teaching strategies of TLE teachers. The grouped of teachers with 31-40 years old garnered a mean score of 4.52. Whereas, the TLE teachers bracketed at age range of 41-50 years old recorded an average grade of 4.78. The senior group of 51-years old and bove accumulated an average score of 4.18.

Observing the mean computed value of each group, it showed much closed mean values which led to the computed F-value of 2.553 at 5% level of significance which is much lower than the critical value of 2.975. Therefore, there is no significant difference on the extent of teaching strategies of TLE teachers in the new normal when grouped according to age. Thus, it only suggests that the extent of teaching strategies of TLE teachers were not differ in terms of its variables.

Table 5.1. *Significant Difference on the Teaching Strategies of TLE Teachers in the New Normal When Grouped According to Age*

Indicators	*Mean*	*Group*				Computed F-Value	Decision	Remarks
	SD	*A*	*B*	*C*	*D*			
2.1. Entrepreneurial	Mean	4.44	4.63	4.78	4.14	3.036	Reject Ho	Significant
	SD	0.35	0.37	0.40	0.44			
2.2. Contextualized	Mean	4.77	4.54	4.75	4.26	1.668	Accept Ho	Not Significant
	SD	0.23	0.49	0.40	0.55			
2.3. Experiential	Mean	4.70	4.48	4.83	4.04	3.132	Reject Ho	Significant
	SD	0.27	0.46	0.23	0.78			
2.4. Constructivist	Mean	4.34	4.49	4.72	4.24	0.637	Accept Ho	Not Significant
	SD	0.96	0.52	0.39	0.45			
2.5. Authentic	Mean	4.63	4.43	4.80	4.20	1.514	Accept Ho	Not Significant
	SD	0.41	0.54	0.19	0.75			
Teaching Strategies of TLE Teachers	Mean	4.58	4.52	4.78	4.18	2.553	Accept Ho	Not Significant
	SD	0.32	0.41	0.23	0.41			
F-Critical/Tabular Value at 0.05 Level of Significance (α) =2.975								

Note: A → 30 & below; B → 31 – 40; C → 41 – 50; D → 51 & above

Table 5.2. *Significant Difference on the Teaching Strategies of TLE Teachers in the New Normal When Grouped According to Gender*

Indicators	*Mean*	*Group*		Computed F-Value	Decision	Remarks
	SD	*A*	*B*			
2.1. Entrepreneurial	Mean	4.54	4.53	0.015	Accept Ho	Not Significant
	SD	0.44	0.41			
2.2. Contextualized	Mean	4.54	4.53	0.015	Accept Ho	Not Significant
	SD	0.44	0.41			
2.3. Experiential	Mean	4.64	4.51	0.645	Accept Ho	Not Significant
	SD	0.46	0.45			
2.4. Constructivist	Mean	4.48	4.43	0.037	Accept Ho	Not Significant
	SD	0.69	0.51			
2.5. Authentic	Mean	4.59	4.38	1.191	Accept Ho	Not Significant
	SD	0.48	0.58			
Teaching Strategies of TLE Teachers	Mean	4.58	4.44	0.950	Accept Ho	Not Significant
	SD	0.39	0.39			
F-Critical/Tabular Value at 0.05 Level of Significance (α) =4.196						

Note: A → Female; B → Male

Table 5.2 revealed the significant difference on the extent of teaching strategies of TLE Teachers in the New Normal when grouped according to sex. Wherein, the grouped of female respondents obtained a mean grade of 4.58 for the extent of teaching strategies of TLE teachers. Observing the mean computed value of each group, it showed much closed mean values which led to the computed F-value of 0.950 at 5% level of significance which is much lower than the critical value of 4.196. Therefore, there is no significant difference on the extent of teaching strategies of TLE teachers in the new normal when grouped according to gender.

Table 5.3. *Significant Difference on the Teaching Strategies of TLE Teachers in the New Normal When Grouped According to Civil Status*

Indicators	*Mean*	*Group*			*Computed F – Value*	*Decision*	*Remarks*
	SD	*A*	*B*	*C*			
2.1. Entrepreneurial	Mean	4.63	4.50	4.80	0.426	Accept Ho	Not Significant
	SD	0.33	0.45	-			
2.2. Contextualized	Mean	4.68	4.57	4.60	0.153	Accept Ho	Not Significant
	SD	0.31	0.50	-			
2.3. Experiential	Mean	4.63	4.50	4.50	0.146	Accept Ho	Not Significant
	SD	0.18	0.57	-			
2.4. Constructivist	Mean	4.18	4.51	4.90	0.952	Accept Ho	Not Significant
	SD	0.98	0.49	-			
2.5. Authentic	Mean	4.65	4.47	4.70	0.352	Accept Ho	Not Significant
	SD	0.36	0.57	-			
Teaching Strategies of TLE Teachers	Mean	4.56	4.51	4.70	0.129	Accept Ho	Not Significant
	SD	0.33	0.42	-			
F-Critical/Tabular Value at 0.05 Level of Significance (α) =3.354							

Note: A → Single; B → Married; C → Widowed/Legally Separated

Table 5.3 revealed the significant difference on the extent of teaching strategies of TLE Teachers in the New Normal when grouped according to civil status. Wherein, the grouped of single respondents obtained a mean grade of 4.56 for the extent of teaching strategies

of TLE teachers. The grouped of married teachers garnered a mean score of 4.51. Whereas, the TLE teachers bracketed at age range of 41-50 years old recorded an average grade of 4.78. The group of widowed/legally separated accumulated an average score of 4.70. Observing the mean computed value of each group, it showed much closed mean values which led to the computed F-value of 0.129 at 5% level of significance which is much lower than the critical value of 3.354. Therefore, there is no significant difference on the extent of teaching strategies of TLE teachers in the new normal when grouped according to civil status. Thus, it only suggests that the extent of teaching strategies of TLE teachers were not differ in terms of its variables.

Table 5.4. *Significant Difference on the Teaching Strategies of TLE Teachers in the New Normal When Grouped According to Highest Educational Attainment*

Indicators	*Mean*	*Group*					*Computed F-Value*	*Decision*	*Remarks*
	SD	*A*	*B*	*C*	*D*	*E*			
2.1. Entrepreneurial	Mean	4.65	4.40	4.72	-	-	0.795	Accept	Not
	SD	0.34	0.45	0.41	-	-		Ho	Significant
2.2. Contextualized	Mean	4.62	4.61	4.46	-	-	0.109	Accept	Not
	SD	0.47	0.42	0.57	-	-		Ho	Significant
2.3. Experiential	Mean	4.67	4.41	4.60	-	-	0.377	Accept	Not
	SD	0.31	0.58	0.59	-	-		Ho	Significant
2.4. Constructivist	Mean	4.51	4.38	4.60	-	-	0.128	Accept	Not
	SD	0.84	0.49	0.51	-	-		Ho	Significant
2.5. Authentic	Mean	4.65	4.47	4.36	-	-	0.279	Accept	Not
	SD	0.35	0.59	0.62	-	-		Ho	Significant
Teaching Strategies of TLE Teachers	Mean	4.62	4.45	4.55	-	-	0.245	Accept	Not
	SD	0.36	0.39	0.50	-	-		Ho	Significant
F-Critical/Tabular Value at 0.05 Level of Significance (α) =2.759									

Note: A → Bachelor Degree; B → Bachelor Degree with MA/MS Units; C → MA/MS Degree; D → MA/MS Degree with PhD/EdD Units; E → PhD/EdD Degree

Table 5.4 revealed the significant difference on the extent of teaching strategies of TLE Teachers in the New Normal when grouped according to highest educational attainment. Wherein, the grouped of respondents with bachelor's degree obtained a mean grade of 4.62 for the extent of teaching strategies of TLE teachers. The grouped of teachers with bachelor's degree and MA/MS units garnered a mean score of 4.45. Whereas, the TLE teachers with master's degree recorded an average grade of 4.55. Observing the mean computed value of each group, it showed much closed mean values which led to the computed F-value of 0.245 at 5% level of significance which is much lower than the critical value of 2.759. Therefore, there is no significant difference on the extent of teaching strategies of TLE teachers in the new normal when grouped according to highest educational attainment. Thus, it only suggests that the extent of teaching strategies of TLE teachers were not differ in terms of its variables.

Question No. 6 Is there a significant difference in the teaching strategies of the TLE teachers as rated by the students and the TLE teachers themselves?

Table 6. *Significant Difference in the Teaching Strategies of the TLE teachers as rated by the Students and the TLE Teachers*

Indicators	*Teaching Strategies of TLE Teachers*		*Computed F- Value*	*Decision*	*Remarks*
	Mean	*SD*			
TLE Teachers	4.52	0.39	5.702	Reject Null Hypothesis (Ho)	Significant
Students	4.27	0.55			
F-Critical/Tabular Value at 0.05 Level of Significance (α)= ±3.885					

Table 6 disclosed the significant difference on the extent of teaching strategies of TLE Teachers in the new normal as rated by the students and the TLE teachers themselves. Wherein, the TLE teachers rated themselves on their extent of teaching strategies with mean grade of 4.52 and deviation of 0.39. Whereas, students' perception was recorded with mean score of 4.27 in terms of the extent of teaching strategies of TLE teachers.

The results signify the difference on the perception of the two groups with t-value of 5.702 which is higher than the tabular value of 3.885 at 5% level of significance. Therefore, there is a significant difference in the perception of the two groups of respondents on the teaching strategies of the TLE teachers.

Question No. 7 What are the problems encountered by the respondents in relation to their teaching strategies in the new normal?

The problems encountered in teaching strategies in the new normal as assessed by the respondents was presented in Table 7, which was computed with 3.56 weighted mean for respondents. Ranked first was indicator number 1 itself, "Lack of trainings related to area of specialization," with 3.77 mean score from the respondents. It was followed by indicator number 2, "Insufficient quantities of qualified technology education teachers", and indicator number 3, "Unrepaired equipment due to absence or lack of budget and inadequate facilities," tied for second and third place with 3.72 mean score.

Table 7. *Problem Encountered in Teaching Strategies in the New Normal As Assessed by the Respondents*

Indicators	*Frequency*					*WM*	*VI*	*R*
	5	*4*	*3*	*2*	*1*			
1. Lack of trainings related to area of specialization	6	13	9	2		3.77	S	1
2.Insufficient quantities of qualified technology education teachers	5	15	7	3		3.73	S	2.5
3.Unrepaired equipment due to absence or lack of budget and inadequate facilities	7	12	7	4		3.73	S	2.5
4.Lack of teaching strategies	4	9	12	4	1	3.37	MS	9.5
5.Unaware of the benefits of using various approaches	6	6	12	5	1	3.37	MS	9.5
6.Inadequacy of business and industry connection with technology education	4	12	11	2	1	3.53	S	6
7.Lack of time to prepare technology based lessons	6	7	11	5	1	3.40	MS	8
8.Lack of technology skills to support the students when they use technology in the subject	7	9	10	3	1	3.60	S	5
9.Lack of internet connection in accessing Learning Resources Management and Development System (LRMDS)	8	8	10	4		3.67	S	4
10.Lack of instructional materials align with pedagogical approaches	4	11	10	5		3.47	S	7
Average Weighted Mean						3.56	S	

Legend: 4.20-5.00, Extremely Serious (ES); 3.40-4.19, Serious (S); 2.60-3.39, Moderately Serious (MS); 1.80-2.59, Less Serious (LS); 1.00-1.79, Not Serious (NS); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

Indicator number 9, "Lack of internet connection in accessing Learning Resources Management and Development System," was on the fourth spot with 3.67 weighted mean. Ranked fifth was indicator number 8, "Lack of technology skills to support the students when they use technology in the subject", which received 3.60 weighted grade from the respondents. At the sixth spot was indicator number 6 itself, "The students learned the process of cooking viands and other foods through TL Inadequacy of business and industry connection with technology education E", which gained 3.63 average score. Placed on the seventh spot was indicator number 10, "Lack of instructional materials align with pedagogical approaches," which has a 3.47 weighted mean. For eighth place, indicator number 7, "Lack of time to prepare technology based lessons," gained 3.40 average score. Completing the list were indicator number 4, "The students recognize the hardware and understand the software Lack of teaching strategies," and indicator number 5, "Unaware of the benefits of using various approaches," accumulating 3.37 average points.

Question No. 8 What are the suggested solutions to the problems encountered by the respondents in relation to their teaching strategies in the new normal?

Table 8. *Suggested Solutions in Teaching Strategies in the New Normal As Assessed by the Respondents*

Indicators	*Frequency*					*WM*	*VI*	*R*
	5	*4*	*3*	*2*	*1*			
1. Conduct more on seminars and trainings related to area of specialization	16	10	4			4.40	HR	1.5
2. Undertake significant efforts aimed at recruiting and preparing new TLE educators at all levels	14	10	5	1		4.23	HR	8.5
3. Improvised tools and equipment that can be fabricated at a lower cost to comply with the needed tools and equipment	12	13	5			4.23	HR	8.5
4. Provide a seminar-workshop which will make the teacher aware on the different teaching strategies on TLE	13	15	2			4.37	HR	3
5. Interact with different expert in the field which will teach them to understand the different activities under various pedagogical approaches.	17	8	5			4.40	HR	1.5
6. Established linkage with partner industries which can support the purchased/ donate the needed facilities	13	11	6			4.23	HR	8.5
7. Provide time management seminars to the faculty to develop their time management skills and prioritization	15	10	5			4.33	HR	5
8. Invest on technology skills trainings and workshops for the TLE faculty to become an effective teacher and facilitator during TLE class	13	11	6			4.23	HR	8.5
9. Provide the teachers with internet connection allowance from any available budget to perform better teaching performance and manage to access LRMDS	16	8	6			4.33	HR	5
10. Identify and communicate a clear and understandable purpose of pedagogical approaches to obtain the necessary instructional materials	15	10	5			4.33	HR	5
Average Weighted Mean						4.31	HR	

Legend: 4.20-5.00, Highly Recommended (HR); 3.40-4.19, Recommended (R); 2.60-3.39, Moderately Recommended (MR); 1.80-2.59, Least Recommended (LR); 1.00-1.79, Not Recommended (NR); WM, Weighted Mean; VI, Verbal Interpretation; R, Rank

Table 8 displayed the suggested solutions in teaching strategies in the new normal as assessed by the respondents. Indicator number 1, "Conduct more on seminars and trainings related to area of specialization", with indicator number 5, "Interact with different expert in the field which will teach them to understand the different activities under various pedagogical approaches.," topped the list with computed value of 4.40. It was followed by indicator number 4, "Provide a seminar-workshop which will make the teacher aware on the different teaching strategies on TLE", for the third place with 4.37 mean grade. Triple tied on the fourth, fifth, and sixth spots were indicator number 7, "Provide time management seminars to the faculty to develop their time management skills and prioritization," indicator number 9, "Provide the teachers with internet connection allowance from any available budget to perform better teaching

performance and manage to access LRMDS," and indicator number 10, "Identify and communicate a clear and understandable purpose of pedagogical approaches to obtain the necessary instructional materials," with 4.33 gathered average score. For seventh, eighth, ninth, and tenth position, all of them gathered an average score of 4.20 from indicator number 2, "Undertake significant efforts aimed at recruiting and preparing new TLE educators at all levels," indicator number 3, "Improvised tools and equipment that can be fabricated at a lower cost to comply with the needed tools and equipment," indicator number 6 "Established linkage with partner industries which can support the purchased/ donate the needed facilities," and indicator number 8, "Invest on technology skills trainings and workshops for the TLE faculty to become an effective teacher and facilitator during TLE class."

Conclusions

The main purpose of the study was to determine the relationship between the teaching strategies of the Technology and Livelihood education (TLE) of teachers and the learning performance of the Senior High School students from the selected schools of Division of City Schools of Valenzuela.

It will also determine the difference on the teaching strategies of the TLE teachers when grouped according to their demographic profile. Based on the data and findings that were gathered, the following conclusions were drawn:

The teacher-respondents were matured, female, married, a graduate of their baccalaureate, and pursued graduate studies.

The assessment on the perception of the respondents on the teaching strategies of TLE teachers in the new normal in terms of five sub-variables namely: entrepreneurial, contextualized, experiential, constructivist, and authentic were all described as highly practiced.

The teacher-respondents highly practiced developing of students' understanding on Technological and Livelihood Education concepts. This will help to develop their students' confidence and prepare them to TLE different tasks and activity. This was supported by the students through their response under entrepreneurial which revealed that their teachers develop the students' self-confidence and resiliency to prepare them on facing problems, risks and even failure.

In terms of contextualized, the teacher-respondents highly practiced encouraging their students to share their personal experiences and background to interact and collaborate with their classmates during the group activity. This was reflected also from the students' response under entrepreneurial which revealed that their teachers asked them to internalize the health and safety procedures through safety measures and encouraged them to share their personal experiences and background.

In line with the experiential, the teachers highly practiced the utilization of video lessons and activities for their students and interact with their students to gauge their level of understanding. Whereas the students acknowledged their teachers' effort on the utilization of video lessons and activities and listening to their questions. This will make them feel smooth and agile on performing their tasks and developed the teaching-learning process.

Based on the constructivist, the teacher-respondents highly practiced to encourage their students to use appropriate local materials as substitute for listed materials that are not available. On the other hand, the students highly enjoyed the practiced of their teacher in allowing them to the task on their own, in turn, it boosted students' confidence.

In line with authentic, the teachers highly practiced relating TLE to current technology which is the ultimate effect of the pandemic. This allows them grow on the technical side of teaching. This was also recognized by their students through different activities provided by their teachers.

The assessment on the perception of the respondents on their learning performance in terms of four sub-variables namely: deep-understanding, reasoning, skills, and products were rated as outstanding.

In line with deep-understanding, the teacher-respondents rated their students' outstanding in terms of applying their knowledge on cooking practices, tasting, plating, utensils and equipment identification and creation of sweet and other dessert.

In terms of reasoning, the teacher-respondents valued their students' outstanding in terms of expressing themselves and effectively reasoned out on some issues on TLE and during activity application and understanding verbal questions from their TLE teachers.

In line with the skills, the teachers evaluated their students' outstanding in terms of gaining livelihood experience through training.

Based on products, the teacher-respondents evaluated their students' with outstanding in terms of their students religiously requesting to document lessons learned and apply them to future projects or products. Their willingness to do their shares of responsibility, and motivates independent learning in time of pandemics.

There is a significant relationship between the teaching strategies of TLE teachers and learning performance of the students. It only implies that the teaching strategies were considered as determinants on learning performance of the students. A quality and effective teaching strategies will definitely enhance and develop learning performance of the students.

There is no significant difference on the perception of the respondents' in teaching strategies of the TLE teachers in the new normal when grouped according to their demographic profiles. It only suggests that the perception of the respondents was the same, common

and similar when grouped according to their demographic profiles.

There is a significant difference between the perception of teachers and students on the extent of teaching strategies of TLE teachers in the new normal. It only denotes the statistically difference of perception between the two groups. The teachers and the students perceived that the TLE teachers' highly practiced their teaching strategies to achieved its lesson targets and objectives.

The top problems encountered by the teacher-respondents in relation to teaching strategies in the new normal as assessed by themselves were, lack of trainings related to area of specialization, insufficient quantities of qualified technology education teachers, unrepaired equipment due to absence or lack of budget and inadequate facilities, lack of internet connection and lack of technology skills to support the students when they use technology in the subject. This means that in relation to the application of teaching strategies in the new normal, related trainings, qualified teachers, technology skills and internet connection are vital in the effective delivery of lessons and application of teaching strategies.

The solutions done to address the problems encountered by the respondents in relation to teaching strategies in the new normal as assessed by themselves were to conduct more on seminars and trainings related to area of specialization, interact with different expert in the field which will teach them to understand the different activities under various pedagogical approaches, and to provide a seminar-workshop which will make the teacher aware on the different teaching strategies on TLE. Administration supports on investing in seminars, presenting new education technologies or pedagogical theories will greatly benefit not only the teachers but the students and the school.

For the School administrators, they should realize that in order to have maximum job performance and application of teaching strategies of the Technology and Livelihood education (TLE) of teachers, financial and material resources and adequate in-service trainings and workshops will have to be provided. They should also further enhance their interpersonal relation and supervision to their TLE teachers in the new normal so as to further motivate them intrinsically and lead to the improvement of teachers' performance. The provision of these, would definitely promote motivation in the teaching profession, which may result to enhanced learning performance of the Senior High School students.

School head may ensure adequate budget for professional development of teachers to ensure the increase of their knowledge, skills and talent. It will not only benefit the TLE teachers but more on students. Teacher training should focus on prioritized teachers' needs. School administrators may practice proper recognition of well-done work and opportunities to growth and become promoted are also prioritized as an effective method for motivation fulfilment.

TLE teachers should utilize an appropriate supervision style and effective communication. They should also be more committed in their teaching by improving peer teaching, experimentation method, chart and table presentation and improving their questions and answer method techniques and teaching strategies. In addition, they should be encouraged to explore and view other effective teaching strategies that would result in the improve learning performance of the secondary school students taking up Technology and Livelihood Education.

Teachers should be encouraged to explore and view other effective teaching strategies and find more ways to entice other students challenge themselves to create their own strategies to use in the field and to become more global in perspective.

For the information technologist, they should provide help and assistance on the use computer technology to become an effective teaching strategy in the new normal, especially when students are given information specific to their own situation rather than general information.

For the future researcher, it is recommended to have a replication of this study that will cover all public secondary schools in the Division of Valenzuela to generate more accurate and valid generalization.

The future researcher can also take into account other school division to have a comparative study or a private and public schools TLE teachers and students as respondents.

The future researches may do a qualitative research focusing on the experiences of TLE teachers in the new normal and take into account best practices that will improve their teaching strategies and teaching performance.

References

Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C. & Ananthanarayanan, V. (2017). NMC horizon report: 2017 Education Edition. Austin: The New Media Consortium.

Aquino, S. D. & Manolito, M. C. (2021). View of Work Attitude and Competency of Technology and Livelihood Education Teachers. Psurj.org. 1(2). https://www.psurj.org/psurj/online/index.php/mrj/article/view/124/88

Baran, E., Canbazoglu Bilici, S., Albayrak Sari, A., & Tondeur, J. (2017). Investigating the impact of teacher education strategies on preservice teachers' TPACK. British Journal of Educational Technology, 50(1), 357–370. https://doi.org/10.1111/bjet.12565

Cahapay, M. B. (2020). Rethinking Education in the New Normal Post-COVID-19 Era: A Curriculum Studies Perspective.

ResearchGate. https://www.researchgate.net/publication/341827574_Rethinking_Education_in_the_New_Normal_Post-COVID-19_Era_A_Curriculum_Studies_Perspective

Cardino, J. M., & Ortega-Dela Cruz, R. A. (2020). Understanding of learning styles and teaching strategies towards improving the teaching and learning of mathematics. LUMAT: International Journal on Math, Science and Technology Education, 8(1). https://doi.org/10.31129/lumat.8.1.1348

Carreon, J. R. (2018). Facebook as Integrated Blended Learning Tool in Technology and 2 Livelihood Education Exploratory. International Journal of Educational Technology, 5(2), 19–25. https://eric.ed.gov/?id=EJ1197714

Deslauriers, L., et al. (2019). Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom. Proceedings of the National Academy of Sciences, 116(39), 19251–19257. https://doi. org/10.1073/pnas.1821936116

Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. International Journal of Educational Technology in Higher Education, 15(1). https://doi.org/10.1186/s41239-017-0087

EDUCAUSE. (2017). Key issues in teaching & learning. Retrieved from https://www.EDUCAUSE.edu/eli/initiatives/key-issues-in-teaching-and-learning

Fayombo, G. (2015). Learning Styles, Teaching Strategies and Academic Achievement among some Psychology Undergraduates in Barbados. Caribbean Educational Research Journal the University of the West Indies, 3(2), 46–61. https://www.cavehill.uwi.edu/fhe/education/publications/past-issues/volume-3-number-2-september-2015/articles/article-grace-fayombo.aspx

Gamiao, J. (2020). Innovative teaching methods in the new normal. The Manila Times; The Manila Times. https://www.manilatimes.net/2020/07/28/public-square/innovative-teaching-methods-in-the-new-normal/746919

Gregorio, M. S. (2016). Technology and Livelihood (TLE) Instruction of Technical Vocational and Selected General Secondary Schools in Catanduanes. International Journal of Learning, Teaching and Educational Research, 15(4). http://ijlter.org/index.php/ijlter/article/view/671

Hew, K. F., Jia, C. Gonda, D. E. & Bai, S. (2020). Transitioning to the "new normal" of learning in unpredictable times: pedagogical practices and learning performance in fully online fipped classrooms. International Journal of Educational Technology in Higher Education. https://doi.org/10.1186/s41239-020-00234-x

Hodges, C., Moore, S., Lockee, B., Trust, T. & Bond, A. (2020). The diference between emergency remote teaching and online learning. Educause Review. https://er.educause.edu/articles/2020/3/the-diference-between-emergency-remot e-teaching-and-online-learning

Jacolbia, R. B (2016). Future educators' perceptions on technology and livelihood education status and development of work skills. Journal of Advances in Humanities and Social Sciences, 2(2). https://doi.org/10.20474/jahss-2.2.3

Jorge, C. (2020). PH education and the new normal. INQUIRER.net. https://opinion.inquirer.net/129286/ph-education-and-the-new-normal

Latheef, Z. I. (2020). Synchronous Strategies for the "New Normal" | Faculty Focus. Faculty Focus | Higher Ed Teaching & Learning. https://www.facultyfocus.com/articles/online-education/online-course-delivery-and-instruction/synchronous-strategies-for-the-new-normal/

Mateo, J. (2020). 22 million back to school under "new normal." Philstar.com; Philstar.com. https://www.philstar.com/headlines/2020/10/05/2047267/22-million-back-school-under-new-normal

Mateo, J. (2020). Various learning strategies eyed for basic education. Philstar.com; Philstar.com. https://www.philstar.com/headlines/2020/05/03/2011471/various-learning-strategies-eyed-basic-education

Mateo, J. (2021). CHED: Flexible learning to stay even after pandemic. Philstar.com; Philstar.com. https://www.philstar.com/headlines/2021/05/23/2100234/ched-flexible-learning-stay-even-after-pandemic

Naelga, S. C. & Sonsona, M. M. (2017). The Competencies of the Grade 9 Technology and - ProQuest. International Journal of Economic Perspectives; Mersin, 11(2), 780-787. https://www.proquest.com/docview/2038222149?pq-origsite=gscholar&fromopenview=true

Pomerantz, J., & Brooks, D. C. (2017). ECAR study of faculty and information technology. Research report. Louisville, CO: ECAR. https:// library.educause.edu/-/media/fles/library/2017/10/facultyitstudy2017.pdf

PressReader.com - Your favorite newspapers and magazines. (2021). Pressreader.com; PressReader. https://www.pressreader.com/philippines/sunstar-pampanga/20201018/281651077587820

PressReader.com - Your favorite newspapers and magazines. (2021). Pressreader.com; PressReader.

https://www.pressreader.com/philippines/sunstar-pampanga/20201021/281659667527527

Prodigygame.com. (2019). 5 Effective Teaching Strategies to Help Your Students in School. https://www.prodigygame.com/main-en/blog/5-effective-teaching-strategies-to-help-your-students-in-school/

Razalan, A. F. (2020). Commitment beyond the old classroom. INQUIRER.net. https://opinion.inquirer.net/133081/commitment-beyond-the-old-classroom

Rose, S. (2020). Medical Student Education in the Time of COVID-19. JAMA, 323(21), 2131. https://doi.org/10.1001/jama.2020.5227

Sabalo, W. (2020). Special Report: Distance learning in the new normal. Yahoo.com; Yahoo News. https://ph.news.yahoo.com/special-report-distance-learning-normal-170800460.html

Santhanam, S. P. (2020). A Reflection on the Sudden Transition: Ideas to Make Your Synchronous Online Classes More Fun - Faculty Focus | Higher Ed Teaching & Learning. Faculty Focus | Higher Ed Teaching & Learning. https://www.facultyfocus.com/articles/online-education/ideas-to-make-your-synchronous-online-classes-more-fun/

Tan, M. C. (2021). Technology and Livelihood Education (TLE) Instruction in the Secondary Schools in Northern Samar Division, Eastern Philippines. Asian Journal of Advanced Research and Reports, 75–84. https://doi.org/10.9734/ajarr/2021/v15i230369

The Star Online. (2020). Learning strategies for the new normal. The Star. https://www.thestar.com.my/news/education/2020/11/15/learning-strategies-for-the-new-normal

Torio, V. A. & Torio, M. A. (2015). Whole brain teaching in the Philippines: Teaching strategy for addressing motivation and academic performance. ResearchGate; Consortia Academia Publishing. https://www.researchgate.net/publication/283619226_Whole_brain_teaching_in_the_Philippines_Teaching_strategy_for_addressing_motivation_and_academic_performance

Valle, A., Regueiro, B., Núñez, J. C., Rodríguez, S., Piñeiro, I., & Rosário, P. (2016). Academic Goals, Student Homework Engagement, and Academic Achievement in Elementary School. Frontiers in Psychology, 7. https://doi.org/10.3389/fpsyg.2016.00463

Wehler, M. (2018). Five Ways to Build Community in Online Classrooms - Faculty Focus | Higher Ed Teaching & Learning. Faculty Focus | Higher Ed Teaching & Learning. https://www.facultyfocus.com/articles/online-education/five-ways-to-build-community-in-online-classrooms/

Xiu, Y., & Thompson, P. (2020). Flipped university class: a study of motivation and learning. J Inform Technol Educ, 19, 41–6.

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