

Cultivating Lifelong Learners through Revitalized Technology Livelihood Education and Technical Vocational Livelihood Programs for Public Secondary Schools

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Abstract

Aim: This study aimed to examine the implementation of TLE and TVL programs in public secondary schools in Pagbilao District at the Schools Division of Quezon as a basis for cultivating lifelong learners and developing the revitalized curriculum framework.

Methodology: The study adopted the mixed method of research utilizing the descriptive developmental research design for quantitative and sequential exploratory for a qualitative approach. The descriptive developmental method was used to understand better the current situation about TLE and TVL program implementation. The sequential exploratory was used to illuminate the specific situation and to identify the phenomena by how the key informants perceived them. It was attended by the secondary school administrators, TLE, and TVL teachers of Pagbilao District 1.

Results: Based on the findings of the study, the following results were drawn: 1) The extent of the TLE and TVL program implementation was found to be adequate and accessible while teachers of TLE and TVL were found competent; 2) assessment of school's program inputs was rated as moderately implemented; 3) inputs on assessment of students' learning outcome was found to be competent; while 4) the acceptability level of the designed TLE and TVL program was found to be accepted; and 5) significant relationship was found between the perceived extent of implementation of the TLE and TVL education programs, assessment of school's implementation of the program, and learners' learning outcomes.

Conclusion: The TLE and TVL program implementation in the District of Pagbilao has adequate and accessible instructional resources, facilities and infrastructure, and competent teachers. The learners were found competent based on their learning outcomes as to technical skills, academic knowledge, and abilities. The study posited that the level of the TLE and TVL programs is significantly related to the school's program implementation and learner's learning outcome. Thus, the null hypothesis is not sustained.

Keywords: Technology and Livelihood Education, Technology Vocational and Livelihood, Competency, Implementation, Skills, Learning Outcome.

INTRODUCTION

A comprehensive reform of the Philippines' basic education is its K to 12 Program. Through this reform, the Philippines is catching up with the global secondary education standards and attaching a high value to kindergarten. The education system's structure, curricula, and philosophy are undergoing reform and improvement. The critical points of the new policy are to prepare learners for higher education, eligibility for entering domestic and overseas higher educational institutions, and immediate employability upon graduation. All of those are leading toward a holistically developed Filipino. The primary aim of the K to 12 education reform is to improve the quality of high school graduates, enhance learners' basic skills, produce more competent citizens, and prepare graduates for lifelong learning and employment. This means filling up the two years in primary and secondary education could make graduates be at par with their counterparts of the other countries.

Although K to 12 Curriculum was already introduced in the Philippines, there has been little attention given to how Technology and Livelihood Education (TLE) teachers have implemented this curriculum. This lack of attention to how teachers implement curriculum innovation is not unusual. How teachers implement changes in pedagogy is an important area that does not receive sufficient attention. Alongside the researcher's personal interest in the topic, the literature suggests that failure to implement a successful new curriculum persists. It is argued that a well-designed curriculum reform with impressive goals has been unsuccessful because too much attention has been focused on the desired educational change and neglects how the curriculum change should be implemented. That little attention has been given to how teachers implement changes in the pedagogy they are practicing.

The Technology and Livelihood Education (TLE) and Technical-Vocational Livelihood (TVL) Track. Albarico et al. (2014) found that instructional materials aided in implementing the BSE-TLE program by engaging students in interactive learning and considering their diverse interests, abilities, and maturity levels. It is also disclosed that all

parts of the TLE program have available instructional materials employed appropriately in the related topics. In terms of the number of students enrolled, the data suggests that the quantity of instructional materials and the number of tools and equipment is insufficient. As a result, students have had to pay for items the school should have provided. The instructional tools, machines, and equipment used to teach TLE are not inspected and evaluated regularly to verify that they are in excellent working order. The findings suggest that instructional materials should be improved to suit the curriculum's requirements better. Ramos (2021) emphasized that to execute successfully, any Adequate human and material resources must be accessible to schools as part of the education program. A sufficient quantity of trained teachers with various sorts of knowledge, in particular. (science, language, technology, and so on) must be recruited and sent to schools as necessary. Furthermore, academic employees must be supplemented by non-academic workers proportionately enough for effective management.

This TVL track was mentioned in the study of Nabuya et al. (2019), which is more defined in the K-12 curricula of the Philippines and Japan. In this track, it was demonstrated that the student must acquire 30 credit points in the specialization, with the remaining 50 credit points coming from general education areas. Also, it was cited that the courses under the Philippine model are organized into four strands from which students can choose. It was added that the programs, however, may not be available in the municipality or barangay (village) in which they reside, necessitating them to travel to nearby cities or villages. It was also expressed that the lack of much-needed tech-voc facilities and the availability of trained professors limit the accessibility of these programs to many. Hence, this has brought the number of people choosing the academic road may also be due to the restricted offerings in senior high schools across the country (Sarmiento & Orale, 2016).

Assessment of the school's program implementation. It is the secondary school preparation of learners for employment in the field in which they have been trained and are most prepared (Castillo, 2012). On the other hand, technical education prepares persons who have completed secondary high school in the areas of trade, agriculture, fishing, and other types of technology to begin employment in the fields in which they are trained and best equipped. He underlined the need for technical and vocational training relevant to the needs of occupations whose major goal is to provide employment. TVET educates students for professions centered on manual and practical tasks, usually non-academic, and completely tied to a certain trade, occupation, or vocation. It is also known as technical education since the learner acquires skills in certain groupings of technological techniques. Galvez (2009), vocational educations around the country think trade schools are reviving since many firms are in severe need of qualified people. Many of today's high school graduates and students are studying to become computer scientists, cooks, graphic artists, mechanics, engineers, and other professions. While an increasing number of students are entering the profession with a degree, many lack the practical abilities required to step straight in without extra on-the-job training. Esguerra and Orbeta (2016), technical vocational education must keep training relevant to industry needs. Curriculums and training regulations must be reviewed regularly. A system for forming or convening industry councils for frequent labor market signaling is required. TVET must meet the unique skill requirements of roadmaps and key value chains. The TVI-industry connections must be strengthened. The employment rates of trainees should ultimately be used to determine the relevance of training.

Learning Outcome. Assessment is an act of interpretation of information about Student performance obtained through any of a variety of sources. Assessment for student experience must be considered as a courtly layer inside a complicated multi-perspective assessment model that also includes assessment of learning, assessment for learning, and assessment for lifetime learning to be accepted. More study is needed to develop a meta-theory of assessment to strengthen the alliance between these diverse techniques and reduce the strain between them. Vanpatten and Benati (2010) stated that skill is the ability to do rather than underlying competence or mental representation. Esguerra and Orbeta (2016), technical vocational education must keep training relevant to industry needs. Curriculums and training regulations must be reviewed on a regular basis. Also, it was added that students could gain real-world work experience by dealing with workplace problems and applying their skills. Furthermore, school-based evaluation has been studied globally in various positions and, to a significant extent, in comparative studies based on the identification of APL organizations in other nations (Andersson & Stenlund, 2012). Ramadhan (2017) stated that demonstration is the process of occurrence of an event according to the teaching materials, on how they are attained in the teaching-learning process.

Objective

The study generally aimed to examine the implementation of TLE and TVL programs for public secondary schools in Pagbilao District at the Schools Division of Quezon as a basis for cultivating lifelong learners and the development of a revitalized curriculum framework.

Specifically, this study sought to answer the following research questions:

1. To what extent is the implementation of Technology and Livelihood Education (TLE) and Technical and Vocational Livelihood (TVL) programs as to their domains:
 - 1.1 instructional resources;
 - 1.2 facilities and infrastructure; and
 - 1.3 professional competencies?

2. How do the respondents assess the school's implementation of the TLE and TLE and TVL programs as to:
 - 2.1 certification and accreditation;
 - 2.2 student's learning outcome;
 - 2.3 student's knowledge and skills;
 - 2.4 appropriateness; and
 - 2.5 employability?
3. What is the learners' performance level to learning outcomes in terms of:
 - 3.1 technical skills;
 - 3.2 academic knowledge; and
 - 3.3 abilities?
4. What is the acceptability level of the designed TVL program as to its results in terms of:
 - 4.1 budget;
 - 4.2 curriculum and instruction;
 - 4.3 human resources; and
 - 4.4 instructional resources?
5. Is the perceived level of implementation of the TLE and TVL education programs significantly related to:
 - 5.1. assessment of program implementation; and
 - 5.2. learner's learning outcome?
6. Based on the result of the study, what revitalized programs for TLE and TVL can be proposed?

METHODS

Research Design

The study adopted the mixed method of research utilizing the descriptive developmental research design for the quantitative approach and a sequential exploratory for the qualitative approach. The researcher used the descriptive developmental method. As Gillaco (2014) explained, the descriptive method seeks the real facts in relation to a current situation. Furthermore, this method works primarily on the description, comparison, analysis, and interpretation of data that exists. Meanwhile, it was also described the developmental method as a body of research literature that pertains directly to instructional development, which means the output will be developed after conducting this research.

Meanwhile, the purpose of the sequential exploratory for the qualitative approach was to illuminate the specific situation and to identify the phenomena by how the actors perceive them (Lester, 2000). The researchers employed a sequential exploratory for a qualitative approach to evaluate experiences among the school administrators, TLE and TVL teachers, and SHS learners in the District of Pagbilao, Schools Division of Quezon who had undergone the assessments in the Technology and Livelihood Education (TLE) and Technical Vocational and Livelihood (TVL) programs. Through this, the researcher was able to identify the different outcomes throughout the assessment. Also, this study approach explores stories from different experiences and gathers data about how these TLE/TVL programs are revitalized, hence cultivating lifelong learners through enhancing the learners' skills of the coming generations.

Population and Sampling

The study included the participation of the school's administrators, teachers, and learners from 2 Mega Schools, 2 Large Schools, and 1 Medium school in the Pagbilao district in the Division of Quezon

Table 1. Population of TLE/TVL teachers and learners from the five secondary schools in the Division of Quezon

Name of School	Respondent		
	Administrators	Teachers	Learners
1 Pagbilao National High School	2	14	40
2 Talipan National High School	3	15	40
3 Silangang Malicboy National HS	2	12	34
4 Binhaan Integrated High School	2	10	34
5 Polo Grande National HS	2	11	34
Total	11	62	182

Listed above are the respondents of the study, which includes 11 administrators, 62 teachers, and 182 SHS learners for quantitative. Moreover, the focus group discussion for qualitative was attended by the administrators, SHS focal person, and three selected key teachers in each school for qualitative.

Instrumentation

Research Instrument. Two sets of the survey instrument were administered by the researcher - for TLE and TVL teachers and school administrators and another one for the learners. The survey instrument was adapted from DepEd guidelines and advisories. Parts of the survey instrument were modified by the researcher to make it

appropriate for educators and learners of TLE and TVL. The survey instrument was crafted based on different DepEd monitoring and evaluation tools such as DO 035 s, 2020 JDVP Guidelines, DO 040 s, 2021 JDVP-2022, DO 073 s, 2012, and TESDA regulatory standards for Bread and Pastry Production NCII. Part 1 of the survey instrument was the extent of TLE and TVL implementation as to its domains. It was composed of 32 items which were rated on a scale of 1 to 4 and were responded to by teachers, administrators, and grade 12 students. Part 2 of the instrument was the respondents' assessment of the school's program implementation. It was composed of 35 items where the respondents also rated it using a scale of 1 to 4 and were also responded by teachers, administrators, and grade 12 students. Part 3 of the instrument was for students' learning outcomes. It is composed of 84 items, rated on a scale of 1 to 4 by the teachers, administrators, and student respondents. Part 4 of the instrument was the acceptability level of the designed TLE and TVL programs. A scale of 1 to 4 was also used by the respondents. This part of the instrument was responded by the teachers and administrators only.

Validation of the Instrument. The self-constructed survey instrument was forwarded to the adviser for comments and suggestions. Revisions were incorporated for the improvement of the instrument and were then validated by a group of 10 external and ten internal experts composed of Educational Program Specialists, Principals, Master Teachers, and Head Teachers. These experts are regarded as members Department of Education and have been in the service for more than a decade in the same institution. Their suggestions were considered in improving the questionnaire. A pre-testing of the instrument was conducted on 30 TLE and TVL teachers in the Pagbilao district division of Quezon to determine the need to conduct the current study. After all the necessary corrections and revisions were made, the questionnaire was reproduced and finally administered to the actual respondents of the study.

Focus Group Interview Guide. From the survey instrument, the guide questions were aligned to gather insights from the key informants. The proponent conducted the interview on the current program in their stations, and from there, the proponent crafted a revitalized program for TLE and TVL, which can be proposed to cultivate lifelong learners. This was done through face-to-face and online platforms via Google Meet or phone calls. It helped the researcher in gathering additional data and information used in the discussion of results.

Data Collection

In gathering the appropriate data for the study, a one-on-one interview was used. The one-on-one interview is a type of interview that has developed as one of the most familiar strategies for collecting qualitative data. An interview is a qualitative method of inquiry that merges a predetermined set of open questions with the privilege for the researchers to explore particular responses further and is used to understand the real-life experiences of the parents of Learners with Special Educational Needs (LSEs). It also allows researchers and participants to ask follow-up questions for clarification. Researchers used video recordings, note-taking, and dialogic form interviews to reach more profound responses from the participants.

A letter of request for the conduct of the study was prepared by the researcher stating all the protocols to be followed in the conduct of the study. Specifically, the following letters were prepared: a Letter of permission addressed to the School Principal; a Consent form for the teacher and learner-participants; Letter of request addressed to the Division Office about the conduct of the study.

Also, during the conduct of the interview, the protocols were explained to the participants that the interview was conducted purposively for the study and if ever presentation of the research paper will push through, no remuneration to be given to the participants nor to the school head or to the school.

The participants were also informed that their names remain anonymous, and results were only used just for the compliance of the study in the school and in the Schools Division.

Data Analysis

The researcher utilized several tools to treat the data generated, such as standard deviation and weighted mean.

To provide a description of the collective assessment of the respondents of the study, the mean and standard deviation was used, while Pearson Product-Moment Correlation Coefficient was used to determine the significant relationship between the perceived extent of implementation of the TLE and TVL education programs, assessment of school's implementation of the program, and learners' learning outcomes and content analysis for qualitative.

RESULTS and DISCUSSION

Table 2. Summary of TLE and TVL program implementation as to its domains

Variables	Mean	VI
Instructional Resources	3.09	Adequate and accessible
Facilities and infrastructure	3.16	Adequate and accessible
Professional Competence	3.33	Competent
Overall	3.19	Adequate and accessible
Mean Range	Scaled Response	Verbal Interpretation
3.50-4.00	Observed to a Very High Extent	Always Adequate and Accessible (AAA)
2.50-3.49	Observed to a High Extent	Adequate and Accessible (AA)
1.50-2.49	Observed to a Moderate Extent	Adequate but limited Access (ABLA)
1.00-1.49	Observed to a Low Extent	Inadequate and inaccessible (II)

Table 2 shows the overall result of the TLE and TVL program implementation in the district of Pagbilao. In general, the secondary public schools in Pagbilao have an adequate and accessible instructional resources, likewise with facilities and infrastructure. The result also revealed that teachers teaching TLE and TVL are competent. All five secondary schools in the Pagbilao district offered SHS programs, all with TVL tracks. However, these tracks can still be improved through the provision of facilities and infrastructure for more holistic teaching and learning experience. Schools mostly have facilities for tourism sectors only and still need to develop facilities for ICT strand, industrial arts, and Agri-fishery if possible. This also implies that the teachers of the TLE and TVL Track are competent individuals who are equipped with the necessary competencies. However, this may also imply that teachers of Pagbilao district must still need to attend relevant seminars, training, and retraining to fully realized their full potential and acquire advanced knowledge and skills for such competency. The finding supports the study of Goodwin et al. (2017), which posited that teachers of Techvoc education should have more knowledge and deeper command of complex skills.

This result was also supported by the FGDs with TLE and TVL teachers from the district of Pagbilao. They revealed that most of them developed instructional materials, teaching guides, and learning resources for subjects that were not provided and or available in DepEd's portal.

According to schools, *Talipan NHS*, "We have much of the resources for our program (TVL/TLE), we provide them with materials they need for us to produce quality graduates. The teachers attended training from TESDA to equip them with the right knowledge in cookery and other competencies". *Pagbilao NHS* "In terms of the specialization, we lack of the learning materials, sa non-teaching staff kulang kami. Sa teaching staff kulang din kaya full load talaga yung aming TVL teachers." *Binhaan Integrated NHS* "We prepared learning activity sheets, performance tasks, and other supplementary materials that will help the students' learning process". *Polo Grande Island NHS* "When it comes to home economics we can say that we have sufficient materials, but when it comes to SMAW and other TVL subjects we have insufficiency, in the JHS we really have to say that we have insufficient teaching materials, nangihiram pa din kami madalas sa SHS". *Silangang Malicboy NHS*, "Sa tle meron naman kaming mga learners' pocket, sa TVL naman, ang aking learning material ay gawa ko mismo, pero dahil malapit kami sa QNAS, humihiram kami, at malaking tulong yung partner school".

This result affirms the findings of Ramos (2021) that engagement is the best way for students to learn. The use of training facilities allows teachers to direct their students' learning rather than speaking from a higher platform to passive students, some of whom might be inactive.

Table 3. Summary of the Assessment of School's Implementation of TLE and TVL program

Variables	Mean	VI
Certification and Accreditation	3.14	Moderately implemented
Learning Outcomes	3.31	Moderately implemented
Knowledge and Skills	3.24	Moderately implemented
Appropriateness	3.31	Moderately implemented
Employability	3.38	Moderately implemented
Overall	3.27	Moderately implemented
Mean Range	Scaled Response	Verbal Interpretation
3.50-4.00	Always	Highly implemented (HI)
2.50-3.49	Often	Moderately implemented (MI)
1.50-2.49	Sometimes	Slightly implemented (SI)
1.00-1.49	Never	Not implemented (NI)

Table 3 depicts that the assessment summary on the school's implementation of the TLE and TVL program is moderately implemented. The result suggests that the Pagbilao district is continuously improving its implementation process to serve its stakeholders better.

The schools in Pagbilao that participated in this study have participated in the Joint Delivery Voucher Program of the DepEd. This signifies a better result for the program implementation as it allows learners to complete their TVL specialization through partners who have the facilities which will provide an appropriate learning environment required for the specialization and addresses the delays in the provision of necessary resources for TVL specialization (DO 033 s, 2018). This finding revealed that the learning objectives set at a school level are achievable. It is critical to ensure that objectives are attainable. Students' abilities, developmental stages, initial skill sets, and time available to acquire these skill sets must all be considered when evaluating outcomes. They must also correspond to what is being taught. This also means that learners in the Pagbilao district, as an output of the program, have a medium level of acquisition of the necessary cognitive and psychomotor competencies taught in their specialization. The respondents also revealed that the specialized school program offered in the schools in the Pagbilao district is appropriate for most of the learners who take the TLE and TVL track with the specialized program and is based on the result of the school survey for the TLE and TVL specialized program. The findings also indicate that the public secondary schools in Pagbilao District consider stakeholders' opinions as a vital part of decision-making. Also, to allow localization and the school's available resources to be at their most utilization. More so, the schools in Pagbilao guide the learners to develop an independent working attitude, competence and produce quality outputs. In the district of Pagbilao, learners are given the opportunity to cultivate their talents through school initiatives. The new normal opens new opportunities for learners to incorporate online platforms and innovate localized materials, which improves their skills, talents, and personality.

This result is supported by the FGD responses of the key informants when asked in the interview, "What is your general impression of your students and their experience in TLE and TVL programs".

"Having TVL programs are effective especially to our learners. Because most of our students can't afford to continue schooling. So, having TVL programs like what we have is a great opportunity for them to cultivate their talents and skills"-Binhaan Integrated NHS

"They are enthusiastic and very interested to learn and to be taught. They are much willing to answer the activities, probably because of the web or internet, they can research".-Talipan NHS

"Mahirap sir kasi di namin sila nakikita at naoobserbahan, mahina ang internet, at sa mga output nila, di namin alam kung sila ba talaga ang gumawa ng mga output na isinasubmit nila. On the other hand, meron din namang mga students na talagang nagtyatyaga sa lahat ng mga learning requirements". - Polo Grande Island NHS

"Iba-iba, may mga batang ang hirap turuan, at mahirap mag adjust, my impression of them is not so competent. To me sa jhs hindi talaga masyadong natututo ang mga bata at sobrang hilaw pa sila". Silangang Malicboy NHS

"Ang mga bata ay magagaling dahil kinaya nilang matututo sa new normal in education. --sa smaw mas gusto nila ang f2f para sa hands-on. --I can say that they are all competent but not enough, naiipasa naman nila lahat ng competencies na required sa track". Pagbilao NHS

The result affirms the findings of Bohlinger (2013), that the use of formal requirements as the standard to raise specific problems such as the main basis for identifying restriction and capabilities is based on the presumption that qualifications are knowledge or understanding and skills or expertise that can be equitably described and are useful.

Table 4. Summary of the Learner's Learning Outcomes

Variables	Mean	VI
Technical Skills	3.33	Competent
Academic Knowledge	3.33	Competent
Abilities	3.31	Competent
Overall	3.32	Competent
Mean Range	Verbal Interpretation	
3.50-4.00	Highly Competent (HC)	
2.50-3.49	Competent (C)	
1.50-2.49	Low Competent (LC)	
1.00-1.49	Not Competent (NC)	

It can be noted in Table 4 that the perceived learner's learning outcomes by the respondents are competent. The result implies that the learners in the Pagbilao district were trained and taught accordingly to DepEd standards. The connection between parent involvement and teachers' assessment of the learner's learning outcomes is important for cultivating lifelong learners.

These results are supported by responses of the key informants in the focus group discussion (FGD) held in their respective schools.

"We are struggling on how the students will take their practical examinations especially in bread and pastry, they are not allowed to go to school and we can't just let the students do performance activities on their own". -Binhaan Integrated NHS.

"Nahihirapan ang aming mga guro sa practical activities ng mga bata dahil wala silang gamit sa kanilang mga tahanan". -Talipan NHS

"we are not requiring our students to have the practical exam as instructed by our school principal". Polo Grande Island NHS.

"Hirap ang mga Guro, Hirap din ang mga bata when it comes to practical test, this pandemic limits our spaces, so yung iba na kaya at may gamit, vinivideo na lang nila then sinesend samin". -Silangang Malicboy NHS

"Noong medyo nagluwag na ang IATF, our teachers in TVL, nagpupunta sila sa mga barangay para doon magpa-practical activities, sa gayon nalalaman din naming ang skills at understanding ng mga learners naming sa bread and pastry". Pagbilao NHS

These responses may suggest that the school administrators develop a strong partnership with the industry that may help teachers in practical applications of the student's learning. Pagbilao district is currently reopening its facilities for students. With this, the administrators may also seek stakeholders' support to make their facilities readier for the practical application of lessons.

The results found that the learners' skills in collecting, organizing, visualizing, and assimilating data information are necessary for the workplace as it allows learners to come up with multiple solutions to complex issues. Meanwhile, our educators may plan future innovations and develop methods where we can build a strong sense of confidence among the learners. Students can express themselves and improve their personal and professional relationships through effective communication skills. Listening and communicating clearly help the students express themselves in job interviews, group meetings, and in their personal lives.

Apparently, Pagbilao district attributed to the fact that teachers are the ones who make the actual assessment of knowledge, skills, and attitude of the students. Magpoc (2020) states that the role of teachers in testing or in the assessment procedure of learners is very important to be taken for granted.

Table 5. Summary of the acceptability level of the designed TLE and TVL program as to its results

Variables	Mean	VI
Budget	3.14	Acceptable
Curriculum and instruction	3.18	Acceptable
Human resources	3.19	Acceptable
Instructional resources	3.08	Acceptable
Overall	3.14	Acceptable
Mean Range	Scaled Response	Verbal Interpretation
3.50-4.00	Very Good	Highly acceptable (HA)
2.50-3.49	Good	Acceptable (A)
1.50-2.49	Fair	Moderately acceptable (MA)
1.00-1.49	Poor	Slightly acceptable (SA)

Table 5 depicts that the assessment summary of the acceptability level of the designed TLE and TVL program as to its results was found to be acceptable. This implies that the school budget is mostly used to fund programs, projects, and activities to continuously improve its curriculum and instruction as identified in the school improvement plan, which is also specifically determined in the annual implementation plan. The school also finances the graduation and recognition ceremonies as mandated by the Department of Education. Hence, the current pandemic has shown individuals that knowledge sharing and communications keep them together even virtually and that learning from others and previous experience is as essential as attending formal education. And training of teachers and school leaders to ensure their readiness to engage in remote learning must be addressed, and education and training providers must revise teaching and learning models to make the best use of digital resources and tools. More so, this result may also suggest for the school heads to double the efforts to find ways on how schools can cope with all these gaps, especially in the mechanisms of facilitating the provisions for physical resources (DepEd Order No. 21, 2019).

Ramos (2021) emphasized that in order to execute an adequate human and material resources successfully must be accessible to schools as part of the education program. A sufficient quantity of trained teachers with various sorts of knowledge, in particular. (science, language, technology, and so on) must be recruited and sent to schools as necessary. Furthermore, academic employees must be supplemented by non-academic workers in proportionately enough numbers for effective management.

Conclusions

Based on the findings, the following conclusions have been drawn.

The TLE and TVL program implementation in the District of Pagbilao has adequate and accessible instructional resources, facilities and infrastructure, and competent teachers.

The learners in their learning outcomes as to technical skills, academic knowledge, and abilities, were found to be competent.

The study posited that the level of the TLE and TVL programs is significantly related to the school's program implementation and learner's learning outcome. Thus, the null hypothesis is not sustained.

The majority of the key informants in the FGDs agreed that adopting the new normal in education was a positive step and that its aspects are beneficial. However, they believe the government was unprepared for its execution, which has resulted in multiple challenges they are currently experiencing. Nonetheless, the majority of them believe that the program objectives will be met eventually but that success will be contingent on the availability of resources.

Recommendation

The following are generated recommendations offered based on the significant finding of the study for improving TLE and TVL programs.

1. Since the result showed that the TLE and TVL program is moderately implemented, the study suggests that DepEd in Pagbilao continues to address the program inputs such as teachers, learning resources, school buildings, facilities, tools, and equipment for the work immersion of the learners. The help of networking with local government, non-government organizations, and provincial offices may be sought.
2. The TLE and TVL teachers may be further equipped with skill-development training or upskilling to ensure that they acquire up – to date knowledge and skills in their area of specialization; thus, students will be properly coached and trained in the competencies where they need further development and improvement.
3. The NCs are expected to boost SHS graduates' probability of employment. Schools may improve arrangements for certifications of skills by strengthening the Joint Delivery Voucher Program -TVL programs

since it appears to have served well the short-term objective of providing a better learning environment for TVL students in public schools which does not have the appropriate facilities.

4. To ensure that the learners will be able to apply the core competencies in bread and pastry production in their daily living and future business ventures, the teacher may consider the integration of acquired skills into bread and pastry production and practice in IDEA (Introduction, Development, Engagement, and Assimilation) lesson exemplar. Encouraged learners to actively participate and engage themselves in academic and non-academic training to further improve their skills in their field of specialization. Also, allowing them in teams or as individuals to apply the process to simple problems with activities could enhance students' problem-solving skills.

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