

# Equipping Students With Life Skills: Technology and Livelihood Education (TLE) Teachers in Focus

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**Abstract.** The study explored and investigated the lived experiences, coping mechanisms, and lessons learned from the experiences of Technical and Livelihood Education (TLE) teachers in equipping students with life skills. A qualitative approach to research from the 8 TLE teachers from Tagum South District, Division of Tagum City, on the lived experiences of teachers in equipping students with life skills were observed: laboratory workshop, teaching practical knowledge, and inadequate instructional materials. Teachers' coping mechanisms for the challenges in equipping students with life skills were providing appropriate workshop places and equipment, acquiring adequate equipment and facilities, and reskilling teachers. Through their experiences and coping mechanisms, we generated new knowledge and ideas on the challenges encountered by the TLE teachers in equipping students with life skills. Finally, the lessons learned from teachers' experiences in ensuring students' learning continuity during the pandemic were: be flexible, be resourceful, and keep updated. These themes can be described as input in successfully crafting and conducting training for TLE teachers to capacitate them on the different strategies and techniques in equipping students with adequate life skills. This study may provide an avenue to enlighten school heads to continue supporting their teachers and equip students with life skills through TLE. It may offer valuable insights to school heads as they work to promote TLE programs for students' betterment and prepare them for their entrance to the workforce.

## KEY WORDS

1. Teachers' lived experiences 2. coping mechanisms 3. lesson learned

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## 1. Introduction

The term "21st-century skills" is widely used in educational contexts to discuss the essential skills that could help students navigate and thrive in today's world and be job-ready as well as "life-ready" once they graduate. These skills enable students to solve real-world problems as productive citizens in contemporary times and to be "members of a larger community with a voice and a sense of responsibility to others." These skills help students approach complex challenges and changing environments in school lessons, their homes, and their future workplaces. Home economics is an academic subject that has similar general aims. The International Federation for Home Economics (IFHE) states that home economics as a curriculum area "facilitates students to discover and further develop their own resources

and capabilities to be used in their personal life, by directing their professional decisions and actions or preparing them for life” (IFHE Position Statement - Home Economics in the 21st Century, 2008). The all-encompassing expression “preparing for life” recalls the question of what knowledge and skills are needed in the 21st century. Technology and Livelihood Education (TLE) is one of the significant features in the secondary education development program curriculum that includes home

Economics. It is concerned with activities related to the development of a person or group of learners. It is a subject that prepares high school students for endeavors that will provide them with the knowledge and skills to be productive and earn a living in case the possibility of Tertiary Education becomes elusive for one reason or another. The provision of skills to be productive and responsible for the economic upliftment of the family, the community, and the country was negatively felt (Galang Mathews, 2020). Recognizing these life skills alone is not enough; the real question is how to teach them, put them into practice (Teo, 2019), and support students’ action competence. One global challenge today is to increase action competence for sustainable lifestyles, in which the production, distribution, and consumption of food and other consumer commodities play central roles (United Nations, 2015). People worldwide are expected to change their lifestyles to live sustainably by 2030, and education ranks among the most effective means to enable them to become sustainable citizens equipped with 21st-century skills and competencies (United et al., 2016; Organization for Economic Cooperation and Development (OECD), 2008). However, most knowledge about sustainable lifestyles, health, and sustainable choices comes from home or media, whereas schools provide only a small fraction (Hoiijer, ” 2013). In the Philippines, Technology and Livelihood Education is part of the Learning and Living in the

21st Century series, which adheres faithfully to the learning standards focusing on the acquisition of Technological Proficiency under the K to 12 curriculums across all levels are based on the Training Regulations of TESDA.

(Villaluz, 2018). This provides varied and rich learning activities to achieve the learning standards expected of the subject in secondary schools in the long term, fulfilling the goal of education. Likewise, Garcia (2009) stressed that in order to provide rich learning activities, part of the school area may be designed as a shop where students may be given actual work. Here the students will be given the opportunity to develop manipulating skills. An important function of this workshop is to provide for the development of good work habits and acceptable social skills. Further, Gregorio (2009) says that the technique of teaching refers to acts of the quality of the acts used by the teacher in representing the subject matter to the pupils. It may also include the skill of the teacher in accomplishing the task of learning. All the activities stated above are a must for learners of technology and livelihood education as they serve as the application of the theoretical knowledge given by the teachers during discussions. Schools, particularly home economics education, have enormous potential to provide skills related to sustainable lifestyles to young people worldwide (for example, Gelinder et al., 2020; Gisslevik, 2018). For example, healthy and sustainable food choices form the cornerstone of a sustainable lifestyle and, therefore, need to be learned and taught at schools. Following this logic, Lichtenstein and Ludwig (2010) argue that the lack of knowledge and practical skills for how to prepare nutritious food at home with inexpensive basic ingredients is an important problem. They conclude that mandatory food preparation curricula.

(that is, home economics education) may be among the best investments a society can make to secure healthy and sustainable lifestyles now

and in the future. In the local scenario, particularly in Catalunan Pequeño National High School, Catalunan Pequeño, Davao City, the Technology and Livelihood Education teachers observed that the responses of the students were not coherent in the workshop; they found it difficult to identify the tools and perform their activities at home poorly. The modules distributed to them since last school year contained several workshop activities that needed to be performed at home. As per observation about their sup-

posed performance task at home that needs to be reported or even recorded via their cellular phones did not meet the expectations of the TLE teachers.

This kind of scenario has happened since the beginning of the pandemic. On the other hand, the teachers were not also satisfied with the answers to the written task. This study was conducted to determine the experiences of teachers in teaching technology and Livelihood Education during a health crisis.

*1.1. Purpose of the Study*—The purpose of this phenomenological study was to find out the experiences of TLE teachers in preparing students for life, their coping mechanisms, and their insights into the experiences of the informants. Further, it will, therefore, serve as a reference material for future researchers in this area.

*1.2. Research Questions*—The study intended to get the insights and the experiences of TLE teachers.

in preparing students for life. Specifically, the study will seek to answer the following questions:

- (1) What are the experiences of TLE teachers in equipping students? with life skills?
- (2) How did the TLE teachers cope with the challenges in equipping students with Life skills?
- (3) What educational insights are drawn from the experiences of the informants?

*1.3. Definition of Terms*—The following terms were operationally defined to make this study more comprehensive. Life Skills- Life skills group of psychosocial competencies and interpersonal skills that help people make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathize with others, and cope with and manage their lives healthily and productively. Technology and Livelihood Education- One of the learning areas of the Secondary Education Curriculum used in

Philippine secondary schools. As a subject in high school, its component areas are Home Economics, Agri-Fishery Arts, Industrial Arts, and Information and Communication Technology. Secondary School Teacher. Secondary school teachers teach students in grades seven through twelve. Specializing in one subject area, such as English or math, these teachers work with five or more groups of students during the day. They lecture direct discussions and test students' knowledge with exams, essays, and homework assignments.

*1.4. Significant of the Study*—To clearly determine the outcomes of this study and to whom the findings are addressed, the following persons or agencies were the beneficiaries. Department of Education Officials. The study's findings led the DepEd officials, particularly

in the South District division of Tagum City, to place more emphasis on capacitating TLE teachers with the skills that would help them prepare the students for life. Technology and Livelihood Education Teachers. The study was significant to them since they would be able to learn about

the issues and insights into the experiences of TLE teachers in preparing students for life. The teachers would also be able to reflect on their practices and share best practices with others.

The learners. This study provided a clear idea of their path to pursue in the future based on the skills they gained during their stay in the

Junior High School. Stakeholders. This study was significant to them since it gave stakeholders insights on professionally assisting school administrators in assisting teachers in benefiting the students. Future Researchers. The findings provided comprehensive data for future research with similar or relevant scope.

*1.5. Theoretical Lens*—This study was anchored on Experiential Learning Theory. David Kolb's (1984) Experiential Learning Theory (ELT) work expands on John Dewey's notions about the importance of an education that connects with students' lived experiences. However, ELT attempts to define and shape the contours of the experiential.

learning process. ELT is also helpful for examining the relationship between mastering the curricula and engaging in experiential learning. Simply put, ELT offers a conceptual model for the experiential learning process. When the model is transferred to the school context, ELT can be utilized as a method to meet curricular goals and objectives through methods such as giving performance tasks to students. Additionally, as Gama and Fernández (2009) assert, Experiential Learning Theory is practical for investigating the development of social skills and dispositions, which are the results of any experiential solid learning activity. Thus, effective experiential learning is not only tied to curricular goals; the learning experience helps develop competencies and skills with life applications (Darling-Hammond, 2000; Wilhoit Pittenger, 2014). Teachers can craft tasks by integrating the lesson into real-life experiences, having them accomplished by the students, and utilizing them as major assessment tools in generating authentic learning for students. The relationship between experiential learning and life application fits how David Kolb defines experiential learning theory. Kolb (1984) asserts that experiential learning is "the process whereby

knowledge is created through the transformation of experience and knowledge results from the combination of grasping and transforming experience." Kolb explains that ELT includes four components: 1) concrete experience, 2) reflective observation, 3) abstract conceptualization, and 4) active experimentation or the testing of concepts in new situations. For Kolb, experiential learning is a cycle that helps learners move from concrete experiences to abstract ideas and concepts.

that can be further tested and applied. However, experiential learning outcomes can be varied and unpredictable (Jules, 2003). How one student chooses to solve a problem will differ from another student, and what one student takes away from an experience may differ for his or her peers. Therefore, teachers need to develop performance-based assessments that measure success in both the process and the product- each area may require separate learning outcomes and criteria. Some of the helpful performance-based assessments stated by Hancock,(2003) are allowing students to define how their work will be judged; creating a reflective journal or a portfolio, essay, report, or presentation; short answers to questions; self-evaluation or group evaluation of a task performed. Another theory used in this study was Contemporary Cognitive Learning. Advances in cognitive psychology theory forced teachers to acknowledge how complex learning is and how diverse the means needed to assess learning fully and fairly (Resnick, 1987). According to early theories of learning based on behaviorism,

complex higher-order skills are acquired bit-by-bit by breaking learning down into a series of prerequisite skills, called a building-blocks-of-knowledge approach. It was assumed that after basic skills had been learned by rote memorization, they could be assembled into complex understandings. However, research on contemporary cognitive thinking reveals that mental processes related to thinking are not restricted to a higher-order stage of mental development (Resnick Resnick, 1992; Shepard, 2000). Instead, higher-order thinking, such as

Reasoning is intimately involved in learning school subjects. In other words, learning involves important components of inference, judgment, and active mental construction. For example, research on memorizing shows that even in “learning the facts,” mental elaboration and judgment are required for success (Brown, 1978). Students cannot effectively memorize the facts without organizing knowledge. Shepard (2000) summarized the new findings from constructivist learning theories. First, intellectual abilities are socially and culturally developed. Cognitive abilities are developed as parents or other significant adults interpret and guide children in their interactions. Second, learners construct knowledge and understanding within a social context. Third, new learning is shaped by prior knowledge and cultural perspectives. Students with more prior knowledge can reason more profoundly, elaborate as they study, and therefore, learn more effectively in that knowledge domain. Fourth, learning involves “metacognition,” or self-monitoring of learning and thinking. Expert learners can control their own learning using a variety of self-monitoring strategies. Fifth, deep understanding supports transfer. Finally, cognitive performance depends on dispositions and personal identity. In other words, ef-

fective skills and motivation are as important as knowledge in learning. Contemporary cognitive psychology, as evidenced by Perkins (1992) and Perkins Blythe (1994), underscores that meaningful learning is reflective, constructive, and self-regulated. This understanding enlightens educators about the importance of metacognition in learning. It’s not just about receiving information, but about the learner’s active construction of knowledge structures. This knowledge empowers educators to guide students in developing their metacognitive skills, enhancing their learning process.

have interpreted it and related it to other prior knowledge that the learner already has. Thus, the presence or absence of 6 discrete bits of knowledge – which is the main focus of traditional multiple-choice tests – is not important in the assessment of meaningful learning. Rather, how and whether students organize, structure, and use that information in context to solve complex problems, which is the main characteristic of performance assessments, is more important. Since it is a performance assessment that focuses on how students organize and apply knowledge (Khattari, Reeve, Kane, 1998) in assessing students learning, performance assessments implement the approach suggested by contemporary learning theory. In other words, new findings from contemporary cognitive learning theory intensified interest in performance assessments. The conceptual framework of the study is presented in Figure 1. Based on the figure, there are two interconnected variables. These variables are the (1) Experiences of TLE teachers in equipping students with life skills; (2) TLE teachers coping mechanisms on the challenges in equipping students with life skills; and (3) Educational insights drawn from the experiences of the informants.

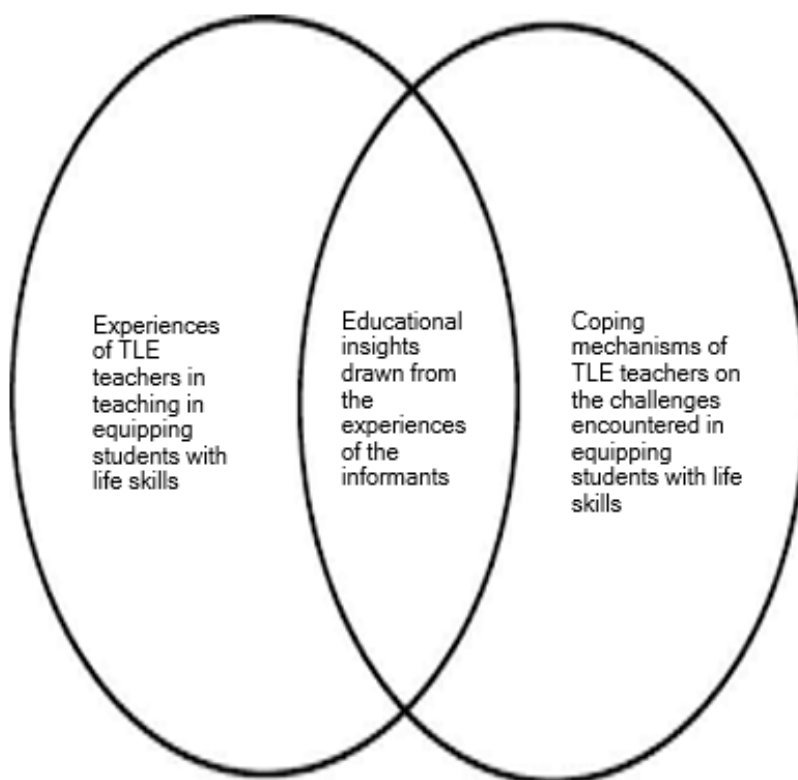


Fig. 1. The Conceptual Framework of the Study

## 2. Methodology

This chapter presents the method, research participants, data collection, role of the researcher, data analysis, trustworthiness of the study, and ethical considerations. As elaborated in this chapter, exploring facts and knowledge in this study necessitates the consequent design and implementation. The three most common qualitative methods were participant observation, in-depth interviews, and focus groups. Each method was particularly suited for obtaining a specific type of data. Participant observation was appropriate for collecting data on naturally occurring behaviors in their usual contexts. In-depth Interviews (IDI) were optimal for collecting data on individuals' histories, perspectives, and experiences, particularly when exploring sensitive topics. Focus groups are influential in eliciting data on the cultural norms of a group and in generating broad overviews of issues of concern to the cultural groups or subgroups represented. Patton (2002) defined phenomenology as an inquiry that asks the question, "What is the structure and essence of the experience of his phenomenon for these people?" the goal of this research worked well with this definition in trying to understand the experiences of TLE teachers in preparing students for life. Giorgi (2007) cautioned researchers to be prepared for an investigation greater in depth and breadth than the offered description implied. He suggested the information be viewed as only the tip of the iceberg.

*2.1. Philosophical Assumptions*—The philosophical assumption was a framework used to collect, analyze, and interpret the data collected in a specific field of study. It establishes the background used for the coming conclusions and decisions. Typical philosophical assumptions have different types and are elaborated below. Good research – selecting the topic, problem, area of interest, and paradigm. Stanage (1987) traces 'paradigm' back to its Greek (paradigm) and Latin origins (paradigm), meaning pattern, model, or example among examples, an exemplar or model to follow according to which design actions are taken. Differently stated, a paradigm was an action of submitting to a view. This view was supported by Denzin and Lincoln (2000), who defend a research paradigm as a "basic set of beliefs that guide action," dealing with first principles, "ultimates" or the researcher's worldview or philosophy. Ontology. This part of the research pertains to how the issue relates to the nature of reality. According to Creswell (2012), reality is subjective and multiple, as seen by participants in the study. The ontological issue addresses the nature of

reality for the qualitative researcher. The reality was constructed by individuals involved in the research situation. Thus, multiple realities exist, such as the realities of the researcher, those of individuals being investigated, and those of the reader or audiences interpreting the study. In this study, the experiences of TLE teachers in equipping students with life skills are discussed by the participants, and their mechanisms used in addressing the challenges and educational insights are examined.

In this study, the researcher relied on the voices and interpretations of the participants through extensive quotes and themes that reflected their words and provided evidence of different perspectives. The participant's answers to the study were coded and analyzed to build and construct the commonality and discreteness of responses. The participants' responses were carefully coded to ensure the reliability of the result. The researcher upheld the authenticity of the responses and precluded from making personal bias as the study progressed. Epistemology. This refers to the awareness of how knowledge claims are justified by staying as

close to the participants as possible during the study to obtain firsthand information. Guba and Lincoln, as cited by Creswell (2012), stated that the researcher attempted to lessen the distance between himself or herself and the participants on the epistemological assumption. He suggests that, as a researcher, he or she collaborates, spends time in the field with participants, and becomes an 'insider. The researcher identified phenomenology using thematic analysis as the best means for this type of study. In this regard, individual researchers "hold explicit belief." This study intended to gather information from the participants or teachers in Tagum South District as to how they equipped students with life skills based on the guidelines set by DepEd. It was assumed that close interaction was established with the participants to gain direct information and clarify the knowledge. Behind the inquiry, particularly the experiences and mechanisms used to equip students with life skills. Axiology. It refers to the role of values in research. Creswell (2012) argued that the role

of values in a study was significant.

Axiology suggests that the researcher openly discusses values that shape the narrative and includes their interpretation in conjunction with participants' interpretation. The researcher ensured the dignity and value of every detail of information obtained from the participants. The researcher understands the personal and value-laden nature of the information gathered from the study. Therefore, the researcher preserved the merit of the participants' answers and carefully interpreted the answers in the light of the participants' interpretation. Rhetoric. It means reporting what reality was through the eyes of the research participants. This was important because it meant that the research would report objectively on what was observed and heard from the participants. The research used personal voice and qualitative terms and limited definitions. In the context of the study, the researcher used the first person to elucidate the experiences of teachers as they equipped students with life skills.

*2.2. Qualitative Assumptions*—The methodology was different from the method. The methodology is a creative and responsive approach to understanding questions and subject matter, while the method refers to the exact knowledge and procedure (Gerodias, 2013). In this study, the experiences of TLE teachers in equipping students with life skills in Tagum South District were gathered through an In-Depth Interview (IDI), and their coping mechanisms were extracted from the participants. The researcher's drive to know the deeper meaning of the experiences of TLE teachers in equipping students with life skills became the basis for doing qualitative research, a means which Kalof and Dietz (2008), as cited from Gerodias (2013) considered helpful in looking for "meanings and motivations that underline cultural symbols, personal experiences, and

phenomena."

By using phenomenology, this need was hoped to be addressed by bringing the experiences of TLE teachers in equipping students with life skills in a manner that, as David (2005) wrote, the themes, symbols, and meaning of the experiences presented. Phenomenological research was based on two premises. The first was that experience was a valid, rich, and rewarding source of knowledge. According to Becker (1992), as cited in Morrissey Higgs (2006), experience is a source of knowledge that shapes one's behavior. From the definition, human experience was viewed as a cornerstone of knowledge about human phenomena and not an unreliable source. The second premise of phenomenological research lies in the view that the everyday world is a valuable and productive source of knowledge. We can learn much about



ourselves and reap key insights into the nature of an event by analyzing how it occurs in our daily lives (Morrissey Higgs, 2006). By doing phenomenology, which is concerned with the "what" and the "how" (Moustakas, 1995), the

researcher projected that the experiences and mechanisms used by the TLE teachers were explored, and insights drawn were the basis for possible future research and policy analysis about this research.

*2.3. Design and Procedure*—This study employed a qualitative approach to research, specifically a phenomenological research design. According to Creswell (2012), phenomenology is an approach to qualitative research that focuses on the commonality of lived experiences within a particular group. The fundamental goal of the approach was to arrive at a description of the nature of the particular phenomenon.

Typically, interviews were conducted with individuals with first-hand knowledge of an event, situation, or experience. Other forms of data, such as documents, observations, and art, were also used. The data were read and reread and were culled for phrases and themes grouped into clusters of meanings. Through this process, the researcher could construct the universal meaning of the event, situation, or experience and arrive at a more profound understanding of the phenomenon. Moreover, Maxwell (2013) also added that with its roots in philosophy, psychology, and education, phenomenology attempts to extract the purest, untainted data, and some interpretations of the approach, bracketing was used by the researcher to document personal experiences with the subject to help remove him or herself from the process. One method of bracketing was taking notes. According to Corbetta (2003), the phenomenological research design was a qualitative type of research for which interviews provide an in-depth method that can grant access to deep knowledge and explanations and help grasp the subjects' Perspective. Creswell (2012) claimed that interviews were primarily used in qualitative research. They occurred when researchers asked

one or more participants general, open-ended questions and recorded their answers. Often, audio tapes were utilized to allow more consistent transcription. Interviews are also useful for following up with individual respondents after questionnaires, such as to investigate their responses further. In qualitative research, interviews were used to pursue the meanings of central themes in the world of their subjects. The main task in doing interviews was to understand the meaning of what the interviewees said (McNamara, 1999).

Withal, based on Quad's (2016) statements, the researcher transcribed and typed the data into a computer file to analyze it after the interview. Interviews are useful for uncovering the story behind a participant's experiences and pursuing in-depth information about a topic. The researcher collected data from individuals who have experienced the phenomenon under investigation, typically via long interviews. Next, the data analysis involved triangulation, extracting significant statements from the transcribed interviews. The significant statements were transformed into clusters of meanings according to how each statement fell under specific psychological and phenomenological concepts. Moreover, these transformations were tied together to make a general description of the experience, both the textural description of what was experienced and the structural description of how it was experienced. The researcher incorporated his or her meaning of the experiences here. Finally, the report was written so that readers understand better the essential, invariant structure of the experience's essence. Conversely, several challenges have been pointed out. The re-

searcher required a solid grounding in the philosophical guidelines of phenomenology. The subjects selected for the study were individuals who had actually experienced the phenomenon. The researcher needed to bracket his or her own experiences and observations, which was difficult to do. The researcher also needed to decide how and when his or her personal observations should be incorporated into the study. Epistemologically, phenomenological approaches were based on the paradigm of personal knowledge and subjectivity and emphasized the importance

of personal perspective and interpretation.

As such, they were powerful tools for understanding subjective experience, gaining insights into people's motivations and actions, and cutting through the cluster of taken-for-granted assumptions and conventional wisdom. Since the focus of this study was to explore and assess the teacher experience and feelings towards the school environment and the perspectives of the seasoned teachers, the researcher employed the phenomenology type of qualitative method research.

**2.4. Research Participants**—The participants of this study were Eight (8) TLE teachers from Tagum South District, Division of Tagum City. The participants were chosen based on the following criteria: (1) must be in the service for at least five years; (2) Junior High School Teacher; and (3) TLE teachers teaching

life skills. The researcher utilized the purposive sampling design since the participants were chosen based on the criteria or purpose of the study (Creswell, 2014). It is also known as judgmental, selective, or subjective sampling. The selection of the participants was purposefully done to ensure that the findings would be authentic (Marshall, 1996).

**2.5. Ethical Considerations**—The ethical considerations were significant in the design of this research study. The researcher needed to consider several ethical issues regarding the research participants in this field. Ethical considerations can be specified as one of the most important parts of research. The researcher needs to promote the research's aims, impart authentic knowledge and truth, and prevent error. Social Value. The research was essential to society. In this study, the social value was focused on the experience of teachers. This study was specifically conducted among elementary teachers. This study also served as a basis for the higher authorities to create more programs and resolutions from which classroom teachers could benefit. Thus, the social problem that interests the researcher is the challenges faced by teachers in using interactive media instruction in the classroom as a way to ameliorate teaching com-

petence. Informed Consent. In the conduct and practice of this study, the Treaty Principle of Participation, as cited by McLeod (2009), was adhered to. The invitation to the participants ensured that their participation in the research was completely voluntary and based on understanding adequate information. The recruitment and selection of participants are lodged in the appendices of this study.

Gaining the trust and support of research participants was critical to informed and ethical academic inquiry and phenomenological research (Walker, 2007, as cited by Pillerin, 2012). All participants were given an informed consent form before scheduling the interviews and participating in the phenomenological research process. Each participant was required to provide a signed personal acknowledgment, consent, and an indication of a willingness- to study the release. The purpose of the informed consent

letter was to introduce the research effort, provide contact information, articulate the intent of the study, request voluntary participation by the recipients, and anticipate the information the informants were expected to provide. All participants were required to sign and return the consent letter to the researcher before participating. Vulnerability of Research Participants. This study's participants could answer the research instrument, for they are all professional teachers in public elementary schools. Thus, the researcher assured them that as the researcher, he or she can easily be reached through the contact number and address in case there are some clarifications or questions about the study. Risks, Benefits, and Safety. The recruitment of the respondents was free of coercion, undue influence, or inducement. Moreover, respondents were provided with the contact numbers of the panel chair or panel members if they had queries related to the study. Furthermore, if respondents experienced potential discomfort and inconvenience while answering the questions, they were not compelling to participate in any manner. Further, the researcher ensured the respondents were safe during the survey and interview. Thus, the questionnaire was distributed in a safe venue and administered at their convenience.

The dominant concern of this study was the Treaty Principle of Protection, as reflected in the respect for the rights of privacy and confidentiality and the minimization of risk. This was done by assigning pseudonyms for each informant so as not to disclose their identity. The possibility of a degree of risk inherent to this was minimized by taking all reasonable steps to guarantee participant confidentiality. Privacy and Confidentiality of Information. This study observed the Data Privacy Act of 2002 to ensure that the data cannot be traced back to their real sources to protect participants' identities. Thus, utmost care was taken to ensure the anonymity of the data sources. Hence, any printed output

that was carried out from this study was kept in anonymity. Furthermore, all the issues were considered so there would be no conflict of interest between the researcher and the respondents. Any misleading information and representation of primary data findings in a biased way must be avoided. Justice. The respondents were informed of their role and the researcher's role in the data-gathering process. They were briefed on the importance of honesty in answering the survey questions and in any communication related to the research. They were also made aware that they would be the first to benefit from the results of the study, thereby ensuring a fair and equitable relationship between the researcher and the participants. Transparency. The study's results were accessed by the respondents and heads of the participating schools because the information is available and will be placed on CDs or other storage devices that the researcher could request. In addition, by learning about the study's results, classroom teachers were aware of the significance of the study and its contribution to their well-being.

Further, each participant was advised that they have the right to withdraw their information at any time up to the completion of the data collection process. They could be requested and allowed to verify their transcript after the interview. This provided the participants had the opportunity to amend or remove any information that they felt might identify them. The researcher reserved the right to employ pseudonyms and change names and/or non-significant dates in the interest of protecting the participant's identity in all subsequent data analysis and reporting. Qualification of the Researcher. The researcher ensured that he or she possessed the necessary qualifications to conduct the study. The researcher has completed the academic requirements and passed the comprehensive examination before writing the thesis, which was the last requirement to obtain a master's degree. The researcher should be qual-

ified to conduct the study physically, mentally, emotionally, and financially. In addition, the advisee-adviser tandem ensured that the study would reach its completion. Adequacy of Facilities. The researcher strived to complete the study successfully in the specified time and was equipped with the necessary resources. Likewise, the technical committee helped enhance the paper by giving the needed suggestions and recommendations. Also, the researcher ensured that he or she had enough funds to continue and finish the research. Thus, this study was hoped to be completed within the target time. Community Involvement. The researcher showed respect for the respondents' local traditions, culture, and views in this study. Moreover, this study did not involve any use of deceit in any

stage of its implementation, specifically in the recruitment of the participants or methods of data collection.

Furthermore, the researcher expressed great pleasure in the interviewees' wholehearted participation in the study. Plagiarism and Fabrication as the researcher. The researcher respected other works by properly citing the author and rewriting what someone else had said his or her way. The researcher also used quotes to indicate that the text had been taken from another paper. Similarly, the researcher assured that honesty was present when working on the manuscript and no intentional misrepresentation and making up of data or results was included or that conclusions were purposefully put forward that were not accurate.

*2.6. Role of the Researcher*—The researcher has a responsibility to uncover, transfer, and exploit knowledge for the benefit of educational institutions. To do so, the researcher takes up the following roles in the course of the study:

Facilitator and Promoter of Unbiased Research. The researcher interviews with the participants and guides them in the process. The researcher interprets ideas and responses based on existing literature and related studies and not on the researcher's knowledge, thoughts, and feelings to avoid the intrusion of bias. Expert in qualitative methods. The researcher implements the qualitative method correctly. To do so, the researcher assesses himself and seeks help from the research adviser and other professionals. These help him demonstrate competence in explaining the study without biasing the participants, conducting interviews according to the design, making appropriate field observations, selecting appropriate artifacts, images, and journal portions, and employing Environmental Triangulation and Thematic Content Analysis precisely. Collector and Keeper of data. The researcher ensures different ways

of making a record of what is said and done during the interview and Focus Group Discussion, such as taking handwritten notes or audio or video recording. The recordings are transcribed verbatim before data analysis can begin. Records done by the researcher are adequately secured as they contain sensitive information and are relevant to the research. However, the data were being collected, and the researcher's primary responsibility was safeguarding participants and their data. Mechanisms for safeguarding must be clearly articulated to participants and approved by a relevant research ethics review board before the research begins. Analyst of data. The researcher sees the phenomenon or problem from the participants' perspective by interpreting data, transcribing and checking, reading between the lines, coding and theming. The researcher ensures that the findings are true to the participants and that their voices are heard.

Organizer and presenter of data. The researcher presents the problem and the related literature and studies that support it. Findings of the study are presented through research ques-

tions – stating the results for each one by using themes to show how the research questions were answered in the study. Moreover, the researcher

gives future directions and implications of the study for the improvement of educational policy and practices.

**2.7. Data Collection**—To ensure safe, educational continuity admits the challenge of COVID-19, this study adhering to the Department of Health (DOH) Administrative Order No. 2020-0015 or the Guidelines on the Risk-Based Public Health Standards for COVID-19 Mitigation, cited by the IATF to aid all sectors in all settings to implement non-pharmaceutical interventions.

The following is the step-by-step process of gathering the data needed.

Asking permission from the Schools Division Superintendent. The researcher asked permission from the Schools Division Superintendent to conduct the study in the identified school. The researcher would send a letter addressed to the Schools Division Superintendent with the attached Chapters 1 and 2 together with the research instrument, which explains the objectives of the study and the Identification of the participants. The researcher would wait for the SDS's response before conducting it. Asking permission from the school heads. After securing the approval of the SDS, the researcher sent letters to the principals of the schools explaining the study to be conducted in their schools.

Obtaining consent from the participants. The researcher asked permission from the par-

ticipants and their parents/guardians. They were formally oriented about the study and the process that they would undergo as participants. Conducting the interview. The researcher conducted the in-depth interview using the interview questionnaire. The profile of the participants was taken, notes were jotted down, and conversations were recorded using a sound recorder for ease of transcription. The researcher carefully listened and responded actively during the interviews. The researcher painstakingly transcribed the interviewees' responses, ensuring the accuracy of their answers. Given that the participants used their vernacular language, the researcher took the extra step to translate it into English, maintaining the fidelity of the data. Data Coding and Thematic Content Analysis. After the transcription, the data would then be categorized and coded. Then, themes were extracted, and individual participant data were compared and contrasted. The researcher then conducted a second round of interviews (FGD) to corroborate any data that needed further explanation and input from the participants; additional information gathered was examined thoroughly and integrated into the existing body of data. After this, the data were compared and contrasted between the participants to identify patterns and trends.

**2.8. Data Analysis**—In this study, the researcher employed thematic analysis to scrutinize the gathered data. The answers of the participants from the conducted interviews were meticulously analyzed using Creswell's Model, specifically the identifying of themes approach. As Creswell (2012) explains, themes in qualitative research are codes that are grouped together

to form a major idea in the database. Familiarization with the data was common to all forms of qualitative analysis; the researcher immersed herself in and became intimately familiar with the data, reading and re-reading it and noting any initial analytic observations. Coding was also a common element of many approaches to qualitative analysis, involving generating pithy

labels for important features of the data relevant to the (broad) research question guiding the analysis. Coding was not simply a data reduction method but also an analytic process, so codes capture both a semantic and conceptual reading of the data. The researcher coded every data item and ended this phase by collating all their codes and relevant data extracts. Searching for themes was a coherent and meaningful pattern in the data relevant to the research question. The researcher ended this phase by collating all the coded data relevant to each theme. Reviewing themes. The researcher reflected on whether the themes told a convincing and compelling story about the data and began to define the nature of each theme and the relationship between the themes. Thematic Content Analysis was employed by the researcher for these. Thematic Content Analysis was a descriptive presentation of qualitative data in which a detailed analysis of each theme was made by identifying the 'essence' of each theme and constructing a concise, punchy, and informative name for each theme (Andersen, 2013). In addition, to enhance validity and create a more in-depth picture of the phenomenon, the researcher em-

ployed environmental triangulation.

It was a technique for analyzing the same study's results using different data collection methods. The key was identifying which environmental factors might influence the information received during the study. These environmental factors are changed to see if the findings are the same across the settings (David, 2015). This type of triangulation uses different settings, locations, and other factors such as time, day, and season in which the study occurred. The idea was to determine which factors influence the information received; these factors are then changed to see if the findings are the same. Validity can be established if the findings remain unaltered under varying environmental factors (Naeem, Saira, 2019). In this study, such triangulation was used considering that the requirement, as mentioned, was the use of environmental triangulation best suited to the environment of the research being conducted. Writing-up involves weaving together the analytic narrative and data extracts to tell the reader a coherent and persuasive story about the data and contextualizing it concerning existing literature.

**2.9. Framework of Analysis**—The framework analysis of this research was flexible, allowing the researcher to either collect all the data and then analyze it or do data analysis during the collection process. In the analysis stage, the gathered data was sifted, charted, and sorted by key issues and themes.

This involves a five-step process: (1) familiarization, (2) identifying a thematic framework, (3) indexing, (4) charting, and (5) mapping and interpretation (Ritchie Spencer, 1994). Familiarization refers to the process during which the researcher becomes familiarized with the transcripts of the data collected (i.e., interview or focus group transcripts, observation, or field notes) and gains an overview of the collected

data (Ritchie Spencer, 1994). In other words, the researcher becomes immersed in the data by listening to audiotapes, studying the field, or reading the transcripts. Throughout this process, the researcher would become aware of key ideas and recurrent themes and note them. Due to the sheer volume of data that can be collected in qualitative research, the researcher may be unable to review all the material. Thus, a selection of the data set would be utilized. The selection would depend on several aspects of the data collection process. For example, the mix of methods used (e.g., interviews, documents, observations), The second stage, identifying a thematic framework, occurs after familiarization, when the researcher recognizes emerging

themes or issues in the data set. These emerging themes or issues may have arisen from a priori themes; however, at this stage, the researcher must allow the data to dictate the themes and issues. The researcher uses the notes taken during the familiarization stage to achieve this. The key issues, concepts, and themes expressed by the participants now form the basis of a thematic framework that can filter and classify the data (Ritchie Spencer, 1994).

Indexing means identifying portions or sections of the data that correspond to a particular theme. This process is applied to all the textual data that has been gathered (e.g., transcripts of interviews). For convenience, Ritchie and Spencer recommend that a numerical system be used to index references and annotate them in the margin beside the text (1994). Qualita-

tive data analysis tools are ideal for such a task. The final stage, mapping, and interpretation, involves the analysis of the key characteristics as laid out in the charts. This analysis should be able to provide a schematic diagram of the event/phenomenon, thus guiding the researcher in their interpretation of the data set. At this point, the researcher was cognizant of the objectives of qualitative analysis: "defining concepts, mapping range and nature of phenomena, creating typologies, finding associations, providing explanations, and developing strategies" (Ritchie and Spencer, 1994:186). Once again, these concepts, technologies, and associations reflect the participant. Therefore, any strategy or recommendations made by the researcher echo the participant's actual attitudes, beliefs, and values.

*2.10. Trustworthiness of the Study*—Trustworthiness was all about establishing credibility, transferability, confirmability, and dependability. In a qualitative study, trustworthiness was very important because the research study's results and findings would depend on how the researcher conducted it. The trustworthiness of a research study was essential to evaluate its worth. Due to the nature of the qualitative study, honesty in all the data and details is required. Trustworthiness makes the researcher's study worthy to read, share, and be proud of.

Credibility was how confident the qualitative researcher was in the truth of the research study's findings. The researcher in this study believed that honesty in everything you do was essential to attain worth while success. The researcher has no derogatory records or administrative issues which ruin her integrity. Lincoln and Guba (2000) state that credibility refers to the idea of internal consistency, where the main issue is "how we ensure rigor in the research process and how we communicate to others that we have done so." Transferability is how the

qualitative researcher demonstrates that the research study's findings apply to other contexts. In this case, "other contexts" can mean similar situations, similar populations, and similar phenomena. The researcher has already studied the effects of using a graphic organizer as a strategy for teaching reading comprehension. Using graphic organizers as a strategy for teaching reading comprehension is effective in the domains of analysis and creation. The researcher was interested in the student's perspective on using this strategy. Gasson (2004) emphasizes transferability as the extent to which the reader could generalize the study based on his context and address the core issue of "how far a researcher may make claims for a general application of the theory." Confirmability was the degree of neutrality in the research study's findings. In other words, this means that the findings are based on participants' responses and not the researcher's potential bias or personal motivations. This involves ensuring that researcher bias does not skew the interpretation of the research participants' statements to fit a particular

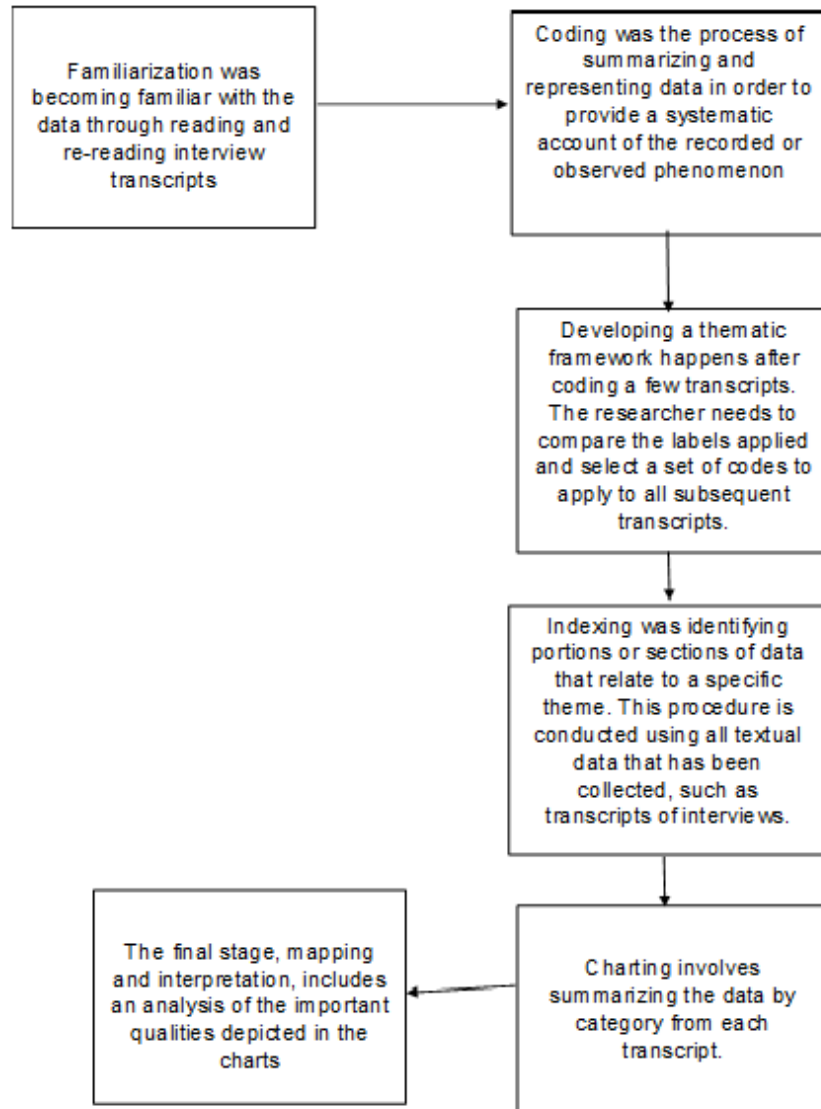


Fig. 2. Analytical Framework of the Study



narrative.

The information using the audit trail in this situation is thoughtfully recorded by the researcher, who highlights every step of data analysis that was made to provide a rationale for the decisions made. This helps establish that the research study's findings accurately portray participants' responses. Gasson (2004) states that confirmability was based on the acknowledgment that research is never objective. Dependability was the extent to which other researchers could repeat the study and ensure that the findings were consistent. In other words, if a person wanted to replicate your study, they should have enough information from your research report to

do so and obtain similar findings as your study did. A qualitative researcher uses an inquiry audit to establish dependability, which requires an outside person to review and examine the research process and the data analysis to ensure that the findings are consistent and can be repeated. In this component, a database was very important in backing up information collected and noting changes for all research studies. All the data collected was properly kept for future use as references. Gasson (2004) stated that dependability deals with the core issue of "how a study is conducted should be consistent across time, researchers, and analysis techniques.

### 3. Results and Discussion

This part of the research dealt with the research questions and requirements of this study. The participants disclosed their experiences in equipping students with life skills as Technology and Livelihood Education (TLE) teachers. The mechanisms used by TLE teachers were also discussed.

*3.1. Technology and Livelihood Education Teachers Experiences in Equipping Students with Life Skills*—Technology and livelihood education are subjects in basic education. The goal of the subject is to prepare basic education students for higher education, middle skills development, employment, and entrepreneurship, as well as to prepare them for life. TLE has been designed to equip students with basic knowledge, attitudes, and skills in different areas of the world of work, such as home economics, agriculture and fisheries, industrial arts, and information and communication technology. It intends to provide authentic and practical experiences that will enable students to understand competencies in various economic activities as they relate to the four major areas of TLE (Tumbali, 2021). Students go through exploratory courses during the first and second year of studies in the four areas of TLE, depending on the availability of the resources and

facilities of the school and the economic needs of the community. Then, students will move on to specializations geared towards the development of competencies

leading to Certificates of Competency (COCs) and National Certifications (NCs) being issued by the Technical Skills Development Authority (TESDA) that signify the acquisition of middle-level skills for gainful employment or business startup (Tumbali, 2021). According to Balhag (2013), Technology and Livelihood Education equips learners with knowledge and information, skills and processes, right work values, and life skills in the field of (Home Economics, Industrial Arts, Agri-Fishery Arts, Information Communication Technology and Entrepreneurship). In addition, TLE aids in the development of work ethics, knowledge, skills, and values that are essential to economically productive endeavors. It also brings about students' awareness in engaging themselves in

income-generating activities and other livelihood projects that eventually improve their lives and lessen their dependence on employment as the only source of income (Cabanig, 2013). In this sense, Javier (2021), in her study, necessi-

tated teachers to be innovative in class towards achieving its vision-mission statement by integrating into the curriculum and instruction the use of digital teaching and learning tools.

*3.1.1. Laboratory Workshop*—Laboratory workshops and hands-on activities are the new trend in education nowadays as a skills acquisition in technology and livelihood education. It has been a modern academic discourse that asserted that the conventional structure of formal education in schools was not sufficient to manage contemporary teaching oppositions (Hakkarainen et al., 2004; Lehtinen, 2008; Tynjälä Gijbels, 2012). Because of this, less conventional components, such as project and portfolio exertion, have progressively been presented in formal

learning (Heikkinen et al. 2012). Practical activity in laboratory rooms was suspended during the onslaught of COVID-19 in the early part of 2020. Furthermore, the enlargement of practical training intervals has been seen as unadvisable; as a result, it affected more pertinent, systematic, and negotiable learning that provided students with a more integrated experience (Harris et al. 2003). In Finland, the vocational education and training (VET) system took a purposeful step regarding the incorporation of casual learning domain in education at the inception of the period. Workplace learning was a principal attribute in school-based technology and livelihood education training (Ministry

of Knowledge, 2006). Nevertheless, various approaches to the composite area of workplace learning called for improving the notion as it linked to this study. Students' experiences with workplace learning vary according to the different tasks at work. Each secondary school made its own accordance with the relative work in the emplacement (Ministry of Knowledge, 2006). The variety of agreements relates to the number of learners attending the work at the same time as the extent of time (Sandal et al. 2014). To be aligned with international quality, the Philippine Basic Education Curriculum requires affixing two years of senior high school to the contemporary four-year secondary education and another year for kindergarten. This essential was incorporated and instructed by Republic Act 10533, known as the 'Enhanced Basic Education Act of 2013' (Jocelyn Kong, 2015). Velasco (2012), in reference to the K-12 curriculum, vocalized about hope and change for the nation. According to her, since civilization puts a premium and pedagogy, it is only right that the governmental administration reinforces the program completely. The Department of Education (2011) expounded that those who were not disposed to go to college and want to pursue technical-vocational courses or entrepreneurial fields stand to benefit from K-12 as well.

*3.1.2. Teaching Practical Knowledge*—Integration of Technology and livelihood education in the theoretical content learned at school into practical knowledge applied was limited at home and to other school subjects, for example, mathematics (Granberg et al., 2017). The learning tasks in technology and livelihood education

lessons are unique, since they are rooted to student's everyday experiences and often include practical learning activities (such as food preparation and others). Therefore, the cognitive challenges that students experience in technology and livelihood education lessons are similar to those in everyday situations (Palojoki, 2003),

where the decision-making process is strongly influenced by social and cultural context (Lave, 1988). It might be that the problem embedded in the learning task is ill-structured; it can also change during the problem-solving process or it can be abandoned in the light of new information or experiences. An additional challenge in home economics is that at the end of the lesson, students eat the meal they have prepared together (Beinert et al., 2021).

Rendahl (2018) stressed that this can be a game-changer in home economics; planning a meal and considering various aspects is one thing; knowing that you will also eat it once it is

ready is even more challenging. This kind of edible learning assignments make technology and livelihood education unique. previous observations of group work assignments from TLE-home economics lessons have led us to believe that problems in home economics lessons are solved through several steps (similarly as in everyday situations), referred to as the gap-closing process (Lave, 1988). Students experience several cognitive challenges and critical moments while working on the cognitive or practical assignment, and thereby, they need to discuss and think together to get closer to the solution of a task.

*3.1.3. Inadequate Instructional Materials*—While a teacher's job does not involve managing the classroom, planning, and evaluating, instructional materials also play a big part in teaching-learning. Students' enthusiasm, involvement, and willingness to learn greatly rely on the material the teacher uses in the classroom. Instructional materials must serve as a vehicle for improving every student's learning quality (Corpuz Lucido, 2008).

Corpuz Lucido (2008) further stated that instructional Materials give a true picture of the idea/ subject presented. Instructional Materials contribute meaningful content to the topic. The instructional materials help the teacher achieve the instructional objectives. The instructional materials are appropriate for the learners' age, intelligence, and experience. The physical condition of the instructional material is satisfactory. Instructional materials help to make students better thinkers and develop their critical faculties. The instructional materials are worth the time, expense, and effort involved. The Participants or teachers discuss how TLE teaches essential life skills that can help students earn money. It covers basic household chores and skills needed for daily living. Learning these skills through TLE helps transform lives by developing productive abilities. It also provided

students with practical courses, teaching techniques, and essential facilities to equip them with knowledge in marketing, selling, book-keeping, and entrepreneurship. Instructional materials dramatically help students remember important information. When properly used, they help students gain and hold their attention. The availability of audio-video materials can be instrumental in supporting a topic, and the combination of both audio and visual stimuli is particularly effective since the two most important senses are involved.

Instructors should remember that they are often salesmen of ideas, and many of the best sales techniques that attract the attention of potential clients are well worth considering (Albarico et al., 2014). Good instructional material can also help solve certain language barrier problems, considering the continued expansion of technical terminology in everyday usage. This, coupled with the culturally diverse backgrounds of today's students, makes it necessary for instructors to be precise in their choice of terminology. Words or terms used in instructional material should be carefully selected to convey the same meaning for the student as for the instructor. They should provide an accurate visual image and make learning easier for the student. Another use for instructional material

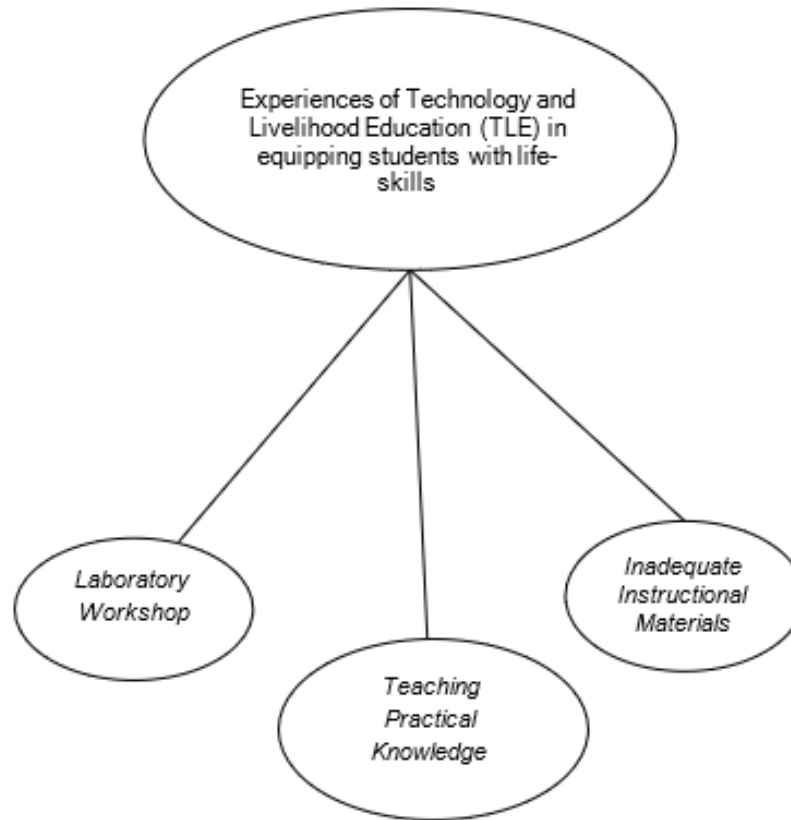


Fig. 3. The emerging themes on the experiences of Technology and Livelihood Education (TLE) in equipping students with life skills

is to clarify the relationships between material objects and concepts. When visually presented, relationships are often much easier to understand (Albarico et. al., 2014)—focusing on the needs of students to understand the importance of Technology and Livelihood Education (TLE) in equipping students with life survival and pro-

ductivity. Figure 3 shows the experiences of Technology and Livelihood Education (TLE) in equipping students with life- skills and decision-making and the emergence of the three themes: laboratory workshop, teaching practical knowledge, and inadequate instructional materials.

*3.2. Coping Mechanisms Of The TLE Teachers In Equipping Students With Life-Skills*—According to Asuncion (2021), it is common knowledge that Technology and Livelihood Education can have difficulties at times, and teachers who are majoring in the said subject are struggling to find the easiest way possible to equipping their students with life skills. Technology and Livelihood Education (TLE) teachers are thinking of innovative ideas on how to relay the lessons effectively to their students.

For instance, they use video demo presentations in order to show the step-by-step process of the skills students must attain given the objectives of the lesson, conduct video conferences to instruct students directly, use messaging platforms to acknowledge and satisfy the questions the students have, and many more. According to the research on TLE teachers coping with their problems in classroom and laboratory activities, a positive approach to dealing with their difficulties was a factor that provided them the neces-

sary strength to move on with their teaching job. Thus, they did not realize they had developed effective strategies to face their predicaments. Coming out of the interviews, they found one solid strategy to be effective: personal initiative and resourcefulness. To lessen the burden

and worry due to lack of equipment and facilities and inadequate support from the administration and community, TLE teachers resorted to their own initiative and resourcefulness (Ariaso Tancinco, 2016).

*3.2.1. Providing Appropriate Workshop Place and Equipment*—Diego (2021) posited that skill-based activities are required in subjects like Technology and Livelihood Education. In such activities, students must demonstrate their abilities regarding a lesson they learned. In that manner, teachers can assess

if the students truly acquired the skills, they must have in the said subject. As for a factor that hinders the students from demonstrating the skills they are required to attain, there are numerous of these factors that challenges the students from performing the tasks they are asked to accomplish. First is that they may not have an appropriate workplace that can provide them with the equipment they need. There are a lot of dangers and other negative possibilities when performing a task without using the correct equipment, let alone doing it in an unsuitable area. And for such reasons, students are not able to comply with the activities they must

do. Given that we are under a global pandemic, necessities are most important. That is why if less privileged students were to choose to buy a certain material for their activity or the food they would eat for the whole day, it is more likely that they would choose their daily needs over something they are required to comply with in school (Diego, 2021). In the study conducted by Chattopadhyay (2019) in his paper *Learner's Support Services in Open and Distance Learning*, the following are the main issues and concerns in distance learning: nonfamiliarity with self-study skills, inadequate interaction with the teachers or instructors, limited access to information and services, financial limitations, lack of conducive environment for study, lack of family support and feeling of isolation. Likewise, in the study by Valentine (2019) at the University of Oklahoma, he finds that the quality of instructions, hidden costs, misuse of technology, and the attitude of instructors, students, and administrators are the problems of distance learning.

*3.2.2. Acquiring Adequate Equipment and Facilities*—Laboratories are not true and effective laboratories if they do not have the proper equipment, facilities, tools, or utensils for demonstration or experiment activities. There is no question about the facility and effectiveness of lesson delivery and skill development with these resources. The lack of adequate equipment and facilities constrained the urgent need to shift to limited face-to-face. In many countries, challenges related to the supply of electricity, online connectivity, low bandwidth,

and the lack of network capacity to cope with increased data usage seemed to add to the crisis's challenges (ILO 2020). The students and teachers also mostly bear the additional data usage costs incurred for distance learning. In many countries, access to the internet was a challenge for many learners. This was reported by skills training providers and other respondents from many

low-income countries such as Afghanistan, Bangladesh, the Central African Republic, Chad, and the Democratic Republic of the

Congo, but also in middle-income and high-income countries. In Albania, Colombia, and Costa Rica, respondents reported a lack of access to the internet and technological devices. In the Philippines, according to TVET providers, online courses were initially offered in the context of the pandemic. However, owing to infrastructure challenges (access to the internet and digital devices), the provision of online courses was discontinued. Access to technological devices is not only a challenge in developing countries. Even in high-income countries like Spain, TVET providers reported that many learners do not have access to the equipment required to complete tasks related to their training and educational program (Wi-Fi, tablet, computer, etc.) and support online learning (ILO, 2020). The digital divide between urban and rural areas was highlighted as another serious challenge in many countries. In countries like Côte d'Ivoire, Sri Lanka, and Trinidad and Tobago, where the government provided remote training via online

platforms or television, skills training providers and other respondents reported that learners living in remote areas could not benefit from these. Measures given the lack of connectivity or absence of devices like computers and TV sets. Respondents from Finland, France, Spain, the United Kingdom of Great Britain, and Northern Ireland reported differences between learners from different regions, mainly rural and urban areas, regarding access to the internet and digital equipment. In Ecuador, TVET providers reported that the problem of the lack of internet access and low connection quality was worse in rural areas than in urban areas.

In some rural areas of Malaysia, according to the representative of a national training authority, power supply depends on an electric generator, and electricity is available for only a few hours per day. The digital divide between rural and urban areas is expected to have exacerbated inequalities in many countries (ILO, 2020).

**3.2.3. Reskilling of Teachers**—Before implementing the K-12 curriculum, Technology and Livelihood Teachers (TLE) weren't required to have National Certificates (NC) from TESDA. They taught their lessons based on what they learned from their baccalaureate degree or the experiences they gained over the years.

This means that TLE/HE still lingered to old teachings, and the skills taught to the students were also traditional. This was way before the evolution of technology became more competitive (Padolina, 2004). When the K-12 curriculum was implemented, all the teachers handling Technology and Livelihood Education subjects were required to take the training and undergo and pass the assessment for a certain specification. That is why most of the teachers in TLE nowadays have one or more NCs, and it is now a basic requirement for new passers to submit

upon ranking (Padolina, 2004) Based on experience, teachers who have one or more NCs are more effective than those who root for the traditional way of teaching (because there are old teachers who most likely do not like to get NC because, according to them, they have all the experience and they do not need the certificate). Yes, it is true that older teachers are already very seasoned, but it is still different to refresh your brain with new knowledge based on the new competencies we now adopt. It would not be a loss if we tried to attend training. Instead, it is an addition and way more advantageous. To our part. We try to teach our students the skills, but how can we teach them if we do not even have one? Our learners nowadays are smarter, and they can immediately detect if a teacher lacks the skills or is efficient in a particular field. We are the bridge of learning, so we need to get more training to build ourselves into our

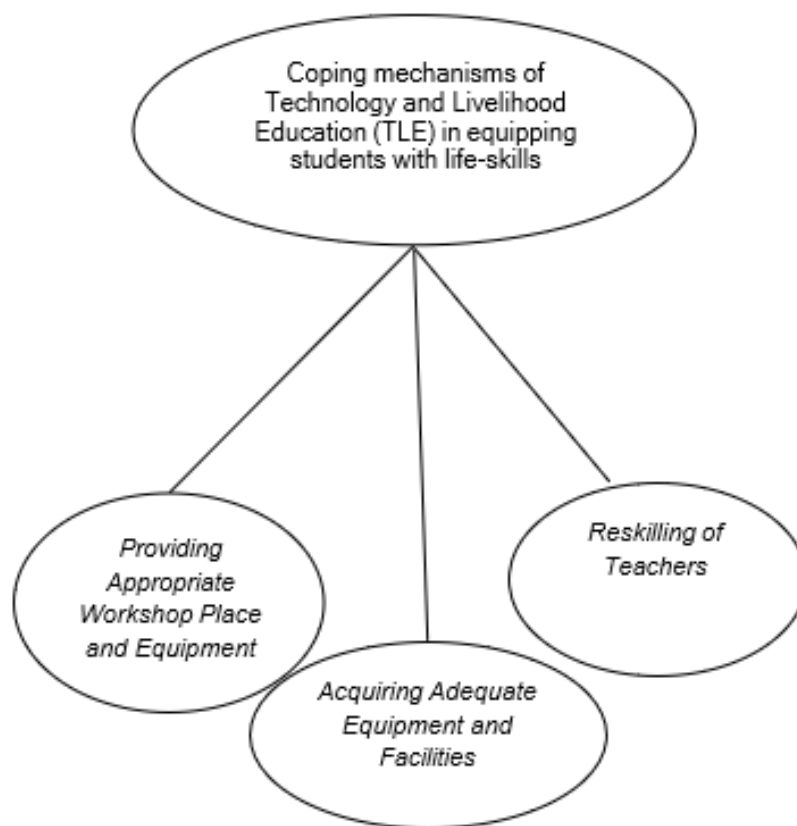


Fig. 4. The emerging themes on the coping mechanisms of Technology and Livelihood Education (TLE) in equipping students with life skills

learners. It is not only by the paper that we have certificates; we also have to ensure we are the best in our field (Padolina, 2004). Figure 4 shows the experiences of Coping mechanisms of Technology and Livelihood Education (TLE) in equipping students with life skills and the emergence of the three themes: providing appropriate workshop place and equipment, acquiring adequate equipment and facilities, and reskilling of teachers.

### 3.3. Educational management Insights gained from the experiences of the informants—

**3.3.1. Be Adaptable—**Adaptability is also highly relevant to teachers because teaching involves responding to and managing constant change (Collie Martin, 2015). The capacity to adapt and manage these changes effectively is crucial for teachers' work in the classroom, staff room, and beyond. Being able to effectively respond to the inherent novelty, change, and uncertainty that characterizes teaching work is a highly important capacity for teachers. Teachers' adaptability or flexibility as a central factor in effective modular distance teaching and learning (Kunter et al., 2013). Much of this work has considered teachers' adaptability in instructional practices (e.g., Corno, 2008, Parsons et al., 2012; Vaughn Parsons, 2013). For example, Corno (2008) highlights the importance of adaptive teaching practices to meet the needs of students with diverse developmental levels, cognitive abilities, language and cultural

backgrounds, social-emotional competencies, and socioeconomic backgrounds. Similarly, Parsons, Williams, Burrowbridge, and Mauk (2012; see also Parsons, 2012) discuss the importance of innovation and “in-the-moment adaptation” in the classroom in order to respond to students’ needs and interests.

More precisely, Parsons and colleagues (2012) observed teachers’ use of adaptations in their instruction, such as spontaneous modeling or scaffolding, adjusting instructions, or working one-on-one with different students. Researchers have also considered the role of adaptability more broadly, that is, beyond instructional adaptation and with respect to teachers’ functioning at work. (e.g., Hargreaves, 2005; Mansfield et al., 2012). For instance, Mansfield, Beltman, Price, and McConney (2012) examined descriptions from early career teachers of what it means to be a resilient teacher and demonstrated that being adaptable and flexible was a central theme in participants’ responses. Moreover, the participants indicated adaptabil-

ity involves adjusting to new roles, accepting changes, and having a “plan b.” As noted above, we suggest adaptability is a protective factor supporting resilience. Effective responses to the inherent novelty, change, and uncertainty that characterize teaching work is an essential capacity for teachers. We can consider potentially adaptable responses using Martin et al.’s (2012) tripartite model of adaptability (as relevant to adjusting thoughts, behavior, and emotions). For example, if a teacher is asked to teach a new subject that is unfamiliar to them, effectively dealing with this change requires regulating thoughts to find connections between the new material and familiar topics (cognitive adaptability), regulating behavior to seek out a helpful person who has more knowledge and relevant resources in the new subject (behavioral adaptability), and regulating emotions such as anxiety or excitement to focus on finding a solution in a focused and timely manner (emotional adaptability).

**3.3.2. *Be Resourceful***—A resourceful teacher is one that can seek and utilize the resources very well to produce meaningful learning for students. It is not about quantity, but it is about quality. Being a resourceful teacher is aligned with our school vision, which is “Fostering and empowering society in building and serving the nation”. Also, to teachers who did their own research and shared useful resources that can cater to our students’ needs and learning styles. The beauty of togetherness has brought teachers to brainstorm, sort out and share powerful resources that will make home learning successful and not to mention zero complaints from parents. Therefore, it is important to consider the best resources for our first graders. Our young learners still need assistance from their parents during the home learning program to achieve their learning goals

(Saraswati, 2020). Our job as educators did not stop there. If we can make an analogy, teachers are like designers. We plan and design our students’ learning journey with the proper tools to achieve the learning goals.

It is essential to be a resourceful teacher to make the learning and teaching process meaningful yet engaging for our students. Being a resourceful teacher means being able to consider multiple solutions or resources that can cater to the student’s needs and learning styles as well (Saraswati, 2020). This pandemic has taught us that we all over the world are not alone and can overcome challenging circumstances together. The beauty of togetherness drives educational websites or applications to generously give free subscriptions to educational resources for schools and educators. As an educator, I would like to thank all the educational web-



sites. Their generosity is indeed valuable for educators worldwide. We know that the home learning program is challenging not only for

parents but for teachers as well. It is not easy to put physical teaching into an online learning program (Saraswati, 2020).

**3.3.3. Keep Updated**—One must understand that a teacher is a package and comes with various skills. It is important these days for teachers to update their teaching skills and pedagogical skills to teach students. A rapidly changing world needs an upgraded teacher! Nobody ever quits learning, not even an educator! It's necessary for teachers to unravel and repackage knowledge, skills, pedagogies, and learning outcomes to stay relevant and connected to the future. When everything else is getting updated, it's important for teachers to get updated with effective pedagogies, new skills, and techniques, including the whole class, structured groups, differentiation, and new assessments (Sagar, 2020). Teachers and students are convinced to be the two fundamental blocks of an education system. The world is moving, making it essential to be a reflective teacher with each passing moment. To provide the best teaching, the teacher must know the best, making upgrading oneself to new skills mandatory. Our instruction framework is advancing step by step. The training framework is rarely stable, from the Gurukul training arrangement to the web and flip classes. Globalization has likewise influenced the education framework, strategies, and pedagogical skills, which have witnessed rapid change. When teaching can help change lives, educators additionally should stay aware of the progressions and trans-

formations (Sagar, 2020) This has collectively made teachers effectively develop their skills and indeed helped in learning and polishing our skills. A simple scenario is when we come up with our ideas for teaching a concept, and how this innovation has become a trend in schools to teach the concepts effectively and share the same happiness with other teachers and students, a new path is created to make the learning fun. Presently, as the advancements of technology are shaping the realities of education, the digital era expects both teachers and students to be more tech-savvy, triggering analytical and critical thinking. The idea of team teaching and sharing the best practices among teachers in school meetings is to collaboratively and collectively create change and update their pedagogical skills and content knowledge (Sagar, 2020). Technology and Livelihood Education (TLE) was established as part of the primary education of Filipino learners and aimed to promote life-sustainable living support as each student learns and acquires valuable knowledge and skills necessary for life. It is meant to equip the learners with hands-on experiences and fundamentals of life abilities. Figure 5 shows the experiences of educational management insights gained from the informants' experiences and the emergence of the three themes: be adaptable, be resourceful, and excessive administrative tasks and keep updated.

## 4. Implications and Future Directions

This chapter presents a summary of the study, and from the summary of the findings, the implications and future directions are drawn. The purpose of my study was to solicit the experiences of the Technical and Livelihood Education (TLE) teachers of Tagum South District, Division of Tagum City, in equipping students with life skills. To achieve the research objectives, a qualitative

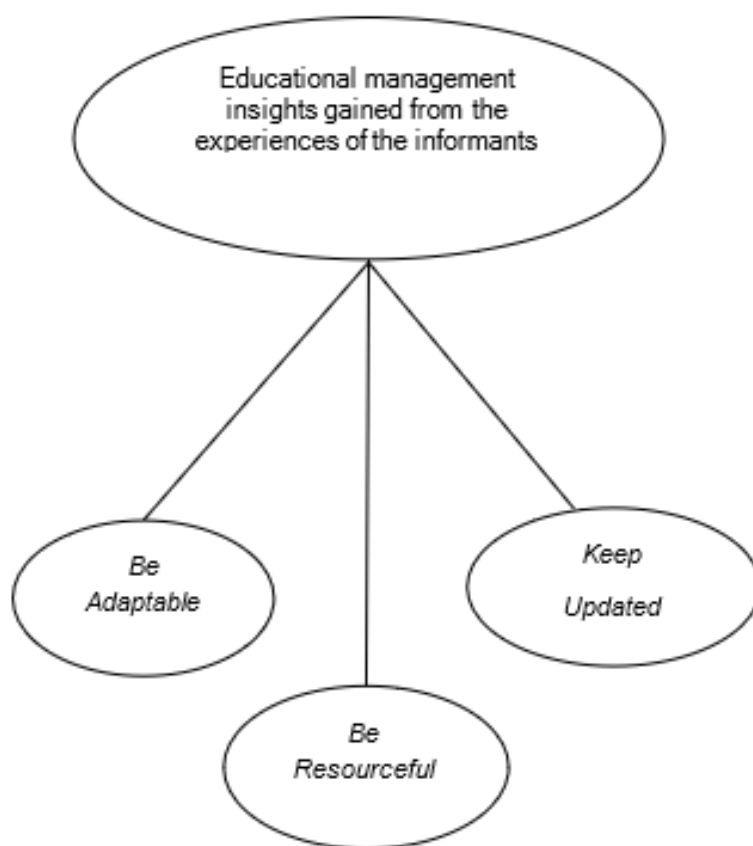


Fig. 5. Educational Management Insights Gained From The Experiences Of The Informant

phenomenological method was utilized, with thematic analysis. In adherence to Cresswell's (2006) guidelines, open-ended questions for interviews were applied to get an authentic understanding of people's experiences. Furthermore, this interview approach encouraged participants to present their own definition or meaning of the phenomenon being explored.

*4.1. Findings*—The study's findings on the experiences of Technical and Livelihood Education (TLE) teachers in equipping students with life skills revealed that it was indeed a laboratory workshop that taught practical knowledge and used inadequate instructional materials. In terms of the coping mechanisms of Technical and Livelihood Education (TLE) teachers in equipping students with life skills, it was re-

vealed that they cope.

Through providing appropriate workshop places and equipment, we are acquiring adequate equipment and facilities, and reskilling teachers. Regarding the educational management insights gained from the participants, the TLE teachers proposed the importance of being adaptable, flexible, and keeping updated as essential insights in their experiences in home-school partnerships.

*4.2. Implications*—The results of my analysis revealed the following significant findings. Based on the experiences of Technical and Livelihood Education (TLE) teachers in equipping students with life skills, interview results revealed the following themes: First, laboratory workshop. The teachers experienced laboratory workshops and hands-on activities, which are the new trend in education nowadays, as skills acquisition in technology and livelihood education. Second, teaching practical knowledge, teaching practical knowledge is essential in helping the students develop life skills. Third, inadequate instructional materials and the use of instructional materials greatly help the students remember important information, and even with inadequate instructional materials being a real challenge, it is also an opportunity to teach the students essential life skills such as resourcefulness and self-reliance. One of the themes discussed was the coping mechanisms of Technical and Livelihood Education (TLE) teachers in equipping students with life skills. The TLE teachers cope with the challenges of equipping students with life skills by providing appropriate workshop places and equipment for hands-on

experience to develop their skills.

The second theme identified was acquiring adequate equipment and facilities, as laboratories are not true and effective laboratories if they do not have the proper equipment, facilities, and tools or utensils for demonstration or experiment activities. The third theme identified was the reskilling of teachers to equip the TLE teachers with the necessary skills to teach the students practical and relevant life skills. On the educational management insights gained from Technical and Livelihood Education (TLE) teachers in equipping students with life skills, the first theme identified was being adaptable as students come from different backgrounds and have different levels of experience, so it is important to be flexible in adapting to their needs. The second theme identified was to be resourceful because a TLE teacher has to be resourceful and creative in finding ways to engage and motivate students when teaching life skills.

The third theme was "keep updated." These days, it is important for teachers to update their teaching and pedagogical skills to teach students. Teaching life skills requires ongoing professional development and learning.

#### *4.3. Future Directions*—

Based on the findings of the study, some important moves must be taken into consideration and be made available for the Technical and Livelihood Education (TLE) teachers, considering the bulk of their work on their assigned function in equipping students with life-skills. This study may provide an avenue to enlighten school heads to continue supporting their teachers and equip students with life skills through TLE.

It may provide valuable insights for school heads as they work to promote TLE programs for students' betterment and prepare them for their entrance to the workforce. The study may assist the TLE teachers in identifying effective strategies, improving curriculum development,

enhancing professional development, and fostering collaboration and networking among other TLE teachers to improve their performance in instructing students with life skills. The learners may better understand the efforts of their TLE teachers, improve their learning experience, and have greater access to resources and support in their future job prospects. Moreover, the learners and their parents may consider their possible contributions to the subject and its teachers to enhance the student's experience with learning life skills. For future researchers, similar studies may be conducted in other regions or divisions. The researchers may consider other aspects of the experiences of the TLE teachers in equipping students with life skills.

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