Struggling, Coping, and Persisting in New Normal Education: Pre-Service Teachers in Field Study Courses

Reggie Boy B. Fabro 1, Eba Christie C. Rivera 1, Janet C. Rivera 2, Niña Theresa Grace S. Rabang 1, Alma C. Asuncion 1, Mark R. Limon 1

1 Technical-Vocational and Livelihood Education Department, College of Teacher Education, Mariano Marcos State University, Laoag City, Philippines

2 Industrial Technology Department, College of Industrial Technology, Mariano Marcos State University, Laoag City, Philippines

Abstract – Students’ learning was temporarily interrupted due to the unexpected closure of academic institutions brought by the pandemic. As a result, pre-service Technical-Vocational Education (TVE) teachers struggled when it comes to their well-being and mental health, educational logistics, and due to restrictions. In order to cope with these identified problems, the participants resorted to positive reframing, reconnecting with interests and learning preferences, and seeking instrumental support. This study recommends that higher education institutions must recalibrate the Field Study (FS) curriculum, capacitate instructors, and update technological infrastructures to enable the effective continuity of teaching and learning in TVE even in turbulent conditions.

Keywords – curriculum, higher education, pre-service education teachers, online learning, teaching.

1. Introduction

Despite the education sector being one of the social institutions that has been critically impacted by the Covid-19 pandemic, the teaching and learning processes still persisted employing a variety of innovative and creative approaches and strategies to facilitate education amidst unfavorable academic conditions. In cases such as this, Schleicher [1] argues that a learning continuity plan should be established, and that crucial measures must be undertaken in order to guarantee that learners continue to experience and attain high-quality education in spite of unexpected disruptions in the educational ecology. Through initiatives instigated by local and national government units, students and teachers across all levels of education transitioned from in-person-oriented to computer- and online-based instruction, as the number of confirmed Covid-19 cases continued its constant increase [2]. In the Philippines, the emergence and discovery of new Covid-19 variants has prompted the operation of heightened countermeasures in the majority of the country's regions. Consequently, both teachers and students have had to adapt their habits, teaching and learning styles, evaluation methodologies, and many other pedagogical practices in order to reframe the entire conventional education system [3]. In order to have students and teachers fully equipped with the knowledge and skills they need in the new normal of learning, and for them to be fully functional when they will eventually become full-fledged members of the community of professional teachers, they have been subjected to immersive learning experiences, where they are expected to imbibe the new and emerging pedagogical theories and practices. Stemming from these reforms in education are a number of benefits that placed the educational stakeholders on advantaged position; however, these
have also brought tensions and hence frustrations among both beneficiaries of the teaching activities and educational actors. Schleicher [1] maintained that educators had to adapt to new pedagogical concepts and modes of delivery of teaching, for which they may not have been trained. As a response, the need to recalibrate the curriculum, capacitate teachers, and establish responsive infrastructures become imperative. One crucial consideration in order to realize the reframing of the educational system's future objectives is a comprehensive and in-depth understanding of the challenges and coping mechanisms of students at an unfamiliar period in education.

In the Philippines, the pandemic necessitated a number of modifications and transitions, as students continued their study outside of the classroom, in their own homes, barangay halls, municipal covered courts, and in other sites where they could avail of strong internet connectivity. Various issues for academic stakeholders arose as a result of these changes and transitions. In fact, the opening of classes had been delayed twice to give schools ample time to prepare for this shift [4]. Moreover, many students and teachers struggled to keep up with distance learning preparations despite the delays. In a study conducted by Darling-Hammond & Hyler [5], they reported that in the immediate aftermath of Covid-19, institutions of education, which are responsible for educating future teachers, had their own set of issues. However, the policies and guidelines ordered by the higher educational offices in the Philippines, such as the joint memorandum orders issued by the Commission on Higher Education (CHED) and the Department of Education (DepEd) [6], many aspects of the educational system were profoundly altered so that the effective delivery of education across all levels through diverse yet inclusive methods could still be realized. Emphasizing the steps undertaken by schools, Tsegay et al. [7] explained that academic institutions have begun to adapt their learning environments through embedding digitalization, which widened and complemented student-teacher connections and other educational networks. Nevertheless, carrying out new technological approaches and strategies as part of the pedagogical transition became challenging for educators who have been used to conventional teaching approaches. Apparently, concerned teachers require appropriate upskilling in order to strengthen their pedagogical knowledge, as well as their 21st century skills, talents, and abilities. Levelling teachers’ competencies to students’ learning demands in an ever-changing academic landscape would aid in the effective management of online or flexible learning, allowing students' learning requirements to be met through student-centered and ICT-oriented pedagogy.

In teacher education institutions (TEIs), the new educational ecology brought about issues and concerns in courses, such as Field Study (FS), that could not be effectively and efficiently implemented in an academic setup that is dominantly online- or computer-based. FS courses are required for students who are taking education as a college degree. Pre-service teachers will have to participate in many teaching and learning activities, such as observation in real classroom interactions, aiding teachers in their classes, creating lesson plans, developing instructional materials, and accomplishing daily reports, among other things, as part of their FS. However, students in pre-service education are having difficulty due to a variety of distractions, such as having to balance studying with fulfilling domestic responsibilities, which may interfere with their attainment of academic goals and objectives. According to Gelles et al. [8], and Son et al. [9], students at university claimed that their homes were a source of distraction and that they were more likely to be stopped by roommates or family members. Internet connectivity is another issue that education students have been grappling with, especially for those who are located in far-flung areas. Weak internet connectivity if not the lack of online access during virtual classes was noted by a number of studies to be the root cause of problems in education during the pandemic. Problematizing the implementation of FS within an educational context that is rife with issues on access, connectivity, and abrupt transitions that negatively affect educational stakeholders, this study was conducted to assess the challenges encountered and the coping strategies employed by the pre-service TVE teachers who underwent FS courses, and to make clearer the various educational implications that are embedded in the multilayered dynamics of problem-solution relationship during turbulent conditions.

2. Literature Review

This section presents a review of literature and studies related to the study which served as the guide of the researchers in the conceptualization and in the conduct of the study.

2.1. Challenges in Online Learning

Due to series of lockdowns that was implemented to ensure everyone's health and safety, online learning was confronted with inevitable obstacles. These include challenges related to technology, students’ self-discipline, and social interactions and partnerships, apart from health issues that primarily
resulted in consequences branching out to different areas. Pre-service TVE students taking FS courses encountered these issues and concerns, and, in the process of adapting themselves to the new learning environment, were able to come up with mechanisms to deal with these problems.

**Technical challenges.** Technical issues related to development, such as flaws, speed, faults, and functions and features that are not working as expected or in accordance with academic criteria, were encountered in online learning [10]. In addition, Taylor [11] inferred that the significant variables to consider include time management, hectic schedules, and the reality that not all content can be presented effectively in an e-learning setting. In relation to this, a good internet connection or enough mobile data is required for online learning. As a result, it imposes financial hardships on students belonging to families that lie within or under the poverty line [12].

**Self-discipline issues.** Due to the fact that no teacher is physically present to oversee students’ learning, participation in online instruction requires a high level of self-control. If compared to in-person learning where the teachers in-charge, including peers, serve as guides and encouragers, online instruction conjures up a huge barrier for those who fall short of imposing self-discipline in particular, because the success of learning became largely dependent on them [13]. Unlike a regular class, the online learning did not allow students to explore a variety of topics in the classroom every week. As a consequence, it was easy for students to put things off and do things at the last minute since they had other things to worry about, such as family, school, friends, and many other social responsibilities. Liu [14] suggested that students must create a study routine in order to avoid procrastination and hence the unnecessary piling up of school work.

**Interaction and collaboration.** Students in distance education have a lot more flexibility in terms of how and when they collaborate. But due to long-distance communication between students, collaboration and interaction is hard to achieve [15]. Supporting this statement, Koi-Akrofi et al. [13] opined that online learning is the polar opposite of in-person learning in that it completely eliminates or significantly reduces the social part of learning. As a result of this worldwide pandemic, relationships, communication, public speaking, and healthy and productive interactions are all negatively affected, which in turn lessened the affordances that one could draw from engaging in meaningful and productive educational environments.

**Health issues.** Mental illness can certainly cause an enduring impact on a student's motivation, focus, and social relationships; all of which are critical for success in higher education [9]. By pushing for the continuity of education through online learning or flexible instruction, Rao et al. [16] reported that students have experienced a variety of drawbacks, including increased stress and worry, which has eventually resulted in mental health deterioration. Copeland et al. [17], and Barrot et al. [18] also revealed in their studies that the pandemic had a negative impact on students' behavioral and emotional functioning, notably attention and externalizing problems. Students expressed worries about learning online, an overwhelming task load, technical difficulties, and confinement [19].

The aforementioned problems prompted the researchers to undertake this study in order to learn more about the difficulties that pre-service TVE students needed to deal with in the course of completing their FS. It is hoped that through the findings in this study, the TVE students’ educational experiences will be comprehensively represented and understood, especially that this study is the first to problematize the curricular implementation of FS courses in a TEI situated in a fast-evolving and even hostile academic landscape.

### 2.2. Coping Strategies in Online Learning

Coping strategy, also known as coping mechanism, is a way of dealing with difficult or stressful events. Coping has been scientifically defined by Richard Lazarus and Susan Folkman as the sum of cognitive and behavioral effort, which is always changing, directed at dealing with specific demands, whether internal or external, that are seen as challenging [20], [21]. When people adopt emotion-based coping, the harmful situation is not changed at its source, thus tension is only temporarily relieved, and psychological issues commonly arise or worsen over time. Problem-based coping, on the other hand, is more likely to develop a better understanding of the problem through cognitive restructuring and/or problem solving (e.g., seeking medical treatment) in order to change the threatening situation, potentially reducing the negative impact of stressors on adjustment. Emotion-focused coping has been found to be a risk factor for stressors having a negative impact on adjustment, whereas problem-focused coping has been found to be a buffer for stressors having a negative impact on adjustment. As a result, the current research hypothesized that problem-based coping can reduce the negative effects of COVID-19-related stressors on adjustment, but emotion-based coping can worsen the negative impacts of COVID-19-related stressors on adjustment [22].

The appropriate use of effective coping strategies is an indispensable skill to develop during turbulent times in education as it allows the pre-service TVE students to be protected from mental illness,
disturbance, and stress due to the various struggles they might encounter. The skill of employing coping strategies when necessary may take some time but by keeping it as a part of one’s routine could lead to its inclusion to an individual’s natural response to problems. Enabling students with the timely use of coping strategies to address their struggles may help them to persist in their college education, until their eventual belonging to the community of professional teachers.

2.3. HEIs Response to Online Learning

Public and private colleges and universities in the Philippines have deployed various modalities of learning, and subscribe to either hybrid (combination of online and in-person), full online (synchronous and asynchronous), or scheduled in-person classes if permitted by CHED and the Inter-Agency Task Force (IATF) for Covid-19. Educational institutions promoted the utilization of learning management systems and other academic-related ICT applications. Moreover, teachers are encouraged to organize and develop tools and materials that must be made accessible and available to their students.

The Philippines is not the only country that is dealing with present issues regarding the implementation of online learning. Its Southeast Asian counterparts have come up with innovative solutions to the same problems and have begun to transition to a new era of education. As early as May 2020, Thailand, Indonesia, and Vietnam have already started carrying out some types of distance learning.

Thailand’s Education Ministry had intended to use a Distance Learning Television (DLTV) platform to implement a learning program. Educational classes, vocational education, non-formal and informal education were broadcasted on seventeen television stations [23]. Also, the Ministry of Higher Education, Science, Research, and Innovation (MHESI) has offered Microsoft software to over 60,000 educators and 2 million students [24]. Meanwhile, Indonesia’s Education and Culture Ministry launched their own distance learning program named “Learning from Home” in cooperation with TV Republic Indonesia (TVRI), a state-owned broadcaster, [25]. The Online Learning System Program (SPADA) is used by 95% of Indonesian universities for online learning [26]. SPADA is a supporter of learning management systems (LMS) in all levels of tertiary education, where online lectures and course materials are made freely available to students.

Furthermore, Vietnam’s Ministry of Education and Training (MOET) organized a national online conference to find ways to improve online learning before beginning its educational program [27]. According to the MOET, 110 of Vietnam’s 240 higher education institutions have started offering online courses. However, not every HEI has a completely functional LMS. Nevertheless, after months of trial and error, online teaching is now acknowledged as a formal technique in Vietnam [27].

Implementing multiple learning modalities by neighboring Southeast Asian nations and by our country is a strategic step toward meeting all of the demands of online learning among its students and teachers. However, this may have been done in conjunction with recalibrating the different needs for online learning, such as content, teacher competency, and infrastructure. Establishing close cooperation with local government units (LGUs) is crucial to provide internet connection to students, allowing for a seamless flow and operation of online learning. Technical setbacks may occur, but accomplishing this leads to a successful online learning deployment.

3. Methodology

This section discusses the methodology of the study which includes the research design, participants, instrument, data gathering procedure, and data analysis.

3.1. Research Design

Qualitative approach was used to make sense of the data gathered since the researchers ultimately aim to provide a comprehensive representation and a multilayered understanding of the several issues that pre-service TVE teachers were confronted with when they were taking their FS courses and how they coped with these problems in order to persist in their college education. The findings in this study may serve as bases in FS curriculum redesigning and in redirecting the focus of FS instruction so that pre-service teachers are fully equipped after completion of the said courses. Data were gathered using a series of semi-structured interview sessions involving the participants. Concepts-Constructs-Themes (CCT) Method of data analysis was utilized in order to examine significant patterns and relevant themes that respond to the questions that this study aims to answer.
3.2. Participants

The 4th year pre-service TVE teachers of the Technical-Vocational and Livelihood Education (TVLEd) Department who took the FS courses served as the population of this study. There were 12 samples who were selected through purposive sampling. Each of the samples must meet the following criteria to be considered as participant; 1) must be a completer of FS courses in the university where he/she is presently enrolled; 2) must be enrolled in the program offered by the department; 3) must be in his/her fourth year level; and 4) must be willing to participate in the study. To obtain the maximum variation among the samples to be involved in the study, the researchers ensured that the various specializations offered in the department are well represented. Table 1 shows the profile of the participants. All of the participants are enrolled in the program offered by the TVLEd department, completed the FS courses last semester, and are all fourth year students. The majority of the participants are males, the average age years of all the participants are 22.33 years. Nine of them are residing in rural areas.

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Major</th>
<th>Year Level</th>
<th>Age</th>
<th>Sex</th>
<th>Place of Residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT01</td>
<td>BTLEd</td>
<td>HE</td>
<td>4th</td>
<td>21</td>
<td>M</td>
<td>Rural</td>
</tr>
<tr>
<td>PT02</td>
<td>BTVTeD</td>
<td>COMHS</td>
<td>4th</td>
<td>21</td>
<td>M</td>
<td>Rural</td>
</tr>
<tr>
<td>PT03</td>
<td>BTVTeD</td>
<td>FSMT</td>
<td>4th</td>
<td>21</td>
<td>M</td>
<td>Rural</td>
</tr>
<tr>
<td>PT04</td>
<td>BTVTeD</td>
<td>GFDT</td>
<td>4th</td>
<td>28</td>
<td>M</td>
<td>Rural</td>
</tr>
<tr>
<td>PT05</td>
<td>BTLEd</td>
<td>HE</td>
<td>4th</td>
<td>21</td>
<td>F</td>
<td>Rural</td>
</tr>
<tr>
<td>PT06</td>
<td>BTVTeD</td>
<td>COMHS</td>
<td>4th</td>
<td>22</td>
<td>M</td>
<td>Urban</td>
</tr>
<tr>
<td>PT07</td>
<td>BTLEd</td>
<td>HE</td>
<td>4th</td>
<td>21</td>
<td>F</td>
<td>Urban</td>
</tr>
<tr>
<td>PT08</td>
<td>BTVTeD</td>
<td>ELTEC</td>
<td>4th</td>
<td>25</td>
<td>M</td>
<td>Urban</td>
</tr>
<tr>
<td>PT09</td>
<td>BTLEd</td>
<td>HE</td>
<td>4th</td>
<td>21</td>
<td>F</td>
<td>Rural</td>
</tr>
<tr>
<td>PT10</td>
<td>BTVTeD</td>
<td>GFDT</td>
<td>4th</td>
<td>23</td>
<td>F</td>
<td>Rural</td>
</tr>
<tr>
<td>PT11</td>
<td>BTVTeD</td>
<td>FSMT</td>
<td>4th</td>
<td>22</td>
<td>F</td>
<td>Rural</td>
</tr>
<tr>
<td>PT12</td>
<td>BTVTeD</td>
<td>ECTEC</td>
<td>4th</td>
<td>22</td>
<td>M</td>
<td>Urban</td>
</tr>
</tbody>
</table>

Note: PT-Pre-service Teacher; BTVTeD-Bachelor of Technical-Vocational Teacher Education; BTLEd-Bachelor of Technology and Livelihood Education; HE-Home Economics; COMHS-Computer Hardware and Servicing; GFDT-Garments Design and Fashion Technology; FSMT-Food Service Management Technology; M-Male; F-Female.

3.3. Research Instrument

A researcher-constructed and open-ended interview guide served as the primary instrument for data gathering in this study. The interview guide consisted of a series of related open-ended questions asked by the interviewer to stimulate meaningful responses from the interviewees. The instrument which contains 12 questions, is divided into three parts namely: profile, problems encountered, and coping strategies used by the pre-service TVE teachers. Two pilot testing was conducted by the researchers in order to determine the instruments’ content validity and consistency, to test whether the participants can understand the questions well, and to elicit appropriate and sufficient responses to the questions asked. All the valid inputs and recommendations from those who participated in the pilot test were considered in the revision and finalization instrument.

3.4. Data Gathering Procedure

After selecting the qualified participants in this study, the researchers asked permission from concerned authorities in the TEI and let the participants review and study the ethical considerations and guidelines concerning their involvement in the research. Once the participants already agreed with the content of the protocol, participants affix their e-signatures to signify their willingness to participate in the study. Two participants were scheduled to engage in the semi-structured interview per day in order to sustain the quality of responses drawn from the participants, and so that the interviewer will not easily feel exhausted from facilitating the interview sessions. The participants were interviewed one by one and were allowed to use English, Filipino, or Ilokano (their local language) in expressing their insights. In compliance with the health protocols put in place by the national and local government to curb the consequences of the COVID-19, online interview via Zoom or Google Meet was carried out to gather data on the different challenges encountered and coping strategies deployed by the pre-service TVE teachers.
who took FS courses during the pandemic. With the participants’ permission, the interview sessions were recorded, and each session lasted for an average of 36 minutes for every interviewee.

3.5. Data Analysis

Responses from the participants collected through the interview sessions were transcribed in Microsoft Word, following a deliberately simple and quickly attainable transcription system that considerably smoothens speech and sets the focus on content. The meaningful qualitative feedbacks from the participants were processed by applying the CCT (Concepts-Constructs-Themes) Method of data analysis. Here, the concepts pertain to the statements that were directly lifted from the participants’ responses in answering the questions provided in the semi-structured interview guide. From these set of categorized statements (concepts), constructs were formulated in order to clearly and precisely explain the insights, principles, and/or theories embedded in the concepts. By simplifying the complex concepts into intelligible constructs, meanings about the problems and coping mechanisms of the participants in relation to completing their FS courses are communicated and shared in a more comprehensible manner. Themes are finally drawn from these constructs. The themes now represent the various problems encountered by the pre-service TVE teachers and how they addressed these through employing different coping mechanisms.

4. Results

The analysis of the interview with the participants deepened and enriched insights about the struggles experienced by the pre-service TVE teachers and the coping strategies they applied to thrive in their college education, particularly in the completion of their FS courses. The CCT method of data analysis yielded the following results.

Table 2. Problems encountered by pre-service TVE teachers

<table>
<thead>
<tr>
<th>Themes</th>
<th>Codes</th>
<th>f</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Being and Mental Health</td>
<td>Difficulty concentrating</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lack of motivation</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Mental issues</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Financial worries</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Weariness</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Logistics in education</td>
<td>Situations in demo teaching and assistantship</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Internet connection</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Problems on technology and gadgets</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Struggling to establish collaboration and interaction</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Restrictions</td>
<td>Not fully vaccinated</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Problems Encountered by the Pre-Service TVE Teachers

The participants revealed that they encountered numerous setbacks as a result of the educational system's abrupt transformation brought about by the Covid-19 pandemic (see Table 2).

The following themes emerged as the main problems that students faced as they took their FS courses during the new normal in education: well-being and mental health, educational logistics, and restrictions.

Well-being and mental health. During the implementation of the FS courses, different health-related concerns impeded pre-service TVE teachers' progress in their studies. These health-related challenges include difficulty in concentrating, lack of motivation, mental issues, financial worries, and weariness.

All the participants reported that they felt difficulty to concentrate in their study due to some factors. These factors include part time jobs, doing household chores, and even poor time management. There are two participants who classified themselves as working students. PT 04 states that: “...being a working student is the most challenging thing for me because I have to accomplish both my work and my classes at the same time” (PT 04, L16). Hence, the time allocated for accomplishing school-related responsibilities became insufficient. They admitted that it was a challenge for them to strike a balance between fulfilling their responsibilities in their school and in their workplaces, which was the primary reason why they usually would fall behind their classmates in terms of meeting the requirements for their FS courses.

With regard to the lack of motivation, there were seven participants who considered themselves as unproductive due to procrastination. According to PT 05: “Procrastination is something that I can’t escape. With the activities that have been given to us, I am not productive...” (PT 05, L28).

Moving on, during the execution of the FS courses, five participants reported that they feel agitated, nervous, sad, and pressured. PT 08 shared: “…Since the death of my grandfather, there has been a minor shift in our way of life. It’s causing emotional setbacks, and everything is all jumbled up.” (PT 08, L62-65).
Financial worries were also a problem to three students. PT 03 confessed, “...I am having financial issues because prices for basic commodities seem to have doubled up and it’s really hard to budget what meager money I have for my studies” (PT 02, L14).

Since pre-service TVE teachers are given a number of work to accomplish, two students reported that weariness became a problem to them as it already negatively affects their mental and physical health. PT 05 explained that “[he] gets quite fatigued most of the time, to the point that [he] usually cries [himself] to sleep at night and [he is] unmotivated to report to school...” (PT 05, L124). In a similar vein, another student testified that “[he is] getting tired of the situation and [he] feel[s] helpless and hopeless” (PT 04, L50).

The challenges that pre-service TVE teachers have are mostly related to their well-being and mental health, since online learning differs significantly from in-person learning, and their mental health suffers as a result of spending over eight hours a day in front of their computers or laptops. Furthermore, they have been required to engage in a lot of school activities and have been constantly bombarded with assignments to submit in order to stay on track in their courses. Immediate actions, such as the conduct of mental health break, academic ease, and a set number of requirements to be delivered per topic, are recommended to avert this situation.

**Logistics in Education.** The second theme refers to the challenges that are directly related to the implementation or operation of the FS courses. These include situations in demo teaching and assistantship, internet connection, problems on technology and gadgets, and issues when it comes to establishing collaboration and interaction.

Situations in demo teaching and assistantship is the leading problem being encountered by the participants. These are some of the responses from the participants in relation to their situations in demo teaching and assistantship: “...when we are going to conduct the demonstration teaching, our major and the topic we are going to present are not aligned” (PT 04, L34); “…the part where our major and the topic assigned to us for teaching do not seem to match” (PT 10, L18); and “…I’m more focused in my studies if I am in school. But, when I’m home, sir, just like this, the surroundings are noisy and not convenient for learning” (PT 10, L10).

Moreover, six out of 12 (50%) participants reported that internet connection is one of the primary problems they encountered during the implementation of the FS courses in the new normal. PT 09 stated: “...my internet connection is not consistent and does not perform correctly, which is the major problem I had” (PT 09, L16). It should be noted that the majority of the participants reside in rural areas, where internet connectivity is poor or weak if not inaccessible.

Problems on Technology and Gadgets also emerged based on the narrations of four participants. PT 09 mentioned that her phone was not compatible with the application used to create their ePortfolio and that her personal computer was not also operational (PT 09, L22). Backing her claim, PT 10 also specified, “...one issue I had was with the quizzes. I'm not particularly familiar with the application used to facilitate the quizzes, and I'm not also familiar with that type of platform so it was hard for me to adapt...” (PT 10, L30).

Another problem that also emerged is the struggle to establish collaboration and interaction during group work. Three participants mentioned that they found it hard to work with their group mates. PT 02 stated that: “When it comes to interacting with people, for example...I know how to interact, but there is a limit at times, so collaboration is a challenge for me.” (PT 02, L32); PT 04 also revealed that, “When we talk about group projects, there are people that refuse to assist. There are also others who do not bother to inquire as to what they should do” (PT 04, L21). Admittedly, Respondent 6 also agrees with the earlier statements by disclosing that “…from the beginning until the end of the semester, some members do not participate at all...” (PT 06, L54).

Since several components of Technical Livelihood Education (TLE) are incorporated in their program course, they should not be startled by the large topics covered by their area because they were introduced to basic issues throughout their lower level of their college years. During the pandemic, poor internet connectivity among students was deemed a major issue that inhibited them, to a great extent, from fully participating in their virtual classroom discussions. In some contexts, students resorted to utilizing their mobile data, which afforded them worse connections than those with high-bandwidth satellite internet providers. Students must have access to the internet provided by their respective municipalities so that their education is not hampered. This issue might be strategically resolved by crafting a memorandum of understanding between the local government and the country’s internet providers that heightens the utilization of fast internet services among educational stakeholders, particularly students and teachers.

**Pandemic-related restrictions.** Because of the global pandemic, health protocols and restrictions were issued and executed. Students experienced hard times coping with these limitations. PT 09 revealed that she had difficulty in traveling to school based on her testimony: “There were many restrictions especially during the surge of the pandemic. Although I understand this measure undertaken by the government, it’s very hard on our part who need
to rely on the services of public transportation for our daily travels. But as time passed by, the restrictions to travel have been eased, so it was a relief” (PT 09, L34). She went on to say that “[she] was not yet vaccinated that time so [she] had difficulty attending limited face-to-face meetings for FS courses” (PT 09, L36).

Taking the three themes generated from the CCT method into account, pre-service TVE teachers were certainly confronted with a variety of challenges while completing their FS courses during the pandemic. The pre-service TVE teachers' problems were caused by a variety of valid and acceptable reasons that they did not foresee. The pre-service TVE teachers, on the other hand, were able to overcome these challenges by applying coping techniques enabling them to persist in their education, specifically in their completion of the FS courses.

4.1. Coping Strategies Employed by the Pre-Service TVE Teachers

Students with various difficulties used different coping strategies to assist them in overcoming their problems (see Table 3). Based on the analysis of pre-service TVE teachers’ responses relating to their coping mechanisms, the following themes emerged: positive reframing, reconnecting with interests and learning preferences, and seeking instrumental support.

**Positive reframing.** The coping strategies employed by the pre-service TVE teachers during their FS courses include time management, self-discipline/ self-reflection, motivation/ praying and adaptation. There were nine out of 12 participants who attested that time management remains to be effective in maintaining balance between their studies and their other responsibilities outside their virtual classrooms. In fact, PT 03 confirms that time management is the key to making work more convenient, as evidenced in his response: “...I manage my time properly to deal with my challenges because I believe that if you are good at managing your time, it will make your work easier. And your work will flow effortlessly as a result of this.” (PT 03, L62).

Moreover, there were nine participants who revealed that self-discipline/ self-reflection is a great strategy in overcoming challenges, which they faced as they completed their FS courses.

According to PT 02: “In the past, I have disciplined myself to focus on what I'm doing since it's important for my future. During my initial attempt, this method worked for me, and I'm still using it today.” (PT 02, L50).

Also, there were four participants who relayed that motivations/prayers are significant coping mechanisms to overcome any struggle at school. These are some of the coping strategies shared by PT 02 and PT 05 in their qualitative feedbacks taken from their interviews: “I encourage myself to collaborate with them since I will gain more knowledge from them. I'm preparing myself for this activity by training myself that we'll collaborate or engage, and it's worked every time I've employed it.” (PT 02, L56); “My classmates appear to be the ones who motivate me to start working on my projects, especially if they ask for updates after I've finished them. For me, this works well.” (PT 05, L126), “When I'm having a dilemma, I always turn to our Lord for help. For me, this is the most effective way to cope. I will combine this work with hard effort and perseverance. Hard labor and perseverance go hand in hand when I do this.” (PT 02, L60).

On the other hand, adaptation remains to be one of the coping strategies deployed by the participants. Three of them coped with their academic struggles through adapting to the changes they encountered. According to PT 01, “...in the future, if God wills it, I will be a teacher. This is always a source of motivation for me... it's the ability to adapt. As a result, I should behave as if I were a teacher and adapt to the current scenario. Adaptability is an important characteristic of a successful teacher and I believe, students like me should embody it.” (PT 01, L28).

<table>
<thead>
<tr>
<th>Themes</th>
<th>Codes</th>
<th>f</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive reframing</td>
<td>Time management</td>
<td>9</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Self-discipline/ Self-reflection</td>
<td>9</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Motivation/Praying</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Adaptation</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Reconnecting with interests and learning preferences</td>
<td>Past time</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Staying late at night</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Seeking instrumental support</td>
<td>Connect device for internet access</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Use someone’s device</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ask favors from friends</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Observing classmates’ work</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Division of labor among group mates</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Positive reframing is one of the most common coping mechanisms utilized by the pre-service TVE teachers, which means that they employed internally-driven strategies to address their problems. Such application of strategies that were drawn from their internal drive to persist in schooling manifests the strong desire of the participants to complete their FS courses despite limitations resulting from the COVID-19 pandemic. For them to survive the rigors of their academic requirements, they acquired time management skills, imposed self-discipline/reflection, prayed for divine providence, and adapted to the changes in their educational ecology.

**Reconnecting with interests and learning preferences.** This type of coping strategy refers to students’ activities that allow them to refresh their minds and keep them away from sources of stress. These activities include what they do during their past time, such as biking, watering plants, listening to music, and working at night.

There were six out of 12 participants who reported that engaging in activities that appeal to their personal interests during their past time is a way to cope with their academic struggles. The following statements from PT 09 and PT 06 testify that the pre-service teachers gain motivation to continue working on their academic-related tasks because of their past time activities: "I take a break when I'm stressed from school work. Cycling and watering my plants are two things I enjoy doing the most. Also, when I’m working, I'm listening to music because this seems to work for me. I'll be able to work more efficiently as a result of this. I'm more motivated to finish my school work now that I've taken a break" (PT 09, L102).

Moreover, working at nighttime is one of the coping strategies of the participants. According to the participant: "When I remain up between 9 am and 12 am, my brain works well... but when I get up in the morning, my concentration is allocated to domestic tasks, and since my attention is divided my brain doesn't operate properly." (PT 06, L136).

Based on the aforementioned testimonies, break time is utilized by the pre-service TVE teachers to reconnect with their personal interests, which they consider as a successful method to cope with the challenges that they identified. Having a break time is extremely beneficial to the students in terms of re-energizing them for the accomplishment of future academic and domestic chores. Other students also consider their learning styles or preferences, and hence some students opt to work late at night since it is their most productive period. The participants work during their most productive and effective period to achieve the best results for their school works.

**Seeking instrumental support.** This coping strategy employed by the pre-service TVE teachers refers to the various ways in which they sought for technological supports from different sources. These strategies include connecting to device and to other networks for internet access, using someone’s device, asking favors and connecting to friends, and observing classmates’ work.

PT 09 experienced difficulties in internet connectivity, device compatibility and travel restrictions. These are the coping strategies shared by a participant for her to manage having difficulties with internet and gadgets: “If I run out of cellular load, I will go to my cousins’ apartment to connect, and it’s alright with them and one thing that I normally do is to install VPN because I am now running out of mobile data every weekend. I download configuration files and VPN bits, which is a huge assistance to me” (PT 09, L88); “My phone isn't compatible, and my PC isn't up to par. These are sometimes the reasons why it took so long to accomplish my projects. As a result, I'm using my cousin's laptop” (PT 09, L22); “...If the activities are done in groups and I live far away from the school, connectivity is unavoidable, I ask a classmate with good internet access to take control of emailing our tasks/activities to our professor” (PT 09, L98).

For pre-service TVE teachers, seeking instrumental support is also an excellent coping approach. During this pandemic, students need many forms of assistance from their family, relatives, and acquaintances. Constant and strong support from people within their varied social circles may serve as a great source of motivation and inspiration for students as they work toward completing their degree programs.

With the participants’ identified problems relating to their academic-related work during the pandemic, pre-service TVE teachers deployed a variety of coping mechanisms to address them. They were able to overcome their difficulties by utilizing coping strategies that align with their values and interests and that seek for emotional and educational support system from people close to them. Apart from technological assistance, students also receive emotional support from family, friends, administrators, and instructors in the form of advice, compassion, and encouraging words.

5. **Discussion**

The sudden shift of teaching mode from traditional in-person learning to full online learning has situated pre-service TVE teachers at a great disadvantage. Despite the fact that some colleges had already built an online learning system for their students prior to the pandemic, it must be emphasized that it was not adequately organized and needed to be recalibrated.
Students and faculty members must also be motivated to do so. They used a variety of modalities to meet all of their students’ demands as a result of the unprecedented issues that they met. With this, the pre-service TVE teachers, who are in their fourth year, must perform and experience observation and assistantship with the teachers in the actual field so that they are sufficiently immersed in the authentic teaching setups, particularly in public schools. Thus the aim of this paper is to describe the problems encountered by the pre-service TVE teachers who underwent the FS course during the pandemic and to determine how they coped with these problems to persist in their education.

Well-being and mental health are the main problems experienced by the participants in this study. Considering the study conducted by Anderson et al. [28], college students’ mental health problems are linked to the lack of routine and loneliness. This cause is being attributed to the wide-ranging effects of the global pandemic. Aucejo et al. [29] found in their study that during the pandemic, students have faced a variety of issues, including delays in degree completion, poor pay, fewer job options, and lowered expectations for the labor market after graduation. Students who belong to the low income bracket were the mostly affected individuals. Such a finding is similar with the study conducted by Rodriguez-Planas [30], who further cited that low-income students in the New York City University were the ones likely to experience challenges and stress with online learning. As an effect to this, students may experience anxiety, loneliness, and stress due to a lack of motivation. This finding is corroborated by the study implemented by Browning et al. [31].

The second issue faced by the pre-service TVE teachers is when students who concentrate in one topic are assigned to teach a subject that is not within their specialization. This is most likely the scenario in the field since the on-campus FS experience of the pre-service TVE teachers are not offered in the laboratory high school, hence the problem. However, in their curriculum, they have subjects that taught them all in the other components so they are all trained across the various components of the TLE. Hence, this could be taken lightly since they are trained a little of everything in the different components. It was also found that pre-service TVE teachers during the completion of our FS courses had difficulty connecting to the internet due to unidentified reasons and low internet connection within the vicinity of their households. Consistent with the findings generated by studies carried out by Bao [32], and Baticulon et al. [33], poor internet access was identified by the participants to be one of the major issues in online learning that they were confronted with.

When it comes to developing countries such as the Philippines that have been struggling in terms of poorly established communications networks, internet accessibility remains to be a prevalent concern [34].

In the new normal, pre-service TVE teachers utilize a variety of coping mechanisms to deal with the issues they encountered throughout their FS courses. The most recurrent theme among the pre-service TVE teachers’ coping mechanisms is positive reframing. This result is similar to the findings generated from the study of Hearon [35], where it was reported that students who employed effective time management to cope with the obstacles they were confronted with were more likely to excel in academic tasks compared to others. As a result, it is advised that students learn how to manage their time in order to cope with the stress of college life during this pandemic. This ability and approach can assist students in effectively managing their work and gaining control over it, allowing them to be more productive. Another coping strategy used by the pre-service TVE teachers is reconnecting with their interests and learning preferences where the students can have a break time to refresh and reenergize. This result corroborates with the study conducted by Calo et al. [36], where they revealed five common coping mechanisms employed by college students: surfing the internet, napping and resting, watching TV or movies or instant messaging, and staying up late at night. Essel et al. [37] mentioned that the human body needs some rest and break from time to time to stay motivated in accomplishing academic tasks. The cognitive thinking of pre-service TVE teachers is affected by the new conditions in online pedagogy where students are required to be online for a lengthy amount of time, especially for their assistantship. Within this context, students felt fatigued and unmotivated to continue with their college education. Hence, they applied coping mechanisms to adapt themselves with the challenges that came with the new learning environment.

Seeking instrumental support is another theme that emerged as one of the coping strategies used by the pre-service TVE teachers. This result is congruent with the results of the study of Akbar and Aisyawati [38], Guevarra and Cimanes [20] where it was revealed that students’ major coping strategy is social support. Social support can come in the form of getting advice from family, friends, and others, talking to someone who has been through similar issues, expressing one’s thoughts, receiving sympathy, or talking to an individual about one’s feelings. When students believe that they have been heard, they believe that their feelings about the unpleasant situation or problem are valid and that they have been given attention.
Okoro [39], Vallente [40] also claimed that getting emotional support from friends and family is also said to be a good approach for students to deal with their stress. Because student life is challenging by nature, students require the understanding and sympathy of their friends and families, especially when they are under a lot of pressure from their academic duties.

6. Conclusion

The findings of this study show that the participants encountered a number of issues during the completion of their FS classes, which resulted in detrimental impacts on their learning outcomes and academic achievement. Moreover, pre-service TVE teachers have developed their own solutions to their problems in order to survive and thrive in the new learning environment. Despite the challenges during this pandemic, pre-service TVE teachers must persist in their college education. This necessitates a review of the university's other operating procedures from the standpoint of students, professors, curriculum designers, and other external stakeholders. Grounded on data, Higher Education Institutions (HEIs) must examine their curriculum and instruction aspects, student engagement, and technology and infrastructure on a regular basis. To ensure the continuity of teaching and learning amidst crisis, HEIs need to migrate to strategic and sustainable flexible delivery mode by recalibrating the curriculum, capacitating the teachers, and upgrading technological infrastructures. This needs-based and stakeholder-oriented intervention plan must have to be periodically assessed, modified, and upgraded in order to create an educational ecology that is future-proof and highly responsive.

7. Implication

This study offers implications for curriculum and teaching which may be of help in the successful implementation of the FS courses in the next semesters. First, instructional and curriculum materials should be created in such a way that they efficiently accommodate flexible learning. This necessitates the digitization, updating, and contextualization of learning content and resources. Teachers must also be oriented on how to prepare learning materials digitally. The program curriculum should be detailed enough that learning goals and relevant learning experiences may be discussed, allowing teachers to choose appropriate assignments for students in the virtual room. Alternative teaching practices that can help instructors use the material in a condensed manner during the pandemic should be included in the curriculum and teachers’ guide.

Second, the coming of virtual teaching shows a long-term and sustainable plan to support students and teachers to prepare for the flexible learning. The most important necessity is that students and instructors have access to the necessary ICT infrastructures and resources, which requires the government to allocate sufficient budget to attain the said purposes. State colleges and universities (SUCs) must guarantee that they have sufficient and up-to-date facilities and resources to efficiently and successfully carry out academic programs. Third, knowledge and skill capacitation among faculty members must be implemented. ICT upskilling for teachers should be prioritized in their professional development. The pandemic has made beginning and experienced professors aware of an alternative method of teaching. This helped them realize that in the new normal, flexible learning is essential during a pandemic. This must be maintained by strengthening strategies and activities to improve service quality even amidst turbulent conditions in education.

Acknowledgments

The researchers would like to acknowledge the fourth year TVLEd students for their participation, contribution, and cooperation during the data gathering of this study. Also, the authors would like to thank Mr. Christian John G. Tarampi, Mr. John Mikko D. Umbao, Ms. Kathleen C. Valencia, and Prof. Elia M. Ubaldo for their help towards the completion of the study.

References


