Technology and Livelihood Education (TLE) During In-Person Classes: Experiences of Secondary School Teachers

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Abstract— This phenomenological inquiry explored the experiences of secondary school teachers teaching TLE subject during the in-person classes in public secondary schools, Division of Tagum City. I employed qualitative – phenomenological study in exploring the experiences of the ten (10) participants of which primary instrument of data gathering was through in- depth interview. Major findings revealed on their experiences in teaching TLE subject during the in-person classes, after analyzing their responses, the following were the emergent themes namely effective teacher-student relationships, acquisition of necessary skills, and teachers' competence on the subject. Furthermore, the challenges of the participants were learning loss and job mismatch. It can be noted that these challenges were critical for the secondary teachers in teaching the TLE subject. Finally, in terms of their insights in teaching TLE subject during the in-person classes drawn from the findings of the study, the emergent themes were holistic curriculum, enhancement of 21st century skills, and provision of high-quality instruction. Results imply that by helping students become more proficient in a variety of life skills and applications of technology, the TLE Department strives, in accordance with the vision and objective of the school, to foster entrepreneurial spirit, critical thinking, self-reliance, independence, cultural sensitivity, and self-sufficiency in its student body. However, a mismatch between skills and responsibilities on the job has a detrimental impact on both the macroeconomic and the microeconomic levels of work productivity. It should come as no surprise that human resources that have a high level of education, qualification, and skills but do not make use of them constitute a waste of resources and a possible missed opportunity for employment.

Index Terms— technology and livelihood education, in-person classes, phenomenology.

1. Introduction

The worldwide pandemic has made one thing very clear: there is much more that can be done to help the teaching sector. In order to return to regular classes, teachers must be aware of the level of their pupils in order to tailor their instruction. Although it is probably too soon to fully comprehend how the Covid-19 pandemic will affect education, it is crucial to remember that there was already a learning issue in schools, with many learners spending years in school without learning (Cambridge Press Release, 2021).

The pandemic has made many imbalances in American

society, particularly those in education, more pronounced. Teachers, administrators, and academics are all raising the alarm that the "learning loss" brought on by an interrupted school year may have lasting effects, especially for pupils in institutions that were already resource strapped (Blouin, 2021). Temporary school closures are said to have resulted in a significant loss of learning, especially for pupils with low achievement. Teachers encountered difficulties in distance learning settings. Less time was spent learning by students (Schult, et al., 2022).

The in-person classes become a challenge for TLE teachers on how the curriculum and the current skills of students are aligned. Teachers should be knowledgeable about the most recent methodologies and trends in education in addition to having the knowledge and expertise to teach a topic especially in bridging gaps (Padullo et al., 2021). According to Beinert et al. (2021), TLE teachers frequently have a mismatch between the curriculum's teaching practices and its requirements.

Inequalities and learning losses brought on by the emergency reaction to the COVID-19 crisis must be addressed by education systems, as well as moving education toward a better normal where all students may succeed, regardless of their circumstances (OECD iLibrary, 2022). In this time of in-person classes, TLE teachers encounter various problems in terms of student's skills that are prerequisite skills to another grade level, teaching the subject and the provision of instructional materials.

According to the study of Jones, et al., (2022), since teachers' experiences at work are heavily influenced by what occurs in their classrooms, it is important to create working environments that enable them to concentrate on their learners. This is a reminder of the crucial role played by teachers' pursuit of a "feeling of success" in their instruction and the importance of teacher-student relationships for teachers' intentions to stay in the field. It should be known that the protective effect that teacher-student relationships may have on how they feel about their job. And we are making it sure that teachers have the resources they require to reap the rewards of doing the fundamental task of teaching.

Hence, this study aims to reveal the challenges of the TLE teachers in teaching the subject during the in-person classes and

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the teachers coping mechanism to these challenges they encountered in public secondary schools in Tagum City Division. Moreover, both current TLE teachers and potential future TLE teachers who may struggle to conduct the TLE lessons should study the various teaching methods for TLE subjects. The secondary curriculum has recently undergone revisions that make teaching more challenging.

2. Purpose of the Study

The purpose of this study was to explore the experiences of secondary school teachers teaching TLE subject during the inperson classes in public secondary schools, Division of Tagum City. In addition, the researcher wanted to explore the challenges encountered by the teachers in teaching the subject after two years of modular learning in in-person classes and how they coped with these challenges. Furthermore, this study aimed to look for other insights of the teachers in teaching effectively the TLE subject during the in-person classes after two years of learning from home.

At this stage of research, the experiences of TLE teachers were generally defined as their challenging and learning experiences in teaching the subject during the in-person classes.

A. Research Questions

This study aimed to explore the experiences of the teachers teaching TLE subject during the in-person classes. Specifically, this study sought to answer the following research questions:

- 1. What are the experiences of secondary school teachers in teaching TLE subject during the in-person classes?
- 2. What are the challenges of secondary school teachers in teaching TLE subject during the in-person classes?
- 3. What are the insights of the teachers in teaching TLE subject during the in-person classes?

3. Methods

This undertaking adopted a qualitative approach, employing phenomenology as guided by Creswell (2015). I adhered to Creswell's explanation of how a phenomenological inquiry can be utilized to explore the lived experiences shared by individuals connected to a particular concept or phenomenon.

This phenomenological inquiry involved ten (10) secondary teachers in the Division of Tagum City. All these ten participants had undergone virtual in-depth interviews (IDI). In consonance with the number of participants, this research adhered to the concept of Creswell (2015) that having 8 to 14 participants was sufficient to saturate the information in making this qualitative inquiry. I followed some criteria in selecting the participants such as: (a) the participants must be holding a permanent position at least Teacher I in public secondary schools in the Division of Tagum City; (b) these teachers had experienced various challenges in teaching TLE subject during in-person classes; (c) they were composed of either male or female teachers; and (d) they were not members of any ethic minority or Indigenous People (IP) group and were willing to participate in this study. Additionally, these ten participants were for in-depth interviews and this number was already enough to provide information with regard to the opportunity to

identify and generate the themes.

Further, in the context of this study, I specifically utilized data coding and thematic analysis in analyzing the data. Adhering to established practices in data management, I engaged in reading, miming, describing, categorizing, interpreting, representing, and visualizing data. For data management, I created organized files containing data from interviews, focus group discussions, observations, recorded notes, and references from online journals and books. Reading and memoing involved going through transcribed texts, making marginal notes, and forming initial codes. Describing included providing a detailed account of the case and its context, while classifying employed categorical aggregation and the identification of patterns within categories. Interpretation involved direct interpretation and the development of naturalistic generalization.

Thematic analysis, involving both emerging and clear contents as themes and categories, was employed in data analysis. The researcher chose between emerging contents and clear contents before proceeding to higher levels of data analysis, aiding in a thorough understanding of qualitative data interpretation (Vaismoradi et al., 2016). Thematic analysis commenced when the first codes were identified, with participants' responses classified and analyzed from generality to specificity. Common core concepts were extracted and grouped to form comprehensive themes, each requiring at least three essential concepts for legitimacy. Notably, each participant was given a code name in this research.

4. Results and Discussions

A. Experiences of Secondary School Teachers in Teaching TLE Subject During the In-Person Classes

When the participants were asked about their experiences in teaching TLE subject during the in-person classes, after analyzing their responses, the following were the emergent themes namely effective teacher-student relationships, acquisition of necessary skills, and teachers' competence on the subject.

1) Effective Teacher-Student Relationships

One reason for that is students tend to be more motivated to learn and be engaged in the classroom when their teacher likes and cares about them. Positive teacher-student relationships change student behavior, and in this study, we found building those positive relationships actually leads to better teaching, too.

According to the study of Jones, et al., (2022), since teachers' experiences at work are heavily influenced by what occurs in their classrooms, it is important to create working environments that enable them to concentrate on their learners. This is a reminder of the crucial role played by teachers' pursuit of a "feeling of success" in their instruction and the importance of teacher-student relationships for teachers' intentions to stay in the field. It should be known that the protective effect that teacher-student relationships may have on how they feel about their job. And we are making it sure that teachers have the resources they require to reap the rewards of doing the

fundamental task of teaching.

As soon as the student and teacher start working together, the teacher models the majority of the work while discussing how and why they do things to aid in the learner's comprehension of the material. The teacher's support decreases as the learner gains familiarity with the content, and the learner accomplishes more of the work independently. Until the learner has mastered the material and no longer requires scaffolding, the scaffolding gradually gets smaller (Indeed Editorial Team, 2021).

2) Acquisition of Necessary Skills

Education and training is one of the essential propelling forces and a prerequisite for the economic, social, and cultural development of a nation. Education performs this role because it increases and strengthens the human capacity for creativity and productivity. Education is a tool for generating knowledge, raising living standards, enriching and transmitting the culture of a society to future generations. As an essential and vital element of education, Technology and Livelihood Education (TLE) contributes significantly to the social and economic transformation of society. It equips learners with the technical skills necessary to contribute most effectively to technological advancements.

The discipline of Technology and Livelihood Education is the most hands-on, participatory, multidisciplinary, and value-laden among the learning domains, including cultural, aesthetic, professional, political-economic, and moral qualities. Filipino students have the opportunity to exhibit their acquired practical knowledge and life skills in this learning area, particularly their empathy and efficiency in the workplace. The goal of Technology and Livelihood Education is to help students acquire the information, abilities, attitudes, and values necessary to succeed in the workplace. This will help the students comprehend numerous concepts and develop their skills in areas related to home economics, agriculture, industrial arts, and entrepreneurship (Calanog, 2019).

TLE seeks to advance students' critical thinking, independence, self-sufficiency, diversity, and entrepreneurship (DepEd, 2019). It places a strong emphasis on developing each life skill covered by the subject's framework by applying what is learned in real-world situations (Darsih, 2018). As a result, TLE complicates a complicated process because it happens outside of the classroom in the real world.

3) Teachers' Competence on the Subject

The competencies of a teacher are the knowledge and abilities that make it possible for them to be successful in their job. Teachers need to have knowledge in a broad variety of abilities in order to enhance the learning of their students in an environment that is very complicated and where hundreds of important choices need to be made each day.

These days, it might be quite difficult to teach the topic of Technology and Livelihood Education (TLE). It calls for a thorough understanding of the subject matter, curriculum, and standards, as well as for excitement, a caring attitude, creativity, a love of learning, and a desire to change the lives of the pupils. In order to create recognized National Certificate holders, it also requires high-quality training in terms of learning abilities in each TLE field of expertise. Additionally, the time in a

teacher's career when they teach Technology Livelihood Education (TLE), a topic that many students take for granted and frequently ignores while having a big impact on their lives, has never received the recognition it deserves. A current situation that requires attention is the requirement to reflect on and assess the field skills of our TLE teachers (Basal, 2022).

B. Challenges of Secondary School Teachers in Teaching TLE Subject During the In-Person Classes

After analyzing the answers of the participants about their challenges encountered in teaching TLE subject during the inperson classes, the following themes emerged namely learning loss and job mismatch. It can be noted that these challenges were critical for the secondary teachers in teaching the TLE subject.

1) Learning Loss

The term "learning loss" refers to the general or particular loss of information or abilities that occurs when a student's normal education program is interrupted for a prolonged period of time or does not continue. A student's falling marks or scores are one of the most telling signs that they have lost some of what they have learned.

The worldwide pandemic has made one thing very clear: there is much more that can be done to help the teaching sector. In order to return to regular classes, teachers must be aware of the level of their pupils in order to tailor their instruction. Although it is probably too soon to fully comprehend how the Covid-19 pandemic will affect education, it is crucial to remember that there was already a learning issue in schools, with many learners spending years in school without learning (Cambridge Press Release, 2021).

The pandemic has made many imbalances in American society, particularly those in education, more pronounced. Teachers, administrators, and academics are all raising the alarm that the "learning loss" brought on by an interrupted school year may have lasting effects, especially for pupils in institutions that were already resource strapped (Blouin, 2021). Temporary school closures are said to have resulted in a significant loss of learning, especially for pupils with low achievement. Teachers encountered difficulties in distance learning settings. Less time was spent learning by students (Schult, et al., 2022).

2) Job Mismatch

A poor fit between a worker and their job has a detrimental impact on both the macroeconomic and the microeconomic levels of labor productivity. It should come as no surprise that human resources that have a high level of education, qualification, and skills but do not make use of them constitute a waste of resources and a possible missed opportunity for employment. However, the application of these new tactics may either be made easier or made more difficult depending on the kind of learning environment. One of the challenges is properly connecting up prospective teachers with instructors who can coach them.

The in-person classes become a challenge for TLE teachers on how the curriculum and the current skills of students are aligned. Teachers should be knowledgeable about the most recent methodologies and trends in education in addition to having the knowledge and expertise to teach a topic especially in bridging gaps (Padullo et al., 2021). According to Beinert et al. (2021), TLE teachers frequently have a mismatch between the curriculum's teaching practices and its requirements.

The results indicate that non-TLE teachers who teach TLE subjects are having a difficult time in their careers due to the fact that the subjects they are teaching are not their area of expertise, they lack the knowledge and expertise to teach TLE subjects, and there are insufficient resources and TLE equipment available for the subjects being taught. As coping strategies, TLE teachers explored various teaching strategies and methods by incorporating technology into class discussions, demonstrations of required skills, and the use of subject-specific instruments. They also sought assistance from their peers and teachers with expertise in TLE subjects, and most importantly, they increased their daily study time and prepared themselves for class. Being resourceful, continuing to learn, displaying fortitude, and implementing pedagogical alignment are some of the insights shared by non-TLE instructors teaching TLE subjects (Tingzon & Buyok, 2022).

C. Insights of the Teachers in Teaching TLE Subject During the In-Person Classes

When the participants were asked about their insights in teaching TLE subject during the in-person classes drawn from the findings of the study, after analyzing the responses of the participants, the emergent themes were holistic curriculum, enhancement of 21st century skills, and provision of high-quality instruction.

1) Holistic Curriculum

A curriculum is said to be holistic if its primary purpose is not only the instruction of academic topics but rather the whole development of a child via the promotion of that children's mental, emotional, moral, and spiritual development in addition to their physical development. The abilities that students acquire via holistic education may be transferred to and used in a variety of settings because they are taught in the context of the actual world in which they will be employed, which holistic education makes possible for teachers. Because the child's whole existence is taken into consideration throughout the learning process, holistic education makes it possible for youngsters to develop robust internal values and self-assurance. We encourage children to have a robust sense of who they are as individuals. Establish a connection with them and contribute to the world they inhabit.

The K-12 Program offers academic and occupational programs that support a continuum toward becoming ready for further postsecondary education and getting the skills you need to get National Certificates I-III. The newly adopted curriculum's overriding objective is the holistic development of every Filipino student with 21st century abilities who is sufficiently equipped for employment, entrepreneurship, intermediate level skill development, and further education. One of the academic subjects covered by the K-12 Basic Education Curriculum in Philippine secondary schools is technology and livelihood education (DepEd, 2012). TLE

primarily covers the fundamental concepts of technicalities that are faced in everyday life. Concepts, techniques, and academic words must be explained, but students must also be given the opportunity to experiment (Ramel, 2020).

2) Enhancement of 21st Century Skills

As students develop skills such as critical thinking and perspective-taking, they will become more flexible and adaptable in our workforce, increase their ability to work across cultures, and be able to assume leadership positions. This new approach concentrates on preparing students for the future by providing them with the skills necessary for success in a global economy. Learning in the 21st century is not about memorization or recitation, but rather about critical thinking, creativity, and collaboration. It is not just about preparing students for a test, but also for the actual world.

According to Pallasigui (2016), the goal of K to 12 TLE is to give Filipino students the opportunity to develop and advance their 21st-century skills, preparing them for the future. Teachers need to be well-versed in the subject area to effectively implement the new curriculum. There are many different topics that may be taught in TLE. When choosing a study area, it's crucial to take into account both the teachers' expertise and credentials as well as the resources that are available. Schools provide a variety of TLE learning areas due to the resources available and the instructors' skill levels, making it harder to manage. This is a challenge for the teacher as they must create unique lessons, execute multiple skills, and utilize diverse equipment and facilities while still fostering the maximum potential of each student (Zabala, 2018).

3) Provision of High-Quality Instruction

To improve the social lives of new students at school, a highquality teaching process fosters the creativity of instructors to generate meaningful ways of learning. These include teacherstudent contact, preparation, curriculum design, instructional activities, and monitoring, to name a few. The ability for instructors to eliminate insufficient education as a potential cause of poor student achievement is made possible by the implementation of high-quality instruction.

The provision of high-quality instruction is necessary for students to acquire the information and skills required for a higher level of education. The school's infrastructure, which includes its buildings, classrooms, restrooms, water access, lighting, ventilation, and even the furniture in the classroom, is crucial. These educational amenities might facilitate instruction, maintain students' interest in the subjects, and boost their academic success. Through the appropriate use of instructional tools and resources, students will learn successfully. The effective usage of educational technology will aid in the students' growth (Surquia, 2019). However, these facilities in teaching TLE subject were not used in teaching during pandemic time. Students who are now learning in inperson classes have little to no experience with these instructional materials and facilities.

As more schools start offering Technology and Livelihood Education, DepEd Secretary Briones claims that the Department is developing a learning recovery program as part of the post-pandemic efforts. In order for everyone to catch up

and accelerate their learning, it is important to make sure the interventions are successful. DepEd intends to step up its reading interventions, carry out routine home visits and followups, implement study groups and buddy systems in person and virtually, promote literacy at home and in the community, enlist the help of parent or guardian teacher volunteers, and create the proper assessment tasks and materials. For the professional development of teachers, however, adaptive teaching techniques, classroom assessments, and a switch from the conventional method to personalized acceleration are being considered in the learning action cell (LAC) sessions (DepEd, 2022).

5. Implications and Future Directions

A. Implications

Results imply that by helping students become more proficient in a variety of life skills and applications of technology, the TLE Department strives, in accordance with the vision and objective of the school, to foster entrepreneurial spirit, critical thinking, self-reliance, independence, cultural sensitivity, and self-sufficiency in its student body.

Additionally, teachers who have a high level of competence have a greater capacity to foster an atmosphere in their classroom that is just, open-minded, and tolerant of the wide range of pupils, views, experiences, and backgrounds they teach. It has been discovered that teachers are the single most critical element that influences the level of success that students experience.

However, a mismatch between skills and responsibilities on the job has a detrimental impact on both the macroeconomic and the microeconomic levels of work productivity. It should come as no surprise that human resources that have a high level of education, qualification, and skills but do not make use of them constitute a waste of resources and a possible missed opportunity for employment.

Likewise, students who cultivate abilities such as critical thinking and the ability to see things from other people's points of view will become more flexible and adaptable in today's profession, boost their capacity to collaborate across cultural lines, and be able to assume positions of leadership as they go through their academic careers.

Finally, to improve the social life of new students at school, a high-quality instruction process enhances the creativity of teachers to generate meaningful methods of learning, such as teacher-student interaction, preparation, curriculum design, instructional activities, and monitoring, among others. To provide quality instruction, a teacher must be able to effectively engage students in the learning process and impart pertinent knowledge. It does not comprise merely of lecturing students or reciting transparencies. A quality lesson should be dynamic, employing a variety of delivery techniques.

B. Future Directions of the Study

Education in Technology and Livelihood, sometimes known as TLE, is essential to acquiring the skills necessary to participate effectively in today's labor market. It is possible that

one of the best ways to boost one's chances of being successful in a professional effort is to first choose a career route, and then to acquire the technological and lifestyle skills that are associated with that sector or business.

As a researcher, I could also suggest doing this with school principals and other members of the education community to trace the effects over time. This is because most of the reported findings concerned the perspectives and strategies of secondary school educators who teach TLE in traditional classroom settings. This idea might be useful for academics looking at the role of schools in solving difficulties with TLE instruction in the future.

The principal of a school may be responsible for providing overall leadership, including setting organizational objectives, evaluating progress, and encouraging open lines of communication relative to curriculum. Organizational redesign includes fostering a positive school climate, fixing inefficient systems, and establishing cooperative practices.

New regulations and programs may be implemented by the Tagum City Division to encourage deeper student inquiry into TLE concepts. For the sake of pupils, the report also recommends that administrators and other stakeholders be allowed to share information.

To get more accurate findings on the practices of secondary school teachers in imparting TLE, focus group discussion might be used as a data gathering strategy. By engaging in focus group discussions (or FGDs), everyone involved in the change management process may share the many perspectives they have developed.

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