



## Navigating learning through catastrophic calamities: A phenomenological study

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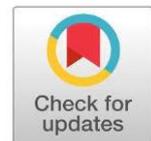
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**Abstract:** This study examined the lived experiences of technology and livelihood learners while navigating in the learning process despite the calamities like COVID-19 pandemic and typhoon Odette. Data were gathered from in-depth interview with participants, focus group discussions, and key informant interview through the interview guide. Transcripts were analyzed using Colaizzi's method, wherein meanings are formulated through sorted codes, categories, and themes. Findings revealed three emerging themes on participants' difficult and challenging experiences which include, uphill battles in learning, learning opportunities, and rise to the challenges. Meanwhile, two themes were found for the underlying effects of these experiences including, role acceptance and psychosocial discomfort. Furthermore, three themes were identified for learners' responses to the challenges in learning process, including actions towards learning, coping amidst adversities, and pillars of strength. These experiences provided concepts to educators to improve teaching and becoming flexible in designing lessons and learning tasks guided with the learning continuity model mainly designed to teach in the midst of crises. Hence, the Department of Education may spearhead community assessment while in curriculum development to suffice the needs of the learning community and may guide division and school offices in the implementation of their localized and contextualized learning continuity plans.

**Keywords:** qualitative; phenomenology; colaizzi method; COVID-19 pandemic.

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### INTRODUCTION

Calamities like Super Typhoon Odette and the COVID - 19 pandemic have tremendously affected numerous places resulting in the loss and damage of various properties, including households and educational structures. The school children in typhoon-affected areas who were already suffering from the impact of COVID-19 on their health and well-being have to deal with the effects of the super typhoon as it affects more to their education, protection, and, more importantly, their health and nutrition.

This challenges the school leaders and the government in their implementation of the Basic Education-Learning Continuity Plan since there is a need to reopen the schools in the midst of these crises, thus preventing learning loss, while the school children and their parents need psychological and psychosocial support to mitigate the impact of the disaster in the midst of the pandemic on their well-being.

This descriptive phenomenological study explores the lived experiences of the technology and livelihood education learners affected by the COVID-19 pandemic and typhoon Odette. According to Rocha et al. (2021), the simultaneous existence of the COVID-19 pandemic and natural disasters has caused devastating and detrimental effects on the mental health of Filipinos. The shift to the new normal of



education due to the pandemic added to the climate crisis has greatly affected parents and students since the former already posed a number of issues, thus there was a need for serious psychological interventions.

In the latest COVID-19 cases update, the Department of Health Philippines has recorded over three million nationwide cases data based on their COVID-19 online tracker ([Department of Health Philippines, 2022](#)). While challenges in restoring livelihood and monitoring children in need of support are still ongoing, finances are needed to repair and rebuild schools with millions of dollars that have been cost on damaged learning materials, as estimated by the Department of Education according to the report made by the Office for the Coordination of Humanitarian Affairs of the United Nations.

The COVID-19 pandemic, compounded by typhoon Odette, has generated abundant crises for students as health, nutrition, and psychosocial support, protection from violence, and continuation of learning that demand immediate response (UNICEF, 2021). In line with this information, researchers have begun to explore the lived experiences of learners affected by COVID-19 and typhoon Odette. There are research conducted on the experiences of learners in these twofold crises, but there has been no research yet to date conducted on the meaning of their lived experiences while the educational system continues to operate to avoid accumulated learning loss.

In the Division of Carcar City Cebu, Philippines, memoranda have been released on how to mitigate the COVID-19 cases among its schools and communities and monitoring damages caused by typhoon Odette which affected most of the learners. There have been concerns delivered to school personnel as partially and totally damaged properties which include student learning resources. The pandemic, which prevented technology and livelihood education learners to respond entirely to the learning competencies and objectives of Technology and Livelihood Education subjects, has been aggravated by typhoon Odette as students have lost the resources needed to perform such. Thus, it is substantial to understand the meaning of the lived experiences of technology and livelihood education learners in this new normal to extrapolate the implication of the experience and lessons in dealing with these two-fold crises.

The learners struggled further with the effects of typhoon Odette as their dwellings were partially damaged. The community learning centers where students gathered for the recorded video lessons were also damaged, thus preventing the technology and livelihood education learners from accessing recorded lessons for their performance-based competencies in Technology and Livelihood Education subject. This challenges more these learners since the Philippines' basic education grading system has put greater weight on students' performance than the written works ([DepEd Order 8, s. 2015](#), [DepEd Order 31, s. 2020](#)). By understanding their experiences, the school can provide interventions and remediation to help this type of learners' cope with their struggles in Technology and Livelihood Education subject. The parents of these students can realize that the pandemic and the natural disaster are not hindrances to accessing quality education. Being resilient in most aspects makes the school and the community move forward and achieve greater heights to avoid being left behind in education in the new normal.

The focus of the study is to explore the experiences of learners in their learning process during the COVID-19 pandemic and after hurricane Odette; how their experiences affect their learning process; and how these learners respond to the challenges they experience, which forms the basis for the learning continuity model proposed for the teaching of Livelihoods Technology and Education when disaster strikes.

## **METHOD**

The study used descriptive phenomenological design. This is done through understanding the lived experiences by studying a small number of subjects through extensive and prolonged engagement to develop patterns and relationships of meaning (Creswell, 2009). The emphasis is to acquire data that explicates the essence of human experience as the researchers set aside their own prejudgments as much as possible to understand the participants in the study (Creswell, 2009). In this study, descriptive phenomenology was chosen as the researchers were searching for an understanding of the meaning of the lived experiences of the technology and livelihood education learners.

The fourteen (14) participants were identified through purposive sampling and inclusion criteria such as: (a) must be a bonafide student of Tal-ut National High School in school year 2021-2022; (b) enrolled in Technology and Livelihood Education; (c) has experiences in the learning process during the COVID-19 pandemic and after the typhoon Odette; and (d) has inadequate to satisfactory performance rating in the subject due to the impact of the disasters in households and community. There were five (5) participants for In-depth Interview, five (5) participants for the Focus Group Discussion and four (4) participants, two (2) student leaders and two (2) participants from the Parent-Teacher Association (PTA) officers for the Key Informant Interview. This is a considerable number of participants as confirmed by Alase (2017) to meet data saturation of which is the point in the research process when no new information is discovered in data analysis, and this redundancy signals to researchers that data collection may cease according to Faulkner & Trotter (2017). With saturation, the researchers reasonably assure that further data collection yield similar results and serve to confirm emerging themes and conclusions.

Concerned authorities were asked for approval before the actual data gathering. Parents' consent and the student-participant's assent were also secured and documented. A preliminary meeting was conducted with participants to provide adequate information and assurance that their participation was voluntary, and they could withdraw anytime. In-depth interview is the main source of data. Supplemental data come from the focus group discussions and key informant interview using the semi-structured interview guide. All interviews were audio-recorded and transcribed with pseudonyms. To prevent the spread of COVID-19, investigators ensured the proper implementation of minimum health protocols. The use of interview logs and phone recording were also done to ensure the validity and reliability of the participants' responses.

Colaizzi's Method of Analysis was utilized to understand the real experience of the phenomenon under investigation. Colaizzi's (1978, as cited in Morrow et al., 2015) distinctive seven step process provides a rigorous analysis, with each step staying close to the data. Using this method, there were seven steps

conducted which include: (1) thorough reading of the transcripts to obtain a general sense of the content, (2) extraction of significant statements from each written transcript, (3) sorting of meanings into categories, clusters and themes, (4) interpreting the results of the study to explore their lived experiences as the technology and livelihood education learners who continue to study in school and at home in the time of the pandemic and after the typhoon odette, (5) playing the recorded interviews several times to ensure the accuracy of the significant statements and lived experiences of the participants, (6) describing and interpreting the fundamental structures of the phenomenon and (7) validating the findings to compare the results to the participants' real experiences.

After comprehensive analysis and interpretation, all confidential files were shredded. There were neither incentives nor amount of money that were given to the participants. Data results were intended to be disseminated only to ensure that the study was done for the betterment of the community and organization. The unknown nature of this examination was likewise kept up all through so participants could react easily without hesitations.

### RESULTS AND DISCUSSION

Results reveal common themes and categories of experiences which emerged from the saturated data using Colaizzi's Method of Analysis. Moreover, participant quotes are used to solidify the themes and provide answers to the research questions.

Table 1. Learners' Learning Experiences During COVID-19 Pandemic and after Typhoon Odette

Themes	Categories
Uphill Battles in Learning	<ul style="list-style-type: none"> <li>• Teacher's absence</li> <li>• Socio-Economic constraints</li> <li>• Poor/ No internet and electrical connectivity</li> </ul>
Learning Opportunities	<ul style="list-style-type: none"> <li>• Presence of a study-buddy</li> <li>• Visits in Community Learning Center</li> <li>• Viewing video lessons</li> </ul>
Rise to the Challenges	<ul style="list-style-type: none"> <li>• Survival measures</li> <li>• Participation in limited face-to-face classes</li> </ul>

In the study, the learners revealed their learning experiences during the COVID-19 pandemic and after typhoon Odette. The experiences described by the participants in this study were taken freshly from the perspective of the investigator toward the phenomenon. In [Table 1](#), it reveals the experiences of technology and livelihood education learners in their learning process during the calamities including COVID-19 pandemic and typhoon Odette. Emerging themes of learning experiences include (a) uphill battles in learning, (b) learning opportunities, and (c) rise to the challenges. Moreover, each theme is comprised by three categories as shown in the table.

### **Theme 1a: Uphill Battles in Learning**

Participants reported that they experienced uphill battles in learning during the pandemic and after typhoon Odette which metaphorically described the difficulties and challenges in the learning process. According to [Lodge et al. \(2018\)](#), difficulties are often unavoidable but important part of the learning process. The sudden shift caused by the calamities developed difficulties and challenges in distance or remote learning. Some participants shared experiences on difficulty in understanding and answering learning tasks using self-learning modules, which is the primary instructional material, and in self-learning. While there are participants who reported on being academically challenged in their socio-economic activities at home. Also, there were participants mentioning challenges in studying due internet and electrical issues. The idea of having difficulties and challenges in the learning process was solidified when the participants identified areas of study which need adequate interventions and this concern was aggravated after the typhoon.

The difficulty to independently grasp learning concepts was experienced by participants who recognized the absence of a teacher as they were not used to self-learning. During remote learning, they greatly needed teachers' physical presence to provide further explanations as teachers were identified as persons who can facilitate learning while enriching their learning experience. This is observed in the response below:

*“Bati kaayo akong life as a student kay lisod kung dili ang teacher ang motudlo...Dili ko kasabot sa ubang lessons unya dili mi pwede mogawas-gawas sa balay pag bag-o pa ang pandemic....” (I feel so bad about life as a student because it's hard if the teacher isn't the one to teach... I don't understand the other lessons then we can't go out of the house at the onset of the pandemic...)* **Lizzie**

A teacher plays an important role in teaching ([Makovec, 2018](#)). With the results, the learners need teacher' guidance to understand and comply with the learning tasks assigned to them such as performing skills-based learning activities in Technology and Livelihood Education. These seemed to be difficult for learners not used to the new structure of learning. As learners engaged in self-learning, satisfaction was not achieved as teachers' presence becomes a necessity as supported by the study of [Dayagbil et al. \(2021\)](#). Hence, new platform that features fitness of the need in the new context is required for responsive learning according to [Ramos & Baldespiñosa \(2021\)](#).

In addition, some participants mentioned socio-economic activities interrupting their learning process as learners learned in their new learning environment. They are tasked to get involve in these activities as their families are affected by the pandemic. Likewise, there are also activities transpired after the typhoon Odette resulted to added socio-financial constraint and this impacted to the way learners respond to learning tasks. This is exemplified in the following response:

*“Makatuon ko sa alas 7:00 sa gabie niya mahuman rasad kog alas 7:30 sa gabii tungod sa mga buluhaton sa balay sama sa pag-atiman sa mga hayop. Nawagtangan ug trabaho ang akong mga ginikananang tungod sa pandemic maong kinahanglan kong moabag sa balay...human sa bagyo kay*

*kinahanglan sad namong ayuhun among balay” (I would study at 7:00 pm then finish at 7:30 pm because of household chores like taking care of the animals. My parents lost their jobs because of the pandemic so I had to help at home ... after the typhoon, we also had to fix our house.)* **David**

This suggests that, while engaged in learning during the crises, learners encountered poor conditions at home such as conflict with home responsibilities and financial-related problems. Their need to assist parents not only in household but also in farm activities, as taking care of the animals is evident in their rural community background. Indeed, families in low socio-economic position households, and those living in disadvantaged neighborhoods provided fewer learning experiences ([Dayagbil et al., 2021](#)). Hence, studies should be carried out to support the hardest hit economically disadvantaged groups as socio-economic conditions in learning environment at home is not uniform ([Pokhrel & Chhetri, 2021](#)).

The intensified student difficulty and challenges in the learning process were further testified by participants who utilized internet in android phones and electricity for charging and lighting to fulfill their need to learn better. As mentioned, understanding topics in self-learning modules and responding learning tasks including performance of the skills required in skills subjects as TLE seemed to be problematic while in remote learning. This is verbalized in the following responses:

*“Nilisod ug samot human sa bagyong Odette kay need kaayo ang internet para maka access sa video lessons para sa akong mga projects labina sa TLE o mag answer sa learning activities sa lain nga subjects. Kinahanglan pa mi moadto sa lugar nga naay signal...” (It became more difficult after typhoon Odette because I really need the internet to access video lessons for my projects especially in TLE or answer learning activities in other subjects. We still have to go to the place where there is a signal...)* **Josie**

*“...nawa ang among kuryente tungod sa bagyo ‘dam. Moadto ko sa balay sa among silingan para moambit sa ilang kuryente samtang mag answer sa akong modules. Maikog kaayo ko ‘dam, kinahanglan ko nga magtoon ug sayo.” (...our electrical connection was lost due to the typhoon ma’am. I would go to our neighbor’s house to share their electricity while answering my modules. I feel so ashamed ma’am, so I have to study early.)* **Jacob**

During distance learning, utilizing printed self-learning modules was inadequate for learners who could not withstand reading and visually analyzing concepts. To provide supplementary materials, thus, access to internet connection has become prevalent due to the fact that not all parents can support the learners’ learning needs and maximum use of senses has an effect to learning. With this, there are participants who were provided android phone to support learning via the internet which is crucial for self-learning and other important tasks as pointed out by [Apuke & Iyendo \(2018\)](#). The internet enables students to find information as well as allowing them to think critically and creatively, to become collaborative and cooperative workers and to solve problems said Dryli & Kinnaman (1996, as cited in [Dogruer, 2011](#)). Nevertheless, poor internet connectivity should not be taken as a sole concern in this case considering the learners’ socio-economic conditions, as [Pokhrel & Chhetri \(2021\)](#) revealed that majority of students do not have access to smartphones

or TV at home in addition to poor internet connectivity. Income earned by families, and continuous access to internet is also a pricey trade for the farming community.

Electricity was also a demand for charging the device and lighting especially when studying during the night. The importance of proper lighting for learning was highlighted in the study by [Sleegers et al. \(2013\)](#). The unfavorable status of lifelines due to the devastating typhoon Odette provided learning disruptions particularly to those who were most affected by the disaster. Therefore, the learners' struggle in learning doubled or even tripled while waiting for the resumption of face to face classes.

### **Theme 1b: Learning Opportunities**

While remotely learning, the participants were able to find challenging and innovative learning opportunities. With teacher's absence, the participants sought out assistance from another person or other means to simplify the process of responding the learning tasks. This is articulated in the following response:

*“Kung lisoran kog answer sa akong modules dam, magpatabang ko sa akong ate nga egsoon sa akong mama...” (If I find it difficult to answer my modules ma'am, I ask help from my mom's sister.)* **Jacob**

In most cases, learners attend school in order to receive opportunities to learn ([Dumas, 2018](#)). When in-person classes were temporarily suspended, the employment of multiple learning delivery modalities has ensured the continued provision of learning opportunities to learners ([DepEd Order No, 32, series 2020](#)). The participants availed these learning opportunities and enhanced through tutorials and interventions conducted in community learning centers to streamline the learning tasks assigned to them. Community learning centers were built to help learners get assistance from teachers, para teachers and other learners. When the centers were damaged by typhoon Odette, meetings with teachers and learners were cancelled. Instead, the learners opted to ask assistance from relatives which relatively showed their persistence. The school has likewise implemented learning programs to support literacy, numeracy, and other learning areas.

### **Theme 1c: Rise to the Challenges**

Participants disclosed their survival measures against the threat of COVID-19 pandemic and typhoon Odette while learning. Additionally, as face-to face classes have been conducted, many participants were delighted to share their thoughts upon learning with teachers and classmates. As learners rise to the challenges, experiences encountered after the typhoon may have been gradually overcome despite the continued COVID-19 restrictions being implemented and with the partially settled aftermath of typhoon Odette. This is reflected in the following response.

*“Nag-andam mig kit ug kanang daling makaon nga mga pagkaon 'dam niya pwede pud ibaligya.” (We prepared (emergency) kit and those easy-to-eat foods ma'am and those which could be sold.)* **Jayla**

Meanwhile, many of the participants conveyed their blissful disposition while being involved in the implementation of face-to-face classes as exemplified in the response:

*“Lahi ra jud ang mag face-to-face nga klase kay masabtan o makasabot jud ta ug sakto ug ma explain ug tarong kaysa modules. Nalipay ko ani ug wala naguol sa mga health protocols.” (Face-to-face classes*

*are really different because we can understand properly and can be explained well, than modules. I am happy with this and not saddened by the health protocols.) Jacob*

The results indicated that learners together with their families have devised ways to survive amidst the double crises. Physiological and security needs became their topmost considerations for enduring the crises due to unfavorable socio-economic conditions experienced. On the other hand, the learners gained confidence along with more learning opportunities as they come back to school. Likewise, the parents are very supportive, so does the school as majority of the learners have continued to participate in face-to-face classes. As for Technology and Livelihood Education subject, classes can now be facilitated in the learning classroom. According to [Cooper & Gamer \(2012\)](#), a learning classroom is student centered, every student is included in the discussion, each has a role and a voice. Creating a learning classroom can provide an avenue to learners to recover from difficult experiences and challenges due to crises. Moreover, by following Safe School Reopening and DepEd Shared Responsibility Principle ([DepEd Order 17, series 2022](#)), learners' engagement in face to face classes has widened their learning opportunities and they learned to rise despite the unresolved situations at home brought by the pandemic and the devastating typhoon Odette.

Table 2. Effects of Learners' Experiences in the Learning Process

Themes	Categories
Role Acceptance	<ul style="list-style-type: none"> <li>• Self-reliance while learning</li> <li>• Demonstrating sense of responsibility</li> </ul>
Psychosocial Discomfort	<ul style="list-style-type: none"> <li>• Mental and emotional distress</li> <li>• Unfavorable learning environment</li> </ul>

Nevertheless, the student experiences during the pandemic and after the typhoon Odette left traces of varied consequences in the learning process. So, educators and those persons behind these learners have to identify them so that best teaching practices can be applied and dealing with these learners shall be coupled with empathy and understanding.

In addition, the study also reveals how the experiences of the learners affect their learning process and how these experiences shaped the values and attitudes of the learners as observed in Table 2. Consequently, there are two themes that were deduced which include (a) role acceptance, and (b) psychosocial discomfort. Furthermore, every theme found under this section is coupled with two categories.

### ***Theme 2a: Role Acceptance***

It has been said that the learner is the center of any educative process. In these trying times, the learner is the most affected in the new landscape of the educational system. To prevent learning loss and to balance with the new ways of learning delivery, the learners themselves have learned to redefine and accept their role through making certain adjustments.

Consequently, many of the participants reported that due to the deficiency of teacher contact, they learn to develop self-reliance while learning since it has become necessary yet challenging. They are challenged

to take active role in developing good attitudes towards responding their learning tasks. As one participant mentioned:

*“Sa balay dam, magtoon ra kog ako through modular, usually walay teacher nga maka discuss then walay classmates nga pwede ma enjoy ko while learning.” (At home ma’am, I just study through modular, usually no teacher can discuss then no classmates that I can enjoy while learning.)* **Nomee**

The implementation of different learning delivery modalities for distance or remote learning has concretized the development of Basic Education- Learning Continuity Plan where learning outcomes in the form of knowledge, skills, attitudes, and values have been assessed (DepEd Order 12, series 2020). The development of self-learning modules as one of the primary instructional materials for learning delivery as mandated by the order is evidently geared towards supporting and developing self-reliance among learners. Likewise, self-reliance may also have cultivated among the participants based on their weekly visits in Community Learning Center (CLC) such as picking up copies of modules and viewing recorded video lessons (RVL’s) as initiated by the Division of Carcar City. To review, some participants also reported that other than RVL’s, they also utilized video lessons online to supplement their printed learning modules. These results were supported by the study of [Sukawijaya & Sudiarta \(2018\)](#) where junior high school learners were exposed to varied instructional platforms and tend to learn self-reliance or learning independently on blended learning environment prior to face-to-face classroom learning.

In like manner, the participants were able to identify themselves as responsible of their own learning. Being responsible here means being able to create and make decisions as exemplified in the response of one participant:

*“Kinahanglan gihapon nga tarongon ang pag-answer sa learning modules. Ako lang gihapon himuon ang gipahimo sa maestro niya akong gamiton ang akong nahibaw-an bisan ug wala ko kahimo sa uban.” (It is still necessary to answer well the learning modules. I’ll just still do what the teacher asked me to then I will use what I know even though I have not done with others.)* **David**

As revealed in the study of [Iversen et al. \(2015\)](#) on learner-led approaches to education, the demands and needs of the society and workplaces could be possibly met as students take part in the co-creating process. That is, they seemed to be more involved and engaged in the learning process. Currently, through learning continuity, the learners were expected to take part of their responsibilities and engaged themselves not only in learning but also in the decision-making process with the help of technology and peers or adults. Being involved in the decision-making process gives students the feeling of ownership which can be illustrated by the example of learners’ opportunity to choose learning methods and set their own learning goals ([Gurbanov & Mirzayeva, 2018](#)). The crises might have complicated their learning experience, but the school has already plot expectations of student learning outcomes. As revealed in this study, the learners demonstrated acceptance, confidence, self-motivation, and initiative. All of these can be reduced that they fully accept their role as learners in this new normal of teaching and learning.

**Theme 2b: Psychosocial Discomfort**

Nonetheless, the experiences of the participants in their learning process during the double crises have caused psychosocial and emotional discomfort. This is seen in the following response:

*“Dili na ko ka focus ‘dam sikad pagsugod sa pandemic niya gitapol ko. Dili nako kaayo kasabot sa akong gibasa niya nahinay nako makat-on.” (I cannot focus ma’am since the beginning of the pandemic then I am getting lazy. I didn’t quite understand what I was reading then getting slower for me to learn.)*

**Ash**

*“Traumatizing ang bagyong Odette kay makulbaan ko kung makadungog ug kusog nga hapak sa hangin hangtod karon.” (Typhoon Odette is traumatizing because I would be nervous to hear a strong gust of wind so far.)* **Arianne**

The results implied that the learners sought for psychosocial and emotional security and support while learning during these crises as, [Pokhrel & Chhetri \(2021\)](#), reported that many students at home or living space have undergone psychological and emotional distress. Some may have devised ways to escape from this struggle by themselves, however, the school other than their families can also provide them emotional and even psychosocial support. According to [Stark et al. \(2021\)](#) in their study, students viewed educators as being influential in promoting students’ sense of psychosocial wellbeing. Self-awareness and empathy among educators played a central role in many students’ decisions to seek support.

Additionally, with the effects of typhoon Odette, the predetermined psychosocial conditions of learners due to pandemic have been compounded with the complexities of home learning environment which are very crucial in the learning process. Maslow’s Hierarchy of Needs, being the forefront in many studies on people’s biological, psychological and social needs, is used in education to identify safety and security needs which arise when physiological needs are relatively satisfied. One dimension of safety needs is to ensure that our students are safe and secured in their learning environment and have their basic needs met before engaging in the learning process. The demand for conducive learning environment has constantly been part in the teaching-learning process as it promotes safety and security among learners. As stated in [DepEd Order 12, series 2020](#), the landscape of child protection and child rights in a new learning environment encompass not only the physical school but more extensively, the cyber world and the home as a “school.”

Table 3. Learners’ Responses to the Challenges Experienced

Themes	Categories
Actions towards Learning	<ul style="list-style-type: none"> <li>• Student initiatives</li> <li>• Time management</li> </ul>
Coping amidst Adversities	<ul style="list-style-type: none"> <li>• Faithfulness and Security</li> <li>• Self-motivation and optimism</li> </ul>
Pillars of Strength	<ul style="list-style-type: none"> <li>• Learner support</li> <li>• Health personnel and school interventions</li> </ul>

With the varied experiences encountered in the learning process, the learners learned to respond according to their desire to learn despite the crises. After the technology and livelihood education learners

disclosed their learning experiences during the pandemic and after typhoon Odette as well as the consequences of these experiences, the learners' responses to the challenges they experienced were identified as shown in [Table 3](#). There are three themes found which include: (a) actions towards learning, (b) coping amidst adversities, and (3) pillars of strength. Notably, each of the themes in this section corresponds to two categories as reflected in the table.

### ***Theme 3a: Actions towards Learning***

As a result, other than the department and school personnel, the participants themselves expressed their distinctive desire to act on the prevailing challenges affecting their learning. Their way of acting upon depends on the degree on how they were affected by the crises and the value they invest for education. As verbalized in the following response:

*“Magkugi sa pag eskuyla labina nga naanay face-to-face.” (Work hard at school especially there is face-to-face.)* **Levi**

*“I used my savings to buy load for mobile data in order to access video lessons. Through the skills, I have learned to save money, recycling, and renovating which are so helpful in our family.”* **Jackie**

The participants expressed positive actions as they come across numerous struggles in learning. Their ability to initiate actions may also have been attributed to their learning adjustments since they have surpassed their first school year of distance or remote learning. There are participants who choose to act according to their learning needs as there are those who prefer video lessons along with self-study, self-reflection through journal writing, and social interactions through participation in the limited face-to-face classes. Time management is also deemed necessary as learners have to comply learning tasks and submit them on time. [Ahmad et al. \(2019\)](#) cited that every learner must familiarly managing time as a skill, and the command on this skill for the sake of better results. Accordingly, a student can only survive if he/she has ability of time utilization properly.

The new set of learning competencies or the Most Essential Learning Competencies (MELC's) were streamlined to the most essential, which focus more on the learning activities and resources, while having sufficient time for coverage and mastery ([DepEd Order 12, 2020](#)). Thus, the introduction of MELC's into the curriculum has addressed the challenges brought about by the global pandemic or other disasters and that includes the capacity of learners to learn at their own pace in their new learning environment. Nonetheless, with the effects of typhoon Odette, the learners may have to adjust further as there are other aspects in learners' lives which also need serious consideration. The Department of Education, however, recognizes the challenges in the delivery of education. According to [DepEd Order 17, series 2022](#), while distance learning facilitated teaching and learning innovations as well as learning continuity during the pandemic, there were major challenges in the teaching and learning process affecting the adjustment and development of learners. Thus, DepEd has continually pushed and made preparations for the safe reintroduction of in-person learning.

### **Theme 3b: Coping amidst Adversities**

Despite the diverse difficulties and challenges confronted in the learning process, the learners remain resilient and continue their journey while learning to adapt and develop coping capacity amidst adversities for the new educational set-up, the remote or distance learning and recently the progressive expansion of face to face classes. The following are some statements from the participants which manifested coping mechanisms in learning amidst crises.

*“Lig-onon ang akong pagtoo nga makatarong ug eskwela. Akong paninguhaon nga mosunod kanunay sa mga health protocols.” (Strengthen my faith to be able to study well. I will do my best to follow frequently the health protocols.)* **David**

*“I always trust and pray to God that everything will be okay soon. Learning skills in TLE is not so hard for me because I already have a cellphone to view video lessons. Learning remotely, is just okay for me.”* **Jackie**

*“Padayon lang gihapon ko sa pag-eskuyla bahalag naagian sa bagyo, padayon gihapon...” (I just keep going to school despite being passed through by the typhoon, still go on...)*  **Jacob**

Learners may have different level and different ways of coping with and adapting to learning situations. In the context of this study, coping mechanisms allowed the participants to focus on finding solutions to the challenges encountered. Becoming faithful has become one of their coping mechanisms while securing basic needs has become a concern. Learners' positive outlook, diligence, and confidence are some desirable attitudes which help themselves face the difficulties and challenges they encountered.

### **Theme 3c: Pillars of Strength**

Finally, the adolescent learners are considered vulnerable against the learning difficulties and challenges they have experienced. As a result, pillars of strength were recognized through the availability of human resources which could help improve their coping capacity during distance or remote learning and in the progressive face-to-face learning. They were also used as stimuli for viewing learning in the brighter side. The following is an example statement that reflects these insights:

*“Ang akong family ni support nako ug mga friends sa gawas sa school.” (My family supports me and friends outside of school.)* **Levi**

The limited physical interaction between teachers and learners truly created a challenge because learners needed support in this new educational set-up. Garrison and Baynton (1987, as cited in [Usun, 2004](#)) define learner support as the resources that learners can access in order to carry out the learning processes, which can be human and non-human resources. In the study, human resources under learner support is extended from school personnel to the wider community where parents, peers, and other stakeholders are available. Results showed that learners also identified themselves as part of these human resources as they have the ability to do self-paced learning. Parents, peers, and health personnel play vital role in strengthening learner support as they facilitate socio-economic variables such as student's financial self-

sufficiency, capacity to cope with their roles and responsibilities in the family and community (Garrison 1989, as cited in [Usun, 2004](#)), and most importantly provide psychological and emotional interventions amidst crises. Support from the participants' parents and/ or families were, for instance, through acting as channels for learning materials as self-learning modules and sometimes, recorded video lessons, and learning outputs, either written or performance tasks/products as in TLE.

Similarly, these parents, or sometimes, guardians attended PTA assemblies including school-based monitoring and evaluation forums, distribution of quarterly report cards, and the like. [Vachkova et al. \(2022\)](#) pointed out that to help the children explore network educational opportunities, support their involvement in the learning process, and find ways to develop their independence and adapt the educational process to the individual characteristics of the child, the parents had to create the necessary conditions for work and efficient rest within the house, where the challenge is to build closer and more complex relationships with the teachers and schools. Peers, friends and classmates extended their support through tutorials and casual meetings during Community Learning Center (CLC) visits and chitchatting using social media as messenger. This student-student interaction has been termed study buddy by [Madland & Richards \(2016\)](#) and it has a significant source of emotional and social support where this feeling of being supported led to the development of a trusting and respectful context. The barangay through the Local Government Unit and the school's division office have continued to provide health services and exercises on disaster mitigation. The school, likewise, has wired its support through its learning programs and projects. All these can be compounded into strengthening the pillars of strength while engaging in the learning process guided by the learning continuity model for teaching when affected by disasters and calamities.

### **Learning Continuity Model for Teaching when Affected by Disasters and Calamities**

This learning continuity model for teaching Technology and Livelihood Education (TLE) when affected by disasters or calamities is designed following the essential requirements covered in the Basic Education Learning Continuity Plan (BE-LCP). As stipulated in [DepEd Order 12, series 2020](#), the BE-LCP responds to the directive of the department secretary which is to ensure the health, safety and welfare of all learners, teachers and personnel of the department, while also finding ways for learning to continue and provides guidance to the department on how to deliver education amidst crisis. Implementation specifics were embodied in appropriate guidelines, rules or directives, and operationalized through programs, projects and activities.

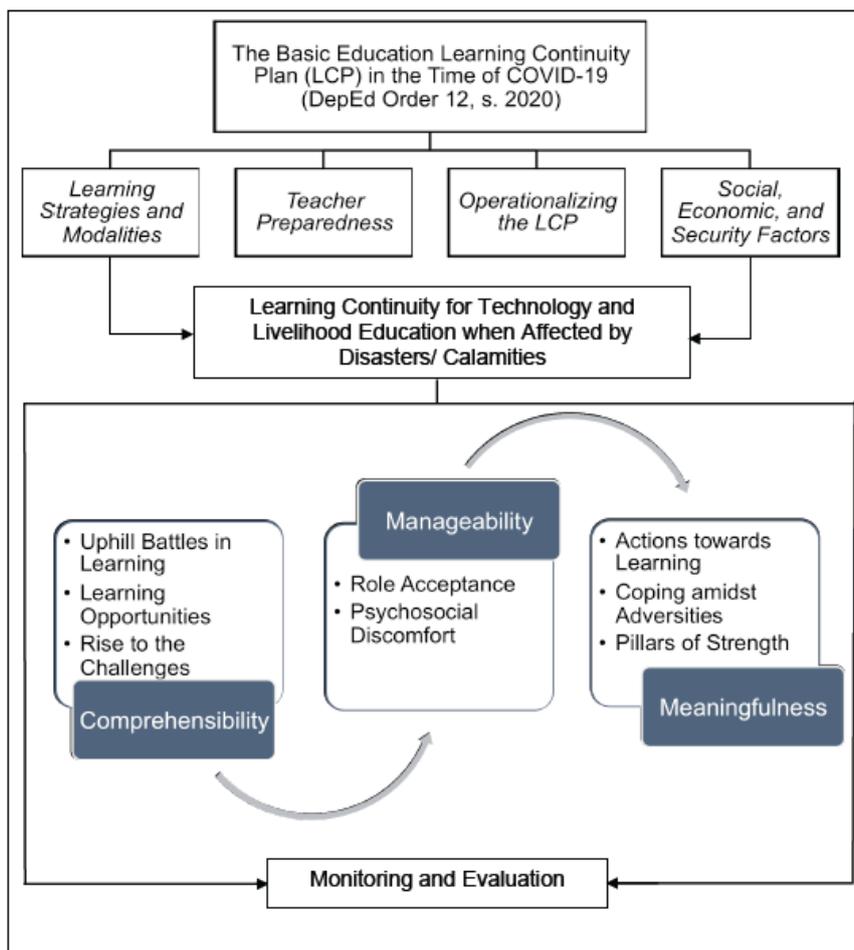


Fig 1. Learning Continuity Model for Teaching Technology and Livelihood Education

The pandemic has recently become part of learner’s lives and it has been hard on all of them as observed in the presented themes. The presence of natural disasters as typhoon Odette has added disruption to their learning process. With the implementation of distance or remote learning, learners experienced difficulties in dealing with self-learning modules and in self-learning.

This model is created by anchoring on Antonovsky’s Theory of Salutogenesis and the Associated Sense of Coherence (SOC), where learners and educators as well should be able to perceive and understand the internal and external stimuli brought by stressful situations in learners’ environment when affected by disasters or calamities as found in the presented themes. Such stimuli in this study include uphill battles in learning, creativity, and innovativeness as learning opportunities, and rise to the challenges (Comprehensibility). Educators should be able to manage these stimuli by providing support to learners who have learned to accept their role, initiating psychological interventions, and building healthy learning environment for learners suffering from psychosocial discomfort. Learners, in turn, would need to engage themselves in managing effects of stimuli in order to balance their learning situations, that is, the readiness to learn in a healthy environment shall be coupled not only by mental but also emotional and social readiness.

Moreover, TLE as a skill subject requires holistic approach to learners, as such, they should be able to acquire knowledge, skills, values, and attitudes necessary in the world of work. These components can only be acquired through manageability of the effects of stressful situations brought by disasters or calamities (Manageability). Finally, learners need to find meaning through emotional attachments in their challenging situations, that is, to investigate actions and coping strategies necessary to fully attack them (situations) given generalized resistance resources (GRR) as described by the theory. Actions as learner initiatives, time management, various coping strategies, and social network through learner support are all attributed to factors describing the GRR (Meaningfulness). By considering the three components of SOC and GRR, learners may be able to evaluate, avoid, and overcome stressors affecting their learning process which, for instance, come from the impacts of disasters or calamities as COVID-19 pandemic and typhoon Odette.

Henceforth, the model can address a position for curriculum implementers, educational leaders and administrators to monitor and evaluate the teaching of TLE as a subject in the midst of crises and strengthen the policies and guidelines embedded in the learning continuity plan to be more responsive to the needs and experiences of TLE learners. This can also provide a better understanding of how the learners perceive and understand their experiences in the learning process during disasters or calamities, manage the effects of these disasters or calamities in their learning process, and find meaning to overcome or respond challenging situations affecting their learning. This also helps teachers apply best teaching practices as they accommodate learners with varied experiences in double disasters in a regular classroom setting. Overall, the model stresses the challenges and responses of TLE learners affected by COVID-19 pandemic and typhoon Odette.

## **CONCLUSION**

The difficult and challenging experiences of the learners in their learning process during calamities have provided promising avenue for creative and innovative learning opportunities to address learning anxieties and taught to accept their role as independent and responsible of their own learning. These are authentic measures of learning outcomes as they were drawn from learners' lived experiences in their learning process in the midst of calamities. The unwholesome effects of their experiences and the continued implementation of learning continuity, where blended learning or a combination of two learning modalities is still an option, engaged learners to take actions and devise coping mechanisms necessary to respond the crises faced back up with healthy support from home and their wider school community. The results therefore have validated the theory of salutogenesis and associated sense of coherence as learners were able to cope with the stressful learning conditions utilizing the available resources with the purpose of achieving survival in the given phenomenon. Equipped not only with knowledge, but also skills, values, and attitudes, these TLE learners need experiential, integrative, contextualized, and authentic teaching learning experience.

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