# A Phenomenological Study of the Lived Experiences of Senior High School Students in Learning Science Subjects in the New Normal

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Abstract: Lived experiences from diverse contexts can be transformational in education. Learning science is intertwined with various experiences, which consequently strengthen the formation of a science concept, thereby increasing students' performance in school. Thus, this paper sought to explore the lived experiences of senior high school students in learning science. Based on this concept, the researchers employed the phenomenological technique of qualitative methodologies to collect complex data regarding students' experiences in science subjects in a blended learning environment and to grasp the phenomenon from their perspective. The study revealed four

distinct themes in the students' lives: (1) varied experiences of students in learning the science subject during the pandemic, (2) challenges encountered, (3) coping strategies employed, and (4) resources needed in learning science. Based on the findings, the student's learning experiences were affected by the academic experience, motivation, preparedness, and support. The difficulties encountered by learners in learning science subjects during the new normal can be classified as personal, social, mental, and academic difficulties caused by the abrupt transition from face-to-face to blended learning. Teachers and parents are urged to assist the students, and educational resources must be well prepared. Students must also create new and productive study habits to face further endeavors in learning.

Keywords: Live experiences, Phenomenology, New Normal

#### 1 Introduction

The COVID-19 pandemic has bowled over everyone, leading to unexpectedly living in the new normal environment. One of the sectors seriously suffering from this health crisis is education. With face-to-face classes, once a vaccine is discovered, the Commission on Higher Education (CHED) believed that education should continue during 2020-2021 through online and other alternative modalities. The COVID-19 pandemic has caused a significant shift in learning activities away from in-person instruction and toward an abrupt high reliance on internet-mediated education. For others, this shift will be a substantial dislocation for educators and learners within the education provision. The social impacts of pandemics were severe, including limited travel, schools closing, and markets and sporting being closed. These are possible realities should a virulent disease with genuine potential for prime morbidity and mortality emerges.

School closure is usually considered the primary non-pharmaceutical intervention for implementing a pandemic, as students can be medium in spreading the virus. Such a move has reshaped the contour of education by shifting from face-to-face to fully online learning. Although online learning is no longer a brand-new norm of instruction in educational activity, previous reports reveal several challenges. These include but are not limited to learners' readiness, lack of variation in pedagogy, and lack of empowerment in content development or merely teaching with predefined content. Further, many universities and colleges need to be equipped with infrastructure that facilitates online teaching, and students need access to elements and internet services (Delgado, J. E., & Arellano, J. (2021).

Learning from the experience of others is one of the best opportunities we have had as a species. However, teaching and learning, whether the littlest child embarking on their first days of college or the foremost mature adult nurturing a lifelong passion for learning, is all about relationships and experiences (Hamre & Pianta, 2005; Pianta, 2006). This pandemic has brought many challenges in education, especially in science subjects. This health emergency is putting heavy demands on the standard of online learning environments. High-stakes assessment

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systems face significant accountability challenges in obtaining reliable measures of learning outcomes when students cannot attend examinations nose to nose. The informal or non-formal learning environments, including families, museums, and other institutions of social networking, have to adapt to different ways of interacting. They are pivotal in ensuring that a systemic approach to scientific literacy is established across society (Erduran, 2020).

The situation of not being able to satisfy one another in a class could be a considerable change. Teachers should reshape their teaching styles, considering the student's needs nowadays. Throughout the pandemic, we observed how each student struggled with understanding complicated concepts in Physics, Chemistry, and Biology, especially without laboratory experiments. A growing body of research in science education indicates that most scholars need help learning basic science concepts in a course built around online teaching methods, textbook problems, and verification of experiments. These studies indicate that students must actively confront complex concepts to boost learning. Effective learning may be assisted by the close interaction of scholars with their peers and teachers within the process (Barrot, 2011). Besides an academic struggle, students' performance was also heavily impacted by their household environment, mental state, and digital inequality, which most senior high school students at Bukidnon National School of Home Industries widely experience.

This research aims to supply a more robust understanding of the lived experiences of Senior High School students in studying science subjects at Bukidnon National School of Home Industries. This research will tackle how high school students will deal with the numerous challenges the new normal of our academic system could offer. This study will provide valuable findings for student services, faculty, policymakers, and other stakeholders to effectively address students' wants, interests, and aspirations, helping them better adapt to the new normal variety of education. A thorough assessment of students' online learning experiences during the COVID-19 pandemic is crucial, given the uncertainty of today. Despite the fact that this topic has been the focus of multiple studies, additional data about the experiences are needed. Therefore, the specific strategies students employ to beat them.

Offering flexible learning may be an excellent adjustment to middle school students in terms of delivery and pacing. It will be unavoidable if the COVID-19 crisis goes on for a long time, and defining flexible quality standards for it will be indispensable similarly. There is no question that adopting and guaranteeing the quality of online education presents multiple issues. Additionally, to problems with access and internet connectivity, not all programs can be supported by online technology, like laboratory-based research programs. Moreover, governments must remember the inequalities that online learning can create as students from lower socio-economic strata find it challenging to access IT infrastructure and internet packages. In light of the insights, the researchers prefer to investigate the lived experiences of Senior High School students in science subjects from the angle of the student themselves, given that there are obstacles hindering them from being taught Science lessons.

# 2. Methodology

In this study, the phenomenology research design was used to examine and understand informants' responses by focusing on their experiences. By focusing on how people adjust to situations and think about this phase of their lives, Merriam and Tisdell (2013) claim that this design aids qualitative researchers in understanding how people interpret their experiences, how they construct their words, and what meaning they attribute to their experiences. This analysis of lived experiences using the phenomenological technique of qualitative methodologies collected detailed data regarding students' experiences in science subjects in a blended learning environment and grasped the phenomena from their perspective.

The participants were selected from different tracks and strands, including humanities and social sciences (HUMSS) and science, technology, engineering, and mathematics (STEM). Purposive sampling was used to choose participants for the in-depth interview, and the student's socioeconomic status was considered. Face-to-face interviews were held. All interviews took place at the agreed-upon time, based on the informant's availability. Participants were contacted and communicated with before the interview to obtain their agreement to participate in the study and to explain the study's objective in detail. A triangulation method was used to ensure the validity and reliability of the study. Triangulation thoroughly understands a phenomenon by combining several methods or data sources. A validated open-ended questionnaire, an individual interview, and a focus group discussion were triangulated in this study.

After receiving their consent, the participants were given the necessary training on the types of information expected of them and how to make the most of their time throughout the communication. As a result, ten (10)

senior high school students were interviewed for this study. The students' respective parents, guardians, and science teachers were also interviewed to verify the data obtained from the students. The interview took roughly 20-25 minutes to complete. The responses of the respondents were recorded during the interview. The participants' real names were not utilized in the transcription or analysis of the interview data to protect the anonymity of the participant's responses.

The researchers utilized the thematic qualitative approach to data analysis developed by Gerald Holton in this study, which entails quoting and characterizing participant replies in words by dividing them into distinct themes based on their relatedness, citing their statements and responses. This approach to examining qualitative data requires searching through a set of data to find, examine, and report on recurring patterns (Braun & Clarke, 2006). It assists researchers in categorizing data and analyzing, identifying, and reporting patterns (themes) within the data. Transcribing and categorizing the participants' responses and identifying core themes based on the study questions were used to evaluate the data collected through interviews and questionnaires. The following is the six-phase framework of thematic analysis used in the study:

- Step 1: Become familiar with the data. Reading and rereading the transcripts is always the initial step in any qualitative study (Maguire & Delahunt, 2017).
- Step 2: Generate initial codes. In this stage, researchers begin to meaningfully and methodically organize our data. Coding condenses large amounts of data into digestible meaning units (Maguire & Delahunt, 2017).
- Step 3: Search for themes. The theme is a pattern that captures something significant or interesting about the data and research question (Maguire & Delahunt, 2017).
- Step 4: Review themes. During this phase, we review, modify, and develop the preliminary themes identified in Step 3 (Maguire & Delahunt, 2017).
- Step 5: Define themes. This is the final refinement of the themes, and the aim is to identify the essence of each theme. (Braun & Clarke, 2006, p. 92)
- Step 6: Writing Up. The result of the research is usually some report, such as a journal article or dissertation.

#### 3. Results and Discussion

The codes were rigorously identified by the researchers after each interview. Data were recorded and organized. After reviewing the interview transcripts, a number of themes emerged across the interviews.

The coding was done using a selection of words and expressions from the interviews. After that, groups were employed to categorize sentences and words. Listed below are the themes and codes that emerged from the interviews.

#### Theme # 1: Varied experiences of students in learning the science subjects during the pandemic

Table 1: Theme number 1, category and subcategory

| Themes   | Category                | Subcategory               |
|--|-------------------------|---------------------------|
| Varied experiences of students in learning science | a. Academic Experiences | a. Multi-tasking          |
|  |                         | b. Insubstantial learning |
|  | b. Motivation           | a. Increase of motivation |
|  |                         | b. Loss of motivation     |
|  | c. Preparedness         | a. Adjustment             |
|  |                         | b. Willingness            |
|  | d. Support              | a. Parental involvement   |
|  |                         |                           |
|  |                         | b. Teacher's guidance     |

Based on the gathered data from the study, there are varied learning experiences encountered by the students in learning the science subject during the pandemic. Their experiences are further classified into 4 categories namely: Academic Experiences, Motivation, Preparedness and Support. Each of these categories has their own subcategory in which it specifies the different factors that contribute to their experience (Table 1).

### Category number 1: Academic Experiences

The academic experiences of students vary from difficulty to answer the module, difficulty to multi-task and insubstantial learning. 6 out of 10 students answered "lisud gyud kayo ang module answeran" (It's really hard to answer the module). 1 student answered "lisud mag multi-task kay daghan house chores" (It's very difficult to multitask because there are also house chores) and one student answered "naa koy na learn ma'am pero murag mababaw lang" (I have learned something, ma'am but it's all shallow knowledge). The result is also aligned with the study of William, Cameron, and Morgan (2020) in which they emphasized that students have a variety of experiences with online education evaluation, accordingly. For starters, this is their first time connecting with an online class, therefore they are having difficulty adapting to this trend, since going from a traditional classroom to computerbased instruction in a virtual classroom completely changes their learning and teaching experience. Second, most students are staying at home during the shutdown in various parts of the country since internet services are still few in rural regions, therefore students use mobile internet, which disrupts online connectivity due to poor internet signal. Aside from that, internet access in our country is still prohibitively expensive. Finally, there are certain technical considerations to consider. According to Kapasia et al. (2020), over 70% of learners participated in elearning during the lockdown time. For online study, the majority of the students used Android phones. Students have been dealing with sadness and anxiety, as well as bad internet connectivity and an unsuitable study environment at home. During this pandemic, students from rural places and marginalized groups face great hurdles in their studies. This study proposes focused interventions to promote a positive learning environment for pupils from underserved communities. Strategies to construct a resilient education system in the state that ensures the development of employability and productivity skills for young minds are urgently needed.

#### Category number 2: Motivation

The second category under theme number one is on motivation. Based on the results of the interview, most of the students are losing motivation to study in this new normal, as they say "murag nawalaan ug gana mu answer kay diko kasabot, lahi ra gyud ug nay mutudlo face to face sa imo" (I lost the motivation to answer because I can't understand the module). Some students on the other hand are more motivated to learn in this new normal, in the interview, ome of the students said that "gusto nako maka learn ana tapos gusto nako ma pursue akong pag skwela" (I want to learn more because I want to pursue my study). The varied response of the students is due to the fact that students' ability to construct meaning through assuming agency in learning, initiating and maintaining meaningful multimodal dialogues, and building conceptual and epistemic understanding through active engagement with digital resources is also strongly reliant on online learning (Hartnett, 2016). Also, the importance of students' selfregulation, motivation, and positive learning dispositions is highlighted in such online settings. Despite the fact that a large number of studies in the field of educational technology have addressed these important issues, research evidence on how to appropriately adapt relevant learning and motivational theories to design effective and sustainable online pedagogy in complex, multifaceted, and even situational online learning environments is still lacking (Chiu & Hew, 2018).

# Category number 3: Preparedness

Category number under theme number one focuses on the student's preparedness to learn in this new normal. There are two subcategories that specifies the factors that affected the student's preparedness. First, is difficulty to adjust to the new normal. Students, in their own words said that "Uhm kuan kanang..tungod sa pandemic murag mas naglisod gyud ko kay murag ga cope up" (I am having difficulty coping with the pandemic). In the study of Taye et. Al (2021) they emphasized that despite the fact that knowledge on the COVID-19 epidemic is constantly changing, the readiness and intent to adapt to the "new normal" COVID-19 prevention campaign was insufficient. Students in non-health sciences fields of study, unmarried, illiterate, and participants without a smartphone expressed a lack of readiness and a negative intention to adjust to the new normal COVID-19 prevention program. A lack of purpose to adjust routine preventative procedures was due to a number of identified constraints.

### Category number 4: Support

Category number 4 focuses on the support the students get from their parents and teacher. Two subcategories include parental support and teacher's guidance. Most of the students feel like they don't receive enough support from their parents and teachers. In their words they said "Kanang lisod jud ang learning ug walay teacher nga mag tudlo" (it's very difficult to learn if there is no help from the teachers). While peer relationships may help children's learning, parents and teachers are the two main groups with formal responsibility for children's educational attainment (cf. Urhahne, 2019). While teachers plan lessons, parents' involvement in homework is more casual (Urhahne, 2019). As a result, teacher and parent participation have been studied separately in theoretical and empirical contexts. Student learning relies heavily on social connections (Vygotsky, 1978; cf. Erbil, 2020).

### Theme #2: Challenges encountered in learning science

#### Table number 2: Theme number 2, categories and subcategories

| Challenges Encountered | 1. Personal             | 1. Self-esteem               |
|------------------------|-------------------------|------------------------------|
|                        |                         | 2. Self-assessment           |
|                        | 2. Social               | 1. Interpersonal             |
|                        |                         | 2. Communication             |
|                        | 3. Mental               | 1. Stress                    |
|                        |                         | 2. Frustration               |
|                        | 4. Academic Performance | 1. Grades                    |
|                        | Concerns                | 2. Mastery of Subject Matter |

In addition to varied lived experiences, the study further recognized the challenges encountered by the students in learning science during the new normal as one of the theme shown in table 2. The challenges encountered by the students are inevitable during the pandemic which includes the personal, social, mental and academic performance of the students. Each of the categories consists of subcategories which are indicated in table 2.

## Category number 1: Personal Challenges

The new normal not only challenged the health sector but also the educational sector of the society. Students in particular encountered personal challenges brought by the new setting in education. When the respondents were asked about the personal challenges they have encountered in learning science, one of the student answered, "Sa personal kay, wala koy learnings (Personnaly, I don't have learnings)". Another student answered, "Personally, makaapekto siya sa akong kaugalingon kay maglisud kog sabot, (It can affect myself because I have difficulty to understand)". In relation with this, Tuguic (2021) said that learning readiness among students must be constructed. Teachers should develop learners into self-directed learners in which they can determine their learning needs, goals, and learning strategies. Moreover, the self-efficacy in computer, internet and online communication should be appropriately defined among students to avoid and or lessen personal challenges faced by the students and to increase their self-esteem in handling the resources used in blended learning (Tuguic, 2021).

## Category number 2: Social Challenges

Due to the shift from face to face to online learning, social concerns among students also arise along with personal challenges. One student testified that remote learning is a social challenge to her, "Lisud gyud siya kay kung nay kay pangutana wala kay mapangutan-an (It is really difficult because I don't have anyone to ask if I'm confused with my subjects)". Another respondent said, "Lisud kay walay socialization ate (It's difficult because we can't socialize)". One also opened up about the importance of having a teacher to approach especially in solving Chemistry subject, "Sa Science dghan jud, specially chemistry solving baya siya, lahi rajud kon nay maestro nga mo teach sa kuan, kanang how to solve, like pareha kagahapon, Makita jud ang differences sa among answers during modular and now nga nag face to face mi (In science, specially chemistry, it is solving, it is really different when there is a teacher who can teach to solve, like yesterday you can see the differences in our answers during modular and now that we are having face to face)". In view of this, teacher's guidance and family involvement is necessary in learning, communication among siblings and peers can support and save learners from the feeling of loneliness caused by isolation and lack of communication (Almuraqab, 2020). Moreover, in improving students understanding the help

of more knowledgeable one can also make a way (McLeod, 2020). The fact that new normal setting in education causes limited social interactions, students have had feelings of isolation, fear and worries about health and lack of communication makes them even vulnerable to stress and frustration. Less communication also means that less group collaboration among students, this has greatly impacted student's ability to learn (Al-Maskari et al. 2021).

### Category number 3: Mental Challenges

Along with the many challenges in facing the new normal education is the mental health challenge among learners. In the interview conducted by the researchers, one of the respondent said that "mentally dili na gyud okay, makabuang na gyud (mentally it is draining)". In the study conducted by Lischer et al. (2021), students during the new normal experienced anxiety, depression and frustration due to the fact that there are lesser physical activities and socialization which may lead them to feel loneliness and depression. Moreover, one respondent said that "Kanang how to solve sa chemistry, lahi jud basta mag discuss (in solving chemistry, its different when it is discussed)". This statement indicates that learners have the difficulty to learn science especially in problem solving without the guidance and proper discussions by the teacher. This is in parallel with the study of Elmer et al. 2020 which emphasize that students stress and frustrations in learning may worsen through less social contact, group collaboration and parental support. Student also have frustrations in solving chemical equations, "Mag answer sa mga chemical equations, dili ko kabalo mag solve (I'm having difficulty in answering chemical equations)", "Naay solving sa science maam, lisodan jud ko ma'am, kay sa physics maam ma lisang jud akong kuan (There is a solving in science ma'am, it's difficult for me, physics make me sick)". In line with this, Tuguic, 2021 emphasize that before engaging the students into blended instruction, they must have blended learning readiness on order to avoid mental health issues like stress, anxiety, loneliness and depression in facing the new challenge in the new normal.

### Category number 4: Academic Performance concern

The new normal setting in education do not just brought challenges personally, socially and mentally, yet also have impacted the learners academically. In the study of Xiomara, 2021 in the influence of online learning to students' academic performance and student's satisfaction shows that students have higher learning motivation with the use of online platform compared to traditional one. However, the respondents in BNSHI testified that online learning is difficult and may cause their grades in science inconsistent from the previous grading period, "Challenging ang pagsabot sa module (understanding the module is challenging)", said one of the respondent, "nigamay akong grades kay igo rako mupasa (my grades got lower because I'm only doing things for compliance)" another student added, "niya ang among grades mutaas, mugamay depende sa teachers (our grades are not consistent, sometimes high, other times low)" another respondent added.

The academic challenges faced by the learners are due to the factors such as personal, social and mental instability during the pandemic. Though some students gets motivated in learning online (Xiomara, 2021) yet other students are struggling with personal problems like low self-esteem, feeling of isolation, less parental and teachers guidance, feeling lonely and or frustration (Elmer, 2020). Thus, Al-Maskari (2021) suggests that faculty and the school administrator should look into the needs of the student in order to overcome the challenges they're facing in the new normal.

## Theme # 3: Coping strategies in learning science in new normal

# Table number 3: Theme number 3, categories and subcategories

| Themes            | Categories         | Subcategories            |
|-------------------|--------------------|--------------------------|
|                   | a. Teacher-student | a. Virtual communication |
| Coping strategies | relationship       | b. Relationship gap      |
|                   | b. Time Management | a. Scheduling            |
|                   |                    | b. Setting priorities    |
|                   | c. Communication   | a. Virtual               |
|                   |                    | b. Physical              |

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Based on the gathered data from the study, there are different coping strategies used by students while learning the science subject during the pandemic. Their coping strategies are further classified into 3 categories namely: Teacherstudent relationship, Time Management, and Communication. Each of these categories has their own subcategories emphasizing more detailed reasons that contribute to students developing their own coping strategies while learning science subjects during the pandemic (Table 3).

#### Category number 1: Teacher-student relationship

When the respondents were asked about their relationship with their teachers during the pandemic, the students have given 3 varied answers namely: little connection, good virtual communication and embarrassed to approach. 4 of the respondents said that "kuan maam dili kaayo mi close sa amoang maestra/o kay dili man mi permi magkita unya usahay kay magkuha ra mi ug module unya wala pa gyud mi nakaila sa among maestro" (we are not that close with our teachers because we don't often meet, we only see each other when we return our module). 3 of the students answered "Oo kay nay time nga sa among gc, mag kanag online online me tapos if naa mi mga dili masabtan pwede ra mag kuan mangutana" (Yes, there are instances that we go online and of we have questions we can asked them online). 3 of the students answered "Kanang maulaw kag approach kay lisod, lahi sa face to face kay maka ask ka, pero sa pandemic kay maulaw ka if unsaon nimo pag pm ka maam or unsaon pag approach sa iyaha kay lahi jud baya sa selpon ug sa kanang personal gyud (I am shy to approach because it is difficult, it is really different from face to face, in face to face you can ask but during pandemic you are shy how to message ma'am or how to approach them because it's really different in contacting them on phones and on personal).

Teachers can assess motivation, engagement, and material understanding by interacting with students in person, which is more difficult to do from a distance (Zweig & Stafford, 2016). Teachers across the country have been charged with shifting from classroom instruction to remote or hybrid models as a result of the pandemic, a shift that has reduced—if not completely eliminated—their possibilities for in-person connections with their students. Meaningful interactions between professors and their students are critical to students' academic success in traditional classroom environments (Liberante, 2012; Quin, 2017).

#### Category number 2: Time Management

Time management is essential in student learning especially during pandemic. Some students have had a hard time to manage their time due to circumstances at home. During the interview of one of the respondents in BNSHI, the respondents were asked of her coping mechanism used in learning science during the pandemic and she said, "ano maam, take one step at a time, kung naa kay goal maam naa gyud kay strategy, akong unahon tung mga sayon2 then ipaulahi tung mga lisud2. Kay kung unahon man gyud nimu ang mas lisud mas ma pressure bitaw ang imong mind nga murag unya gamay nlng ang time, murag ma rattle na dayun ka, ana bitaw maam". Indeed it is true that time management and scheduling of priorities can help in order to lessen the burden brought by the online class. The study of Sari, 2021 conform that there is a positive impact of time management to student's outcomes in online learning. In line with time management is scheduling of priorities, one of the respondent prefer scheduling to keep on tract with the activities, "Sa akoa karun parehas karun nga nagka busy mi tungod kay daghan kaayo requirements gi isa isa nako ug human para ug naa na poy another mao na pud to akoang sugdan (for me, since there are a lot of requirements, I prefer to schedule tasks in order to keep my activities on track)" she said. This implies that time management is also self-management (Cyril, 2015). When having a goal to accomplish, proper time management is important in order to be productive (Fleming, 2019). While having a flexible and independent learning at home, it is also advisable to keep records and schedule each task to lessen the burden and to avoid activities missing. This can help students in having good academic outcome and to avoid mental health issues such as stress, depression, and anxiety. The role of parents and family members are also important since learners need their support and understanding while having an independent learning at home (Robinson, 2020).

#### Category number 3:

The communication strategies of students vary from virtual and physical communication. Two students answered "kanang mag ask, dili ka maulaw mag ask sa others, maka learn ka through others" (Just ask, you should not be afraid about asking others, because you can learn from the).

The respond of the two students corresponds to the study of Voronova et.al (2021) which show that using various electronic means promote active interaction. Despite the difficulties, the majorities of respondents are active participants in virtual interaction and are willing to continue communicating using the available means. In addition it also relates to the study of Valente and Macmahon (2020) which reveals that effective interactions among group members who share ideas, information, and clarification characterize face-to-face communication in a synchronous environment.

### Theme 4. Resources in Student's Learning in Science

# Table number 4: Theme number 4, categories and subcategories

| Themes              |        | Category                       | Sub-category               |
|---------------------|--------|--------------------------------|----------------------------|
|                     |        | 1. Unavailability of resources | 1.Digital divide           |
|                     |        |                                | 2.Socio-economic status    |
| Resources in Stud   | dent's | 2. Available Resources         | 1. Availability of Gadgets |
| Learning in Science |        |                                | 2. Internet Connection     |
|                     |        | 3. Suggested Resources         | 1. Lecture Videos          |
|                     |        |                                | 2. Free Gadgets            |

Resources make learning more interesting for learners and make it easier for them to learn. It also assists the students' and teachers' interaction during the learning process. Based on the gathered data from the study, there are different learning resources that influence the learning processes of students in learning the science subject during the pandemic. The resources are further classified into four (4) categories, namely: Unavailability of resources, Available Resources, and Suggested Resources. Each of these categories has its own subcategory that describes the different things that affect how they learn with these kinds of resources.

#### Category number 1: Unavailability of resources

The unavailability of resources of students varies from the digital divide and socio-economic status. Seven (7) of them answered "hinay kaayo ang internet, walay wifi" (very slow internet, no wifi). One (1) of the students answered "Lahi ra gyud ug naa kas eskwelahan kay makagamit ka sa laboratory" (It's very different when you are in school; you can use the laboratory) and the other student answered "Walay ga help nako sa family, ang teacher usahay ra mu reply sa chat" (No one helps me in the family, the teacher sometimes replies to the chat). Another one (1) student answered "akong module kay wala natarung ug print ang akong module" (my module was not properly printed) and one (1) student also answered "Kanang trabahuon sa balay maam, dili kaayo makafocus" (work or chores at home ma'am, I cannot focus well). There are also two (2) students who answered "wala" (none).

The selected views of the students coincide with the study of Asio et al. (2021) when they found out that internet connectivity will pose a big challenge among students for their learning. In addition to that, for students who do not possess such an internet connection, it will be difficult for them to access learning resources as the Internet is a priceless source of information for students and a tool to enhance their productivity (Metzger, Flanagin & Zwarun 2003). It is implied that without the use of the internet, it limits the resources of reference of the students. A study conducted by Salac and Kim (2016) shows that the Philippines has slow internet connections and has an expensive internet connection because there are only a few internet providers, which in turn means only a few can afford high internet connections. In line with this, Graetz (2005) conducted a study on the socio-economic status of the parents of students and concluded that the socio-economic background has a great impact on the students' academic performance. It has been the main source of educational imbalance among students and students' academic success. For children in low socio-economic status, inadequate access to technology can hinder them from learning the tech skills that are crucial to success in today's new normal. The rich and educated are still more likely than others to have good access to digital resources, such as the internet.

Some thoughts of the respondents relate to the study of Rotas and Cahapay (2020), which shows that conflict with home responsibilities, is among the difficulties in remote learning and thus hinders the acquisition of resources and help in learning science subjects during the pandemic.

### Category number 2: Available resources

The available resources of students vary from the availability of gadgets and internet connection. 10 out of 10 students answered cellphone and internet "Cellphone gyud ma'am niya dapat nay internet" (Cellphone ma'am and the internet) and some students also answered laptop "I use laptop and cellphones now."

Cellphones and the internet were mentioned by all of the respondents as the resources that they used to cope with the challenges while learning science subjects throughout the pandemic. The responses by the students are highly supported by the study of Al Tameemy (2017), which implies that mobile phones are well-liked by students and have become one of the best tools for an educational institution to adopt. Mobile phones with smart technologies have increased fast, which also coincided with a more efficient utilization of their internet capabilities. With the wealth of information available on the Internet, mobile phones have become an invaluable conduit for information. In their study, Kapasia et al. (2020) also said that most of the students who answered used Android phones to attend online classes. This implies that mobile phones have greatly assisted and helped students learn during the pandemic.

#### Category number 3: Suggested resources

The suggested resources of students vary from restoration of face-to-face classes, lecture videos, and providing free gadgets. Six out of 10 students answered "Kanang unta naa najuy discussion face-to-face" (I hope there will be faceto-face discussion). There were also two students who answered, "Cellphone maam kay madala man everywhere" (Cellphones ma'am it can be carried everywhere). Two students also mentioned that "pwede ra sila maghatag lecture videos para makasabot gyud mi" (They can give us lecture videos for us to really understand).

The above findings are in consonance with the study by Miliszewska (2007), in which the respondents preferred face-to-face classes since they offer instant feedback, afforded easier communication with fellow students and instructors, and are suited to the resolution of study problems and give them better motivation to study. This was also supported by the study of Kemp and Grieve (2014), in which students expressed a strong preference for class discussions to be conducted face-to-face, reporting that they felt more engaged, and received more immediate feedback, in face-to-face discussion than in online discussion. This suggests that face-to-face discussions are highly favored by students even when in the midst of a pandemic.

Some of the respondents' thoughts relate to the findings of Robertson and Flowers (2020), in which students prefer online courses with lecture videos to those without. In addition, the results show that the use of video lectures improved student outcomes statistically. In terms of student outcomes, previous research has found that when multiple senses are used to learn a subject, students understand and retain more information. In addition to written materials, the use of videos allows students to read, see, and hear words, images, and explanations.

Two students also suggest that there should be free gadgets such as cellphones, which relates to the study of Asio et al. (2021), which states that mobile devices, such as smartphones, are extremely useful in today's world because of their numerous functions. Students who don't have enough money to buy such a device can get one through sponsorship and other forms of donation from kind people.

#### 4. Conclusions and Recommendation

The lived experiences of senior high school students in learning science subjects in the new normal were classified into varied experiences of students in learning the science subjects during the pandemic, challenges encountered, coping strategies employed, and resources in students' learning in science.

During the pandemic, students had a variety of experiences learning science. Their learning experiences were affected by factors such as academic experience, motivation, preparedness, and support. Thus, learning in a pandemic poses different challenges and experiences among students at different levels, and the study reveals that students are having hard time learning. The difficulties encountered by learners in learning science subjects during a pandemic can be classified as personal, social, mental, and academic difficulties caused by the abrupt transition from face-to-face to blended learning. Students are prone to depression, stress, and anxiety because of the limited interactions among teachers, peers, and even parents. These challenges may lead to low students' academic

performance and difficulty in understanding the lesson. Self-assessment and readiness are important to keep students' self-esteem high during the online classes. Moreover, communication is also vital in combating the challenges faced. These difficulties caused students to develop various coping strategies, such as their relationship with their teacher, which is critical for academic success; time management in order to complete tasks; and communication.

Resources are vital for the teaching and learning process. Learning resources during a pandemic are classified as available, unavailable, and suggested resources. Mobile phones and the internet are the most available resources for students during a pandemic. Having a slow internet connection hinders students' ability to acquire information in learning science subjects during the pandemic. The restoration of face-to-face classes, lecture videos, and providing free gadgets are the suggested resources by students that science teachers should provide in order for them to learn science better during the new normal.

The conclusion of the study supports the following recommendations:

- 1. Teachers are urged to build relationships with their students. Teachers should keep an eye on challenging students and ensure that they have access to necessary tools and assistance.
- 2. To deal with the many problems that the new normal presents, students must create new and productive study
- 2. Students are advised to seek assistance if they are having difficulty learning science during the pandemic. Parents are encouraged to offer assistance to their children. Their role in offering certainty, stability, and security may be able to assist pupils in overcoming the numerous problems they have in learning science.
- 3. The school should ensure that the modules are printed correctly, as this could lead to greater confusion among the students. During this circumstance, the school should be able to provide the necessary aid to the student.
- 4. It is suggested that future researchers increase the size of the study's population. They are encouraged to re-create the study in a different setting, region, and culture. Researchers are also encouraged to revisit and expand on the findings and approach discussed in this study.

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