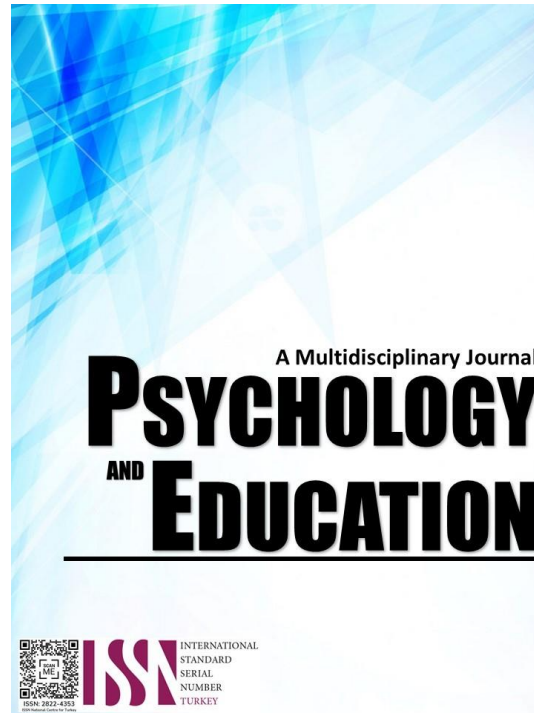


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Unraveling the Hurdles of Mathematics Majors in the New Normal

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Abstract

This study examined students' Personal Experience Narratives (PEN) as learners in the new normal. Five (5) college students from one of Kabankalan City's private colleges were selected to participate in the oral interview. The spoken interview narratives were written down and subjected to analysis utilizing the personal experience narrative approach. These PEN were explored using a path diagram that depicted the aspects influencing the Personal Experience Narrative. The findings showed that all five (5) participants found the modular distance learning program to be difficult and full of pressure. The participants' experiences also led to the discovery of three (3) common codes – (1) The Academic Pressure of students in the New Normal, (2) The Creativity and Independence of Struggling Learners, and (3) Astonishing Insights gained through Personal Experiences. Additionally, it was discovered that the participants believed that persistence in one's studies, grit, patience, and access to the internet were crucial to the success of modular distance learning in the new normal.

Keywords: *hurdles in mathematics, mathematics majors, narrative analysis, new normal*

Introduction

The COVID-19 pandemic had a tremendous effect on modern society, with unanticipated implications in virtually every field of human activity. A few of the issues that have led to substantial disruptions include travel restrictions, the global economic fall, discrimination, misleading information, and most critically, the shutdown of schools (Viner et al., 2020; Barua, 2020; Enitan et al., 2020)

Devastating impacts from COVID 19 were felt both locally and globally. It has led to a widespread suspension of activities in all spheres of society, the economic, private, and public functions, and undoubtedly in the area of education. In accordance with President Rodrigo R. Duterte's Proclamation No. 922 "Declaring a State of Public Health Emergency throughout the Philippines," the Department of Interior and Local Government (DILG) issued an advisory on March 18, 2020, placing the entire island of Luzon under an enhanced community quarantine (ECQ) (DILG, 2020). Relatively, the province of Negros Occidental proclaimed class suspension at all levels within the province. However, due to the deteriorating circumstances, the suspension was prolonged until the closing of the 2019–2020 academic year.

In line with this, it was expected that Filipinos were expected to experience the "new normal" for longer period of time. The education system therefore had to figure out how to consistently provide high-quality,

accessible education for all students across all levels of

learning through the Commission on Higher Education, Technical Education and Skills Development Authority, and the Department of Education. On the other hand, there were benefits and chances with the new educational standard. Given that teachers are interacting with students in the new normal, the country's educational platforms have become relatively challenging. However, teachers have experienced difficulties in assessing students' learning (Salendab, 2021).

With the current situation of education, a multitude of strategies and procedures were used to create engaging courses to improve instruction. Additionally, the construction and development of effective teaching strategies were designed with a focus on the new norm of teaching. Despite the resource limitations of modular and online learning, it produced the proper teaching strategy to highlight the encouragement of initiative and the learning process (Mallillin, 2020). Education is a valuable resource that individuals work to achieve in the world. Everyone needs it to lead fulfilling lives. It helps in learning and discovering new things while also advancing one's expertise. One of the keys to success is education since it will lead learners to a live a successful life and, with proper knowledge and training, have stable employment in the future (Saro et al., 2022).

Modular distance learning enables students to study at their own pace, in their own method, and utilize self-learning modules (SLMs). Lessons are delivered to students through printed, digital, or electronic copy as well as learning tools including textbooks, activity sheets, study guides, and other learning materials.

Access to electronic learning resources is possible for students using a computer, tablet PC, or smartphone. CDs, DVDs, USB storage, and software for computers can all be used to distribute e-learning resources, including offline E-books. The educator is in charge of monitoring the students' progress. Teachers must visit students who need remediation or help with their module in their homes, even though students may contact them by phone, email, text message, instant message, or other methods. Everyone in the family and other community stakeholders may contribute. Additionally, self-learning modules (SLM) are used in the kind of distant learning known as "modular learning" (Manlangit et al., 2021).

At the height of the pandemic, there were teachers who experienced difficulties in the distribution and retrieval of the modules, learning activities, assessment, and health safety measures (Olivo, 2020; Dargo & Dimas, 2021). Parents had concerns about their roles in helping their children and how they got instruction (Castroverde & Acala, 2021). Mathematics was one of the areas that students experienced difficulties despite the educational resources provided to help them learn. Many of them struggled to grasp the concepts and comprehend problems. These were evident in the quality of outputs they submitted to their teachers. It was on this premise that the researchers came up with this research study. They wanted to identify the underlying causes of the difficulties that students experienced and to find means for administrators and teachers to address the problem.

Research Question

This research paper aimed at analyzing the difficulties of the Bachelor of Secondary Education (BSEd) Major in Mathematics students in learning lessons during the new normal. Specifically, this research study sought to answer the question, "What are the hurdles of mathematics majors in the new normal?"

Literature Review

Modular Distance Learning

Nardo (2017) asserts that using modules promotes independent learning. The use of modules for learning is advantageous for students who have better self-study or learning skills. The ideas covered in the modules keep students interested in what they are studying. Due to the activities, they get, students learn responsibility. They were prepared to advance alone. As they understand how to learn, they gain power. The

students also engage in practical exercises. They get new information and use it in their own experiences. Students get the ability to reflect on their own experiences, which enables them to gain new knowledge. Students can manage their education by learning through modular instruction. On the other hand, Bijeesh (2017) emphasized that students are more prone to become distracted and overlook deadlines if they are not surrounded by classmates and instructors who remind them of their responsibilities. The main difficulties encountered in the implementation of modular distance learning were also revealed by Dangle and Sumaoang (2020), including an inadequate amount of money for the development and delivery of modules, students' difficulties with their module assignments, and parents' lack of academic knowledge and experience to assist their sons/daughters.

At the time this article was published, researchers had been working on the information required to integrate distant learning during the COVID-19 crisis. For instance, Perienen (2020) focused on instructors while examining the variables that influence the use of technology by mathematics teachers and discovered only a small proportion of them did. However, a sample of UAE university students who participated in the survey conducted by Almuraqab (2020), which sought to understand the perspectives of all university students, revealed a willingness to continue their online education after COVID-19. The results of Almuraqab's (2020) study will impact people who decide on higher education in the UAE. Through online learning and modular learning experiences, in connection to and to underline the significance of mathematical inquiry for students during pandemics.

Mathematics Learning in the New Normal

Due to the nature of interactions with students and the accessibility of content delivery during instruction, teaching mathematics through modular distance learning has proven to be difficult for math educators. In the past, students were able to engage with the materials and with one another in the classroom while learning mathematics mostly through face-to-face instruction. For teachers that employ different distance learning modalities, facing the new paradigm in education is critical. The ability of an instructor to reach out to students while teaching content to them is a significant challenge, especially for those students who cannot afford a cellphone or even just enough to connect with them (Dampog, 2021). Aksan (2021) emphasized that the teaching-learning process in new normal education has an influence on students'

performance, particularly when using a modular setup in studying mathematics. Parents are now teachers' partners since learning no longer takes place only in formal education settings. Parents are essential because they facilitate learning at home. Their main responsibility in modular learning is to get to know the student and to mentor them (Flip Science, 2020).

Even under normal circumstances, mathematics is generally seen as being challenging (Fritz, Haase, & Rasanen, 2019). A few investigations on distant learning were conducted prior to pandemic. Evidently, many of these studies simply were not that interested in mathematics (Astri, 2017). However, in this pandemic situation, learners are far away on their own with their devices. The various studies that have concentrated on using technology as a mediator in mathematics education disagree with this. For instance, Juliane et al. (2017) investigated digital teaching and learning for digital natives while researching e-learning implementation issues in Saudi Arabian universities. Given that mathematics differs from other academic fields in a number of important ways, it is essential to understand how students perceive the experience of online learning in this subject area, including utilizing platforms, Microsoft Teams, and other apps. It was believed that while the technology used as platforms for distant learning was useful for students and instructors to share ideas and discussions, it was insufficient to teach mathematics as effectively as conventional face-to-face instruction. When teaching many disciplines, for example, the instructor and students must engage in discussions, give presentations, and expound on the learning objectives. This is not the case when teaching mathematics, because in addition to facilitating discussions, the teacher must additionally put words and symbols on the board to communicate with the students. This is challenging because of distance learning (Cassibba et al., 2020; Astri, 2017).

Students' viewpoints toward the subject, teachers' instructional practices, and the school environment may all have an impact on how well they learn and perform in mathematics, according to Mazana et al. (2019). In terms of effective school systems with consistently high standards of education, various studies also found that schools with strong and supportive school-home partnerships were effective despite the low economic and social communities (UNESCO, 2017). Students believed that amount of effort placed into an activity would determine whether it was successful or unsuccessful. Parents and teachers both share responsibility for a child's education (UNESCO, 2020). Both parties should be actively

involved in school events or assemblies that may call for parents to volunteer and assist their child at home and at school. As a result, dedication is required.

Challenges Associated with Modular Distance Learning during COVID-19 Pandemic

Numerous physical activities, including instructional ones, had to be suspended because of the COVID - 19 Pandemic. Because of this, educational institutions must adapt to accommodate online learning. Online learning is not a relatively new phenomenon, but the drastic transition to it has created significant challenges for educational activities around the world, especially in resource-constrained countries like Cambodia, where educational institutions, teachers, and students are frequently unprepared for this unexpected disruption to traditional teaching and learning methods.

In their recent study, Adedoyin et al. (2020) noted that a variety of specific challenges were brought on by the sudden digital transfer of instructional activities during the COVID-19 Pandemic. The most significant problems are still with technological infrastructure and digital proficiency, socioeconomic factors (educational gap), evaluation and supervision, hard labor, and compatibility (some subjects such as sports sciences require physical interactions). As online learning is fully dependent on technological tools and the internet, it is undeniable that technology is the biggest issue with it if people involved in the teaching and learning process lack technological proficiency due to inexperience or inadequate training. Lack of application understanding and a slow internet connection are two prevalent problems. Mahyoob (2020) mentioned in his study that throughout the lockdown, almost 70% of the students were participating in e-learning. Most of the students used Android smartphones to take part in online learning. Countless issues, such as depression, anxiety, bad internet access, and an awkward learning environment, have been bothering students at home. Rural and marginalized students have extreme difficulty in their academic endeavors during this pandemic.

According to Subekti (2021), there are insufficient supporting infrastructures or resources, Ozudogru (2021) views the lack of the internet as a "impossibility," there are "technical" issues that need to be resolved, and Taghizadeh and Ejtehadi (2021) added that there were unawareness of online collaboration tools and their effectiveness in learning as well as the lack of an adequate technology. According to Hill (2021), the college students did not

demonstrate content mastery in their area of concentration. Hill stressed that the situation was a major factor in why this issue occurred, but it was nevertheless noted that college students' previous knowledge in the subjects they specialized prevents them from doing effectively during their teaching demonstration. Ilic (2021) also mentioned the problems with outdated technology. The limited economic, cultural, and social capital of students, particularly those from low-income families and their schools, as well as communication challenges, were noted to be obstacles to their distance learning as stated in the study of Choi and Chiu (2021).

The topography has traditionally been a big challenge, according to assessments by PNA and UNESCO in 2020. Locally, learning action cells (LAC), better resource materials, and other techniques were used by the division and regional offices to undertake capacity-building programs and make sure that educators were prepared. To fulfill the needs of the period, DepEd and CHED offered teacher development training and specialized programs. Public health measures were generally established by the national government to reduce the spread of virus, and educators found strategies to adjust to and manage the pandemic's effects. Traditional practices were modified in response to the community's demands during the outbreak. Landicho (2020) pondered on how the pandemic had affected his routine. He emphasized that they were forced to make adjustments as a result of the cancellation of laboratory operations and the postponement of off-campus events, which caused them to look into other options. He advised that everyone concerned, including the educators, parents, and learners, should take the effort to handle difficult challenges. He recommended that when confronted with difficulties and changes, educators should consider training programs as means of improving teaching in the new normal. Even with the outbreak, there should be opportunity to provide best education. It enhanced learners' preparation by introducing them to the localized modes that would be most helpful, in a manner similar to how DepEd and CHED began offering access to its various platforms. Informational campaigns that pushed local communities to help their students prepared teachers, families, and community partners on how to support students.

Coping Mechanism of College students during COVID-19 Pandemic

According to Ackerman (2018), he highlighted that having the right perspective does not include always being cheerful or disregarding any unpleasant or

distressing experiences in your life. It requires choosing to be generally optimistic while including both the positive and negative components of your outlook. According to the Kentucky Counseling Center (2021), "being in a support group allows various individuals to share their own stories and challenges; a space where they learn how to live with the weight they are carrying and how to progress with healing because being surrounded by others who are experiencing or have experienced the same thing is incredibly reassuring, and they get to see these people become happy despite their situations."

Methodology

The qualitative research design using narrative analysis was employed in this study. Josselson (2021) described the narrative analysis as a qualitative approach that centers on the individual as the analytical unit, closely examines the "voices" of individuals through their narrative data, and focuses on how individuals interpret their life experiences. It entails an attempt to encourage new researchers or seasoned researchers looking to expand their methodological competence to ponder on narrative analysis. Rich and detailed life stories that are gleaned from interviews or written sources are interpreted using narrative analysis. It goes beyond describing the text to evaluate the meanings that are expressed by the discourse's content and structure and it always sets the participant in a social and historical context. Additionally, a genre of analytical frameworks known as "narrative analysis" allows researchers to understand stories that are shared in both the setting of study and/or in daily life (Allen, 2017).

According to De Fina (2021), researchers who carry out this type of study analyze previous research that has influenced this approach in narrative studies and explain some of the limitations of recent work as well as areas that require more research. The researcher is in favor of broadening the study into a wider range of practices, paying attention to the traits of narrative genres, and generally engaging in more critical discourse.

Narrative Analysis Model has six factors: Abstract, Orientation, Complicating Action, Resolution, Evaluation, and Coda. The full narrative is summarized in the Abstract. The Orientation provides details on the people, setting, and events that will occur in the subsequent parts. Narrative clauses called "Complicating Actions" tell the viewer what happened. The audience is told how the complicated action was handled in the Resolution. The Evaluation

provides the emotional core of the story and justifies the importance of the narrative. Lastly, the coda clauses are found at the end of the narratives and signify that it is over, linking the past and the present, or perhaps offering a brief summary of the whole narrative (Esparar et al., 2022).

In this research study, purposive sampling was used to select participants who could provide an understanding of the hurdles/challenges of mathematics majors. Purposive sampling, according to Tjahjani (2023), is a non-random sampling technique where the researcher chooses the sample by identifying particular features that are in line with the study objectives in order to address the research problem. The participants were the BSEd students major in mathematics who gained honor titles during face-to-face learning before the pandemic and dealt with the challenges in the New Normal. The research was able to examine several interesting narratives using narrative analysis in order to unravel the insightful and enlightening lessons that these stories were expressing and conveying (Esparar et al., 2022).

The Individual Interview Form (IIF) was utilized in the research study to collect the participants' personal data such as age, year level, course, and major. According to Esparar et al. (2022), the narrative can be shared in writing or orally. Participants in this study told their experiences in face-to-face interviews while strictly complying to the Inter-Agency Task Force's health and safety guidelines (IATF). The research instrument contained the question: "What are the hurdles of mathematics majors in the new normal?"

Using narrative analysis to engage with narrative data, the philosophical frameworks of narrative research are highlighted by the initial dissection of a few key premises. This assumes that stories have a deeper impact on people's lives than simply reflecting or describing experiences (Smith, 2020). However, according to Esparar et al. (2022), second-hand stories, which are accounts of other people's personal experiences in modular distance learning, were included by the researchers to expand the idea of personal experience narratives.

Participants

The participants of this study were five (5) Bachelor of Secondary Education (BSEd) Major in Mathematics students and were selected based on the following criteria: (1) Currently enrolled in the first semester of A.Y. 2022-2023 in one of the private colleges in the City of Kabankalan City, (2) Enrolled as BSEd Major

in Mathematics, (3) was an honor student before the new normal, (4) willing to be interviewed, and (5) willing to share his/ her experiences. Due to COVID-19 restrictions, their personnel narratives were written on the Individual Interview Form.

Instruments of the Study

The Written Interview Form (WIF) was utilized in this study. This was divided into three (3) unique sections: (1) Challenges/Hurdles Faced in the New Normal, (2) Management of Mathematics Learning, and (3) Ways of Coping to the Standards Despite the Situation. Along this line, the importance of generalizability in qualitative research should not be overlooked (Hays & McKibben, 2021). The instrument collected interesting stories in an effort to unravel the insightful truths and lessons being revealed and conveyed through these narratives.

Procedures

The researchers sent a letter that was approved by the Vice President for Academic Affairs, asking permission to interview the five (5) BSEd mathematics majors they had chosen. Following the letter's acceptance, the researchers went to the dean of the College of Education to ask permission to conduct the written interview with the chosen participants. Based on the aforementioned criteria, the participants were chosen.

The data were collected through a simple Individual Interview Form (IIF). The written stories were transcribed based on the Discussion Model of Esparar et al. (2022). The participants verified the transcriptions to ensure their authenticity. In order to comprehend the important lessons that these stories teach and demonstrate, these responses were assessed. The data collection cycle was adapted from Snyder (n.d.). To analyze the data, the following steps were adopted by Esparar et al. (2022).

Goal (Personal Experience Narrative)

Examining the personal experience narrative, narrative structure components, and evaluative terminology used in oral and written narratives. Story analysis in this form is easily examined to observe the various components (i.e., factors) merging to gather to construct the narrative, which in this case is of the personal experience form.

Factor 1 (Abstract). Even though it is not strictly essential, the abstract, which is only one or two clauses

at the start of the story and sums up everything, is highly helpful in letting the reader—or the intended audience—know what the story is really about.

Factor 2 (Orientation). Orientation provides details about the people, the setting, and the action or circumstance that will occur in what happens next. The orientation gives the details readers need to know about the setting, people, and time period of the story. Readers should, after all, be familiar with the character profiles.

Factor 3 (Complicating Action). Complicating actions are narrative clauses that describe the events that occurred. This is the heart of the narrative since it describes the story's plot in detail (i.e., what actually happened). The narrative's main body is made up of this.

Factor 4 (Resolution). The reader is given information about the complicated action's outcome in the resolution. By releasing the tension, this section shows how a series of events came to an end. Without an end, there could never have a beginning. The narrative is tied together by the resolution, which successfully brings the story to a conclusion.

Factor 5 (Evaluation). Evaluation creates the emotional component of the narrative and explains why it is worthwhile to share it. The assessment phase is where things start to become very interesting because the narrator utilizes it to express how they were feeling at the moment the story transpired. Later, further details about the evaluation process would be revealed.

Factor 6 (Coda). Coda clauses are found at the conclusion of narratives and signify that the story is done, linking the past and the present, or perhaps provide a brief summary of the story. This includes what can be called the "lesson gained" from the narrative. Every story takes place in the past. What impact did it have on your present?"

Results and Discussion

Abstract

The interviewees described their experiences, difficulties in their academic lives, and coping mechanisms as learners in the new normal in their in-depth accounts. Their accounts gave readers the impression of students who made an effort to succeed academically despite difficult circumstances in their

lives. Despite what seemed like obstacles, these students were a motivation to keep learning mathematics while they adjust to the new normal situation in education.

Orientation

The Coronavirus, which generated a lot of uncertainty worldwide in the academic year 2020–2021, served as the trigger for everything. Like any other organization, the Commission on Higher Education was severely shaken by the pandemic as the department's instability in continuing to provide tertiary education in the nation was revealed by the lack of planning and inadequate logistics. Five (5) Bachelor of Secondary Education majors in Mathematics from one of the private institutions in the City of Kabankalan were asked to participate in a face-to-face interview about their experiences with the Modular Distance Learning (MDL) in the final quarter of 2022. The interview was informal, and both the interviewers and the interviewee sat opposite from one another. The question was, "Share to us the hurdles/challenges of mathematics majors in the new normal? In the new normal, they truly shared their Personal Experience Narratives (PEN). It was noticed that there were many similarities in their PEN, which were evaluated using the dual layer of interpretation in narrative analysis, which according to Pollock et al. (2021) are "means to map any available evidence and identify its strengths and weaknesses, and determine directions for future research."

Complicating Action

The interviewees viewed their experiences with the new normal as difficult. There were several challenges, including comprehending the module material, completing the assignments, not receiving any face-to-face assistance from the instructors, having the students' learning evaluated, and other academic-related activities associated with being a college student. In the new normal, academic pressure is truly a big problem for math majors. Even though the school sought to recognize the achievements made prior to the pandemic, Shen, one of the interviewees, claimed that managing academics and other activities was a highly demanding task. During the outbreak, he faced a significant burden in each subject, particularly in mathematics. It became more difficult for him to focus on his studies as he felt the overwhelming amount of work rising. Additionally, Kelly observed that face-to-face discussion was a great way to learn mathematics. Since she had no one to ask for assistance when she wanted clarifications or explanations on how to handle

math problems, it was challenging for her to study and learn mathematics independently. Shenna felt the same way as she looked back to the previous situation. She found it difficult to keep up with the lessons and even felt exhausted after reading the modules all day. Demi was also aware of how challenging it is to comprehend math lessons either modular or online. She could grasp ideas that have been individually explained and demonstrated for her via face-to-face. Weekends were handled like weekdays and time flies extremely quickly in the modular distance learning.

Inner feelings are often intense and persistent; they are a reflection of one's internal emotional state and include both how one feels and what one has experienced. According to Kelly's testimony, she cried in the middle of the night because she struggled to adhere to the lessons and rushed to complete her tasks since there were piles of work waiting to be scanned. She also emphasized that being the oldest daughter, she had many obligations at home. She found that waking early was the better option because it allowed her to do other household tasks at home and respond to her activities earlier. Demi claimed that she had several distractions and temptations during the modular learning. Even though there were online classes, she remained extremely hooked to technology and social media. It was very simple for her to open social media sites like Facebook, Messenger, TikTok, Instagram, and even the Wattpad app, which jeopardized her learning and deadlines. She was quite sincere when she stated that she was only reading Wattpad while her teacher discussed about topics during online consultations. Georgia and Shenna experienced the pandemic with a similar feeling. They described that even though they procrastinated during their high school years, they were still able to keep up with their education. In contrast, with modular learning, they were forced to sail their own boats and even put pressures on themselves to solve mathematics problems. However, they did not completely comprehend and retain what they had learned.

Students discussed obstacles of how the situation challenged their academic life in the online class, a complementary way of modular distance learning. Kelly was very honest when she said she did not like taking lessons online or even modular. She had to borrow money in order to have access to the internet for two to three hours to attend online classes and download online tutorials. Despite her struggles with a lack of a comfortable space, a poor internet connection, and a noisy workplace, she wanted to learn mathematics so that she could understand all ideas and formulas and be knowledgeable about the many areas

of the subject. She was quite worried about the years wasted on not learning anything and not having mastery since the methodology of studying mathematics had changed. In the new normal, learning mathematics was like responding merely out of obligation rather than with enthusiasm. In addition, Shenna also had trouble understanding lessons because of poor internet access that caused a lot of delay while streaming videos. Demi faced the same issue, having trouble connecting to the internet or taking online classes. She lived in a location with an extremely slow internet connection. She looked for areas with stronger signal during her online classes so she could show up for the scheduled class. The students' academic performance was clearly affected by difficulties in digesting the module content, internet access, and other factors at home.

Resolution

Despite the difficulties the interviewees experienced, initiative and creativity were evident. For instance, Shen tried to assume the part of a teacher by explaining lessons to someone after initially training his mind by reading the modules. He had to go through everything he had learned over the previous years in order to assess his general knowledge and motivation to continue learning. He focused on his goal of teaching the youth despite how challenging it was to learn everything from scratch. "How could I possibly be an effective teacher if I am unable to understand the material that I will be learning?", he questioned. Because of this, even though he had a lot to handle, he felt motivated to continue learning.

The interviewees also showed other ways like pressuring themselves in order to finish the tasks given and be able to reach deadlines. Kelly, for instance, attended online lessons and scanned old books and notebooks in order to understand mathematics despite having family and financial problems. She believed that meeting deadlines cannot be compromised. Also, placing a lot of pressure on herself to fully comprehend lessons and respond to exercises was quite a challenge but fulfilling at the end. Her old math notebooks and books had greatly helped her throughout her journey in the new normal.

This pandemic also taught amazing realizations of how to maximize the use of internet and social media. For example, Shenna having lots of troubles studying mathematics in the new normal, kept fighting by using social media, Google, and watched tutorials on YouTube to compensate the learning gaps she had for the past months. She felt that the discussions with the

teachers were insufficient and occasionally she had a tendency to forget the lessons since they had been covered in just one day. As a consequence, she had to find other ways to augment what she had learned from the online consultation. In order to deal and revisit her areas of difficulty while solving mathematical problems, Georgia was also able to handle learning mathematics by downloading PDFs with prepared exercises and answer keys.

Moreover, other interviewees, like Demi and Georgia, sought help from their aunts who are math teachers. They stated that because they cannot learn mathematics on their own, asking someone other than their teachers may help them succeed in their endeavor. Another way to enhance their understanding and knowledge was to look for some examples related to the topics covered. They presented their solutions to their aunts and frequently questioned key points to understand what they missed and where they failed so they could do the process again until they found the right answer. Additionally, Shen found that despite the difficulties of the situations, the best thing he did at the time was to challenge himself to get finish his tasks more effectively. It was something he had achieved over time. He used it as inspiration to push through and solve any math problem he would come across.

Evaluation

These five (5) students' poignant narratives about their own experiences in the new normal as they described them were absolutely astounding. Although students faced numerous challenges in their academic lives, including those related to preparation, mental conditioning, independent learning of the lessons, assessment compliances, and other academic-related tasks they must accomplish, their constant resilience motivated them to progress gradually in their learning of mathematics.

The absence of logistics made it easy to infer the difficulties the interviewees faced. For instance, colleges and universities were unprepared for the pandemic surge, resulting in teachers who did not have the competencies to provide high-quality modules. Many issues were encountered on the part of the students as a result of the majority of schools abruptly adopting the new normal of educating college students, including their preparation for how they would handle the pressure of the new way of learning, multitasking their learning independently, prioritizing home-related tasks over academics, assessing their own learning, accepting feedback from their teachers, and, finally, how they cope up with the shortcomings of their

learning that they experienced along the way.

Due to a lack of training for instructors in creating modules with high-quality material, it was discovered during the modular distance learning preparation stage that this issue existed. During the interview process, complaints including unclear evaluations, printed material mistakes, and students who had trouble comprehending some instructions from the modules were also brought up. Additionally, because they felt under pressure to perform well academically, they sought to comply with all requirements despite not being ready to engage in modular distance learning. As a result, the quality of the work they presented suffered.

Another issue that was raised during the interview process was the academic dishonesty. As mentioned above, since students had trouble analyzing everything from the modules and with lack of assistance from the teachers, they engaged on relying the answers generated by Symbolab, Photomath, and other mathematics apps making them very dependent to technology and compromised their learning. On the other hand, there were still students who passionately answered mathematics problems using only the things that they had like printed modules and notes recorded during the online consultation. Since students were restricted to socialize with others, it became an opportunity for them to be more reliant to their gadgets making them slaves of the technology instead of making technology an assistance for learning.

During the pandemic, internet connectivity was another problem that was emphasized by the interviewees. It was revealed that quite a number of their classmates including them experienced internet lags resulting to delays of understanding lessons given through online consultations. Worst case scenario, some of them were not able to attend because of financial constraints and signal problems. These problems on internet connectivity were problems existing even before pandemic but because students were reliant to the internet in the modular distance learning, things got even worst. As observed by the majority of the interviewees, they knew the consequences of being reliant to the internet but since they were more conscious of submitting outputs on or before the deadline, they have no choice but to comply.

Lastly, the vital role of assessment in the academic life of students to ensure learning outcomes was not met. The participants said that they had uncertainties and concerns about their ability to learn mathematics

lessons in the setting of evaluation. It was observed that several evaluation scores in mathematics were extremely high and solutions were almost of the best standard. The reality that the answers presented matched the procedures discovered in mathematical applications made it quite clear. Additionally, the student-submitted activities all followed the same processes and even the erasures were copied and pasted. In the midst of a pandemic, evaluation authenticity was totally lacking.

Coda

Three (3) general codes were used to classify the students' personal narrative experiences: (1) The Academic Pressure of students in the New Normal, (2) The Creativity and Independence of Struggling Learners, and (3) Astonishing Insights gained through Personal Experiences.

Under the first code, the narratives unraveled the hurdles of mathematics majors in the new normal that includes academic pressures, financial constraints, stress in internet connectivity, and procrastinations. All of these hurdles challenged their lives and has shaken their comfort zones in academics. These findings were supported by the study conducted by Adedoyin et al. (2020) which reported rapid digital transfer of instructional activities during the COVID-19 Pandemic caused a number of distinctive hurdles. The biggest issues were the technological infrastructure and digital competency, socioeconomic reasons (educational disparity), evaluation and supervision, hard labor, and compatibility (some subjects such as sports sciences require physical interactions). According to Hill (2021), the results revealed that college students failed to exhibit mastery of content in their field of specialization.

As they constantly addressed every issue with a positive outlook and independence from the usual practice, struggling learners demonstrated creativity and independence, which had been highlighted by the second code. The last code unraveled the astonishing insights gained through personal experiences. These codes were supported by the study of Kentucky Counseling Center (2021), stating that being in a support group allows different people to share their personal stories and struggles; a space where they learn how to cope with the burden they are carrying and how to proceed with treatment because being surrounded by people experiencing or have experienced the same thing is very reassuring. They get to see people become happy despite their conditions.

Despite the challenging situations experienced by the students, the Commission on Higher Education still envisions to ensure that graduates are internationally competitive, locally relevant, and socially aware in order to increase student achievement by fostering equity of access, effective teaching and learning, and to have curriculum development.

Conclusion

Based on the results of this study, BSED Math students find difficulties in dealing with the modular distance learning and they had struggles most of the time. Students still believed that face to face class is more effective than modular distance learning. Therefore, the following conclusions and insights were drawn from the participants' PEN: (1) Ensuring the availability of these services – high-quality modules and mode of instruction, teacher trainings to adapt to the new normal, and improvement of internet connectivity, (2) Revisiting the curriculum to find better ways of to deliver instruction to the students, (3) Constant follow up to cater students' needs in learning, (4) Encouraging students to be open to the assistance of the Guidance Office in attending their psychological and emotional needs, (5) Fostering knowledge, skills, and character by enabling lifelong learning to students.

References

- Ackerman, C. (2018, July 5). Positive Mindset: How to Develop a Positive Mental Attitude. Positive Psychology.com. <https://positivepsychology.com/positivemindset/#:~:text=Aside%20from%20enhancing%20your%20skills%20and%20personal%20resources%2C>
- Adedoyin, O.B. and Soykan, E. (2020) Covid-19 Pandemic and Online Learning: The Challenges and Opportunities. Interactive Learning Environments. - References - Scientific Research Publishing
- Aksan, J. A. (2021). Effect of Modular Distance Learning Approach to Academic Performance in Mathematics of Students in Mindanao State University-Sulu Senior High School Amidst COVID-19 Pandemic. Open Access Indonesia Journal of Social Sciences, 4(4), 445-467. <https://doi.org/10.37275/oaijss.v4i2.64>
- Allen, M. (2017). Narrative Analysis. The Sage Encyclopedia of Communication Research Methods. Sage Research Methods
- Almuraqab, N. (2020). Shall universities at the UAE continue distance learning after the COVID-19 pandemic? Revealing students' perspective. International Journal of Advanced Research in Engineering and Technology 11(5), 226-233. doi:10.34218/IJARET.11.5.2020.024
- Archer, L. J., Müller, H. S., Jones, L. P., Ma, H., Gleave, R. A., da Silva Cerqueira, A., ... & Shennan-Farpon, Y. (2022). Towards fairer conservation: Perspectives and ideas from early-career

researchers. *People and Nature*, 4(3), 612-626.

Astri, L. Y. (2017). Barrier factors that influence satisfaction of e-learning: A literature study. *Advanced Science Letters*, 23(4), 3767-3771. <http://doi.org/10.1166/asl.2017.9007>

Bijeesh, N. A. (2017). Advantages and disadvantages of distance learning. Retrieved from <http://www.indiaeducation.net/onlineeducation/articles/advantages-and-disadvantages-of-distance-learning.html>

Cassibba, R., Ferrarello, D., Mammanna, M. F., Musso, P., Pennisi, M., & Taranto, E. (2020). Teaching mathematics at distance: A challenge for universities. *Education Sciences*, 11(1), 1-20. <http://doi.org/10.3390/educsci11010001>

Castroverde, F., & Acala, M. (2021). Modular distance learning modality: Challenges of teachers in teaching amid the Covid-19 pandemic. *International Journal of Research Studies in Education*.

Choi, T.-H., & Chiu, M. M. (2021). Toward equitable education in the context of a pandemic: supporting linguistic minority students during remote learning. *Emerald Insight*. <https://www.emerald.com/insight/content/doi/10.1108/IJCED-10-2020-0065/full/html>

Dampog, M. (2021). Impact of Teaching Mathematics using the Distance Learning Delivery Modalities to the Performance of Grade 5 pupils' school Baras Pinugay Elementary School. *10.13140/rg.2.2.23522.25285*.

Dangle, P., Sumaang, D. (2020) The Implementation of Modular Distance Learning in the Philippine Secondary Public Schools.

Dargo, J. M., & Dimas, M. (2021, October 16). Modular Distance Learning: Its Effect in the Academic Performance of Learners in the New Normal | Dargo | JETL (Journal of Education, Teaching and Learning). Modular Distance Learning: Its Effect in the Academic Performance of Learners in the New Normal | Dargo | JETL (Journal of Education, Teaching and Learning). Retrieved October 19, 2021, from <https://journal.stkipingsikawang.ac.id/index.php/JETL/article/view/2672>

De Fina, A. (2021). Doing narrative analysis from a narratives-as-practices perspective. *Narrative Inquiry*, 31(1), 49-71.

Delgado-Gaitan, C. (2017). *Protean literacy: Extending the discourse on empowerment*. Routledge.

Department of the Interior and Local Government, Philippines (2020). Advisory. March 18, 2020. Accessed: September 5, 2020

Flip Science. (2020, October 5). 'Tagapagdaloy': How Filipino parents can help ensure successful modular distance learning. Flip Science - Top Philippine Science News and Features for the Inquisitive Filipino. <https://www.flipsience.ph/news/features-news/tagapagdalo-y-modular-distance-learning/> Llego, MA. (n.d). DepEd Learning Delivery Modalities for School Year 2020-2021.

Fritz, A., Haase, V. G., & Rasanen, P. (Eds.). (2019). *International handbook of mathematical learning difficulties*. Springer.

Hays, D. G., & McKibben, W. B. (2021). Promoting rigorous research: Generalizability and qualitative research. *Journal of Counseling & Development*, 99(2), 178-188.

Ilic, U. (2021). Online Learning Readiness, Phubbing and Sofalizing Levels of Pre-Service Teachers amidst Pandemic. *Shanlax International Journal of Education*, 9(4), 1-12. <https://eric.ed.gov/?id=EJ1309587>

Josselson, R., & Hammack, P. L. (2021). *Essentials of narrative analysis*. American Psychological Association.

Juliane, C., Arman, A. A., Sastramihardja, H. S., & Supriana, I. (2017). Digital teaching learning for digital native; Tantangan dan Peluang. *Jurnal Ilmiah Rekayasa dan Manajemen Sistem Informasi*, 3(2), 29-35.

Junry M. Esparar, Milagros Aurea A. Sabidallas, & Rolando Z. Peralta Jr. (2022). Teachers' Narratives: Unveiling the Visceral Accounts of Learning Facilitators in the New Normal. <https://doi.org/10.5281/zenodo.7011358>

Kentucky Counseling Center. (2021, October 22). The Advantages of Support Groups and Why You Should Join One. *Kentucky Counseling Center*. <https://kentuckycounselingcenter.com/advantagesof-support-groups-and-why-you-should-join-one/>

Landicho, C. J. B. (2020, December 18). Changes, Challenges, and Opportunities in Teaching Senior High School Earth Science amidst the COVID-19 Pandemic. *Institute of Educational Sciences*. <https://files.eric.ed.gov/fulltext/EJ1285388.pdf>

Llego, M., (2021) He is the brain of Teacher PH. Growing up being surrounded by educators. (2021, April 09). DepEd learning delivery modalities for school Year 2020-2021. Retrieved May 02, 2021, from <https://www.teacherph.com/depedlearningdeliverymodalities/4May2021>

Mahyoob, M. (2020). Challenges of e-Learning during the COVID-19 Pandemic Experienced by EFL Learners. *Arab World English Journal*, 11 (4) 351-362. DOI: <https://dx.doi.org/10.24093/awej/vol11no4.23>

Mallillin, L. L. D. (2020). Different Domains in Learning and the Academic Performance of the Students. *Journal of Educational System*, 4(1), 1- 11. 26.

Manlangit, P., Paglumotan, M., and Sapera, S. (2020). Supercharging Filipino Parents is Key for Successful Modular Distance Learning. *Flip Science*. <https://www.flipsience.ph/news/featuresnews/tagapagdaloymodulardistancelearning/#:~:text=Modular%20learning%20is%20a%20form,%20and%20students%20desired%20competencies>

Mazana, M. Y., Montero, C. S., & Casmir, R. O. (2019). Investigating Students' Attitude towards Learning Mathematics. *International Electronic Journal of Mathematics Education*, 14(1), 207-231. <https://doi.org/10.29333/iejme/3997>

Nardo, M. T. B. (2017). Modular Instruction Enhances Learner Autonomy. *American Journal of Educational Research*, 5(10), 1024-1034.

Olivo, M. G. (2021). Parents' Perception on Printed Modular Distance Learning in Canarem Elementary School: Basis for Proposed Action Plan. *International Journal of Multidisciplinary: Applied Business and Education Research*. 2 (4), 296- 309. doi:10.11594/ijmaber.02.04.03

ÖZÜDOĞRU, G. (2021). Problems faced in distance education during the Covid-19 Pandemic. *Participatory Educational Research*, 8(4), 321-333. <https://doi.org/10.17275/per.21.92.84>

Perienen, A. (2020). Frameworks for ICT integration in mathematics education - A teacher's perspective. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(6). <http://doi.org/10.29333/ejmste/7803>

Pollock, D., Davies, E. L., Peters, M. D., Tricco, A. C., Alexander, L., McInerney, P., ... & Munn, Z. (2021). Undertaking a scoping review: A practical guide for nursing and midwifery students, clinicians, researchers, and academics. *Journal of advanced nursing*, 77(4), 2102-2113.

Salendab, F. A. (2021). Effectiveness Of Performance-Based Assessment Tools (Pbats) And the Students' Academic Performance. *Turkish Journal of Computer and Mathematics Education (Turcomat)*, 12(10), 6919-6928.

Saro, J., Cuasito, R., Doliguez, Z., Maglinte, F., Pableo, R., (2022). Teaching Competencies and Coping Mechanisms among the Selected Public Primary and Secondary Schools in Agusan del Sur Division: Teachers in the New Normal Education. *Psychology and Education: A Multidisciplinary Journal*, 3(10), 969-974.

Smith, B., & Monforte, J. (2020). Stories, new materialism and pluralism: Understanding, practicing and pushing the boundaries of narrative analysis. *Methods in Psychology*, 2, 100016.

Subekti, A. S. (2021). Covid-19-Triggered Online Learning Implementation: Pre-Service English Teachers' Beliefs. *Metathesis: Journal of English Language, Literature, and Teaching*, 4(3), 232-248. <https://doi.org/10.31002/metathesis.v4i3.2591>

Taghizadeh, M., & Ejtehad, A. (2021). Investigating pre-service EFL teachers' and teacher educators' experience and attitudes toward online interaction tools. *Computer Assisted Language Learning*, 1-35. <https://doi.org/10.1080/09588221.2021.2011322>

Tjahjani, A. I., & Jonbi, N. T. (2023). Study of Economic Activities of the Affected Community Toll Road Development.

UNESCO. (2020, November 10). The Gaps and Challenges Faced by Teachers in the Classroom for Science and Mathematics Primary Education in Timor-Leste. UNESCO. Retrieved October 8, 2022, from

<https://en.unesco.org/news/gaps-and-challenges-faced-teachers-classroom-science-and-mathematics-primary-education-timor>

Viner, R. M., Russell, S. J., Croker, H., Packer, J., Ward, J., Stansfield, C., & Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *The Lancet Child & Adolescent Health*, 4(5), 397-404. Retrieved on November 10, 2020 from <https://bit.ly/2Xqli0>

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