Navigating Uncharted Territories: Stories of Pre-Retired Science Teachers Amid Emergency Remote Online Learning

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Abstract

The purpose of this qualitative inquiry was to explore the narratives of pre-retired Science teachers who are teaching remotely amid the global health crisis. It hopes to describe and elucidate the significant events, realizations, insights, and how the pandemic changed their stories as facilitators of learning. A Qualitative research design was employed in this study; specifically, it utilized the descriptive narrative approach to get the limited stories of the participants. The participants of the study consisted of four (4) pre-retired Science teachers, two of whom came from private schools and two came from public schools in Bacolod City. The participants were selected through purposive sampling. The data was gathered through a semi-structured interview questionnaire and focused group discussion (FGD). Three themes emerged regarding the stories of the participants, a.) Trials and Tribulations of Pre-retired Science Teachers in Crossing with three (3) sub-themes; Building the Ark Before it Starts to Rain, Hands coated with Grease, and Changing Gears Manually. The second theme, b.) Involvement, Practices, and Role of Pre-retired Science Teachers with three (3) subthemes, Pre-retired Science Teachers as Drivers of Curriculum and Instruction, Curvy Roads make a Skillful Driver and Overcoming Road Barriers and Practices in Teaching Science Online, and lastly, Opportunities and Privileges in Teaching Amidst Pandemic with two (2) subthemes, Reinventing and Realigning the Wheels and Midway Cognizance. The study discovered that various issues and challenges primarily mark pre-retired teachers' stories and encounters with emergency remote learning during a pandemic. Science teachers realized that acceptance, development, consideration, patience, passion for teaching, adequate instruction, and an open mind about emergency remote learning are all critical components for the effective implementation of emergency remote learning.

Keywords: Pre-retired teachers, remote learning, narrative research, teaching

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

1

Introduction

The world has experienced one of the most significant education challenges because of COVID-19. Face-to-face classes have been suspended, and the demand for remote learning has increased, not compromising students' learning opportunities. As noted by Duc (2012), remote learning is a flexible delivery of instruction in a variety of modalities where learners aren't physically present in the traditional classroom and thus can study at their pace. The shift from conventional instruction to remote learning has made significant adjustments to the school's administration, students, parents, and teachers. In the study by Morgan (2020), he emphasized that teachers need support in implementing remote learning. The majority will be doing it for the first time, especially with virtual classroom systems. Pablate (2020) reports that teachers' personal lives in private and public institutions are affected by the transition.

This study emphasizes telling and retelling pre-retired science teachers' stories amid emergency remote learning for private and public schools. In this study, pre-retired is defined as teachers who are 45 years old and above but aren't retired (De Los Reyes, M., & Samson, L. 2019). Through pre-retired science teachers' narratives, the truth about their teaching experiences will be unveiled amid a global health crisis. In telling stories, meaning is given to experience, it is in telling stories that people understand (Demarais & Lapan, 2003). As they traverse this new normal education, they are also challenged to explore more tools to make learning more meaningful at the same time enjoyable. Pre-retired science educators must have extensive knowledge of various platforms to deliver instruction seamlessly. In this pandemic, science teachers should embrace a "new normal," specifically in science education (Lee & Campbell, 2020). Likewise, in this study, the researcher would like to have more in-depth insights into their experiences and explore if it has affected teachers' function as facilitators of learning, their teaching performance, and their commitment to the institution. This study is considered necessary in understanding how essential skills are needed for them to keep abreast, especially with modern technology.

Objectives of the Study

This narrative inquiry aims to explore the life stories of pre-retired science teachers amid emergency remote learning. Specifically, it sought to:

1. Identify significant events and realizations pre-retired science teachers encounter in immersing themselves in emergency remote learning.
2. Determine how the pandemic and the pre-retirement age affect one's life story, and function as facilitators of learning, and commitment to the institution.

Methodology

Participants of the Study. Participants in this study were pre-retired science teachers aged 45 and up who are still teaching in either public or private schools in Bacolod City and whose instruction is delivered via remote online teaching.

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

2

Research Instrument. The Semi-Structured Interview was used to collect relevant information.This is a technique for collecting data that is derived from the interaction of two people through in-depth interviews.

Data Collection. In drawing out narrative data from the participants, an interview protocol for questions and responses will be utilized. According to Creswell (2013), the following elements are included. 1)The participants received informed consent before the formal interview. It included the nature of the study and can decide whether to participate or not. 2.) Upon approval of the participants, the interview schedule and the questions' contents were discussed. The schedule is flexible, depending on the participants' availability. 3.) The interview was recorded via digital audio or video with the consent of the participants. The open questions were used to enable participants to tell the stories. 4.) The interview was based on dialogical questions consisting of identity, resource, and connection/affiliation issues. 5.) The transcribed interview data was returned for verification and consistency to the participants.

Data Analysis. This is qualitative narrative research. A narrative research study, according to Creswell (2012), must meet the requirements for qualitative research. The gathered stories from the participants were transcribed. Moreover, the researcher proceeded with the manual coding technique where the significant statements for the four pre-retired science teachers were categorized and coded. In addition, after creating codes from the stories of the four pre-retired Science teachers, the researcher was able to generate sub-themes and themes. The final step in this analysis is to interpret the meaning of the stories and visualize the data through narration. The researcher used re-storying as a technique of reorganizing individual stories into a more general context.

Results and Discussion

1. Re-storying their Stories

This section contains narrative descriptions and exemplar statements of the encounters based on in-depth interviews with the study's four participants.

1.1. The Wanderers Crossing

The life experiences of *Amelia, Barbara, Carolina, and Deborah* as Science teachers before the pandemic were mostly characterized by the typical experiences of a regular teacher in private and public school settings which focus more on the adaptation of the school curriculum and philosophies, attending training and seminars related to professional development, using of traditional and varied Science teaching strategies and attending to the needs of the students. The narratives of the four participants are related to the study of Reiss (2020), Before the pandemic, science teachers possessed a greater depth of scientific knowledge; this depth of knowledge, coupled with their interests, competencies, and willingness to devote their entire attention to science, enabled them to provide students with high-quality science learning experiences. Meanwhile, the four participants disclosed that their experiences are also characterized by various struggles or challenges including struggles with age-related concerns, changing philosophies, and curriculum, lack of Science laboratory facility, the ratio of teacher and students, lack of Science learning and laboratory resources, parents' expectations, negative students learning habit, too much workload as a teacher, as a multilevel teacher and struggle on time management.

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

3

Exemplar Statement*:*

"Before the pandemic, I would always go back also to the training I had and the experience I had, so those are most of the factors that contributed to what kind of a teacher I was before the pandemic so meaning to say I was also trained traditionally I was exposed to teachers who also taught traditionally but are also really effective, so I think we should erase that most of the traditional are already obsolete".

1.2. The Crossroads

In general, the transition process encountered by the Science teachers as they entered the pre-retirement age was characterized by expectation and acceptance. All the participants accepted that their age and being a tenured or seasoned teacher lies a great expectation from teachers and even from external stakeholders. But above all this, all the participants also learned that being a tenured or seasoned teacher does not mean a perfect teacher but they also have flaws or weaknesses that can be considered as strengths among younger generations. Through acceptance, the participants realized that age is just correlated to the number of years of service, still, every teacher has weaknesses that needed to be addressed which can be addressed through teachers' collaboration and peer support. With regard to the existing programs of educational institutions for the pre-retirees, all the participants admitted that the school administrators are creating programs for them to enjoy their remaining years as well as ease their workload including the policy of not giving advisory classes to the tenured teachers. It was also seen among the narratives of the respondents how supportive the younger teachers among the pre-retirees were by giving technical support and consideration. According to Schultz (2016), during the process of teachers entering retirement, they concentrated both on the conditions needed to learn from experience and on the process itself. Time, maturity, and contact with others were all mentioned as required conditions for learning from experience by the teachers.

Exemplar Statement:

"The school gives an extra mile or walks an extra mile to help their employees, in terms of skills yes, a lot of training that they offer."

1.3. Coming to a Head

Overall, the current learning situation poses a great challenge among pre-retired science teachers including connection lags, poor internet connection in the country, introduction of new learning platforms, lack of administrative and external stakeholders support, too much workload among teachers, and absenteeism among students. The study by Alves & Precioso (2020) showed that sex, length of service, well-being, perceptions of teaching difficulties, and future perspectives proved to be predictors of professional well-being in times of pandemic. But despite the above-mentioned issues encountered by the participants, their situation was not all characterized by negative experiences, the participants took it as a challenge, seen as an opportunity to grow, witnessed the camaraderie among the faculty members, and developed various coping mechanisms. These coping mechanisms include looking for technical support, attending seminars and training, and acceptance of the situation.

Exemplar Statement:

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

4

"*We cannot apply that all the strategies that you have developed all the classroom management that we know works, and this is an entirely different platform. So, I felt anxious, will I be able to deliver despite my skills would not be enough.*"

1.3. The Road to Self-Realization

Generally, teachers admitted that it is okay to explore the field of teaching that there are many things that the internet can offer, and that any teacher will be surprised in terms of knowledge, it is very convenient. They also shared that the only factor that may hinder this positive learning is time as there is limited time and there is so much thing to explore in using technology. Moreover, even though their age is not that fit and she has a lot of limitations in this time of the pandemic, they admitted that they grow and still growing as a teacher with this emergency remote learning. With proper use and maximization of its use, this online learning is a very good type of medium of teaching and learning. In addition, the participants realized how this online learning leveled them up in terms of navigating the gadget and navigating the internet. This pandemic, allowed them to make the concepts in teaching and in lessons relatable and practical, and applicable to the current situation. They also shared that through emergency remote learning, they became a very novice teacher and instead of being the mentor of the young teachers, the world turned upside down. They also, added that with that significant experience, the teacher needs to be humble to acknowledge the deficiencies as a teacher and there is no shame in that when the teacher looks at it something, this is not about the teacher, this is about the children who are going to receive the instruction and she believed that it is okay to ask help from whoever be it young or experienced teacher. According to Jandric, Hayes, and Hayes (2020), experiences during remote learning developed all the teachers' teaching and pedagogy. In general, remote learning creates time for civic engagement, raising self-awareness, refreshing teaching, and deliberate connections among teachers and students.

Exemplar Statement:

"*You would ask the help of the young teachers because you are savvy in terms of navigating online*"

2.   Themes and Structure of Stories

Significant statements were established after all data collection items were collected and transcribed among the four study participants. Three interwoven themes arose from the coding of each of those important and exemplary stories.

2.1. Trials and Tribulations in Crossing of Pre-Retired Science Teachers

In addition to understanding the experiences of pre-retired Science teachers in the implementation of Emergency Remote Learning, the challenges and problems in teaching Science using emergency remote learning were a theme that emerged from among the data.

Sub-theme One: Building the Ark Before it Starts to Rain

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

5

A continuing issue identified by the pre-retired teachers in teaching emergency remote learning was the absence of comprehensive training or seminar related to emergency remote learning. This challenge or problem is the most commonly discussed challenge by the respondents. The participants stated that the absence of comprehensive training or seminar in teaching emergency remote learning and the absence of administrative support as one of the issues and challenges of this program based on their experiences.

The participants' narratives indicated that rigorous training and preparation are critical for teachers before bringing students into an emergency remote learning environment. This was because prior studies indicated that a lack of comprehensive teacher preparation resulted in teachers developing negative attitudes and learners having trouble learning (Hodges et al, 2020). Fawns, Aitken, and Jones (2019) added that a lack of extensive teacher preparation may have led to their program misconceptions. Several of the study's participants acknowledged that they had not undergone adequate or thorough training on emergency remote learning, which could have aided in their instructional preparation. Participants concluded that a lack of high-quality instruction contributes to the program's poor success rate, thus, the school should conduct comprehensive training or seminar about curriculum, assessment, evaluation, teaching strategies, and approaches relative to teaching Science using emergency remote learning. Thus, there is a need for comprehensive training and administrative support to make the result of inclusion successful and effective and to address the educational needs of the learners properly, efficiently, and effectively during this time of the pandemic.

Exemplar Statement:

"I do receive training but I believe that it is not enough. They just trained to implement the program but not to use various platforms to cater to the needs of the students. We need a comprehensive one."

Sub-theme Two: Hands Coated with Grease

All the participants in this study talked about the sudden increase in workload and paper works and divided their time or consume most of their time teaching and preparation as they adapted the emergency remote learning during this pandemic.

The participants considered implementation of emergency remote learning in their school resulted to a sudden increase on workload and paper works among them and considered it as one of the challenges and problems they encountered based on their experiences. Participants believed that a recurring need was for more time and consideration. A need that repeatedly surfaced, participants claimed, was for more time and planning. Emergency remote learning necessitates more time with students and more preparation time for Science teachers. They believed that they needed more time to prepare for teaching the students, who took up the majority of their time. Teachers have mentioned investing more time in training and learning how to use technology and online tools to meet students' needs and adapt to the new standard. There was one common theme in all participants' descriptions of how this time was spent not enough time for individualized and distinct educational tasks, and too much time spent completing reports and documentation as part of the evidence.

McIntosh and Nenonene (2020) noted that paperwork has long been identified as a point of contention in the implementation of distance education. Rosalina, Nasrullah, and Elyani (2020) added that increased workload and paperwork associated with distance learning implementation resulted in teachers developing negative attitudes and views toward the program.

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

6

Exemplar Statement:

”*I have to work overtime just to finish my instructional materials for the next day. This added to my workload as a teacher.*”

Sub-theme Three: Changing the Gears Manually

Creating time and effort to complete tasks among learners with two different modalities was one of the most widely addressed challenges by the participants. Divided time in teaching students with different learning modalities was mentioned how many times in the transcripts of the interviews with them. With two different modalities, the two teachers in public school revealed how hard and ate their time in preparation and assessment for the students with two different modalities. Although it was hard on the part of the teachers, they cannot argue with the system as it is one of the programs of the Department of Education to cater to the needs of the students and to achieve education for all programs. According to Alipio (2020), it was revealed that the Department of Education is not pro-teachers but more on the side of the students. What is best for the students is their major concern. Hence, the teachers should adjust and make necessary actions to cater fto their needs. In addition, it was revealed in the study, the majority of the teachers are not ready with this kind of set-up. According to Arinto (2016), a training curriculum alone is insufficient for practitioner growth with the introduction of open and distance education.

Exemplar Statements:

“There are students who cannot afford to go online, thus, choose the modular just in one class which divided my time for the preparation and assessment with two different modalities. It was hard on my part as I have to prepare two different instructional materials and two different lessons.

2.2. Involvement, Practices and Role of Pre-Retired Science Teachers

This theme emerged because teachers play such a critical role in the introduction of Emergency Remote Learning in a school. They are primarily responsible for ensuring that, despite the pandemic, a conducive learning environment is established in the classroom for students. Additionally, those who have direct contact with students, such as teachers, are accountable for their development and growth toward successful social independence. According to Reiss (2020), having established roles in the implementation of Emergency Remote Learning improves student learning by allowing teachers to concentrate on their position and become experts rather than being overwhelmed with multiple roles.

Sub-theme One: Pre-retired Science Teachers as Drivers of Curriculum and Instruction

Teachers revealed that to address the unique needs of each student enrolled in emergency distance learning, they must carefully prepare and change the curriculum. Additionally, instructional materials and techniques should be adjusted to facilitate learning. Participants revealed how they made necessary adjustments in the curriculum, learning materials, teaching, and approach to fit with the needs, skills, and available resources of the students. It was clear how the pre-retired Science teachers developed the curriculum into developmental, personalized, and evolving during this pandemic. According to Zhao and

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

7

Watterson (2021), the pandemic has provided a once-in-a-lifetime opportunity for educational reforms that were proposed before COVID-19 but never completely implemented.

Exemplar Statement:

"*We're always doing something new because this is what about us, this is about the client and if the client are evolving, so do we and our approaches our strategies to become relevant you have to evolve with no shortcuts and there's no alibi to that.*"

Sub-theme Two: Curvy Roads make a Skillful Driver

One crucial element seen in the narratives of the pre-retired Science teachers is their commitment and confidence. Because both internal and external education stakeholders are new to emergency remote learning, committed and optimistic teachers are needed to make this work. From students to parents and the community, all other stakeholders will struggle to see the value of this emergency remote learning as the latest way of learning during this pandemic without the teachers' dedication and positive attitude.

Cutri, Mena, and Whiting (2020) discovered that the COVID-19 situation necessitates not only expertise and skills but also trust in online teaching performance. Concerning the affective-motivational domain, there should be a strong emphasis on teachers' self-efficacy as one of the most critical structures in teacher competence, as self-efficacy refers to teachers' assumptions about their ability to excel in circumstances. Collaboration, partnering with others, and asking for help combine both partners' expertise, experience, and abilities to achieve a shared goal for the learners. Support from other teachers and people is crucial for the effective implementation of emergency remote learning. Furthermore, strong foundations are needed for collaboration to emerge and function under certain challenging conditions.

Exemplar Statement:

 "*I make sure that there's always part of the lesson where children can see why such things exist. It doesn't matter if all the other things are sacrificed.*"

Sub-theme Three: Overcoming Road Barriers & Practices in Teaching Science Online

Although there are some shortcomings in the implementation of emergency remote learning, we cannot deny that it has the potential to produce positive outcomes, especially for teachers and students. As an innovative science teacher, the participants find a way to make Science learning more meaningful. As a result of their selfless dedication to the service of young learners, it is just right to call these Science teachers advocates of emergency remote online learning. Participants revealed how positive they are to continue learning during this time of the pandemic. In return, they are the ones who must show the students and parents the importance of learning in this time of pandemic by being advocates of emergency remote learning. According to Frederick et al. (2020), there is no textbook or a specific set of practice guidelines outlining exactly how we will assist our students, parents, and teams during this crisis. We can, however, guarantee that during this period, the support services considered appropriate for students to access their educational programs will be enforced to the maximum extent possible and with the least amount of delay.

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

8

Exemplar Statement*:*

"It was hard at first but I cannot deny the fact that it changed me as a teacher. In return, I have to continue teaching and learning using this new form of learning,.g and become an advocate of it."; In addition, *"If all schools became distance learning-friendly and would welcome all the students into their school despite their barriers to learning, the fears of learning this pandemic would be much less. As teachers, we must show the students and parents how really important to continue learning.*

2.3. Opportunities and Privileges in Teaching Science Amidst Pandemic

Sub-theme One: Reinventing and Realigning the Wheel

Although emergency remote learning is challenging, the statements of the participants indicate that it has some positive effects on the teachers involved, including professional growth and improvement, as stated by participants. According to Sa and Serpa (2020), most distance-learning teachers have observed a change in their instructional style. Teachers evolved as facilitators and guides, addressing the needs of diverse learners, differentiating instruction, delving deeper into skills and values, offering more choices, and approaching lesson planning differently.

Exemplar Statement:

 "As a science teacher in a pandemic, well, of course, you always connect; you can always link what you are doing to the pandemic. Even the small ones are aware of COVID -19; you can always go back to the related concepts, and in the long run, you always go back and make perhaps that would make teaching more meaningful… In my entire experience, A teacher is always a forever learner" Teaching is forever learning."

Sub-theme Two: Midway Cognizance

Experiential learning was also used by the participants. This included learning from personal experiences as well as the education they gained from their current and everyday experiences as teachers who used emergency remote learning. Based on their experiences, the following are the ideas shared by the participants as realization and learning as one of the resources and privileges in teaching Science using emergency remote learning during a pandemic. During this pandemic, participants had both positive and negative experiences with emergency remote learning. These experiences strongly influenced their attitudes and opinions about the program. Consideration, patience, a love of teaching, adequate preparation, open minds toward emergency remote learning, prior awareness and background about the program, acceptance of the program, and taking the risk are all critical components required for effective implementation of emergency remote learning during this pandemic, according to respondents.

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

9

According to Reyes-Chua et al. (2020), implementing emergency remote learning successfully in the Philippines is difficult but not impossible. As teachers have observed, there are many obstacles to teaching and learning during this pandemic. However, this emergency remote learning is a welcome addition to the teachers' ever-increasingly difficult tasks.

Exemplar Statements:

 "*You cannot teach them well if you don't have heart and passion in teaching. To develop this, you must accept first the program and find any ways to learn and enhance your skills.*"

Conclusions

Pre-retired Science teachers recognized that change, progress, consideration, patience, a passion for teaching, adequate preparation, an open mind toward emergency remote learning, prior awareness and background about the program, acceptance of the program, and taking a risk are all critical components of effective emergency remote learning implementation. The study discovered that various issues and challenges mark pre-retired teachers' stories and interactions with emergency remote learning during pandemics. However, the experiences were not entirely negative, as the teachers seem to have felt a sense of accomplishment during the introduction of emergency remote learning. Despite the challenging situation they were in, there seems to be some realization and learning. This demonstrates that, despite the difficulties and obstacles encountered during the introduction of the emergency remote learning program, and even though some pre-retired Science teachers have negative attitudes and perceptions toward the program, the teachers remain cognizant of their position and the reasons for their inclusion in the program. They feel they are responsible for establishing an appropriate learning atmosphere for the students.

Recommendations

Based on the findings and conclusions drawn, the following are the recommendations that emerged from the results of the study:

1. The school administrators and human resource department should identify training needs that would enable teachers to do their work in enabling this emergency remote learning.
2. The teachers under emergency remote learning should be receptive to change and improvement; Attend training related to emergency remote learning; Orient yourself first with the concept of emergency remote learning and the various strategies and techniques in the implementation of the program.
3. The methodological limitations of the study should increase the number of participants and incorporate diaries, observation, and elicit more stories from the participants and optimize the quantitative and qualitative data.
4. Future researchers should the attitudes and perceptions of the school administrators of both private and public schools to determine their side and insights about emergency remote learning as well as their leadership and managerial competence during this time of the pandemic.

Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

10

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Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

11

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Uberas, A.D., *Navigating Uncharted Territories: Stories of Pre- Retired Science Teachers Amid Emergency Remote Online Learning, pp. 1 – 12*

12