

**EXPLORING THE WORLD OF PRE-SERVICE TEACHERS: BASIS FOR
RESILIENCE EDUCATION**

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Abstract

The world of teaching as a profession exposed pre-service teachers with stressors. This Colaizzi's descriptive phenomenological method of data analysis is anchored on Cognitive Motivational Relational Theory of Coping which determines the sources, effects, coping strategies, and solutions of pre-service teachers on stressors. Data gathered through focus group discussion among pre-service science teachers who were purposely selected. Findings revealed time management, discipline of students, demands of supervising teachers, financial aspects, relationships with co-practice teachers, and family as sources of stress — positive effects: time management and professionalism while negative effects: lack of sleep, limited social life and health problems. They manage their tasks as teachers using personal, behavioral and social-coping strategies. The result of the study serves as basis of offering resilience education to carry out practice teaching successfully.

Keywords: Pre-Service Teachers, Stressor, Resilience Education, Coping Strategies

Introduction

One of the perpetual aims of our country's educational system is improving the quality of tertiary education specifically in building a strong foundation of our pre-service teachers the future molders of the youth. Pre-service education prepares practice teachers the necessary knowledge and skills (Wilke, 2004). It provides them with opportunities to do teaching in a school setting and apply those theoretical knowledge before getting into the actual real world of teaching (Kiggundu *et al.* 2009). Hence, it is the most worthwhile part of their program where they learned to teach (Mapfumo *et al.* 2012). Along with this line of thought, it is essential that practice teachers need to be aware of the reality of teaching as a profession prompted with stress. However, pre-service teachers were aware that only a few studies were conducted that provide comprehensive data on the challenges, causes, effects of stress, coping mechanisms and suggested solutions to solve those stressors. Pre-service teachers should be oriented that along with the rewarding and satisfying part of the practice teaching program; they will also encounter stressful experiences. Mapfumo *et al.* (2012), teaching has consistently been ranked as a high- stress occupation. As identified by Chaplain

(2008), due to the occupational stress in teaching, the attrition rate for teachers has alarming proportions on some parts of the world.

However, in order for practice teachers to understand one's stress, Blona (2005) pointed out that they should know the causes, effects, and how to cope up with stress. He explained that the reason why a person experiences stress is they are trying to cope up with the demands of adapting to a new learning environment, peers, and academic concerns. Deniz (2006) added that stress is a form of frustrations brought about as a result of physical, mental, and emotional hindrances. What are the effects of stress? Effects of stress include self-doubt, anxiety, fear, and even anger. It is caused by physical symptoms, muscular tension, headache and exhaustion (Mapfumo *et al.* 2012). Stressful situation results to trembling hard, tense muscles, migraine, headache which can attribute to chronic diseases such as hypertension, and ulcers (Blona, 2005). It is in this aspect that student teachers have been reported to be vulnerable to stress since they enter a field which the professional teachers are highly stressed (Wilhelm *et al.* 2000) being exposed in stressful work, practice teachers should know how to cope and handle stress by identifying different coping mechanisms. As defined by Bland *et al.* (2012) coping mechanism is a process of attempting to manage the demands caused by stressful events. Samms (2010) proposed some coping techniques: instrumental coping which focuses on ways on how to tackle the issue to reduce stress in a given situation; emotional coping focus on tools or strategies to protect one's emotional health during the stressful period. He added active coping strategies such as: awareness of stressor, reduce the negative outcome, and venting which an externalizing coping technique is shown through outward expression of emotion usually in the company of friends and family.

However, despite that observation in reality, types of researches provide comprehensive information about the causes and effects of a stressor to practice teachers. No specific education subject or competencies prepares practice teachers to the said challenges. It is then the main aim of this study to train pre-service teachers on how to cope up with their stressor and to be resilient of the challenges in the world of teaching before they have their actual practicum. This study explored how the pre-service teacher discovers and recognize the emerging issues they have encountered in line with their practicum work that gives them stress which include: effects, coping mechanisms, and how they manage those stressors. Results of this study will guide pre-service teachers. on how they respond and manage to become resilient teachers. It will prepare them on how to cope with those challenges and improve their performance in their practicum work and the real world of teaching.

Review of Literature

Pre-service teachers' field experiences not only exposed them to the reality of the teaching profession, but they are also subjected to stressful experiences. As cited by Mapfumo *et al.* (2012), teaching has consistently been ranked as a high-stress occupation. Mac Donald (1993) added that in the training of teachers, the practice teaching was the most stressful component. Bowers *et al.* (1983) explained the practice teacher's stressors are based on the following areas: classroom discipline and relationships. Classroom discipline and instruction include knowledge of the subject and intellectual activities, while the relationship with students, cooperating teachers, and parents comprise the affective aspect.

Martin *et al.* (2009) shared the same thought that teaching is a stressful occupation and include high levels of work-related stress. Stressor includes workload, the relationship with colleagues or students and poor school climate as part of occupational stress. These stress-related factors result in self-doubt, anxiety, fear, and even anger accompanied by muscular tension, headaches, and exhaustion (Mapfumo *et al.* 2012).

Sources and Effects of Stress on Pre-Service Teachers

Stressors of practice teachers as beginning teacher identified by Boakye & Ampiah (2017) and Veenman (1984) includes student's indiscipline, student's inability to understand the lessons being taught, and student's indifferences. They also mentioned other problems such as lack of resources in teaching and time management. Grant (2005) added that lack of support from school heads, co-practice teachers, and inadequate teacher training education affects practice teachers performance inside the classroom.

Stressful activities as pre-service teachers include both positive and negative effects. Positive effects include the vulnerability of pre-service teachers to stress since they enter a field in which the professional teachers are highly stressed (Wilhelm *et al.* 2000). While negative effects include physical, mental, and emotional burden brought about by stressful work as practice teachers (Deniz, 2006). Mapfumo *et al.* (2012) added that stress involves self-doubt, anxiety, fear, and even anger accompanied by physical symptoms such as muscular tension, headaches, and exhaustion.

Coping Stress Mechanism of Pre-Service Teachers

Knowing these causes and effects of stress, practice teachers should be knowledgeable on how to handle this stress by identifying the different coping mechanism. A recent study done by Richaudde & Sacchi (2001), coping includes behavior and thoughts employed by a person in order to manage as stressful situation. Kirton (2003) proposed some

coping techniques such as instrumental coping which focuses on ways to tackle the issue in order to reduce stress around a given situation, while emotional-focused coping gather tools to nurture one's emotional health during the stressful period. He further explained that active coping strategies involve an awareness of the stressor followed by attempts to reduce the negative effects. He suggested venting which is the outward expression of emotions through the company of friends and family.

Stress Program: Pre-Service Teachers' Perspective

With the problems and issues faced by the pre-service teachers, there are solutions found in their point of view. Schonfeld (2001), De Noble & Mc Cormick (2005), Parker & Martin (2009) proposed that educating pre-service teachers about resilience is one way of equipping individuals to manage their work-related strategies. In the subject outline, the topic of teacher resilience stated that pre-service teachers should be able to: (1) describe the stressor that a pre-service or novice status can produce for someone entering the teaching profession; (2) explain why this stressor can occur; (3) define resilience and be able to describe the factors that can increase one's resilience; (4) construct or analyze possible teacher responses demonstrating resilience or lack of resilience to school-related potentially adverse scenarios; and (5) construct adverse scenarios, provide illustrations, resilient and less resilient responses.

Research Questions

Specifically, this study seeks to answer the following questions:

1. What are the emerging issues encountered by the pre-service teachers during their practice teaching?
2. What are the coping mechanisms of pre-service teachers to counteract emerging issues?
3. How do they respond, if any in solving those issues?

Theoretical Framework

This study relied on the Coping Mechanisms Theory of Lazarus & Folkman (1987) since the study is concerned on how pre-service teachers identify the emerging issues of their work, its effect and how they cope up with problems related to their fieldwork as a practice teacher. Khrono (2001) clarified that Lazarus and Folkman proposed the theory of coping in a macro-analytical approach which eliminates the potential negative outcomes from the experienced problem like stress (Sincero, 2012).

Lazarus (1993), Lazarus & Lazarus (1994) distinguished two general coping strategies: (1) problem -solving strategies are done to alleviate the stressful condition that includes confrontative coping, seeking social support which indicates that an individual has the control to manage the situation and the cause of the problem, whereas (2) emotion-focused coping strategies include self-control, seeking social support, distancing, positive appraisal, and accepting responsibilities. He added four steps of the problem-based coping: (a) define the problem, (b) generate alternative solutions, (c) learn new skills to deal with stressor or the problem, and (d) reappraise and find new standards of behavior.

Moreover, the study also adapted Cooley's Symbolic Interaction Theory as adapted by Basibas (2000) which explained that individuals are capable of creating a solution to their problem. Applied to this study, it means that pre-service teachers can find ways and means to handle stress, Thus they can cope up with the stress they encountered in their practice teaching. Sevilla *et al.*(1998) develop the concept of General Adaptation Syndrome which refers to the physiological processes that develop when an individual is exposed to stress. He explained that the body reacts to stress in three successive stages, namely: alarm reaction stage, stage of resistance, and stage of exhaustion. The Transactional Model of Stress and Coping is also used as the basis of how the pre-service teachers evaluate the process as they cope with stressful events (Lazarus & Folkman, 1987).

In this study, when faced with a stressor, pre-service teachers evaluate the potential threat or primary appraisal. The second appraisal follows with an assessment of students coping resources and options and on what he can do about the situation.

Methodology

Qualitative research using phenomenology was an appropriate methodology for this study exploring the lived experiences of pre-service teachers. This study tried to capture an in-depth understanding of the daily struggle of pre-service teachers. As the supervising teacher educator, the experiences shared would serve as study point in the formulation of a comprehensive resilience program of pre-service teachers before they have their practicum. This part of the paper comprised discussion on the following: research design and its setting, participants of the study, research instruments, data gathering, and analysis tools.

Research Design

This research study made use of Descriptive Husserlian Phenomenology employing a case study approach that generates an in-depth understanding of a particular case in real life (Crowe, et al..2011). It specifically gives a detailed description of the lived experiences of

pre-service teachers that give them stress: its sources, effects, coping mechanisms, and suggested solutions in solving the stressful experiences during their practicum. This approach was taken as an appropriate method to examine the phenomenon in detail and allow the research participants to describe the situations in their context (Ary, Jacobs, Razavieh and Sorensen, 2006).

Research Setting

This study was conducted in one of the leading state university of education located in Tacloban City, Leyte, Philippines. The researcher had purposely confined the study in the said school being the frontline teacher training institution in the region and one of the highly recommended universities nationwide. It was founded 1921, as a 2-year teaching training school, and in 1995 was converted into a university. The school's programs and policies adhered to the university's vision and mission of producing top performing professionals equipped to engage in knowledge and technology production, necessary to develop a sustainable society. Attuned to its vision, the school produces qualified teachers in the region who are top notchers in the Licensure Examination for Teachers (LET).

Research Participants

The research participants of this study were the five BSED Physical and Biological Sciences Pre-service Teachers who were deployed for the First Shift in the laboratory school of the university and in a public high school for the Second Shift second semester of SY 2017-2018. They were chosen through purposive sampling wherein the researcher based his judgment when choosing participants of the study (Patton, 2002). This involves identifying and selecting a group of individuals that are knowledgeable and shared a common field of interest since they are both secondary science majors (Creswell & Plano Clark, 2011). The author strictly followed the ethical rules of conducting qualitative research. Letter of permission addressed to the unit head of BSED, and the supervisor of the BSED Practice Teaching Unit was submitted to request practice teachers to answer the questionnaire. A consent form is also made to be filled up by the participants concerned. Availability of the participants was noted and considered before administering the focus group discussion. The venue for the focus group was made sure to be wide enough to ensure the participant's comfort. Utmost confidentiality of the information shared and audio-recordings were observed throughout this study. The names of the participants were substituted with pseudo names in the transcript.

Research Instruments and Data Collection

The study utilized the use of the researcher-made interview instrument which is the interview guide used in the focus group discussion (FGD) to extract the responses of the practice teachers regarding the stressors, causes, effects, coping mechanisms, and how they respond to those stressors. FGD interview guide was submitted for validation. It was divided into two parts; Part I aimed to gather information on the participant's data such as the name, the school, major field, and age; Part II was about practice teaching experiences and its related problems.

The researcher requested the practice teachers to answer the questionnaire. Focus group discussion (FGD) was integrated after to further elaborate and validate their answers. Before the FGD the researcher gave a consent form to the target participants and explained the purpose of the study. Then, the researcher together with each participant set a date and place for face to face interview. In this way, the researcher elicited more in-depth responses and clarified the information when the participant did not understand the question (Olson & Muise, 2009). The interviews lasted for an hour. The audio-recorded interviews were transcribed by the researchers, and then proceed to qualitative content analysis using individual themes as the unit for analysis.

Data Analysis

Data gathered was analyzed using Colaizzi's Phenomenological Method of Data Analysis. Shosha (2012) explained the following Colaizzi's seven steps: (1) each transcript is read and reread in order to obtain a general sense about the whole content; (2) from the transcript, significant statements that pertain to the phenomenon under study were extracted and recorded on a separate sheet noting their pages and line numbers; (3) meanings were formulated from these significant statements; (4) the formulated meanings were sorted into categories, clusters of theme, and themes; (5) the findings of the study were integrated into an exhaustive description of the phenomenon under study; (6) the fundamental structure of the phenomenon were described; and, (7) validation of the findings were sought from the research participants to compare the researcher's descriptive results with their experiences.

Results and Discussion

Based on the sharing of experiences of the pre-service teachers, data collected were processed in response to the research questions which were grouped into three themes and subthemes as follows: (1) road of pre-service teachers; (1a) challenges, (1b) positive effects, (1c)

Negative effects; (2) coping mechanisms and (3) ideals of pre-service teachers.

I. Emerging Issues Encountered by the Pre-Service Teachers During their Practicum.

Theme I. Road of Pre-Service Teachers

Theme IA. Challenges

The use of “road” diagram represents the challenges or problems encountered by pre-service teachers. Just like a rough road, the vehicle could not move easily and reach its destination on time. This same case is applied to the challenges and problems encountered by the practice teachers if they will not know how to handle it, it will become an obstacle finishing their teaching practicum. As the aforesaid statements revealed that pre-service teachers encountered challenges and problems which are the sources of their stress that include: (a) time management, (b) disciplining the students, (c) demands from CTE and STE, (d) financial aspects, (e) relationship with co-practice teachers, and (f) family problems.

Participants shared their experiences that time management is one of their main concern especially if they are bombarded with many requirements. They do not know anymore what to prioritize first, study and research for their lesson or making instructional materials. According to Kyriacou (2001) cited by Montgomery *et al.* (2005), time pressure causes stress to practice teachers. Abebe (2001) also found that budgeting one’s time is stressful. Participants claimed that the time is not enough to cover the topics especially in sciences subjects that have many activities. They added that most of the time they use their snack and lunchtime as working time. They are more stress when there are unexpected activities in the school that create a conflict of their planned activities.

Handling misbehaving students is another stressor of the practice teachers. Students misbehave because they want the teacher to prove themselves as well as they want to be noticed (Cerwin, 2005). In the study conducted by Bezzina (2006), class discipline is one of the most challenging parts of teaching experience. She added that most researchers in school focused on student’s misbehavior. Tudela (2014) explained that most of the practice teachers bad experiences are derived from the difficulty of managing student’s behavior. Mapfumo *et al.* (2012) mentioned the misbehavior of student is one of the main sources of stress among practice teachers. Atkinson (2004) further explained that failure of practice teachers to manage students’ behavior might cause them to quit teaching. It is not only students’ misbehavior that gives stress to pre-service teachers but also their low performance in the subject.

Cooperating teachers and the supervisor of the BSED practice teaching is considered as one of the challenges the practice teachers have to deal with. Celik (2004) pointed out that the cooperating teacher and practice teacher coordinator is one of the sources of anxiety which include the demands and expectation of cooperating teachers as follows: (a) deliver the lesson well or redo the lesson; (b) some supervising instructor do not guide them in making lesson plans and no feedbacks was given to improve their demo teaching. As identified by Kyriacou (2001) cited by Montgomery *et al.* (2005) was the relationship of practice teachers with authority as part of the challenges of practice teachers.

Concerns about financial aspects are also identified as stressors from the study of Mapfumo *et al.* (2012). In the interview conducted, participants revealed that they sometimes skip snacks and meals so they can provide materials needed for their lesson. Sometimes they have to borrow money from their classmates for their transportation, boarding, house rental, and reproduction of class activities and IMs.

Teachers are collaboratively oriented people (Scherer, 2012). However, some practice teachers have difficulty in dealing with their co-practice teachers. They experienced the attitude of indifference and selfishness. Sometimes they have to do their assigned tasks when they were absent giving the burden of the unfinished tasks to the other practice teacher.

- **Time Management**

Significant Statement 1. *“I am sleeping late and waking up early.”*

Significant Statement 2. *“I do not know what to prioritize writing a lessonplan or making the instructional materials (IM’S).”*

- **Disciplining the Students**

Significant Statement 3. *“Students are not listening to me; I find it hard to hold their attention.”*

Significant Statement 4. *“Some students are playing on their cellular phones while I am discussing the lesson.”*

- **Demands from Cooperating Teacher Educator (CTE) and Supervising Teacher Educator (STE)**

Significant Statement 5. *“My STE required me to submit a lesson plan even for the evaluation part of my topic.”*

Significant Statement 6. *“I am pre-occupied with many DepEd forms to accomplished different from CTE and STE.”*

- **Financial Aspects**

Significant Statement 7. *“I skipped snacks just to buy materials for my IM’S and activity sheets.”*

- **Relationship with other Co-Practice Teachers**

Significant Statement 8. *“It is an additional burden on my part if my Co-Practice Teacher was unable to do the assigned tasks”*

- **Family Relationship**

Significant Statement 9. *“I sometimes can’t attend important family events since the weekendis pre-occupied with the preparation of my lessons.”*

Theme 1B. Positive Effects

Participants identified time management as one of the main good things that resulted from the challenges/problems encountered. They learn to manage their time by being prompt in submitting the requirements and doing the task on time. Ndifon & Ukpepi (2014) explained that punctuality to school is a vital factor of teacher’s attitude to work which can affect the academic performance of the pupils. As mentioned in the study of Gutierrez *et al.* (2016), teachers who are always punctual in school can instill such attitude to her students which can result in their good academic performance. They also become thrifty, resourceful, and productive.

The virtue of professionalism which includes being thrifty, responsible, resourceful, productive, and confidence in teaching are the other positive effects to them. Isangedighi (1998) explained that having professionalism avoids humiliation, rejection, and worthlessness. As pointed out by the participants in the study of Gutierrez *et al.* (2016), they have to motivate themselves to be more responsible in doing their requirements to create quality outputs.

- **Proper Time Management**

Significant Statement 1. *“You know what ma’am, with the many paper works to do, I learned to manage my time wisely.”*

- **Professionalism**

Significant Statement 2. *“I gain confidence in facing and teaching my students.”*

Theme IC. Negative Effects

Participants identified negative effects which include: lack of sleep, easily irritated and angry, no social life, health problems, low- quality performance in teaching. Denise *et*

al.(2013) mentioned that sleep deprivation is a world-wide health concern. As mentioned by the participants, they lack sleep because they have to make a lesson plan, study their lesson, make instructional materials, and other requirements of their cooperating teachers.

As stated in the study of Gutierrez *et al.* (2016), practice teachers need to sacrifice their time in preparing their lesson, IMs in order to properly execute the topic assigned for demo teaching. They added that their body does not have enough time to recharge and regenerate lost energy. Appold (2004) confirmed as cited in the study of Richard (2012) that sleep deprivation may cause people to feel depressed that affect their immune system. Kaur (2011) identified some effects of stress as follows: increase blood pressure, digestive abnormality, depression, anxiety, alcoholism, and congenital heart disease. They further added that they have no time for their family and friends.

- **Lack of Sleep**

Significant Statement 3. *“There are times that I got sick and become irritated easily due to lack of sleep.”*

Significant Statement 4. *“My lesson is not delivered well since I am pre-occupied many tasks.”*

Theme 2. Coping Mechanisms

As mentioned in the study of Gutierrez *et al.* (2016), knowing how practice teachers cope with stress provide support for practice teachers and provide them grounds in order to prepare themselves to combat possible stressors. Coping makes their journey smooth sailing and able to reach their destination despite the rough road. It was supported by Mapfumo *et al.* (2012) that coping mechanisms of practice teachers could be enhanced if school administrators could help identify the stressor and provide support that they need the most. Murray-Harvey (2000) categorized coping mechanisms of practice teachers to overcome stress as follows:

A. Personal Coping Strategies include (1) *cognitive strategies* such as positive thinking and optimistic. Bernard (1991) mentioned that being optimistic has many benefits for mental health including protection against depression and anxiety. Bennis (2000) further explained that optimistic people have the gift of being able to convince others that they achieve beyond what they thought possible. Participants during the FGD mentioned that they still smile even though they are already tired and irritated. Their family is their source of motivation and inspiration to work hard and bear the challenges.

- **Personal Coping Strategies. (Cognitive)**

Significant Statement 1. *“During my vacant time, I used it to write my lesson plan and make my IM’S instead of having FB using my phone.”*

Significant Statement 2. *“I sleep by 10:00 o’clock in the evening and wake up early at 4:00 o’clock in the morning.”* (2) *Behavioral coping strategies.* Donne (2013) explained that it is a good feeling to reward ourselves with a special treat after a hard day. Practice teachers mentioned that after a long period of hard work for the day, they go to the school canteen to relieve stress by eating. This is further explained by Donne (2013) that stress increases the production of the stress hormone cortisol which makes us crave for foods that provide good feeling and re-energize. Some practice teachers find time to cope with the stressor of sleeping during their break time; they added that they do their requirements ahead of time so they can sleep early. They further mentioned that they need enough sleep in order for them to have the energy to teach the following day. As cited by Richards (2012), it is beneficial to get an adequate amount of sleep to have clear thinking and strength to deal with life’s stress.

- **Personal Coping Strategies. (Behavioral)**

Significant Statement 1. *“I watched funny movies and had bonded with my friend on weekends after doing my school tasks.”*

Significant Statement 2. *“I eat first ma’am before doing my school works and it makes me feel good.”*

B.Social Coping Strategies. As cited by Mapfumo *et al.*(2012) in the study of MacDonald (1993) explained that one of the most significant coping strategies is to seek advice from family and friends in times of crisis simply for conversation and reflection. Done (2006) suggested having jokes with colleagues lessen the effect of stress. Establishing rapport with their co-practice teachers and cooperating teachers will lighten the burden and help them forget the problems encountered on that day.

Significant Statement 1. *“Observing ma’am what my STE has done, I learned to set up rules for the students to be consistent and firm with it.”*

Significant Statement 2. *“Opening up to my STE and CTE of my school concern gives me a feeling of relief.”*

Theme 3. Ideals of Pre-Service Teachers

Pre-service teachers find solutions along the way in their practicum to meet challenges such as (1) prompt in submitting the requirements and assigned tasks; (2)

organizes in one's work by having a timetable on tasks that need to be done first; (3) attend lectures, training and workshops on teaching strategies in terms of classroom management, comprehensive delivering of the subject matter, and accuracy in accomplishing DepEd forms; (4) enhancement of skills on the use of latest technology in teaching, assessment, and computation of grades; and (5) offering resilience education as support to pre-service teachers through knowledge and skills in how to manage the emotional aspects of their practicum work.

- **Prompt**

Significant Statement 1. *“Once my STE and CTE give a test or a requirement, I do it at once.”*

- **Organized**

Significant Statement 2. *“I have a small notebook as my checklist of things to do. It gives me a good feeling of my achievement for the day.”*

- **Attending Training and Mentoring on Effective Teaching and Classroom Management**

Significant Statement 3. *“It helps a lot to me, ma’am when I search and read in the internet and YouTube about my lesson.”*

Significant Statement 4. *“We hope ma’am there is a subject that will be offered on how we can handle well the stress of a practice teacher.”*

Significant Statement 5. *“It is true ma’am because what was taught are strategies, but we are not aware of the possible stress that we will encounter and how to cope with it.”*

Conclusion

Challenges encountered by the pre-service teachers open their eyes on the reality that practice teaching is indeed a stressful work. However, findings connote that even if they face many challenges and problems, pre-service teachers see practicum experiences as a help for them to discover and recognize the causes of their stress, positive and negative effects and coping mechanisms. Despite many stressors, they were able to see in a better perspective and suggested solutions to prepare and guide the next practice teachers for the anticipated challenges as future pre-service teachers through: (a) support from the supervising teacher educators and cooperating teacher educator through filling-up forms and giving feedbacks on how to improve their classroom management to have effective teaching-learning process (b) offering resilience education involving topics on the challenges, causes, effects, coping

mechanisms, and suggested solutions in solving the challenges encountered by the practice teachers

Thinking of a better perspective of the pre-service practicum program include: (a) thorough study on causes, effects, coping mechanisms of the science pre-service teachers in other Grade 7 science subjects; (b) conduct study on pre-service teachers of other grade level and other science subject area to make the result more conclusive; (c) consider the specialization and demographics of pre-service teachers to have a more in- depth information about the causes, effects, and coping mechanisms of stressors in the teacher's work field; and (d) revisit and thorough evaluation of the curriculum on the possibility of offering resilience education as one of the subjects of pre-service teachers before they will have their practicum.

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