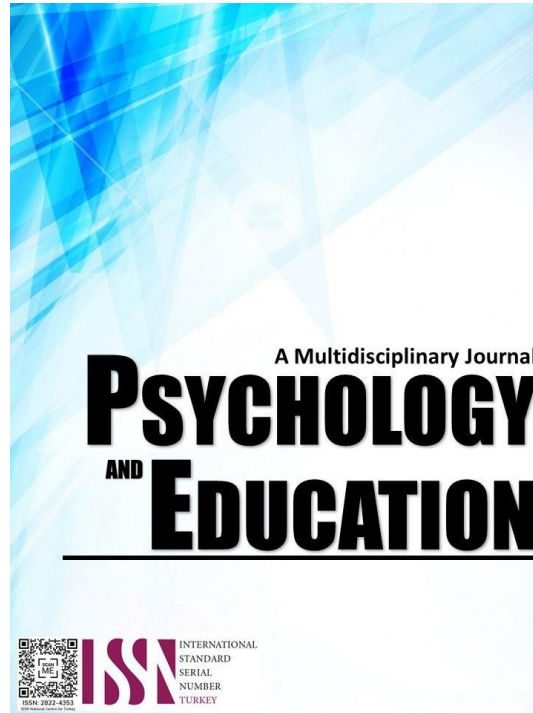


OUT-OF-FIELD TEACHING EXPERIENCES OF SCIENCE TEACHERS IN NON-SPECIALIZED SUBJECTS: A PHENOMENOLOGICAL STUDY



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Out-of-Field Teaching Experiences of Science Teachers in Non-Specialized Subjects: A Phenomenological Study

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Abstract

A teacher must have immense knowledge of the subject they are going to teach. However, teachers in the field experiences teaching on the subject that they do not master. The study aimed to explore science teachers' experiences in teaching non-specialized subjects. The study utilized Moustakas' Transcendental Phenomenological (TPh) design and employed in-depth interviews (IDI) as the data collection method. Ten participants were purposively selected for this study, consisting of junior and senior high school teachers from Mlang National High School under the Cotabato Division for the School Year 2023–2024. Thematic analysis was applied to generate the data from various sources to gain a fuller perception of the study. Coding was done, and themes were categorized accordingly. Seven (7) essential themes were generated on the teachers' lifeworld in teaching non-specialized subjects. The contexts of the teacher's lived experiences in teaching non-specialized subjects revealed three (3) significant themes. Additionally, it is shown that six out of ten participants see themselves teaching specialized subjects in the future and four of them learned to love handling non-specialized subjects. As a result, the study recommends realignment of subjects taught, applicant selection, and conducting school visitation among the Department of Education (DepEd) Key Personnel to ensure the exact number of teachers needed in the specific field. Furthermore, the researcher recommends conducting further studies to determine the root cause of the unresolved problem of mismatch among teachers in the education system. Also, future studies could use quantitative methods to provide a more structured and statistically backed analysis and examine how various motivational factors affect teachers who teach subjects outside their specialization, despite facing challenges such as a lack of expertise or resources.

Keywords: *non-specialized subjects, out-of-field teaching, thematic analysis, transcendental phenomenology*

Introduction

The K to 12 science curriculum is designed to develop students' scientific literacy, equipping them to become knowledgeable and active citizens capable of making informed decisions about using scientific knowledge, especially in areas affecting society, health, and the environment. Thus, quality education needs quality teachers.

Moreover, teacher quality usually relates to issues in education. Ingersoll and Gruber (1996) argue that Education and training are crucial components of effective teaching and high-quality teachers. One key trait of a quality teacher is the thorough preparation of the subject or field in which the teacher is teaching.

In high schools, issues such as teaching outside of one's specialization and mismatched assignments have been highlighted (Co et al., 2021). Teaching unspecialized subjects is rampant worldwide (Du Plessis, 2015, as cited in Limpot & Arendain, 2022).

Out-of-field teaching happens when teachers are tasked to teach outside their area of specialization without proper training. However, educators are expected to be efficient in learning and knowledge building (Plessis, 2013, as cited in Yumang, 2021). It is a global issue, and researchers in Australia (Hobbs, 2013; McConney & Price, 2009, 2009), Korea (Ee-gyeong, 2011), Norway (Bonesronning et al., 2003), the US (Ingersoll, 2006) and South Africa (Du Plessis, 2005; Du Plessis, 2010) have focused on its occurrence and implications.

It is also prevalent in the Philippines, where teachers face challenges when instructing a subject, they are not fully proficient in (Bayani & Guhao, 2017). The challenge of unimpressive performance in science subjects is worldwide, greatly affecting students who aim to pursue higher education and secure long-term opportunities (Rebucas, 2022). Additionally, the practice known as out-of-field (OOF) teaching, has been found to have a detrimental effect on instruction and limit teachers' professional growth.

Studies on non-science teachers teaching science focused on problems, adaptation, and anxiety. It was discovered that the teachers lacked content and pedagogical content knowledge, while they possessed some technical knowledge, which was insufficient for effective science teaching.

The teacher adjusted by reviewing the publisher's guidebook and exploring materials from YouTube channels to understand the teaching content better. Direct teaching was employed, particularly during the lecture, where the opening clip from YouTube aligned with the discussed content. Teachers experienced high anxiety regarding content instruction, students' attitudes toward science, national exams, and teaching responsibilities (Instasingh, 2019).

The purpose was to provide reliable information concerning science teachers' experience teaching non-specialized subjects. It ensures administrators and DepEd key officials are aware of this concern. Science requires teachers' expertise so that appropriate knowledge and skills can be transferred to students, so that they can apply them in real-life scenarios.

Recent studies have concentrated on teachers with inadequate qualifications in specific subjects like science and mathematics. While out-of-field teaching is common in classrooms, it remains a relatively under-explored topic (Hobbs, 2012; McConney & Price, 2009). Previous important studies have examined its prevalence, its impact on student academic performance (Darby, 2012; Dee & Cohodes, 2008; Ingersoll, 2001; McConney & Price, 2009), and its implications for school leadership and professional development (Du Plessis, 2005, 2010).

This study is anchored on two theories. First is the Person-Environment Fit theory (Caplan, 1987). Kristof-Brown, Zimmerman, and Johnson (2005) state that this theory refers to the compatibility of an individual's characteristics with their work environment.

The second is the Self-efficacy Theory (Bandura, 1977). It refers to a person's confidence in their ability to complete a task or take action necessary to achieve a specific outcome (Nurindah et al., 2019). These theories prompted me to study teachers' experiences teaching students in non-specialized subjects.

Out-of-field teaching presents a challenge that needs to be addressed to enhance the professional growth of teachers, especially those teaching subjects beyond their specialization. This study explored the experiences of out-of-field teachers as they taught subjects or courses outside their areas of expertise.

Research Questions

This study explored the out-of-field science teachers' experiences in teaching non-specialized subjects. It answered the following questions:

1. What is the lifeworld of the teachers in teaching non-specialized subject/s?
2. What are the contexts of the teachers' lived experiences in teaching non-specialized subject/s?
3. How do the teachers handling non-specialized subject/s identify themselves in the future?
4. What program can be developed to address subject-specific mismatching?

Literature Review

Non-specialized teachers/Out of Field Teachers

People need to learn how complicated and vital teaching is (Ingersoll, 1998; 2000; 2001; 2011). Non-specialized teachers or out-of-field teachers relate to educators who are tasked with instructing students in non-specialized courses (Ingersoll & Collins, 2018).

The out-of-field situation occurs as a result of systematic teaching. Teacher shortages, uneven distribution of educators, difficulties with school scheduling, and the teacher education systems in various countries, where teachers are hired as specialists instead of generalists (Hobbs & Porsch, 2021). This issue occurs as a result of incorrect teacher assignments due to differences in teacher qualifications, the subjects they teach and their assignments, teacher union demands, and teacher shortages in a specific field (Mohd et al., 2013). Furthermore, out-of-field teaching refers to instructing a subject, field, or educational level for which teachers do not have a major or minor degree from higher education (university) (McConney & Price, 2009 as cited in Du Plessis et al., 2023). Therefore, out-of-field teaching is defined as when teachers are assigned to teach subjects in which they have limited education or where their field, specialty, or training does not align (Ingersoll, 199 as cited in Sebreo, 2021).

This situation can also arise as a result of managerial decisions or recruitment procedures (Zepeda, 2006). The constant transformation and rapidly changing nature of education make staff recruitment and placement difficult. As a result, more out-of-field teachers are being assigned (Wirt et al., 2004).

Teaching outside of one's specialization can hinder professional development and lead them to leave the profession (Hobbs, 2021). When teachers are assigned to teach subjects outside their area of expertise, their effectiveness tends to decline (Pillay et al., 2005) due to subject knowledge deficiencies (Zepeda, 2006). Teachers teaching outside their field, which they need to prepare for, lack training and support should have been addressed.

Perceived Opportunities

Teaching a new subject takes time, but it may be a worthwhile investment (Hobbs, 2020). Teaching a non-specialized subject is a temporary and transitional experience to learning unfamiliar content (Hobbs & Porsche, 2021). They saw the practice as a way to learn new things.

Hobbs (2013), love of profession makes the way to learn and thrive in teaching. Teachers who had a calling to teach were more likely to be committed and maintain their effectiveness (Palmer, 2017). Thus, out-of-field teaching can be seen as a strong indicator of a teachers' commitment to education. It demonstrates their readiness to take on challenges, adjust to evolving situations, and prioritize their students' educational needs, all of which are key traits of committed and effective teachers (Palmer, 2017).

Du Plessis (2020), teachers in non-specialized subject matter are also interested in their teaching. It represents a chance to acquire new knowledge, with the belief that teaching a subject they have not yet fully mastered can benefit their future as educators (Arendain & Limpot, 2022).

Moreover, teaching subjects outside their specialization is a great opportunity to learn new perspectives, move out of their comfort zone, and discover self-discovery (Yumang, 2021). It presents a valuable opportunity for individuals passionate about a specific field of study who aspire to become experts in that area. Teachers have a crucial impact on shaping their students' lives, and teaching is a profession that carries significant responsibility (Ling, 2008). Teachers' responsibilities go beyond the classroom, shaping both the future of their students and the broader world.

Strategies and Coping Mechanisms

Cramer (1998), as cited by Uugwanga (2010), states that used to manage and deal with various stressors, challenges, or difficult emotions to resolve a problem or manage a situation. Thus, individuals can consciously and purposefully select coping mechanisms to manage stress and navigate situations, and this conscious effort is an essential part of effective stress management and emotional regulation. For teachers teaching non-specialized subjects (Bugwak, 2020), using a range of teaching approaches and strategies is a fundamental aspect of effective education. It acknowledges the uniqueness of each student and creates a dynamic and inclusive learning environment. Teachers engaged in continuous professional development as they advanced reading and wide-range research.

Besides, according to Co et al. (2021), essential coping strategies and teaching methods deal with the subject and pedagogical knowledge, such as technology integration, hands-on experimentation with ICT tools, and more effective teaching methods. Gordon (2007) states that effective teaching and learning require both content knowledge and pedagogical skills.

Related Studies

The study conducted by Ruaya (2016) found that teachers given teaching loads out of their specialization needed help adjusting to the subject loads given. They must do further research, have additional readings, and study more to deliver every lesson clearly and understandably to their learners.

Bayani and Guhao (2017) teaching outside one's field of expertise can be a challenging task, but it is not uncommon, especially in educational settings where teachers may be asked to cover a variety of subjects. In such situations, it is critical for schools and educational institutions to provide assistance. Professional development opportunities and resources to help teachers improve explore these challenges. Additionally, teachers can benefit from strategies like seeking mentorship, collaborative planning, and ongoing self-improvement to enhance their teaching abilities in these areas.

(Hobbs & Porsch, 2021) The out-of-field teaching phenomenon can indeed be attributed to several systemic factors in education. These factors contribute to situations where teachers are assigned to teach subjects or topics for which they may not have the necessary qualifications or expertise. Several key systemic factors contributing to the out-of-field teaching issue include persistent teacher shortages, uneven teacher distribution, and challenges in school scheduling, and issues within the teacher education system. As a result, teachers assigned to teach subjects outside their area of expertise may experience a lack of confidence, which can manifest in various ways in their teaching. Some of the ways in which this lack of confidence can be observed in their teaching include: lesson planning, choice of activities, answering students' questions, and generating interests and passion (Kola & Sunday, 2015). Furthermore, when teachers lack the necessary skills, they usually have the necessary knowledge and skills to teach a specific subject. Students are subjected to lower-quality instructional practices (du Plessis, 2015), and Clotfelter et al. (2010) found that students experienced less academic growth. Here are some of these ideas: lower- quality instructional practices, student learning outcomes and educational inequity.

Additionally, the study highlighted the coping strategies employed by these teachers when facing the phenomenon, including being resourceful and creative, hardworking and attentive, making lessons engaging for students, and maintaining a calm and composed attitude.

The findings from Bugwak's study in 2021 highlight some common challenges and difficulties that teachers who are not experts in specific subjects may encounter when teaching out-of-field. These findings highlight the importance of providing support and professional development for teachers assigned to teach subjects outside their area of expertise. Such support can include access to resources, training, mentorship, and collaboration with colleagues who have expertise in the subject. Additionally, schools and educational institutions can consider strategies for better aligning teachers' assignments with their areas of competence to minimize out-of-field teaching challenges.

Methodology

Research Design

This study utilized a Transcendental Phenomenology (TPh) as a research design. Husserl developed a transcendental phenomenological study that focused on understanding and exploring the human experience as it is lived by individuals (Moustakas, 1994).

In addition, Moustakas' (1994) TPh focuses less on the researcher's interpretations and requires a deeper understanding of the phenomenon as it is perceived and lived by the participants. It is a method that emphasizes empathy, open-mindedness, and the ability to truly listen to and understand the voices of those who have directly encountered the phenomenon being studied.

Hence, content analysis is a common approach in qualitative research. It is a systematic way of extracting meaningful information from qualitative data, and it can be particularly useful for identifying commonalities and differences in participants' experiences and uncovering hidden patterns or trends within the data.

Participants

The participants in the study were ten (10) Science teachers from M'lang National High School, comprising both Junior High and Senior High School levels, who were teaching non-specialized subjects in Grades 7 to 12 at the time of data collection. Moreover, science teachers often face the challenge of being assigned to teach subjects beyond their area of specialization or expertise. This issue is one of the key reasons why the scope of this study was limited specifically to science teachers (Co, et al., 2021).

Instrument

The researcher adhered to the proper research protocol by first obtaining approval from the Schools Division Superintendent (SDS) of the Cotabato Division. Subsequently, permission was sought from the Public Schools District Supervisor (PSDS) of Mlang Central District, and finally, from the School Principal of M'lang National High School to conduct the study. The researcher obtained informed consent from participants who met specific criteria and voluntarily agreed to take part in the study through an in-depth interview and that the chosen participants were relevant to the research objectives.

The participants were Science teachers teaching non-specialized subjects. The researcher conducted casual face-to-face interviews to create a friendly atmosphere and help participants feel comfortable sharing the necessary information.

With the interviewees' consent, the researcher recorded the interview sessions to ensure accurate documentation of all shared information. The collected data was then transcribed and translated into English, ensuring that the meaning of the sentences remained faithful to the original version. To verify validity, the researcher sought the assistance of debriefers to check for any errors in her interpretations.

Data Analysis

The study aimed to provide an objective and detailed analysis of the experiences of participants who teach non-specialized subjects to facilitate an in-depth discussion. This research sought to understand and present these experiences comprehensively and unbiasedly, which can be valuable for gaining insights into the challenges, successes, and unique aspects of teaching such subjects.

Based on the questionnaire and in-depth interviews (IDIs), the participants' experiences, challenges, and feelings were carefully and thoroughly examined. The notes from the in-depth interviews were analyzed using thematic analysis, which focuses on identifying, analyzing, and reporting patterns (themes) within the data.

Themes were central to qualitative research as they help the researcher organize and interpret data, providing a way to describe and understand the phenomenon under investigation about the research question (Boyatzis, 1998). Thematic analysis, as described by Braun and Clarke (2006), involves a specific process that provides a structured and systematic approach to uncovering patterns and meaning within qualitative data. It is a widely recognized and rigorous method for analyzing and reporting qualitative findings. It involves six main stages: familiarization, initial coding, generating themes, reviewing potential themes, defining and naming themes, and interpreting and writing a report.

Ethical Considerations

The researcher observed ethical considerations while conducting the research. Research ethics define the standards of conduct for scientific researchers, providing guidelines for carrying out research responsibly (Wagle, 2020). In addition, Halai (2006) proposed that five fundamental ethical principles were commonly found in the ethical codes of research institutions and associations. These principles include: a) informed and voluntary consent, b) confidentiality of shared information, c) anonymity of research participants, d) beneficence, or ensuring no harm to participants, and e) reciprocity.

Informed and voluntary consent. The researcher's major role is to obtain informed consent from all those directly involved in the research or in the vicinity of the research. This principle addresses a larger issue of respect for the participants, so they were not coerced into participation and had access to relevant information before consent. Informed consent is usually acquired through written consent forms, with review committees outlining the necessary elements of consent. It includes providing prior information on key aspects of the research, such as its purpose, procedures, duration, risks, benefits, and a statement confirming that participation is voluntary and participants have the right to withdraw from the study at any time (Halai, 2006). The researcher secured informed and voluntary consent from the participants before the IDI.

Confidentiality of Information Shared and Anonymity of Research Participants. The researcher showed respect and protected the participants by ensuring the confidentiality of the information shared, preserving their anonymity, and not disclosing their identities. Typically, anonymity is provided using pseudonyms or codenames to protect their identity (Halai, 2006). The researcher assigned codenames to the participants.

No Harm to Participants, Beneficence, and Reciprocity. The researcher gave the participants an overview of the potential risks and

benefits. In addition, the interchange required that researchers actively consider ways to compensate participants for their time and effort. The researcher explained the benefits they can get from participating in the research from the start until the end of the study. She explained the risks and benefits in summary as indicated in the consent form (Halai, 2006). The researcher was transparent to the researcher. She discussed the risks and benefits of their participation in the research.

Results and Discussion

The Relevant Themes on the Lifeworld of the Teachers in Teaching Non-specialized Subject/s

The seven (7) relevant themes are Passion for teaching, Personal growth and Open-mindedness, Self-confidence, Difficulty, Insufficient knowledge, Acceptance, and Responsibility.

Figure 1 presents a thematic concept map that illustrates the lived experiences of teachers assigned to teach subjects outside their area of specialization.

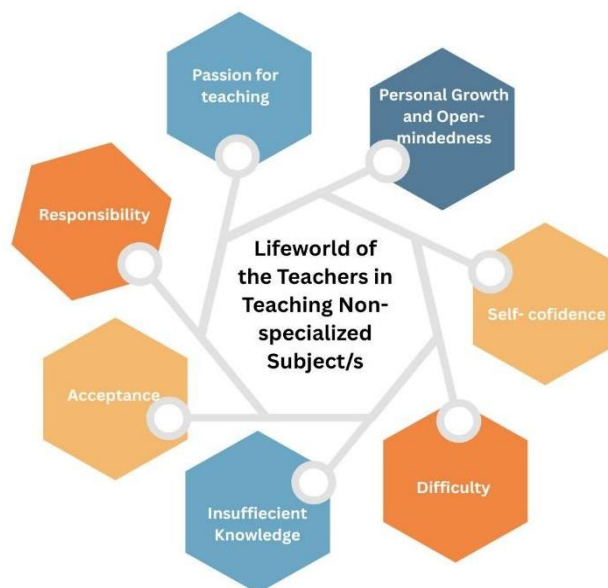


Figure 1. Lived Experiences of Science Teachers

Relevant theme 1: Passion for Teaching

Teachers assigned to teach non-specialized subjects have shown their passion for teaching. It showed that twelve out of ten teachers expressed their love for teaching, wherein they agreed to teach non-specialized subjects. As to the statement indicated below:

T-01: Uhm, the aspects of my life intimately connected with being a science teacher teaching non-specialized subjects that stands out for me ay ang passion for teaching kag inspired sa pagtudlo sini. [The aspects of my life intimately connected with being a science teacher teaching non-specialized subjects that stand out are my passion for teaching and being inspired to teach it.]

T-04: Ang gugma sa pagteach because even though it is not my specialized subject, I still teach it wholeheartedly. [My love for teaching because it is not my specialized subject. I still teach it wholeheartedly].

T-05: My passion for teaching stands out as an aspect of my life that is intimately connected with being a science teacher who teaches non-specialized subjects.

T-06: Simple lang, it is the passion to teach, never mind the subject. [Simply, it is the passion to teach, never mind the subject].

T-07: Being a science teacher teaching non-specialized subjects, what stands outis kay and compassion. [Being a science teacher teaching non-specialized subjects, what stands out is my compassion in teaching].

T-08: Absolutely, I have compassion for teaching. Basta, I have the opportunity to teach, and I will share the gift of education. [Absolutely, compassion for teaching as long as I can teach, I will share the gift of teaching].

T-09: The aspect of my life intimately connected with being a science teacher teaching non-specialized subjects stands out ay ang gugma sa pagtudlo. [The aspect of my life that is intimately connected with being a science teacher teaching non-specialized subjects stands out is my love for teaching].

T-10: Para sa akon, the aspects of my life intimately connected with being a science teacher teaching non-specialized subjects stand out kay ang love of teaching. [The aspects of my life intimately connected with being a science teacher teaching non-specialized

subjects stand out for me, such as the love of teaching.]

Relevant theme 2: Personal Growth and Open-mindedness

Teaching non-specialized subjects contributed to the personal growth and open-mindedness of the participants. It shows that three out of ten teachers considered teaching non-specialized subjects to lead to personal growth and open-mindedness. As to the following statement;

T-02: Katong nagteach ako sang non-specialized subjects as a chance for personal growth and as a science teacher embracing one of the fundamental skills of a science teacher kay and personal growth and being open-minded. [When I take up teaching non-specialized subjects as a chance for growth and as a science teacher, I embrace one of a science teacher's fundamental skills, which is being open-minded.]

T-03: Inaamin ko nga I have insufficient knowledge, but am willing to explore for personal growth [I admit to having insufficient knowledge, but am willing to explore for personal growth].

T-10: I also look for personal growth as a teacher.

Relevant theme 3: Responsibility

Teaching non-specialized subjects is the responsibility of a teacher. It has been shown that three out of ten teachers admitted that teaching non-specialized subjects was a responsibility. The statement indicated that,

T-05: hindi ko gusto ang idea of accepting subjects that are not my major, but then I am a teacher. It's a responsibility that I need to fulfill hindi lang para sa akon, but to every Filipino learner. I am born to teach. [Actually, I do not like accepting subjects that are not my major, but as a teacher, it is a responsibility I must fulfill for myself and every Filipino learner. I am born to teach].

T- 10: Ahhh, it is true that I find it difficult, but it is a responsibility being a teacher to teach the Filipino students... [I indeed find it difficult, but it is a responsibility being a teacher to teach the Filipino students...].

Relevant theme 4: Insufficient Knowledge

Teaching non-specialized subjects, the teachers are said to have insufficient knowledge. As the participant shared,

T-05: Hindi madali ang may teach sang non-specialized subject having insufficient knowledge, but it is an enormous challenge in my life, especially in teaching, that I need to accept wholeheartedly. [It is not easy to teach non-specialized subjects with insufficient knowledge, but it is an enormous challenge in my life as a teacher that I need to accept wholeheartedly.]

T-08: Gina-amin ko, I have insufficient knowledge, but I am willing to explore for personal growth. [I admit to having adequate knowledge but am eager to explore for personal growth].

T-10: Even though my knowledge is insufficient, gusto ko man challenge, and I do research sang topic nga akon e-studio. [Even though my understanding is inadequate, I want to challenge myself, and I do research, especially on the topic that I will teach].

Relevant theme 5: Acceptance

Teaching non-specialized subjects is a challenge that every teacher should accept. Three out of ten (10) participants agreed that,

T-02: Hindi madali ang mag-teach sang non-specialized subject having insufficient knowledge but it is an enormous challenge in my life as a teacher that I need to accept it wholeheartedly. [It is not easy to teach specialized subjects with insufficient knowledge, but it is an enormous challenge as a teacher that I need to accept wholeheartedly.]

T-08: It is the reality of being a teacher; I need to accept it.

T-10: I take the challenge of being a teacher teaching non-specialized subjects.

Relevant theme 6: Self-confidence

Although teachers of non-specialized subjects admitted their struggle, they also proved they have self-confidence in teaching. A person's professional background helps boost self-confidence, which the participant admits. It reveals that two out of ten teachers stressed their self-confidence due to their educational background. They said that;

T-04: I graduated from Nursing before my Professional Education, and I believe that it is my edge to stand out in teaching non-specialized subjects.

T-09: Biskan nagakalisod na, I gained self-confidence, believing I could do it because I had graduated from a four-year teaching course. [Despite the difficulty, I gained self-confidence, believing that I could do it because I had graduated from a four-year course in teaching].

Relevant theme 7: Difficulty

Teaching non-specialized subjects brings difficulty to a teacher. Two out of the ten teachers expressed themselves that,

T-02: Hindi madali ang mag-teach sang non-specialized subject having insufficient knowledge but it is an enormous challenge in my life as a teacher that I need to accept it wholeheartedly. [It is not easy to teach specialized subjects with insufficient knowledge, but it is an enormous challenge as a teacher that I need to accept wholeheartedly.]

T-10: Sa tenured lang, I find it difficult, but it is a teacher's responsibility to teach Filipino students. [It is true I find it difficult, but it is my responsibility as a teacher to teach Filipino students.]

The Relevant Themes on the Contexts of the Teachers' Lived Experiences in Teaching Non-Specialized Subject/s

It discusses the contexts of the teachers lived experiences in teaching non-specialized subject/s. Three major themes were mentally disturbed, sleep deprivation, and physically unfit.

Figure 2 illustrates the various contexts surrounding teachers lived experiences in teaching subjects outside their specialization.

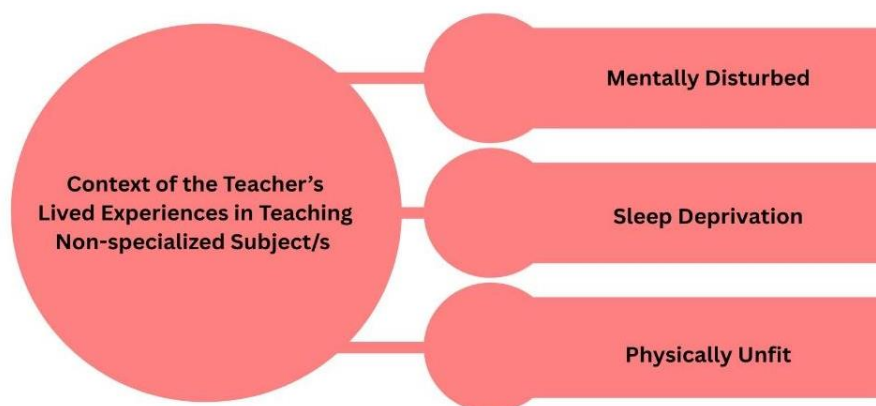


Figure 2. Context of the Teacher's Lived Experiences in Handling Non-specialized Subject/s

Relevant theme 1: Mentally Disturbed

Teaching non-specialized subjects has resulted in bodily changes among the participants. Seven out of ten teachers confessed that,

T-03: I must admit that teaching non-specialized subjects is quite stressful, but I do not experience bodily charges.

T-04: When I began teaching non-specialized subjects, I felt nervous about teaching the courage to interpret the lesson. From apprehension that I might fail to determination to achieve my goal,

T-05: A teacher must be effective in teaching his lesson. Sometimes, I also wonder if I would effectively introduce a subject, I lack knowledge of. I am not disappointed because, although it is hard at first, eventually, you learn to love these changes.

T-06: The changes that make me aware, as a teacher of non-specialized subjects, are that we cannot give what we do not have, so we need to equip ourselves with the necessary knowledge to impart to our students.

T-07: An old saying, but one that applies to my situation, is, "We cannot give what we do not have."

T-08: Due to the stress, I face for the non-specialized subject. I ate a lot to unstress myself, and as a result, I gained weight.

T-09: Emotionally, I am not ready. Sometimes, I think of giving up, but I must pursue it because I already accepted the subject. It is mental turmoil on my part, which can be seen due to hormonal imbalance.

Relevant theme 2: Sleep Deprivation

Some of the participants experienced sleep deprivation during the time they taught non-specialized subjects. Four out of ten teachers confirmed that,

T-02: Sleeping pattern since I tend to stay overnight making instructional materials and lesson plans.

T-07: Emotionally, I am not ready. Sometimes, I think of giving up, but I must pursue it because I already accepted the subject. It is mental turmoil on my part, which can be seen due to hormonal imbalance.

T-08: I always overthink this made me able to sleep properly. Sometimes, I thought, "What if the principal or the visitor caught me teaching a topic I have not mastered? I felt nervous now and then.

T-09: I am overweight because the more I am mentally drained, the more I eat. I experienced sleepless nights.

Relevant theme 3: Physically Unfit

Some of the participants admitted that they became physically unfit. Five out of ten teachers shared that,

T-01: "I am aware of the bodily changes from which I teach non-specialized subjects (s). I gained more weight and the appearance of my skin allergies due to stress, thinking I would do better in the next lesson session.

T-05: A teacher must be effective in teaching his lesson. Sometimes, I also wonder if I would effectively introduce a subject I lack knowledge of. I am not disappointed because, although it is hard at first, eventually, you learn to love these changes.

T-08: Due to the stress, I face for the non-specialized subject. I ate a lot to unstressed myself, and as a result, I gained weight.

T-09: I gained weight because of stress. I find comfort in food. I am suffering from hormonal imbalance.

T-10: I am overweight because the more I am mentally drained, the more I eat. I experienced sleepless nights.

The Relevant Themes on the Way the Participants See Themselves in the Future

The data shows how the participants handling non-specialized subjects identify themselves in the future. There were two emerging themes. These themes are teachers teaching specialized subjects and four of them learned to love handling non-specialized subjects.

Figure 3 displays the themes on the way the participants see themselves in the future.

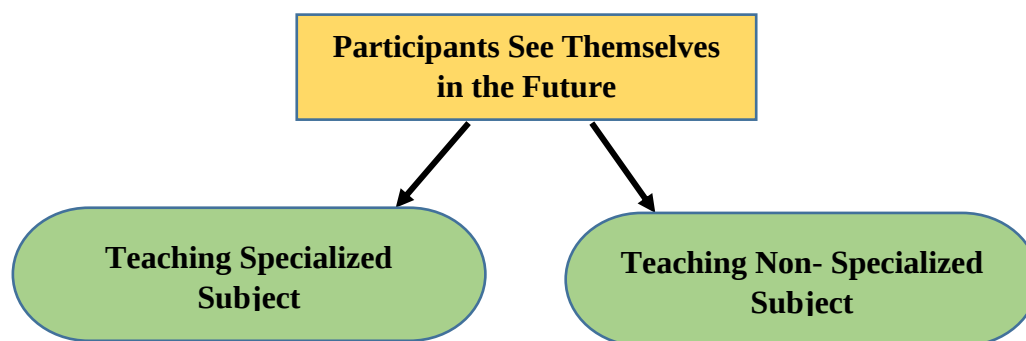


Figure 3. Way the Participants See Themselves in the Future

Relevant Theme 1: Teaching Specialized Subject

As to how the participants teaching non-specialized subjects saw themselves learning their specialized subject in the future. Six out of ten participants said that,

T-03: Being a science teacher teaching non-specialized subjects, I've been looking forward to seeing myself in the future teaching my specialization to share what I have learned and to impart the knowledge to my students as well.

T-04: Being a science teacher is my first love, and I pray to handle science subjects soon.

T-05: Of course, I still want to teach my specialized subject.

T-07: Teaching non-specialized subjects is difficult. I pray that I can teach my specialized subject next time.

T-08: Being open-minded opens us an opportunity to teach science subjects.

T-10: My teaching life is challenging, and I want to see myself teaching my specialization subject.

Relevant Theme 2: Teaching Non- specialized Subject

In teaching non-specialized subjects, some participants learned to love their non-specialized subjects. As indicated, four out of ten teachers expressed that,

T-01: Along with my subject, I still envision myself teaching non-specialized subjects.

T-02: I can see myself exhausted, but seeing my students learn because of my hard work, I will accept the challenge of being a teacher teaching a non-specialized subject.

T-04: I will not stay the same as a positive thinker teacher. Nandito lang ako para tumulong sa mga co-teachers ko (I will already be extending help to my co-teachers) and providing technical assistance to them.

T-05: I have loved and will continue to love the subject I teach. I loved the science subject at first, but I can say now that I love social

studies more now. Para lang sa akon, gusto ko na ni sya nga subject nga etudlo hasta ako mag retire. (If it were up to me, I see myself teaching this subject until I retire.)

The Relevant Themes on the Program that Can be Developed to Address Subject-Specific Mismatching

Some programs or guidelines are to be established in teaching subjects outside of specialization. Four emerging themes are Policy Implementation, Conduct of Survey, School Visitation, and Applicant Selection.

Figure 4 presents the themes related to a potential program that can be developed to address the issue of subject-specific mismatches in teaching assignments.

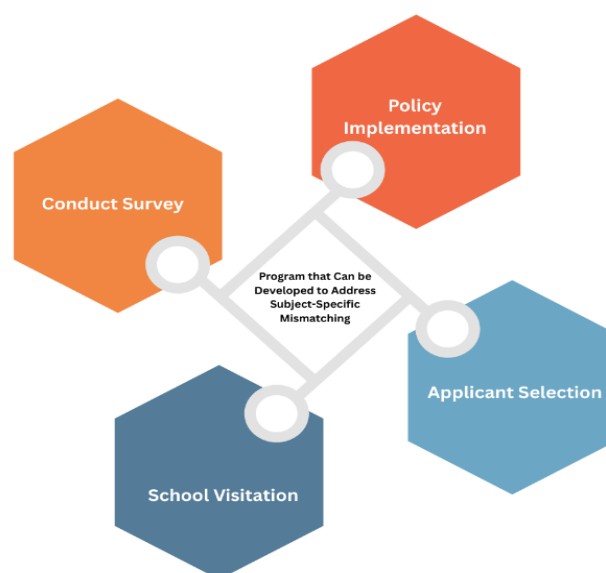


Figure 4. Themes on the Program Aimed at Addressing Subject-specific Mismatching in Teaching Assignments

Relevant Theme 1: Policy Implementation

Establish some programs or guidelines to respond to teaching subject/s outside of specialization. Five out of ten teachers said that:

T-01: Facilitating and adhering to the SHS-MELC are my guidelines to establish a response to teaching subject/s outside my specialization.

T-04: Provision of Curriculum guide with appropriate materials.

T-08: Some ways to establish guidelines to respond to teaching subject/s outside of my specialization are to keep updated with the DepEd memorandum...

T-09: In some ways or guidelines, it is always to keep updated with the DepEd memorandum.

T-10: We need to update ourselves with the DepEd memorandum.

Relevant Theme 2: Conduct Survey

In the data, five participants out of ten agreed that there is a need to survey their statements. They said that:

T-01: I suggest schools survey teachers' needs per subject area before hiring. The list of lacking teachers per subject area will be reported to the Department of Education.

T-02: Additionally, the Human Resource Department of the Department of Education will secure a list of teachers needed per subject area. We should eradicate the term mismatch as much as possible because the students will be affected if this scenario continues.

T-03: The Department of Education must look into the number of needed teachers per subject area and rehire them according to their specialization. It must be done before the hiring process.

T-04: Survey to ensure the number of teachers needed per field of specialization.

T-07: I suggest that the Department of Education visit schools from school to school ahead of time and gather data about the number of teachers to be hired for the next school year, per subject area of specialization. They should prioritize the needed number of teachers according to the qualifications, not the needs because many teach non-specialized subjects. It is time to put an end to this issue.

Relevant Theme 3: School Visitation

School visitation among the DepEd Key Personnel is necessary to ensure the exact number of teachers needed in the specific field. Five out of ten teachers said that:

T-01: School visits so that key Department of Education officials can see the real situation of every school. The data gathered will be based on that.

T-06: DepEd Key officials will visit each school to ensure that the principals submit the exact number of needed teachers per subject area.

T-07: I suggest that the Department of Education visit schools from school to school ahead of time and gather data about the number of teachers to be hired for the next school year, per subject area of specialization. They should prioritize the needed number of teachers according to the qualifications, not the needs because many teach non-specialized subjects. It is time to put an end to this issue.

T-08: I suggest that the Department of Education conduct a school visitation to ensure the necessary number of teachers are hired in a specific field of specialization.

T-09: The Department of Education will conduct a survey and school visitation to confirm the report's accuracy concerning the number of teachers to be hired in certain subjects.

Relevant Theme 4: Applicant Selection

The purpose of recruitment guidelines is to set the necessary standard for hiring employees. The Department of Education is meticulous in hiring, but the usual problem is unresolved mismatches. In this sense, five out of ten teachers emphasized that:

T-04: The Department of Education should improve the guidelines for recruiting and selecting applicants to avoid mismatches.

T-05: A teacher must be effective in teaching their lesson. Sometimes, I also wonder if I would effectively teach a subject I lack knowledge of. I am not disappointed because, although it is hard at first, eventually, you learn to love these changes.

T-07: I suggest improving the applicant selection during the recruitment process.

T-09: The DepEd recruitment needs to be improved.

T-10: The Department of Education is expected to provide quality education, which means it must hire teachers according to a set of standards during recruitment and selection.

The Relevant Themes on the Lifeworld of the Teachers in Teaching Non-specialized Subject/s

Relevant theme 1: Passion for Teaching

A passion for teaching involves a deep commitment to educating and inspiring students. It goes beyond simply conveying information; it includes nurturing curiosity, encouraging critical thinking, and fostering a love for learning. Passionate teachers are dedicated to their students' success, constantly seeking new ways to support and challenge them and often going above and beyond to impact their lives positively. A teacher's passion enriches the educational experience and helps students develop a love for learning that can last a lifetime. To maintain passion, qualities like commitment, resilience, and effectiveness are developed through ongoing professional conversations and upheld by the active support of a community of practice (Wenger, 2007, as cited in Rampa, 2012).

Passionate teachers derive joy from the entire teaching and learning process, not just the results. They are willing to experiment with various teaching methods, engage in ongoing professional development and stay abreast of new research and educational trends, put in extra effort to understand the unique needs, strengths, and interests of each student, relate a lively and stimulating classroom environment where students feel excited to learn and participate and often encourage collaboration among students (Pottinger, 2024). When teachers show their passion for a subject, it can be contagious, inspiring students to develop a similar enthusiasm.

Passion involves a strong inclination and willingness to dedicate time and energy to an activity that an individual enjoys or considers meaningful (Carboneau, Vallerand, Fernet & Guay, 2008, as cited in Serin, 2017), often demonstrated by going above and beyond—such as putting extra effort into lesson planning, supporting students, and engaging in professional growth.

Thus, passion for teaching can enrich the profession and enhance a teacher's effectiveness; it is not the only factor that makes a good teacher. A combination of professional competence, interpersonal skills, professional attitudes, reflective practice, and collaboration are all critical components of effective teaching.

Relevant theme 2: Personal Growth and Open-mindedness

Out-of-field teaching, where educators are assigned to teach subjects beyond their formal training, has often been viewed as a challenge or a limitation within educational systems. This unfamiliar terrain usually demands intensive learning, research, and preparation. Teachers who remain receptive to new ideas, methods, and perspectives are better equipped to adapt to unfamiliar subjects. Rather than

viewing the assignment as a deficit or burden, open-minded educators see it as an opportunity to grow professionally and diversify their teaching portfolio. As they navigate new content and pedagogical strategies, teachers build subject knowledge, resilience, and adaptability, vital for continuous personal growth. According to Du Plessis (2020), educators in out-of-field roles often acquire deeper insights into the subjects they teach, expanding their competencies beyond their original training. Continual interaction with unfamiliar content encourages intellectual curiosity, sparks creativity, and builds confidence. As a result, teachers often enhance their capacity to relate to students and develop cross-disciplinary lessons, ultimately strengthening their overall teaching approach.

It shows that teachers assigned to subjects outside their expertise often deepen their understanding, particularly in the subjects they teach. Du Plessis (2020) also noted that these out-of-field teachers show genuine interest in their teaching. They view acquiring new knowledge as an opportunity and believe that teaching a subject they have not yet mastered will benefit their future as educators. According to Arendain and Limpot (2022), it is an opportunity to deepen understanding of a particular subject and pedagogical knowledge as a teacher. In addition, although out-of-field teaching may seem intimidating at first, it offers valuable opportunities for growth to educators who approach it with openness. This experience can lead to unforeseen personal and professional development, fostering increased empathy, adaptability, and enhanced teaching skills.

Relevant theme 3: Responsibility

Responsibility involves being accountable for one's actions, fulfilling one's duties, and understanding the impact of those actions on others. It includes personal accountability, dependability, moral and ethical conduct, awareness, and thoughtful decision-making. As noted by Jensen and Kiley (2000), when a teacher is tasked with educating someone already knowledgeable about teaching, they must possess a broad range of teaching skills and the ability to apply them effectively in various situations (as cited in Gunduz, 2016).

Gurus are the third teacher of students at school, guiding students in exploring secular and religious knowledge. Secular encompasses subjects like science, mathematics, literature, history, and the arts and aims to cultivate analytical thinking, the ability to solve problems, and a thorough comprehension of the natural and social world. At the same time, religious knowledge involves teachings related to spirituality, morality, and various spiritual traditions. It helps students understand ethical values, cultural heritage, and different religions' diverse beliefs and practices. Teachers' responsibilities are crucial in ensuring their students' academic success and personal development. In addition, a teacher is also responsible for creating a supportive and inclusive learning environment for every student while recognizing and valuing their influential role.

A teacher can shape students' conversations, thinking patterns, and future selves. Fulfilling social responsibility means that a teacher should care for their current students and guide, prepare, and help them find their place in the future community (Sihem, 2013). Teachers ensure that every student feels safe, respected, and valued in the classroom, help students overcome challenges and build confidence, aware of and respect the diverse backgrounds and needs of students, prepare students to be active, informed, and responsible members of the society, and encourage participation in community service, social issues. Furthermore, teachers contribute to academic achievement and play a crucial role in shaping students' character and preparing them for a meaningful role in society.

Relevant theme 4: Insufficient knowledge

Insufficient knowledge refers to a gap in specific areas of expertise. For instance, individuals focusing heavily on science and engineering may have a limited understanding of the humanities and arts. In contrast, those studying the humanities may lack knowledge of natural sciences.

Additionally, many people may be unaware of nutrition and medical expertise (Pandey, 2021). When teachers feel insufficient knowledge in certain areas, it can impact their effectiveness and confidence in the classroom. Addressing knowledge gaps enhances teaching effectiveness and demonstrates a commitment to continuous improvement and student success. This finding was reinforced by the research conducted by Cinkir and Kurum (2015). Teachers who instruct subjects they have not mastered fear that the knowledge they impart may not be sufficient to impact their students' futures.

Furthermore, teachers must be proficient in their subjects to ensure high-quality teaching and education. In the 21st century, professionals are expected to possess advanced skills in their field and showcase excellence in their specialization.

Addressing and overcoming includes professional development, collaboration, research and study, feedback and reflection, subject mastery, and networking to address and overcome gaps in knowledge.

Relevant theme 5. Acceptance

Accepting a role in teaching non-specialized subjects can be challenging, especially if the subject matter is outside your primary area of expertise. Teaching an unmastered subject is challenging for a teacher (Arendain & Limpot, 2022). The acceptance and readiness to teach Physical Science can be inferred from the original quotes, which suggest they are open to embracing the challenges of managing different subject components.

Moreover, these challenges help them become better prepared for any aspect of teaching that needs to be addressed before the class begins. They are aware of their weaknesses, which makes them more receptive to their role and better equipped to fulfill their responsibilities as educators in the teaching and learning process. A study by Luft et al. (2020) highlights that teachers are adequately

prepared when teacher preparation policies are implemented in the context of out-of-field teaching.

Teachers should embrace the challenge by approaching non-specialized subjects with curiosity and a willingness to learn, being flexible and open to adapting teaching methods to fit the new subject area, building knowledge, leveraging existing skills, seeking support, engaging students, continuous improvement, and professional growth. By accepting the role with a positive attitude and taking proactive steps to build knowledge and skills, you can effectively teach non-specialized subjects and provide valuable learning experiences for your students.

Relevant theme 6: Self-confidence

Studies have demonstrated that teachers' beliefs in their teaching abilities influence their approach to teaching students. Confidence in the classroom enhances job satisfaction and empowers teachers to act with more assurance. They become more open to experimenting with new ideas and strategies and are better equipped to handle unforeseen challenges. Hasper (2023) noted that teacher confidence, which typically grows over time, is linked to belief in one's teaching abilities. Even for experienced educators, teacher confidence can fluctuate as the context highly influences it.

These results contrast with Kola and Sunday (2015), who observed that teachers assigned to teach subjects beyond their area of expertise often lack confidence, which is evident in several ways. It includes difficulties preparing lesson plans, selecting or creating activities and analogies to enhance student learning, addressing student questions, setting up lab experiments, and igniting students' interest and enthusiasm for the subject.

It was concluded by Shaplin (2014) that out-of-field teaching is a major concern that can affect teachers' effectiveness. He also highlighted that educators lacking the necessary expertise and experience in their teaching subjects face considerable challenges. The number of out-of-field teaching cases rapidly rises, negatively affecting students' learning outcomes. The increasing number of these cases indicates the unjust organization of teachers (Zhou, 2012).

Relevant theme 7: Difficulty

The theme is supported by the study of Rebuscas (2022), which found that teaching subjects outside a teacher's specialization negatively impacts their instructional competence. It significantly affects students' overall academic performance. Teachers assigned to unfamiliar subject areas face added burdens due to the extra preparation required. Moreover, issues such as ineffective teaching, inability to address students' questions, limited knowledge shared, irrelevant examples, and uncertainty about lesson content were commonly observed during instruction—factors that greatly diminish teachers' confidence in their teaching.

Additionally, the participants shared that teaching out-of-field subjects is particularly difficult when unfamiliar with the content, as it demands significant preparation. It is especially true for those new to the profession, as teaching the subject effectively requires thorough reading and research. Teachers also found adapting to the subject's academic content challenging, especially when teaching older students. As a result, they felt compelled to study more to meet the demands of the class. Teachers face challenges in responding to students' questions, particularly when they cannot adequately prepare for the day's lesson. Participants also reported struggles asserting authority, largely due to students' perception that they are not subject experts and the minimal age difference between them. Lastly, participants encounter challenges in using suitable teaching methods, as some are not graduates of teacher education programs. Additionally, others struggle with teaching due to the significant differences between instructing college students and elementary students (Bugwak, 2021).

The Relevant Themes on the Contexts of the Teachers' Lived Experiences in Teaching Non-Specialized Subject/s

Relevant Theme 1: Mentally Disturbed

This theme explores the complexities of mental health conditions, including their symptoms, impact on individuals, and societal perceptions. Teaching out-of-field can lead to significant stress, anxiety, and feelings of inadequacy for teachers. It can impact their overall mental health and well-being. Teachers who are not specialized in a subject may feel unprepared and overwhelmed, leading to feelings of anxiety and insecurity. Understandably, teaching outside of one's specialty could be stressful and challenging. It is like being asked to perform a task you're not fully equipped for, which can lead to feelings of inadequacy and overwhelm. Teaching multiple subjects or unfamiliar content can be stressful, but this stress is typically related to workload, preparation, and the learning curve rather than an indication of mental health issues.

Additionally, a study in Malaysia by Ghani, Ahmad, and Ibrahim (2014), as cited by Basalan et al. (2024), found beyond the negative effects of subject misalignment on students. These teachers lack familiarity with the subject and often face ridicule from their students, leading to mild strain and stress. Furthermore, many teachers in Australia face daily frustration due to their lack of familiarity with the subject content, ultimately leading some to consider resignation (Hobbs et al., 2022). According to Basalan et al. (2024), this misalignment increases professors' workload and stress levels threefold because teaching the competencies is difficult. After all, they are not experts in the topic due to the course's lack of exposure and background. Tope (2023). It might be difficult to teach more than one subject, especially for secondary school instructors who are generalists or nonspecialized; they may experience stress, burnout, and reduced job satisfaction.

To address this issue, teachers need the support and resources to feel confident and prepared, regardless of their subject. Providing personal support helps co-teachers feel valued and confident. Encouragement and positive feedback can boost morale and job satisfaction, leading to a more collaborative and supportive teaching environment. Willis and Willis (2013), as cited by Raymundo (2021), stated that providing task support to new teachers gives them the confidence they need to complete their lesson plans, assignments, etc., is one of the reasons this type of support is crucial since it undoubtedly helps the teachers figure out what to do when they run into issues and challenges while completing tasks. Moreover, coping strategies include seeking colleague support, modifying teaching methods, and engaging in professional development activities (Lai & Leung, 2019; Smith & O'Neill, 2017) as cited by Tope (2023). In summary, professional development opportunities, personal support, and/or even just a chance to collaborate with other teachers who specialize in the subject they are teaching are fundamental in creating a productive co-teaching environment, helping build trust and confidence, lessen the burdens felt by the teachers, clarify roles, and ensure that teaching strategies are well-coordinated, ultimately enhancing the learning experience for students.

Relevant theme 2: Sleep Deprivation

Sleep is vital to a teacher's cognitive function, mood, and overall performance (Ridenour, 2023). Good sleep is not just a luxury for teachers but a fundamental necessity for their well-being and effectiveness.

Sleep deprivation can significantly impact teaching effectiveness, especially involving non-specialized subjects. It can exacerbate the challenges of teaching a subject they are less familiar with, leading to a cascade of negative impacts on the teacher's well-being and the quality of instruction. The effect of sleep deprivation on teaching non-specialized subjects hinders cognitive function, increases moodiness, stress, and anxiety, can impair a teacher's ability to empathize with students, and may have difficulty managing classroom behavior and burnout.

In one study, Sanchez-Narvaez et al. (2023) discovered that teachers with poor sleep quality (38%) were more likely to experience emotional dissonance, social alienation, and failure at work compared to educators who get enough rest. Moreover, he discussed that Teachers who experienced poor sleep quality were about twice as likely to report back, wrist, ankle, and foot pain and had higher body mass index (BMI) values.

Teachers should prioritize sleep to mitigate the effects of sleep deprivation. Effective time management strategies can help balance the demands of teaching non-specialized subjects with other responsibilities, collaborate with colleagues, seek support, and engage in self-care practices.

Relevant theme 3: Physically Unfit

When teachers are physically unfit to handle out-of-field teaching assignments, it adds another layer of complexity to the already challenging situation. Physical unfitness, whether due to health conditions, fatigue, or other factors, can further impact the quality of instruction and the teacher's well-being. Hence, physical fitness can play a role in improving teacher well-being, managing stress, and boosting energy levels.

According to Caldis (2022), participants in the study revealed that out-of-field teaching was the most challenging aspect of their transition, and they felt that their initial teacher education (ITE) had not sufficiently prepared them for the challenges they encountered. In addition, the teaching timetable of one early-career teacher was 100% out-of-field. According to one early-career educator, she felt so burdened by the workload related to learning and instructing new things that they claimed classroom management was a worse issue in their out-of-field classes, which further increased the pressure and that leaving the study was their only choice. Teachers in this situation often feel overwhelmed, underprepared, and anxious. Thus, physical fitness can play a crucial role in mitigating these negative impacts. For teachers facing the challenges of out-of-field teaching, maintaining a healthy level of physical fitness can be a valuable coping mechanism. Promoting physical fitness among teachers, especially those in out-of-field positions, could potentially contribute to increased retention by matching these teachers to subjects or roles that are within their expertise, ensuring flexible hours and breaks, offering counseling or psychological support for teachers facing physical challenges, and provide professional development sessions like stress management and ways to conserve energy during teaching.

The Relevant Themes on the Way the Participants See Themselves in the Future

Relevant Theme 1: Teaching Specialized Subject

Teaching a specialized subject involves in-depth knowledge and expertise in a specific study area. Effective teachers have many characteristics that recognize their quality. These traits include general academic aptitude, training and credentials, teaching experience, and content knowledge (Policy Studies Associates, 2005, as cited in Attia, 2017). A teacher's mastery of content knowledge covers a deep understanding of the subject matter itself; pedagogical content knowledge refers to the ability to present subject matter in ways that are both understandable and engaging for students, and curricular knowledge encompasses the knowledge of the curriculum and instructional materials related to the subject.

Since subject-specialized teachers have spent years learning and expanding their knowledge in a field of study, they exhibit greater enthusiasm when teaching their subject of specialization (Fromyhr, 1995) and use their expertise in the subject to help students produce

work of superior quality (Byrne, Ewing, Macdonald, Sheridan, & Wilson, 2008 as cited in Attia, 2017).

Relevant Theme 2: Teaching Non- specialized Subject

The effectiveness of instruction largely depends on the quality of teachers. The issue of students being taught by out-of-field teachers—individuals who lack specific qualifications in the subject they are teaching—represents a major concern in education systems globally. This mismatch between the subjects taught and a teacher's professional background can negatively impact the quality of education and student outcomes. The issue of out-of-field teaching is a key factor contributing directly to the decline in instructional quality (Ingersoll, 2003) and is closely related to factors such as the administrative practices of assigning teachers and organizational characteristics of schools rather than the inadequacies in the number of teachers prepared or in the quality of preparation (Ingersoll, 2002) (as cited in Kim, 2011).

Teachers who are assigned to teach subjects in which they lack training may find that their preparation time is distributed differently across all of their courses and that they need to spend less time on other classes to prepare for the course or courses for which they lack experience (Kola & Sunday, 2015). According to Ingersoll (2003), the misalignment of teachers was an accepted administrative technique, so many school principals in the United States assigned teachers to teach out-of-field subjects because it was often more convenient, less expensive, or less time-consuming than finding fully qualified teachers. Indeed, one of the consistent findings in educational research is that out-of-field teaching often compromises the quality of instruction, regardless of the teachers' overall academic qualifications. Even if a teacher holds a strong academic background or a high level of education, teaching a subject outside their area of expertise can lead to several challenges that undermine the effectiveness of their instruction.

While there is limited research on the phenomenon of out-of-field teaching on an international scale, the existing studies highlight that it is a widespread issue across various educational systems worldwide. Yet, in many regions, studies are scarce specifically focused on out-of-field teaching within local contexts. As a result, Bayani and Guhao, Jr. (2019) highlighted that this phenomenon exists in all schools.

While out-of-field teaching is generally viewed as a challenge due to its potential to compromise the quality of instruction, there can be some positive impacts in certain contexts. These positive effects are often context-dependent and may arise under specific conditions where teachers and schools adapt creatively. It may encourage teachers to expand their knowledge base and develop new skills. Teachers from different subject areas may bring fresh perspectives and innovative approaches to the subjects they teach out-of-field. It often necessitates collaboration with colleagues who are experts in the subject, can help schools and teachers become more adaptable and flexible, and out-of-field teaching can ensure that students still receive quality education.

The Relevant Themes on the Program that Can be Developed to Address Subject-Specific Mismatching

Relevant Theme 1: Policy Implementation

Policy implementation is the process of implementing a government policy or plan. Effective implementation is crucial for ensuring that policies achieve their desired effects and benefit the target population. It requires careful planning, resource management, stakeholder engagement, and continuous monitoring and adaptation. While challenges are inevitable, a well-executed implementation strategy can overcome these obstacles and ensure that policies achieve their intended impact.

In the recent K to 12 Program, the teacher shortage presented further difficulties in implementing the Senior High School program. Teachers who concentrate on science face the challenge of instructing subjects outside their expertise or concentration (Abella, Co, & De Jesus, 2021). This situation can arise due to factors such as teacher shortages, scheduling constraints, or school policies requiring teachers to cover subjects beyond their primary expertise.

Under RA 10533, also known as the Enhanced Basic Education Act of 2013, the State shall create, uphold, and encourage a comprehensive, sufficient, cohesive educational system pertinent to the demands of the populace, the nation, and society. To achieve this, the State shall establish an effective basic education system that fosters the development of productive and responsible citizens equipped with the essential competencies, skills, and values necessary for lifelong learning and employment. Thus, this reveals that teachers played a big part in the students' academic achievements. Raymundo (2021), as stated in Section 16 of the Education Act of 1982, highlights that every teacher must (1) Perform their duties according to the school's philosophy, goals, and objectives and (2) Be responsible for the efficient and effective attainment of defined learning objectives to support national development goals, within the limits of available school resources. On the other hand, Republic Act No. 9155, known as the "Governance of Basic Education Act of 2001," states that the State encourages local initiatives to enhance schools and learning centers and provides a framework through which these improvements can be achieved and sustained. Thus, the ongoing nature of this Act focuses on solving the identified problem.

Relevant Theme 2: Conduct Survey

To effectively conduct a survey, we must define the purpose, target audience, and specific questions. It involves several key steps to ensure that you gather useful, reliable, and actionable data. In this regard, numerous surveys have shown that out-of-field teaching is a major global and local issue in the education sector. In many countries, factors such as teacher shortages, budget constraints, or changes

in curriculum requirements can lead to educators being assigned to teach subjects outside their expertise.

According to research done in Western Australia, in 2007–2008, 28% of teachers taught students subjects unrelated to their areas of expertise (Weldon, 2016). The statistical analysis reveals that there are 1,410 secondary teachers nationwide, and out-of-field teaching is prevalent in Korea, highlighting the need for immediate action to address the escalating issue (Kwak, 2019 as cited in Arendain & Limpot, 2022). Lopez Jr. and Roble (2022).

Also, in Washington, USA, the number of educators assigned to teach subjects that do not align with their education keeps growing, even though almost all have at least rudimentary qualifications. The issue of out-of-field teaching is significant in the Philippines and has been a longstanding concern within the education system, particularly within the Department of Education (DepEd). In the Philippine context, out-of-field teaching often occurs due to various factors such as teacher shortages, limited resources, and the need to fill teaching positions quickly.

Out-of-field teaching, where teachers are assigned to teach subjects, they have not been trained for, is a widespread issue with various contributing factors. Several studies revealed that teacher shortages, budget constraints, administrative mismanagement, curriculum changes, and teacher qualification and teaching assignments are the most common reasons for this issue.

Mitigating out-of-field teaching requires a multi-pronged approach that involves various stakeholders, including teachers, school leaders, researchers, subject associations, universities, teacher unions, and policymakers. Several Research findings revealed that in the education system, strategies that can reduce the incidence of out-of-field teaching are as follows: teacher training and professional development, recruitment and retention strategies, policy reforms, data-driven decision-making, collaborative teaching models, and supportive school leadership.

Relevant Theme 3: School Visitation

School visitation by the Department of Education (DepEd) key personnel is crucial for ensuring the accurate assessment of teacher needs across various fields. It highlights the DepEd's focus on addressing teacher workload and increasing the number of non-teaching personnel. It allows for a comprehensive understanding of the challenges and opportunities within individual schools and facilitates the development of targeted solutions.

DepEd can help drive meaningful changes that enhance educational outcomes, improve teacher effectiveness, and transform schools into thriving learning communities by integrating school visitations into a broader professional learning plan. According to Dias, school visits are not about judging but about learning from each other and sharing best practices. These learning visits can be incorporated into longer-term partnerships, in which teachers work together both before and after visits to provide input on plans and what they observe in action as those plans are carried out (Corrow & Gagnon, 2023).

Site visits offer a valuable opportunity for schools to enhance teacher professional development, fostering a culture of knowledge exchange, innovation, and continuous improvement, especially in the issue of out-of-field teaching. By carefully planning and incorporating site visits into their work development strategies, educational institutions can enable educators to investigate various methods, expand their pedagogical repertoire, and ultimately enhance their students' learning experiences.

School visitations focusing on out-of-field teaching, where teachers are assigned to teach subjects or grade levels outside their area of expertise, are essential for maintaining educational quality and ensuring that students receive instruction from qualified educators. Through school visits, key personnel can review teacher assignments to identify instances of out-of-field teaching, evaluate whether teachers possess the necessary qualifications and certifications for the subjects or grades they teach, and support professional development. DepEd personnel can recommend redistributing teachers to better align with their areas of expertise. By addressing out-of-field teaching through focused school visitations, DepEd can work towards ensuring that all students receive the best possible education, delivered by teachers who are well-equipped to teach their assigned subjects and grade levels.

Relevant Theme 4: Applicant Selection

The DepEd's applicant selection process is a comprehensive and systematic approach that aims to ensure the recruitment of highly qualified teachers who can contribute to delivering quality basic education in the Philippines. Devi and Comi (2018) define selection as putting the right person on the right job (as cited in Pantoja & De Castro, 2023). This system is designed to prioritize merit, competence, and fitness, aligning with the principles of the 1987 Philippine Constitution and the Civil Service Commission (CSC).

In DepEd, the applicant selection process for teacher positions is where the Schools Division Superintendent (SDS) appoints qualified applicants to vacant teacher positions based on the RQA and the specific needs of schools within the division. According to Tucker (2010), the primary issue in hiring, selection, and employee promotions ought to be determined by equity, fitness, and merit (as cited in Pantoja & De Castro, 2023).

When advertising teaching positions, it is important to provide clear and detailed job descriptions that specify the subject area, grade level, and qualifications required, and ensure that their educational background, certifications, and professional experience align with the subject or grade level of the vacancy. The selection process of applicants should involve school administrators, subject matter experts, and community representatives to ensure that the chosen candidates meet the needs of the school and its students. Also,

encourage and support ongoing professional development for all teachers, including those who may have been hired for out-of-field positions, to help them gain the necessary qualifications and expertise over time.

If out-of-field teaching is unavoidable, ensure that these teachers receive strong support, mentoring, and professional development to help them succeed in their temporary roles. By providing the necessary resources and guidance, schools can ensure that out-of-field teachers can effectively fulfill their temporary roles and provide quality education to students.

Conclusions

The lifeworld of teachers teaching non-specialized subjects is their being a science teacher. The themes represent the positive and negative sides of the coin and stand the ends. The non-specialized subjects given to them seem to impact the result positively, but behind this is the reality of putting the quality of education at stake. Teachers are compassionate in teaching, so they give their best to perform their duty, but put them in situations where they do not have any options. The teacher also perceives difficulty, a lack of cognitive challenge, and inadequacy and incompetence, bringing the subject to life for students who do not know anything about it.

Moreover, the context of the teachers' lived experiences in teaching non-specialized subjects revealed their compassion for teaching but also portrayed their struggles and sacrifices affecting their personal relationships and health conditions.

Consequently, teachers handling non-specialized subjects identify themselves in the future as teachers in the subject of their specialization. In this sense, teachers wanted to teach confidently by sharing their expertise with the students. Also, the teacher participants expressed that they foresee themselves teaching subjects outside their area of expertise, especially in situations where subject assignments are not properly organized or when there is a potential shortage of teachers.

Therefore, to address the out-of-field teaching, the participants suggested three important steps for the Department of Education officials such as conducting a survey, facilitating school visits, and improving the implementation of the recruitment process for applicants.

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