

Contexture of out-of-field teaching in selected public national high schools: Implication for practice and policy formulation

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Abstract

The emergence of out-of-field teaching has become evident in the Department of Education. This poses wide range of research gaps that need investigations. Consequently, this research study was implemented with the aim of exploring the phenomenon of out-of-field teachers in Santa Cruz, Ilocos Sur. The study used a qualitative case study research design that utilized aide-mémoire as the main data gathering tool; the semi-structured interview questions was based on established a priori codes to ensure answer relevancy in terms of covering the four foci of the study: emergence of out-of-field teaching, difficulties encountered, gains acquired, and implications of findings for practice and policy formulation. Ten out-of-field teachers from Santa Cruz, Ilocos Sur were interviewed. Results of the thematic analysis discovered that out-of-field teaching was caused by the shortage of teachers. Likewise, the study revealed that teachers struggled in terms of using appropriate teaching strategies. They also became adaptable due to the exposure of unfamiliar subject areas. Hence, support to teachers should be the priority of future policies to ensure that out-of-field teachers can manage the demands for their roles.

Keywords: out-of-field teaching, emergence, difficulties, gains, policy formulation

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1. Introduction

Education is essential in our life because it gives us the chance to improve our ways of living. To achieve this, we need the support and guidance of our teachers. They play a vital role in our life and that is to provide the best possible educational experience for their students, equipping them with knowledge, skills, and values they need to succeed academically and in life. A teacher's knowledge of the subject matter is the heart of his or her teaching career (Breen et al., 2018). An effective teacher must have a vast knowledge of the subject matter that he or she teaches. However, what if a teacher teaches a subject that he has not even mastered? This gives birth to the emergence of out-of-field teachers. Out-of-field teaching is a global issue where teachers are assigned to teach subjects outside their area of expertise or training (Goos et al. 2021). This practice can arise when there is a mismatch between the supply and demand of appropriately qualified, subject-specialist teachers, leading to insufficient numbers of specialist teachers. These teachers are referred to as out-of-field teachers: generally, such teachers possess a teaching qualification but have limited advanced studies in the content and little or no specific training in the subject they are assigned to teach.

In the United States of America, the issue of out-of-field teaching has been recognized as a problem for more than half a century and the topic is a subject of much current domestic and international research, (Ingersoll, et al 2019). In the study conducted at West Australia, they found out that in the year 2007-2008, 28% of teachers taught subject matter that was not related to their specialization (Weldon, 2016). Among 79 countries, the Philippines ranked lowest in reading comprehension and second lowest among the same countries in Science and Mathematics. Thus, despite everyone's effort to pursue education, the DepEd emphasized that the problem that dramatically affects their quest for quality education is mainly attributed to the few numbers of teacher-education graduates who are specialists or prominent in such subjects. Hence, it is found that teachers' performance on knowledge assessments is poor (Demombynes, 2018).

In the study of Du Plessis (2017), she confirmed that out-of-field teaching is widespread and affects teachers' teaching efficacy. In addition, teachers teaching unspecialized subjects tend to have low self-esteem (Du Plessis, 2019). Teaching a low-skilled topic can have a negative impact on a teacher's psychological well-being, which can hinder his students' learning and teaching (Akram et al., 2017). Out-of-field teaching is more difficult and stressful on teachers, and they are, therefore, more likely to leave the profession (Donaldson and Johnson, 2010).

Out-of-field teaching, defined as assigning teachers to teach subjects outside their field of specialization or expertise (Katigbak and Andal, 2023); this implies the lack of background knowledge, and the additional research required by teachers before the beginning of the class add stress and fatigue, which may result in burnout. Several studies have shown that teaching across specialization affects a teacher's sense of identity and overall wellbeing, teaching performance, and knowledge of self-worth. Meanwhile, many teachers are teaching outside their field of expertise. This is because in an institution there's a few numbers of specialized teachers and there's a need to teach various subjects. Another observation is that the head of institutions gave various subjects to non-specialized teacher because it can help them to widen their knowledge on different concepts. Furthermore, it was observed that the researcher experienced difficulties in teaching due to subjects she does not master with. It gave her additional time to read and learn new concepts new to her and gave her low esteem in teaching. It is hard also for her to inject such strategies into teaching that is suitable for the whole class.

Undeniably, out-of-field teaching is one of the major dilemmas of teachers nowadays because of too many reasons. This ignited the interests of researchers to investigate this phenomenon. Review of this studies suggested that future studies should be conducted to investigate the underlying factors of out-of-field teaching to be able to

provide the solutions (Buguak, 2021). Also, the difficulties of teachers who are in such setting should be investigated (Pacaña et al., 2019). Hence, this study was conceptualized and implemented. Out-of-field teaching is one of the challenges faced in the education system today as classroom teachers were assigned to teacher subjects, they do not really master due to inadequate training and qualifications. Philippines were also exposed to this challenge as Adbheadhoncho (2023) points out to the need of at least 150,000 teachers in the Department of Education to meet the demands of the teacher shortage in the country. This is partly due to the increasing student population and mainly to the addition of 2 additional school years for Senior High School.

This study was premised on the Lewin's (1936) Person-Environment Fit Theory that describes the importance of congruency on an individual's preference and his/her work to produce positive outcomes in terms of satisfaction, performance, and commitment. This is parallel to what Arendain and Limpot (2022) pointed out that newly hired teachers are affected heavily by the negative effects of out-of-field teaching as they struggle to adapt and choose the right strategies for subjects they do not master.

Relative to the aforementioned theory is Zone of Proximal Development (ZPD), Vygotsky (1931) describe ZPD as the gap between a student's initial level of problem-solving skill and a potential level of development with the help of a teacher that provides scaffolding through learning activities and learning resources. The instruction paradigm shifted to student-centered learning; therefore, teachers are tasked to plan activities that nurture cooperative learning. Relative studies revealed that activities helped students understand the lesson. This poses a problem if teachers are not well acclimating to the subject, Bajar et al. (2021) reported in their study that out-of-field teachers manifested difficulties in terms of preparing and delivering the lesson and more importantly, constructing assessments that properly measures students' progress.

As a result, out-of-field teachers do not have adequate confidence in teaching subject areas assigned to them, this has observed by Castro et al. (2023) as teacher respondents confirm that they are not even sure of themselves if they can teach the subject and result to low motivation as they still need to study the lesson of the subjects assigned to them. This can be traced down to Bandura's (1995) Self-Efficacy theory that confidence is built when an individual successfully performed a task or achieved a goal and serves as a drive or motivation to execute new task. This explains the low level of motivation attained by out-of-field teachers as they do not have the confidence due to having low mastery to the lesson.

Finally, this study intends to identify the factors that results to out-of-field teaching and its effects to teachers in the field as the study hinges on the ideas of Lewin, Vygotsky and Bandura as its foundational theories to describe their performance in terms of their preference of subjects taught, quality of scaffoldings they provide to address learners' needs and their perceived level of confidence.

2. Methodology

Research Design - This study employed qualitative case study as its research design. Case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clear (Yin, 2018). The researcher found this research design suitable for the study because of its ability to provide in-depth understanding of issues within their real-life context. Through this design, the study described the factors that contribute to the emergence of out-of-field teaching, the difficulties of out-of-field teachers, and their gains from their experiences. Finally, it also provided rich qualitative data that can inform and address educational practices through examining personal experiences of out-of-field teachers.

Sources - The study was conducted at Dili National High School and Amarao National High School in Santa Cruz District in Santa Cruz, Ilocos Sur. The key informants of the study were high school teachers who were chosen using criterion sampling in which three criteria were set; this was to ensure relevance and depth of data. First, they are teaching or had taught subject areas that are not their major of specialization for at least two years. Second, they are holding permanent appointments. Third, they are willing to participate in the study. With these

criteria, the 10 teachers served as the key informants of the study.

Inclusion Criteria: Teachers with at least two years of teaching experience given teaching loads outside their field of specialization, holding a permanent position and willing to participate in the interview process.

Exclusion Criteria: Teachers who are teaching subjects in line with their field of specialization and teachers holding temporary or substitute positions.

Research Instrument - In gathering pertinent data, aide-mémoire – which is a semi-structured interview guide was the main data gathering tool. The aide-mémoire was formulated based on the interview guide that contains a priori codes. These a priori codes served as bases of the questions will be asked to the participants during the interview; these questions ensured that all relevant aspects of the study were covered and allowing exploration of insights that emerge during the interview. Finally, robotfoto form was used to gather demographic data of the target key informants to provide detailed profile of participating teachers; this was used before the actual interview.

Data Gathering Procedure - In conducting the study, the researcher secured permission from concerned agencies and officials. Then, the robotfoto and aide-mémoire were constructed. After the approval to conduct the study, the researcher used the robotfoto to determine the possible participants of the study. After using the robotfoto, the target participants were approached personally in which the nature and scope of the study were explained to them. Likewise, the consent of the participants was sought through an informed consent form. They were assured also that participation in the study is voluntary, and they can withdraw anytime they want. The researcher also ensured that all data to be gathered in this study shall be treated with utmost confidentiality and will only be used for research purposes.

To ensure the reliability and validity of the collected data, several strategies were employed. Triangulation was utilized by gathering information from multiple sources and comparing the responses. Additionally, member checking was conducted to allow participants to review and confirm the accuracy of their interview transcripts. Furthermore, the schedules of the interview were set based on the availability of the participants. Then, the face-to-face individual interviews were conducted and lasted for at least 20 minutes. After each interview, the audio recordings were transcribed. The interview transcripts were spot check to establish the accuracy and correctness of the gathered data. Finally, the transcribed interviews were analyzed through thematic analysis. Notably, member checking procedures were followed in this study. These procedures included conducting follow up interviews, returning the interview transcripts to the participants, and sharing the results of the study to them (Azarias, 2022).

Analysis of Data - The researcher used thematic analysis to gain insight and knowledge from the data gathered. It is a method used to identify, analyze, and report patterns within data. In this process, the researcher assigned codes to segments of data based on established themes in the priori codes. Notably, the 6-phase coding framework for thematic analysis was used to identify themes and patterns in the data (Braun & Clarke, 2006). The phases are familiarization of data, generation of codes, combining codes into themes, reviewing themes, determining significance of themes, and reporting of findings (Braun & Clarke, 2013).

3. Results and Discussion

3.1 Contributing Factor to the Emergence of Out-of-Field Teaching

Shortage of Teachers. This theme shows the systematic problem of insufficient teachers in schools that leads to out-of-field teaching as a practical solution to make sure that all subjects are covered. Likewise, this theme emphasizes that teaching assignments outside of one's expertise are often an outcome of necessity rather than choice, driven by the urgent requirements of the school to provide. Evidently, the rise of teaching outside the field of specialization is primarily influenced by constraints within the institution. Respondents stated that they were tasked to teach subjects beyond their expertise because of a lack of qualified teachers for specific subjects. Policy interventions are essential to tackle these challenges. Educational authorities should examine implementing

targeted recruitment and training programs to raise the number of specialized teachers. Furthermore, offering professional development opportunities for teachers can help reduce the negative effect impact of teaching outside their expertise by providing them with the necessary knowledge and skills.

The scenario is not exclusive to Santa Cruz District. In fact, Goos et al. (2021) highlighted that a mismatch between the supply of specialized teachers and the demand in specific subjects often lead in teachers teaching outside their field of specialization. This worldwide issue is worsened where educational resources and teacher training programs are limited, leading to reliance on available teachers to handle all subject areas regardless of their qualifications. Furthermore, the scarcity of specialized teachers and the subsequent rise of out-of-field teaching assignments can have a great impact on the quality of education. Weldon (2016) showed that out-of-field teaching can have a depressing impact on student outcomes because the teachers may not possess the necessary comprehensive content knowledge to effectively teach certain subjects. The issue is particularly troubling in subjects like science and mathematics which need specialized knowledge and a firm basis for student success.

Additionally, Ingersoll et al. (2019) stated that out-of-field teaching is really a persistent issue in the education system with continual shortages of specialized teachers. They underscored the necessity for systematic change to tackle shortages because it can cause a negative impact both to the teachers and performance of the students. Similarly, Weldon (2016) stated that there were nearly 28% of teachers were teaching out of their field of expertise in Western Australia which was credited to a scarcity of specialized teachers. This study is widespread in smaller schools or rural areas, where there are a limited number of teachers, leading to a greater dependence on out-of-field teaching.

Above all, the findings and the literature accentuate that addressing out-of-field teaching is critical to improving student academic performance. Students benefit from instruction by teachers with subject expertise, which can lead to higher achievement levels. Notably, qualified teachers are better equipped to create engaging and relevant lessons, fostering student interest and motivation in learning. Addressing out-of-field teaching is a step toward broader educational reforms that can strengthen the entire education system, ensuring that all students have access to qualified and effective educators. By prioritizing this issue, we can create a more equitable and effective educational landscape.

3.2 Difficulties of Out-of-Field Teachers in Teaching

Mastering the Lesson. This theme highlights the added responsibility that out-of-field teaching places on teachers who are required to devote additional time and effort to effectively study and teach unfamiliar content. The participants shared that they lack the deep understanding required for effective instruction in unfamiliar subjects, leading to investing their time learning their lessons. Notably, the data indicate that teachers teaching outside their field of expertise significantly increase the assignment for teachers because they indulge so much time and effort in becoming proficient in new material. This additional responsibility not only tests their skill to teach effectively but also affects their self-confidence in conducting lessons. The constant stress on the need for widespread study and preparation underscores the pressure placed on teachers, which could affect their effectiveness inside the classroom and their overall job satisfaction. Therefore, targeted professional development and support systems is really a need to help out-of-field teachers manage the demands in teaching.

Interesting, Du Plessis (2017) also emphasized that teaching outside one's field can lead to diminishing teaching effectiveness and increased stress. Additionally, teachers are more uncertain to execute their lesson well when the subject matter is unfamiliar to them, which leads to negative psychological well-being and their students' academic outcomes. Similarly, Akram et al. (2017) pointed out that teaching outside one's field can be challenging for teachers as it demands learning new content while trying to teach it to students. Similarly, Loughland and Nguyen (2020) highlighted that teacher teaching outside their field of expertise affects their confidence and student learning, as it requires them to devote much time and effort to master unfamiliar subjects. This problem is intensified by insufficient support, which can result in a decrease in effectiveness in teaching and heightened

stress among teachers.

Finally, Ingersoll and Collins (2021) underscored that teaching outside their field of expertise not only added to the workload for teachers but also contributes to increased stress and anxiety among them. This situation impedes professional satisfaction and potentially leads to lower retention rates and eventually affecting student outcomes. Hobbs and Torner (2019) also point out that extra time and effort needed to acquire new subject matter when teaching out-of-field can stress teachers' well-being and effectiveness. Nonetheless, this additional responsibility often leads to intensified stress levels, which can reduce the overall quality of instruction and negatively impact the achievement of students.

Choosing the Appropriate Teaching Strategy. This theme highlights the difficulty in selecting effective teaching strategies for subjects outside their field of expertise. They shared that their being out-of-field teacher often demands extensive effort and creativity to achieve effective teaching. Similarly, Sullivan et al. (2020) revealed that out-of-field educators face challenges especially when it comes to choosing right and effective teaching strategies to because of the inadequate content knowledge. Also, Fitchett and Heafner (2021) analyzed that teachers encountered difficulties in developing instructional strategies that are both impactful and stimulating. These challenges frequently lead in the use of less interactive methods, which may hinder students' comprehension and engagement with the subject matter.

Furthermore, Bertrand and Marsh (2022) revealed that out-of-field teachers encounter problems when modifying their teaching methods, specifically in choosing strategies that align with unknown subject matter. With insufficient professional learning, these adjustments can lead to ineffective teaching methods and diminish the performance of the students. Likewise, Young and Warrington (2019) underscored out that teaching in STEM subject faces unique challenges in selecting suitable instructional methods. Educators often encounter difficulty in crafting pedagogical approaches that effectively convey complex content, which can result to student disengagement and reduced performance in these essential subject areas.

Lucidly, the findings of the study suggest that teaching outside one's field poses significant challenges to teachers especially in emerging and applying teaching strategies effectively. Selecting or designing appropriate instructional approaches that align with both the subject matter and the needs of the students are often the challenge of teachers that leads to feelings of uncertainty and frustration. This challenge is intensified by the need to implement various strategies across different subjects, which demand significant creativity and adaptability. Consequently, unfamiliarity with the subject matter can impede the overall effectiveness of teaching and other hosts of virulent problems in the classroom, highlighting the need for specialized training and resources to help teachers in these circumstances.

In fact, Pacaña et al. (2019) further noted that teaching outside one's field can lead to a lower student's achievement, as teachers find it challenging to deliver intricate subject matter in a way that students can understand and engage them. Accordingly, the study conducted in the Philippines found that students who are being taught by out-of-field teachers typically had a lower test score. The author attributed this to the teacher's insufficient content knowledge and confidence in delivering the lesson. Hence, the creativity to craft teaching strategies must out-of-field teachers depend on how to connect to learners (Madden et al., 2021). Yet, the absence of knowledge of the subject matter often led to fewer effective strategies, diminishing engagement of the learners and achievement.

3.3 Gains from Becoming Out-of-Field Teachers in Teaching

Acquire New Knowledge and Skills. This theme highlights the beneficial results of being an out-of-field teacher where they can increase their knowledge base and acquire new skills and improve their overall professional competence and effectiveness. To the participants, out-of-field teachers often develop a broader range of skills by adapting their teaching methods to new subjects, enhancing their overall pedagogical abilities. They also shared that exposure to various content areas may encourage creative and innovative approaches to lesson planning and classroom engagement. Likewise, their experiences led to professional development opportunities.

In the same way, Co et al. (2021) discovered similar results in terms of developing teachers' skills that make them more versatile and effective. To them, these sets of skills they have acquired through this nature of work allowed them to be more flexible and able to adapt in different subjects and teaching methods even though out-of-field teachers often face significant challenges. Similarly, Castro et al. (2023) pointed out that teachers who accepted their out-of-field work tend to develop stronger research and lesson planning skill. This acquired skill not only benefited teachers but also the students as they are exposed to flow of lesson more applicable to them. Likewise, Bajar et al. (2021) also discovered positive result in terms of out-of-field teachers' creativity in terms of engaging the students, teachers became more innovative in their teaching approaches that led to a more dynamic and interactive learning environment.

Undeniably, the result highlights that being an out-of-field teacher offers benefits in terms of adaptability, flexibility and coming up with new teaching strategies despite the challenges brought by out-of-field teaching. It can still be an avenue for opportunities of professional growth and development. Teaching subjects outside their field of specialization helped in expanding their knowledge and made them more resilient, capable of handling different teaching assignments and variety of classroom situations. Hence, school administrators should recognize these potential benefits and provide teachers with more opportunities to develop new skills and explore other possible teaching methods e.g. targeted professional development programs and mentorship.

Develop Adaptability and Resilience. This theme underscores the strength of the teachers to adapt to emerging challenges and become more resilient, that makes them more versatile in their educational careers. To the teachers, teachers who can adapt to new curricula, technologies, and teaching methods are more effective in today's rapidly changing educational landscape. This implies that out-of-field teaching promotes the development of adaptability and resilience among educators, to make them more versatile in their educational careers. By facing and overcoming the challenge of teaching unfamiliar topics, these educators boost their self-assurance and become more adaptable to change, enhancing their capacity to navigate different scenarios in teaching. This development not only aid their career growth but also equips them with the skills necessary to meet the evolving demands of the education sector, ultimately resulting in a more versatile and capable teaching staff.

The result is similar to the study of Van Driel and Berry (2021) which highlighted that out-of-field teaching improves teachers' self-efficacy as they can navigate unfamiliar subjects more effectively which gave them more confidence in their ability to handle content outside their specialization, this has positive impact in their overall effectiveness as a teacher. Additionally, Hobbs and Torner (2019) revealed that out-of-field teachers often develop stronger pedagogical skills because of them having to be forced in adapting new teaching approaches and innovate unique practices. This is reflected on the interviews where respondents report that they became more flexible in lesson planning.

Finally, Hobbs and Torner (2019) affirmed that teaching beyond their areas of specialization compels educators to build stronger teaching skills. The need to adapt to innovative teaching methods and implementing fresh approaches in response to the challenges of teaching outside their field of specialization to enhanced adaptability in making lesson plans, as illustrated in the experiences of the respondents. Gehrke (2020) emphasized the instability and challenges faced in teaching unknown subjects that push educators to cultivate greater adaptability. Clearly, this adaptability not only strengthens their versatility but also fosters their overall career growth.

3.4 Implications of the Findings for Practice and Policy Formulation

The study site just like many regions in the country, especially rural and underserved urban areas, faces significant shortages of qualified teachers in critical subjects like MAPEH, Values Education, Filipino and among others. Likewise, the increasing diversity of student populations necessitates a wide range of subjects and teaching styles, contributing to the assignment of teachers to out-of-field positions. Budget limitations often restrict hiring practices, forcing schools to rely on out-of-field teachers to fill vacancies, particularly in high-need areas.

Notably, shifts in educational policies, accountability measures, and curricular demands can pressure schools to fill teaching positions quickly, sometimes prioritizing availability over qualifications. However, it should be made clear that many out-of-field teachers lack access to relevant professional development, making it challenging for them to effectively teach unfamiliar content areas. Policymakers may need to reevaluate hiring requirements and processes to create more flexible pathways that allow qualified individuals to teach in high-need areas, helping to address shortages. Targeted initiatives could provide resources and incentives for recruiting and retaining qualified teachers in areas facing significant shortages. Moreover, developing comprehensive data collection systems to monitor the prevalence of out-of-field teaching can inform policy decisions and highlight areas needing intervention. Policies should prioritize funding for targeted professional development programs that equip out-of-field teachers with necessary skills and content knowledge. Policies should support the establishment of mentoring and induction programs specifically designed for out-of-field teachers to enhance their effectiveness and retention.

Undeniably, the emergence of out-of-field teaching calls for the revision or modification of some guidelines stipulated in the hiring system and processes of the Department of Education (DepEd). The Guidelines on the Recruitment, Selection, and Appointment in the Department of Education (DO 7 s. 2023) serves as the legal basis of the agency regarding its appointment process. As stipulated in Section V: Procedures of the department order, comparative assessment of participants focus more on general requirements e.g. Licensure Examination for Teacher (LET). Notably, it lacks emphasis on the subject specialization of the teacher. This part of the provision may be up for consideration to add and give higher emphasis to subject-specialization criteria of the LET the teachers passed. Additionally, though training and seminars are considered during the recruitment process, they are only credited as points added to the final rating for the Registry of Qualified Applicants (RQA). The appointment process, and updates to the provision should provide inclusion for subject-specific training of qualified teacher-applicants wherein teachers with relevant training with given certifications should be given preference for teaching their specialized subjects.

Furthermore, DepEd Order 51 s. 2017 titled “Amended Qualification Standards for Senior High School Teaching Positions in The Technical-Vocational-Livelihood Track and Other Clarifications on the Hiring Guidelines” highlights residency as the key criterion in terms of teacher deployment. This prioritization of locality over the needed subject specialization contributes to out-of-field teaching as qualified applicants from other areas that may fit the needs of schools in terms of teacher assignment are overlooked due to geographical constraints. The main emphasis should be on subject expertise, followed by the residency of the applicant. This adjustment would support the proper alignment of the needed teaching assignment and teacher specialization ensuring that teachers deployed in schools are more effective and fit their needs.

Moreover, the DepEd Order 9 s. 2016 titled “Reinforcement of Guidelines for Kindergarten to Grade 10 Teaching Positions” outlines the hiring prioritization based on teachers’ length of service, but it is lacking in terms of detailing subject-specific teaching experience. This leads to hiring teachers with general experience without ensuring their alignment with the subjects taught, potentially increasing the number of out-of-field teachers. The length of service could still be a priority, but adjustments should be made in terms of incorporating subject-specific experience in the criterion during the application process. This adjustment leads to a better subject-teacher alignment and ensures that teacher experience is relevant to the needs of schools.

Also, DepEd Order 37 s. 2012 titled “Revised Guidelines on the Hiring of Teacher I Positions Based on the Reform Actions in Basic Education Sector Reform Agenda” highlights inclusivity as the main priority in hiring teachers in Indigenous Community Schools. Consequently, it diverts the focus on teachers’ specialization as available teachers may not meet the subject requirement of the school resulting in out-of-field teaching as there is a lack of specificity in the subject-specialization requirements. A possible way to improve this approach is for teachers to undergo targeted subject-area training. By enabling out-of-field teachers through skills and content knowledge training, the department ensures that the teacher is effective enough to perform their roles in the classroom.

Finally, partnerships between schools and teacher preparation programs can ensure that new educators are adequately prepared for the realities of diverse teaching assignments. Policymakers must consider the equity implications of out-of-field teaching, ensuring that all students have access to qualified educators, particularly in low-income and rural communities. Revising evaluation systems to consider the unique challenges faced by out-of-field teachers can promote fair assessments of teacher performance and student outcomes. Nonetheless, by addressing these implications, policymakers can create a more equitable and effective educational landscape that supports both teachers and learners.

4. Conclusion

The reviewed research topic conducted by the researcher mainly focused on the emergence of out-of-field teaching. The topic included essential areas such as contributing factors to the emergence of out-of-field teaching in public secondary high schools in Santa Cruz District, the difficulties out-of-field teachers encountered in their teaching practice, gains out-of-field teachers encountered and the implications of the findings for practice and policy formulation. Most of the reviewed studies employed qualitative case study as its research design that utilized aide-mémoire as the main data gathering tool, as it provides in-depth understanding of issues within their real-life context. The research underscores the importance of specialized teachers teaching in a specialized subject that is aligned to their field of expertise. The success of the study demonstrates the potential of well-designed research to bring out meaningful improvements in educational outcomes.

The research agenda and framework aim to understand the phenomenon causes, impacts and possible solutions of out-of-field teaching in public secondary high schools in Santa Cruz District. Support systems and provision of targeted professional development for out-of-field teachers should be enhanced to positively impact the effectiveness of these teachers to improve the teaching and learning process. Reskilling these teachers with the appropriate content knowledge through variety of means; training and mentorships can mitigate the negative consequences of teachers not practicing their field of specialization in the teaching process. For students, having a well-equipped teacher – confident to deliver assigned subject matter leads in improved engagement and academic performance. Therefore, integrating support systems for out-of-field teachers can promote a more conducive learning environment resulting to an overall improvement to the quality of education.

Finally, the findings of the study highlight the vital role of the identified research gaps and future directions for studies for teachers and administrators as this help guide future educational practices and policy decisions. Identifying these gaps often requires collaboration between teachers, administrators, and researchers, fostering comprehensive solutions and shared dedication in addressing educational difficulties. Teachers and administrators benefit from making decisions informed by current research data to implement more effective educational practices and policies. Recognizing and addressing research gaps fosters a culture of continuous learning and improvement, which is critical for adapting to new challenges and advancing educational practices, particularly when supervising and advising students on the conceptualization and implementation of research projects as part of their graduation requirements. By identifying and addressing research gaps, teachers and administrators can enhance their practices, improve educational outcomes, and contribute to the ongoing development of effective and innovative educational strategies.

4.1 Recommendation

Future researchers could focus on specific factors influencing the efficacy of out-of-field teaching and its impact on student learning. Using the qualitative methodology, researchers could identify the emergence of out-of-field teaching, difficulties of out-of-field teachers, gains of out-of-field teachers in teaching practice and its implication for practice and policy formulation. Exploring these areas further with a repertory grid technique may help highlight under-researched aspects of the phenomenon including emergence, beneficial results and psychological effects of teachers teaching outside their field of expertise. Developing a structured research agenda focused on professional development, resource allocation, and targeted support programs for out-of-field teachers

may also contribute significantly to the field. This agenda and accompanying frameworks could foster new insights and strategies, ultimately enhancing teaching effectiveness and policy formulation within educational institutions

5. References

- Adbheadhonso. (2023). Teach for the Philippines. Asian Development Bank.
<https://www.adb.org/projects/47261-001/main>
- Akram, M., Gondal, M. B., & Saeed, R. (2017). Impact of teaching stress on teacher efficacy and student achievement. *Journal of Education and Educational Development*, 4(2), 242-262.
<https://doi.org/10.22555/joed.v4i2.1371>
- Anna, S. N., & Plessis, E. D. (2023). Facing the dilemma of the out-of-field teaching phenomenon in vocational education and training (VET). <https://alkindipublisher.com/index.php/jweep/article/view/1345>
- Arendain, I., & Limpot, M. (2022). Phenomenological approach of out-of-field teaching: Challenges and opportunities. *Epra International Journal of Multidisciplinary Research (IJMR)*, 8(1), 2455-3662.
<https://doi.org/10.36713/epra2013>
- Azarias, R. A. (2022). Milieu of English language use in industrial-technical classrooms: Implication for intervention and policy formulation. *International Journal of Research Studies in Education*, 11(12), 103-124. <https://doi.org/10.5861/ijrse.2022.332>
- Bajar, J. T. F., Bajar, M. A., & Alarcon, E. P. (2021). School Learning Action Cell as a remedy to out-of-field teaching: A case in one rural school in southern Philippines. *International Journal of Educational Management and Innovation*, 2(3), 249-260. <https://doi.org/10.12928/ijemi.v2i3.3667>
- Bertrand, R., & Marsh, C. (2022). Adapting pedagogy in out-of-field teaching: Barriers to effective instruction. *Educational Review*, 74(4), 472-487. <https://doi.org/10.1080/00131911.2021.1934417>
- Castro, M., Assignado, R., & Recede, R. (2023). Out-of-field teaching: Impact on teachers' self-efficacy and motivation. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(9), 519-533. <https://doi.org/10.11594/ijmaber.04.02.19>
- Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120-123.
- Co, L., Geiger, V., & Dole, S. (2021). Out-of-field teaching: Implications for professional development and practice. *Australian Journal of Teacher Education*, 46(2), 1-17.
<https://doi.org/10.14221/ajte.2021v46n2.1>
- Du Plessis, A. E. (2017). Out-of-field teaching practices: What educational leaders need to know. *Leadership and Policy in Schools*, 16(1), 89-119. <https://doi.org/10.1080/15700763.2016.1197281>
- Evardo Jr., O. J., & Abina, I. L. S. (2023). Research competence of out-of-field teachers in teaching practical research: Input to capability building series. *International Journal for Multidisciplinary Research (IJFMR)*, 5(2), 1-15. <http://www.ijfmr.com>
- Fitchett, P. G., & Heafner, T. L. (2021). Challenges of out-of-field teaching in social studies: Implications for teacher quality and student engagement. *Journal of Social Studies Research*, 45(2), 157-169.
<https://doi.org/10.1016/j.jssr.2020.05.003>
- Gehrke, R. S. (2020). The role of resilience in out-of-field teaching: Adapting to uncertainty. *Journal of Teacher Education*, 71(4), 432-445. <https://doi.org/10.1177/0022487119876543>
- Goos, M., Geiger, V., Dole, S., Forgasz, H., & Benison, K. (2021). Impact of a national professional development programme for out-of-field teachers of mathematics in Ireland. *International Journal of Educational Research*, 100, 101562. <https://doi.org/10.1016/j.ijer.2020.101562>
- Hobbs, L., & Törner, G. (2019). Out-of-field teaching and professional growth: Examining the benefits and challenges. *European Journal of Teacher Education*, 42(3), 331-344.
- Hobbs, L., & Törner, G. (2019). Out-of-field teaching and its impact on pedagogy. *International Journal of Educational Research*, 96, 146-154. <https://doi.org/10.1016/j.ijer.2019.03.004>
- Ingersoll, R. M., & Collins, G. J. (2021). The status of teaching as a profession. *The ANNALS of the American Academy of Political and Social Science*, 673(1), 142-165.

- Ingersoll, R. M., Merrill, L., & May, H. (2019). What are the effects of teacher education and preparation on beginning teacher attrition? *Educational Evaluation and Policy Analysis*, 41(3), 256-278.
<https://doi.org/10.3102/0162373718816914>
- Juillion, P. (2019). What is PE fit theory? Studybuff.com. <https://studybuff.com/what-is-pe-fit-theory/>
- Katigbak, R. L., & Andal, E. Z. (2023). Challenges, coping strategies, and skills of out-of-field physical education teachers as mediated by self-efficacy. *International Journal of Social Science Humanity and Management Research*, 2, 489-501. <https://doi.org/10.58806/ijsshmr.2023.v2i7n04>
- Lopez-Garrido, G. (2023). Bandura's self-efficacy theory of motivation in psychology. *Simply Psychology*.
<https://www.simplypsychology.org/self-efficacy.html>
- Loughland, T., & Nguyen, H. T. M. (2020). Teaching out-of-field: Teachers' perceived needs and the impact on student learning. *Teaching and Teacher Education*, 96, 103187.
- Madden, J., Smyth, P., & Pearson, R. (2021). Navigating creativity and challenges: Teaching strategies in out-of-field teaching. *Teaching and Teacher Education*, 98, 103259. <https://doi.org/10.1016/j.tate.2020.103259>
- McLeod, S. (2023). Vygotsky's zone of proximal development and scaffolding theory. *Simply Psychology*.
<https://www.simplypsychology.org/zone-of-proximal-development.html>
- Osei, W., & Agyei, D. D. (2023). Teaching knowledge and difficulties of in-field and out-of-field junior high school mathematics teachers in algebra. *Journal of Education*, 233(6), 1-15.
<https://doi.org/10.1080/2331186X.2023.2232240>
- Pacaña, J. C., & Aquino, A. B. (2019). Out-of-field social studies teaching through sustainable culture-based pedagogy: A Filipino perspective. *International Journal of Education and Practice*, 7(3), 230-241.
<https://doi.org/10.18488/journal.61.2019.73.230.241>
- Sullivan, G., Fitzpatrick, D., & Johnson, R. (2020). The impact of out-of-field teaching on educator effectiveness and student outcomes. *Journal of Educational Research*, 113(3), 203-215.
<https://doi.org/10.1080/00220671.2020.1725443>
- Van Driel, J. H., & Berry, A. (2021). Teacher professional growth and development: Exploring the role of out-of-field teaching. *Teaching and Teacher Education*, 97, 103-112. <https://doi.org/10.1016/j.tate.2020.103112>
- Van Driel, J. H., & Berry, A. (2021). Teaching out-of-field: Implications for teacher self-efficacy and professional identity. *Research in Science Education*, 51(5), 1107-1124.
- Weldon, P. R. (2016). Out-of-field teaching in Australian secondary schools. *Policy Insights*, 6, 1-12.
<https://research.acer.edu.au/policyinsights/6/>
- Young, M. E., & Warrington, S. (2019). Challenges in STEM out-of-field teaching: Pedagogical strategies and student outcomes. *Science Education International*, 30(2), 108-119.
<https://doi.org/10.33828/sei.v30.i2.3>

