

# TEACHERS' LIVED EXPERIENCES IN HANDLING CROSS- DISCIPLINARY SUBJECTS: BASIS FOR CAPACITY-BUILDING PROGRAMS

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## ABSTRACT

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This study explored the lived experiences of senior high school teachers in the Department of Education, City Division of Tagbilaran, who were assigned to teach cross-disciplinary subjects. Using a qualitative phenomenological design, data were collected through semi-structured interviews with twelve teachers who had at least two years of experience teaching outside their specialization. The data were examined via thematic analysis in accordance with Braun and Clarke's methodology. The findings

uncovered five key themes, which are as follows: (1) issues about confidence and readiness; (2) dependence on support from peers and administration; (3) flexible pedagogical strategies; (4) difficulties in teaching and assessment; and (5) professional development and identity change. Although educators initially encountered difficulties due to a lack of subject-matter knowledge and formal training, they succeeded in overcoming these obstacles by engaging in self-directed learning and collaborating. The study highlights the importance



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of structured, contextually relevant capacity-building programs that involve focused professional development, mentorship, and institutional support systems. These findings can help legislators and school administrators improve support mechanisms for teachers engaging in cross-disciplinary teaching.

## INTRODUCTION

The demands placed on educators have been dramatically reorganized with the introduction of the K–12 curriculum in the Philippines, codified under Republic Act No. 10533. The increasing assignment of teachers to cross-disciplinary roles, which requires them to teach courses outside their areas of specialization, is one of the demands expected of them. Although the goal of cross-disciplinary teaching is to encourage holistic learning and the application of knowledge in real-world situations, it also presents significant hurdles, particularly for educators who have not received sufficient formal preparation in new subject areas.

It is common for teachers assigned to teach subjects outside their area of expertise to struggle with issues such as content mastery, instructional design, and time management. These challenges have the potential to negatively affect teaching confidence, self-efficacy, and overall instructional effectiveness in the classroom. This problem is made much worse by a persistent shortage of teachers and the uneven distribution of subject specialists across schools. As a direct result of this, there is a growing demand for capacity-building programs that are not just structured but also sensitive to the environments in which they are executed. When it comes to addressing the challenges of teaching across disciplines, these programs are meant to assist educators.

In this study, the lived experiences of senior high school teachers who engage in cross-disciplinary teaching are investigated. These instructors are employed by the Department of Education (DepEd) City Division of Tagbilaran. In particular, it investigates the difficulties they face, the methods they use to address them, and the ways these experiences contribute to their professional development. In doing so, the study contributes to the development of focused professional development programs that address both the cognitive and affective aspects of teaching, going beyond the scope of a single teacher's area of expertise.

It has become popular in modern education to teach across disciplines because it can help students think critically, solve problems, and get involved (Tsui & Mok, 2021; Steinert et al., 2019). The reason for this is the chance it gives students. By combining information from different subjects, this method helps students gain a full picture of the complex problems people face in the real world. The implementation of cross-disciplinary education, on the other hand, creates considerable obstacles, particularly for educators who are asked to teach subjects outside their areas of competence. Several studies (Tschannen-Moran & Hoy, 2001; Tomás-Fulgado, 2020) have shown that

teachers who are asked to teach subjects outside their main area of expertise often feel less confident and more stressed. These results show how important it is for teachers to be prepared because it affects how well they teach.

One of the most important aspects of resolving these issues is continuing one's professional development. According to Darling-Hammond et al. (2017) and Steinert et al. (2019), effective professional development helps increase both pedagogical competence and professional identity. Support mechanisms such as mentorship and peer collaboration have been demonstrated to boost instructors' confidence and instructional effectiveness (Spalding & Wilson, 2002; Tiongson, 2023). Another benefit of these support mechanisms is that they help teachers.

Three theories are used in this work to support one another. First, the Social Cognitive Theory emphasizes how self-efficacy shapes teachers' perceptions of their own skills, which, in turn, affects how well they perform their jobs. Second, the Interdisciplinary Learning Theory highlights the difficulty of integrating information from different areas and the importance of formal support systems (Klaassen, 2018). Third, the Teacher Identity and Professional Development Theory (Mockler, 2011) posits that teaching subjects outside your main area of expertise can change your professional identity, which, in turn, requires you to keep learning and adapting.

Cross-disciplinary instruction is beneficial in terms of increasing student engagement and fostering higher-order thinking skills, according to several empirical research (Jacob, 2015). On the other hand, these advantages depend on proper teacher preparation and support from organizational institutions. It is possible that multidisciplinary teaching could result in fragmented education and lower learning outcomes if these are absent (Darling-Hammond et al., 2017).

Experiences from other countries, especially those with strong education systems such as Finland and Singapore, show that strong collaborative cultures, systemic support, and ongoing professional development are important for cross-disciplinary teaching to work (Taguma et al., 2020). This is because these three things are necessary for transdisciplinary teaching to work. This is the result drawn from international studies. This situation came about because these three things are necessary for cross-disciplinary schooling to work. These systems invest heavily in developing teachers' skills, ensuring they are ready to meet the needs of integrated learning.

According to Salvador et al. (2022) and Leonin (1984), teachers in the Philippines who are assigned to teach subjects outside their area of competence commonly report feeling less confident in their ability to teach and experiencing greater professional strain. Even as new research is beginning to examine this subject, the empirical foundation remains fairly limited. This is especially true in more specific contexts, such as the City Division of Tagbilaran. Given this gap, context-specific investigations must be conducted to document educators' actual experiences and inform efforts to increase responsiveness.

In addition, it is standard practice for educators to rely on self-directed learning to make up for deficiencies in formal training (Tomas-Fulgado, 2020). These tactics include, for instance, the use of internet resources and peer collaboration. Although the use of these strategies demonstrates educators' resiliency and adaptability, it is important to note that they are not suitable replacements for formal professional development programs.

The study results shed light on the importance of engaging in a wide range of activities to build people's skills. Formal training, mentoring, and institutional support should all be part of these programs. Using these tools is important for two main reasons: first, it makes teachers more effective; second, it makes sure that cross-disciplinary teaching works well in the K-12 system.

The following research questions guided this study:

1. What are the lived experiences of senior high school teachers handling cross-disciplinary subjects?
2. What challenges do teachers encounter when teaching outside their specialization?
3. What strategies do teachers employ to cope with these challenges?
4. How do these experiences influence their professional growth and identity?

## **RESEARCH METHODOLOGY**

Using a qualitative phenomenological design, this study examined the real-life experiences of senior high school teachers in Tagbilaran City, Philippines, who work for the Department of Education and teach subjects from various fields. The phenomenological method was chosen because it can provide deep insights into the personal problems teachers face, how they deal with them, and how their work as teachers affects their professional growth.

A purposive group of 12 teachers with at least 2 years of experience teaching similar subjects across different fields was selected to provide a range of perspectives on the problems faced. To collect data, people were asked to agree to semi-structured interviews lasting 30 to 45 minutes, which were taped. Aside from discussions, nonverbal cues were also written down in field notes. The Braun and Clarke (2006) framework was used to look at the themes. As part of this framework, themes were repeatedly created and coded. These themes were carefully reviewed and refined to ensure they were true to what the people went through. To ensure the study was sound, members checked their answers to confirm their accuracy, and interview data were compared with field notes. The term for this is "data triangulation." An audit trail was kept so that everything was clear and could be checked by someone else. Ethical approval was obtained from the relevant authorities, and all participants provided informed consent. It was possible to hide personal information by anonymizing it and storing it securely.

Purposive sampling was used to choose participants based on three

factors: (1) they were ready to take part in in-depth interviews; (2) they were currently teaching subjects from different fields; and (3) they had taught subjects outside of their specialty for at least two years. The sample size of 12 people was deemed appropriate because the data were complete, and further conversations did not yield any new themes.

The interviews took place in a secret, quiet area of the school to keep things as quiet as possible and protect privacy. Each interview lasted 30 to 45 minutes and followed a guide designed to prompt people to talk about their experiences, problems, and how they dealt with them. To elicit deeper answers and clarify new ideas, probing questions were used.

Throughout the study, the researcher remained reflexive, aware of their own ideas and potential biases regarding the subject. During data gathering and analysis, a reflective journal was used to ensure that interpretations were grounded in participants' stories rather than the researcher's own views.

## RESULTS AND DISCUSSIONS

The study's results are based on the real-life experiences of senior high school teachers in the City Division of Tagbilaran who teach across subjects and work for the Department of Education (DepEd). The study of the data revealed five interconnected themes that show how teachers address new teaching demands and problems and gradually build flexible, self-reflective methods. These themes show that teaching across disciplines is an ongoing process shaped by both the teacher and the school environment.

**Theme 1: Confidence and Preparedness in Cross-Disciplinary Teaching.** Their depth of material understanding significantly impacted teachers' confidence and sense of readiness. Participants regularly reported increased confidence when teaching in their area of expertise, but unfamiliar subjects often led to hesitancy and self-doubt. For instance, one teacher shared, "I feel hesitant because I am not confident with the content when teaching outside my specialization." This indicates that confidence depends not only on knowledge but also on educators' beliefs in their competence. These results align with the concept of self-efficacy in Social Cognitive Theory, which holds that repeated practice can boost confidence (Tschannen-Moran & Hoy, 2001). Another participant noted, "With time and support, I gained more confidence despite the challenge." This means that teaching students from different fields can make teachers feel less ready at first, but it can also help them grow as professionals if they get sufficient support and opportunities to learn.

**Theme 2: Dependence on support from peers and administration.** Support from peers and administrators seemed to be a major factor in how teachers felt about their jobs. Often, participants needed help from their friends, especially when learning something new. One teacher expressed, "My colleagues have been my backbone in handling unfamiliar subjects." It was easy to solve teaching problems by talking them through informally, such as

sharing teaching tools and going over lesson plans.

Still, not everyone had the same opinion about support services. Different teachers spoke about the support they received from their coworkers and the administration. Some said they needed more organized and regular help: “Sometimes, I wish there were scheduled mentoring sessions,” while others felt the existing support was adequate. This range shows how support systems are run and how the school environment affects their effectiveness. Institutional backing went beyond personal relationships. Teachers’ ability to handle tasks across different fields was greatly affected by the availability of teaching, administrative, and technological support. When this kind of help was not enough, educators reported feeling alone and confused.

According to the Social Cognitive Theory, these results show the social side of professional learning. Observational learning and social interaction make it easier to learn new skills. They align with the Teacher Identity and Professional Development Theory, which emphasizes the importance of supportive settings for helping teachers adjust to new job duties (Mockler, 2011; Steinert et al., 2019). Statistics show that cross-disciplinary teaching is not just something one person does; it is deeply ingrained in how institutions operate.

**Theme 3: Flexible Pedagogical Strategies.** Because of the needs of interdisciplinary teaching, teachers have shown great flexibility and ingenuity. The participants learned independently by studying and using online tools and digital platforms to deepen their understanding of unfamiliar topics. One participant mentioned, “ I rely a lot on online resources to fill gaps in my knowledge.”

Collaboration was crucial to adapting the lessons. Teachers asked their peers who were experts in the same field for advice, which made it easier to share information and work together to solve problems. “Peer advice helps me modify lessons to suit my students,” shared one participant. Using technology and video tools improved learning by making lessons more engaging and easier for students to understand.

When teachers planned lessons, they ensured they aligned with the program’s standards, such as the Most Essential Learning Competencies (MELCs). By looking for ideas and skills applicable to other situations, they sought to integrate knowledge from different fields. This shows that people are getting better at putting knowledge together rather than just giving it.

Interdisciplinary learning ideas emphasize integrating information from different fields, which these tasks do (Klaassen, 2018; Klein, 2017). Still, the data show that a big part of the adaptation work is being done by people themselves, not with the help of institutions. This shows a disconnect between policy goals and actual implementation.

**Theme 4: Instructional and Assessment Challenges.** Even with flexible methods, teachers still had problems when they tried to teach across disciplines. One big problem was that planning lessons outside of one’s area of expertise

required more thought and time. Participants said that creating lessons and learning new material simultaneously took a lot of time and mental energy. As one participant put it, “It takes more time to plan and coordinate lessons aligning with multiple goals.”

Another big problem that came up was assessment. Teachers said that the usual subject-specific testing methods were ineffective for assessing learning that involved more than one subject. Because of this limitation, it was hard to get a full picture of how much kids understood. As one participant shared, “It is tough to assess interdisciplinary learning as most assessments focus on individual subjects.”

These problems show how hard it is to teach across disciplines, both as an individual issue and as a systemic problem. Without the right training and support from the school system, it might be hard for teachers to use interdisciplinary approaches successfully. This result aligns with other research emphasizing the importance of institutional support and professional development in making interdisciplinary teaching work (Darling-Hammond et al., 2017).

**Theme 5: Professional Growth and Identity Transformation.** There were times when it was hard to teach students from different fields, but it also helped teachers get better. Participants said that, over time, they became more flexible, creative, and open to new ways of teaching. Teachers initially felt worried, but as they learned more about the problems and how to solve them, they gained confidence. For example, one participant stated, “Teaching cross-disciplinary subjects has broadened my knowledge since I need to study subjects outside my specialization”. Another shared, “It molded me as a teacher to be more flexible and creative”. At the same time, another reflected, “My teaching experience has broadened my skills, improved my adaptability, and deepened my understanding of different learning areas”.

Teachers also thought mixed-subject lessons were more interesting because they helped students see how ideas could be applied in real life. The fact that these teachers have said these things shows that teaching across subjects could make the classroom more interesting and fun.

It is important to note that teaching subjects outside one’s specialty helped change one’s work identity. Teachers said they were more willing to learn, more thoughtful, and better able to adapt to change. This shows how teachers’ identities change over time as they gain experience, think about their work, and connect with their classrooms (Miller et al., 2017; Mockler, 2011).

However, the fact that students are relying on self-directed learning and informal mentoring suggests that there are no organized professional development programs for cross-disciplinary teachers. This shows that teachers are strong, but their growth would last longer with formal support systems in place.

**Discussion.** As a whole, the results show that cross-disciplinary teaching is a dynamic interaction between individual choice and societal support.

Teachers show resilience by using flexible methods, collaborating, and continually learning. However, the availability and consistency of support systems significantly affect their ability to succeed in cross-disciplinary roles. Self-efficacy is a very important part of this process. According to Bandura's (1986) Social Cognitive Theory, teachers are more likely to feel confident about doing new things when they have small successes, get help, and keep practicing. At the same time, Teacher Identity Theory shows how these events change teachers' work and require them to constantly adapt and reflect on it.

There are also underlying problems that the results point to. Even though teachers can change, their own efforts are not enough to keep cross-disciplinary teaching working well. Interdisciplinary education cannot reach its full potential without structured professional growth, consistent institutional support, and the right frameworks for evaluating students.

Overall, the study shows that for cross-disciplinary teaching to work, teachers need to be able to adapt and institutions need to work together. Some of these are targeted training, systems for working together to get help, and policies that understand how hard it is to teach across fields.

## CONCLUSIONS

The study offers a comprehensive examination of instructors' experiences in managing interdisciplinary topics within the Department of Education, City Division of Tagbilaran, Senior High Schools. It shows that teachers' confidence and readiness are strongly influenced by how well they know the material, how easily they can find resources, and how much support they receive from their coworkers and administrators. Teachers' biggest problem is the lack of formal, targeted professional development for interdisciplinary instruction. This leaves them feeling unprepared and overwhelmed when teaching outside their area of expertise. The data also show that teachers use a range of informal methods to fill gaps, such as working with other teachers, conducting their own research, and using ICT resources. These qualities indicate that you may be very dedicated to helping pupils do well and that you can also be creative and adaptable. However, these specialized methods do not adequately address the challenges that arise when educating across disciplines. They need organized support systems grounded in applicable educational theories. Some of these are Social Cognitive Theory, Teacher Identity and Professional Development Theory, and Interdisciplinary Learning Theory.

Cross-disciplinary teaching has a clear positive effect, such as increasing student engagement, encouraging more critical thinking, and helping them solve real-world problems. However, for these gains to last and improve, schools need government support, strong capacity building, and a culture of collaboration. Lastly, it is important to provide teachers with ongoing training, support, and access to tools to help them address the challenges that arise when they teach more than one subject. These kinds of changes to the way

things are done will not only boost teachers' confidence and help them do their jobs better, but they will also make the classroom a better place for new ways of teaching and for students to get better all around. Meeting these needs aligns with the main goal of improving education and preparing students for the challenges they will face in life. This will make the K-12 curriculum useful in the long run.

## RECOMMENDATIONS

This study recommends measures to address cross-disciplinary teaching challenges and support teachers' professional growth.

**1. Increase Teacher Confidence and Preparedness:** Provide teachers with targeted training and resources focused on both content and interdisciplinary teaching methods, allowing them to feel more confident and prepared in handling subjects outside their area of expertise.

**2. Enhance Professional Development:** Develop structured, ongoing professional development programs specifically for cross-disciplinary teaching, with an emphasis on effective lesson planning, curriculum integration, and the use of technology.

**3. Promote Collaborative Learning:** Foster a collaborative environment by establishing peer learning groups and mentorship programs. These initiatives will encourage teachers to share experiences, strategies, and resources, strengthening their teaching practices.

**4. Strengthen Institutional Support:** Ensure that schools offer necessary resources, such as teaching materials and adequate planning time, to support teachers in integrating multiple disciplines effectively in their lessons.

**5. Provide Personalized Mentorship:** Create a mentorship program that pairs less experienced teachers with seasoned educators, offering tailored guidance on cross-disciplinary teaching and professional growth.

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