

Original Article

Challenges and Coping: Non-Technical Vocational Livelihood Major Teachers Teaching TVL Subjects

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Abstract

This qualitative phenomenological study explored the lived experiences of non-Technical-Vocational-Livelihood (non-TVL) major teachers assigned to teach TVL subjects in a public senior high school in Davao City, Philippines. Ten teachers participated in in-depth interviews, and their narratives were examined through thematic analysis to identify challenges, coping strategies, and insights. The findings showed three major challenges: technical unpreparedness, inadequate learning facilities, and weak institutional support. Teachers reported limited hands-on skill, fear of technical tasks, poor equipment access, unsafe tools, and assignments outside their specialization. They coped through self-directed learning, shared practical support, and adaptive classroom strategies, which included online preparation, home practice, assistance from skilled individuals, community help, borrowed materials, student-assisted learning, hands-on adjustment, and safety control. Their insights centered on learning through practice, respect for skilled work, and the need for program support. The study emphasizes the need for proper teacher assignment, sustained practical training, adequate tools, and stronger institutional mechanisms to improve TVL instruction.

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1. Introduction

Technical-Vocational-Livelihood (TVL) education occupies a critical place in the Philippine senior high school curriculum because it links school-based instruction with practical skills, livelihood readiness, and future employment. In the broader language of technical and vocational education and training (TVET), the field covers education, training, and skills development across occupational fields, production, services, and livelihoods (UNESCO-UNEVOC, n.d.; TESDA, n.d.). The Department of Education (DepEd) positions TVL within the K to 12 system as a track that can prepare learners for employment, entrepreneurship, middle-level skills certification, and further education (Department of Education, 2016a, 2022). This mandate places practical instruction, safety, equipment use, and competency-based performance at the center of TVL delivery.

The promise of TVL depends heavily on teachers who can translate occupational competencies into classroom and workshop experiences. Unlike purely academic subjects, many TVL specializations require teachers to demonstrate procedures, supervise tool use, assess performance tasks, and connect lessons to labor market standards. DepEd curriculum guides for technical specializations, such as welding, specify tools, equipment, safety resources, demonstration, direct observation, and practical skills as core elements of instruction (Department of Education, 2016b). These curricular expectations create a high demand for technical competence, workplace familiarity, and pedagogical skill.

International literature describes vocational educators as dual professionals because they require both pedagogical competence and occupational expertise (OECD, 2021; Smith, 2020). The OECD (2021) notes that vocational teachers need current industry knowledge and experience alongside effective instructional strategies, while UNESCO (2022) frames TVET as central to just transitions, productive employment, and inclusive skills development. In this view, TVL teaching is not only a matter of content delivery; it requires the teacher to mediate between school learning, workplace standards, learner motivation, and available institutional support.

A major tension arises when teachers are assigned to subjects outside their preparation. Out-of-field teaching has been described as a systemic response to teacher shortages, scheduling problems, and uneven distribution of qualified staff (Hobbs & Porsch, 2021). Du Plessis (2019) argues that such assignments require targeted professional support because teachers in complex teaching positions may experience pedagogical uncertainty, identity strain, and greater need for context-specific learning. In TVL, out-of-field assignment can be especially difficult because the teacher is expected to handle equipment, model skill procedures, and supervise safety-sensitive tasks that may not belong to the teacher's academic background.

In the Philippine setting, the challenge is intensified by the structure of senior high school implementation. Schools are expected to offer tracks and specializations based on learner needs, school capacity, and available resources, yet TVL subjects often require tools, consumable materials, laboratories, industry partners, and

specialized teachers (Department of Education, 2016a, 2022). When resources and teacher specialization do not align, non-TVL major teachers may become responsible for specialized instruction while they continue to learn the technical content themselves. This situation raises questions about instructional quality, teacher confidence, student safety, and the sustainability of TVL delivery.

Existing TVET literature has emphasized the need for industry-aligned professional development, communities of practice, reflective learning, and supportive leadership (OECD, 2021; Siliņa-Jasjukeviča et al., 2025; Smith, 2020). Effective teacher professional development is more likely to influence practice when it develops insight, motivation, techniques, and repeated use in the classroom (Sims et al., 2025). For TVL teachers, such support must include practical training, access to tools, mentoring by skilled practitioners, and opportunities to observe authentic work environments. These needs become more urgent when teachers assigned to TVL subjects do not possess formal TVL specialization.

Despite the relevance of these issues, limited qualitative evidence centers on the lived experiences of non-TVL major teachers who teach TVL subjects in local Philippine school contexts. Many discussions focus on curriculum structure, specialization choice, certification, or general teacher competence, but less attention is given to how non-TVL major teachers experience the daily realities of teaching practical subjects outside their field. Their narratives are important because they show how policy and curriculum expectations are actually enacted in classrooms where teachers must adapt to resource gaps, technical unfamiliarity, and learner needs.

This study addressed that gap by exploring the experiences of non-TVL major teachers assigned to teach TVL subjects in a public senior high school in Davao City. It specifically examined the challenges they faced, the coping strategies they used, and the insights they gained from their teaching experiences. By foregrounding teachers' narratives, the study contributes to discussions on teacher deployment, professional development, institutional support, and the quality of TVL instruction in the Philippine senior high school system.

2. Methodology

This study used a qualitative phenomenological design to explore the lived experiences of non-TVL major teachers who were assigned to teach TVL subjects outside their field of specialization. Phenomenology was appropriate because the inquiry centered on how teachers made sense of their experiences, including their challenges, coping strategies, and professional insights. The approach followed the view that lived accounts can reveal the meanings that individuals attach to a shared phenomenon (Creswell & Poth, 2018; Moustakas, 1994). The study was grounded in a constructivist orientation, which assumes that reality is shaped through participants' social contexts, interpretations, and personal encounters with the phenomenon.

The informants were 10 senior high school teachers from one public senior high school in Davao City who were officially assigned to teach at least one TVL subject

despite having non-TVL academic preparation. They were selected through purposive sampling because they had direct and relevant experience with the phenomenon under study. Selection focused on teachers who could provide rich descriptions of what it meant to teach skill-based subjects outside their preparation, how they managed technical and resource constraints, and how the assignment affected their sense of competence and role. The sample size was consistent with phenomenological inquiry, where depth, relevance, and reflective engagement are prioritized over statistical representation.

Data were generated through in-depth interviews guided by a researcher-made and expert-validated interview guide. The guide contained open-ended questions aligned with the three research aims: challenges encountered in TVL instruction, coping strategies used to address those challenges, and insights gained from the experience. Before data collection, the required administrative and ethical clearances were secured. Informants were informed about the purpose of the study, voluntary participation, confidentiality, the right to withdraw, and the use of their responses for research purposes. Written informed consent was obtained prior to the interviews. Interviews were conducted in a setting acceptable to the informants, recorded with permission, and supplemented by field notes to capture relevant observations.

The audio recordings were transcribed and reviewed for accuracy before analysis. The researcher engaged in bracketing to reduce the influence of prior assumptions and to focus on the informants' descriptions. Data were analyzed through thematic analysis following the logic of familiarization, coding, theme development, theme review, definition of themes, and narrative synthesis (Braun & Clarke, 2022). Significant statements were extracted from the transcripts, clustered according to shared meanings, and organized into themes and subthemes that corresponded to the study's research aims. Non-English statements were translated directly into English while preserving the participant codes used in the transcripts.

Trustworthiness was strengthened through careful documentation, repeated transcript review, and systematic coding. Credibility was supported by grounding the findings in direct statements from informants. Transferability was addressed through clear description of the study context, informants, and procedures. Dependability was supported through a consistent analytic process, while confirmability was addressed through bracketing and reliance on participants' narratives as the primary basis of interpretation. These procedures followed qualitative standards that emphasize rigor, transparency, and ethical responsibility (Creswell & Poth, 2018; Lincoln & Guba, 1985).

3. Results

3.1 Challenges faced by non-TVL major teachers

Theme 1: Technical Unpreparedness

Informants reported that their non-TVL preparation limited their confidence in demonstrations, equipment use, and practical decision-making. They also described fear and embarrassment when technical tasks required skills that students expected them to model.

"I was an English major, so holding a knife correctly or knowing the difference between specific cuts was not second nature to me." (IDI-I1)

"I had zero background in makeup or nail care. I did not even wear makeup myself." (IDI-I3)

"It was really difficult, Sir, because I had no knowledge about machines. My major was History, which was very far from machinery." (IDI-I8)

Theme 2: Inadequate Learning Facilities

Informants reported that practical instruction was constrained by scarce equipment, outdated computers, broken tools, and spaces that did not match the activity. They also described lost practice time and reduced hands-on access when many students had to share only a few working materials.

"I had 40 students and only one working gas range, which made the lessons drag on too long." (IDI-I1)

"Most computers were running Windows 7, so I could not install modern networking simulators." (IDI-I2)

"I only had access to two welding machines. Thirty students had to line up, and the class time ended before some of them even got a chance to try." (IDI-I10)

Theme 3: Weak Institutional Support

Informants reported that lack of budget, delayed supplies, and assignments outside specialization made TVL instruction harder to sustain. They also described frustration when TVL classes were diverted to school service tasks that interrupted regular instruction.

"I asked for a budget for the cookery ingredients, and the principal said to ask the parents. I felt unsupported because parents were also struggling." (IDI-I1)

"I felt unsupported when I requested alcohol and cotton, basic supplies, and it took three months to arrive." (IDI-I3)

"I was asked to make steamed rice cake for the visitors, but I was also the one who had to spend for the ingredients. It was disheartening." (IDI-I9)

3.2 Coping strategies used by non-TVL major teachers

Theme 1: Self-Directed Learning

Informants coped by preparing lessons independently through online resources, home practice, and theory-focused instruction. They used these strategies to stay ahead of students and to organize lessons in areas where they had limited hands-on background.

"YouTube is my best friend. I download tutorials from professional chefs to improve their learning." (IDI-I1)

"I rely on online forums and tech websites as resources to improve learning." (IDI-I2)

"Only Google and YouTube were really my sources of support." (IDI-I8)

Theme 2: Shared Practical Support

Informants coped by asking for help from skilled people, community members, parents, and other departments. They also used donated and borrowed materials to continue practical activities despite limited school resources.

"I sought support from colleagues, specifically the canteen manager." (IDI-I1)

"I sought support by hiring a local electrician to guide me." (IDI-I5)

"I sought support from a local tailor." (IDI-I7)

Theme 3: Adaptive Classroom Strategies

Informants coped by adjusting classroom routines, using student strengths, and organizing group work during hands-on tasks. They also applied strict safety control and video demonstrations before students handled tools or equipment.

"I identified students who cooked at home and let them lead the group activities. It worked well." (IDI-I1)

"I adjusted by asking the knowledgeable students to assist their classmates when things became technical." (IDI-I2)

"I adjusted by letting the stronger students do the heavy sawing." (IDI-I6)

3.3 Insights gained from TVL teaching experiences

Theme 1: Learning Through Practice

Informants learned that students responded better when they performed tasks, produced outputs, and saw the concrete value of their work. They also noticed that practical tasks revealed abilities that were not always visible in lecture-based or academic activities.

"I realized they learned by doing, not by listening to me lecture." (IDI-I1)

"The turning point was when I let them take apart a PC without fear of breaking it; engagement soared." (IDI-I2)

"They did not like lectures; they wanted to do the task right away." (IDI-I10)

Theme 2: Respect for Skilled Work

Informants gained deeper respect for manual, technical, and vocational work after they experienced the effort, precision, and discipline required in TVL tasks. They also recognized that TVL skills were tied to real careers, livelihood, and social contribution.

"These experiences made me respect TVL teachers more; it shaped my perspective that this job is physically exhausting." (IDI-I1)

"This shaped my perspective that manual labor is dignified work." (IDI-I6)

"It made me appreciate farmers and shaped my perspective on labor." (IDI-I4)

Theme 3: Need for Program Support

Informants emphasized that effective TVL instruction required proper teacher assignment, practical training, and complete tools. They also identified safety resources and industry-relevant training as necessary support for teachers assigned to specialized subjects.

"DepEd had to stop assigning non-majors without training." (IDI-I1)

"I recommended aligning the teacher's major to the subject." (IDI-I2)

"A teacher who truly knew how to weld should have been assigned." (IDI-I10)

4. Discussion

The findings show that out-of-field TVL teaching is not simply a mismatch between teacher major and subject assignment; it is a complex role condition that

affects confidence, safety, lesson design, and professional identity. Hobbs and Porsch (2021) describe out-of-field teaching as a consequence of systemic staffing and scheduling constraints, and the present findings extend that concern to TVL contexts where technical procedures and equipment amplify the cost of role mismatch. Du Plessis (2019) argues that teachers in complex assignments require targeted professional support rather than generic expectations to simply adjust. In this study, the teachers' technical uncertainty, fear of tasks, and loss of confidence can be read as role strain, in which the demands of the assigned role exceed the preparation and support available to the teacher (Goode, 1960).

Technical unpreparedness is particularly consequential in TVL because vocational teaching requires the integration of occupational expertise with pedagogy. The OECD (2021) characterizes vocational teachers as dual professionals who must maintain both industry knowledge and teaching competence, while Smith (2020) similarly stresses that VET teachers need to keep current in their occupational field and in pedagogy. The informants' reliance on online tutorials, videos, and theory-first instruction shows teacher agency, but it also reveals that self-study served as a substitute for structured technical preparation. Siliņa-Jasjukeviča et al. (2025) note that effective VET professional development should be industry-aligned, active, collaborative, and transferable to daily practice, which means that webinars alone are insufficient for teachers expected to supervise actual performance tasks.

The results also show that facilities and safety resources are not peripheral concerns; they are part of the instructional core of TVL. DepEd curriculum guides for technical specializations include specific tools, equipment, PPE, demonstration, direct observation, and practical skills assessment as normal features of instruction (Department of Education, 2016b). When teachers lack working tools, safe environments, or sufficient equipment for student practice, TVL shifts from competency-based instruction to verbal explanation or improvised demonstration. This weakens the work-readiness purpose of TVL, especially because UNESCO (2022) frames TVET as a pathway for inclusive skills development and productive employment, not merely as classroom exposure to occupational vocabulary.

The coping strategies point to the resilience of teachers, but they should not be romanticized as a long-term solution to institutional gaps. Self-directed learning allowed teachers to prepare lessons, home practice helped them manage fear, and online resources provided immediate technical support. However, Sims et al. (2025) show that effective professional development requires more than information exposure; it must support insight, motivation, techniques, and repeated application in practice. For non-TVL major teachers, this implies a need for mentoring, practice-based workshops, supervised skill rehearsals, and feedback cycles that help them move from emergency preparation to confident instructional performance.

Shared practical support emerged as a meaningful form of situated professional learning. The teachers' use of skilled colleagues, local experts, parents, community members, donations, and borrowed materials parallels the community and industry linkages recommended in TVET literature. The OECD (2021) emphasizes the role of

institutional leaders in engaging stakeholders and allocating resources, while Silina-Jasjukeviča et al. (2025) identify professional communities, social partners, mentoring, and authentic workplace learning as essential to VET teacher development. In the Philippine context, DepEd's senior high school implementation framework also recognizes the need for collaboration among DepEd, TESDA, CHED, industry, and other stakeholders (Department of Education, 2016a), making school-community support a policy-aligned response rather than a mere workaround.

Adaptive classroom strategies further show that teachers reconstructed instruction around available competence and resources. Student-assisted learning, group work, and hands-on adjustment allowed informants to use learner strengths and maintain participation despite their own technical limits. This is consistent with experiential learning perspectives in which concrete experience and reflective action support learning (Kolb, 1984; Morris, 2020). However, experiential learning in TVL requires safe boundaries; the teachers' emphasis on strict rules, video demonstrations, and caution underscores that active learning must be paired with risk control, adequate supervision, and appropriate equipment.

The insights on learning through practice affirm the distinct contribution of TVL to learner development. The teachers observed that students who appeared weak in academic tasks could excel in practical work, design, repair, cooking, and problem solving. This finding challenges narrow views of student ability and supports a more inclusive account of competence. UNESCO-UNEVOC (n.d.) presents TVET as education and skills development across production, services, and livelihoods, and this broader view helps explain why TVL can reveal learner strengths that are less visible in traditional academic assessment. Such insights are important for schools that aim to value multiple pathways to success.

The theme of respect for skilled work also has implications for teacher identity. Beijgaard et al. (2004) argue that professional identity develops through teachers' interpretations of their roles, contexts, and experiences. In this study, teachers who initially felt underprepared began to recognize the dignity of manual labor, the career relevance of TVL, and the expertise of workers and skilled tradespeople. This shift does not remove the need for technical support, but it suggests that meaningful exposure to TVL can reshape teachers' beliefs about vocational education and elevate the status of practical work within the school culture.

The clearest implication is that TVL program quality requires institutional design, not only teacher effort. Proper teacher assignment, practice-based training, complete tools, and safety resources should be treated as minimum conditions for effective TVL instruction. DepEd's TVL specialization guidelines require schools to consider capacity and specialization selection (Department of Education, 2022), while the OECD (2021) links VET quality to well-prepared teachers and leaders who can mobilize resources and support staff. If non-TVL major teachers must be assigned because of staffing realities, schools need transition support that includes skills audit, TESDA-linked training, mentorship by qualified practitioners, equipment provision, and scheduled opportunities for supervised practice.

5. Conclusion

The study concludes that non-TVL major teachers assigned to TVL subjects experience a demanding form of out-of-field teaching marked by technical unpreparedness, limited facilities, safety concerns, and weak institutional support. Despite these constraints, they sustain instruction through self-directed learning, practical collaboration, and adaptive classroom strategies that use available resources and student strengths. Their experiences also reveal the strong educational value of practice-based learning, the dignity of skilled work, and the need for stronger program support. For TVL instruction to meet its purpose, schools and education authorities must move beyond reliance on teacher improvisation and provide proper teacher-subject alignment, hands-on professional development, mentoring from skilled practitioners, adequate tools, safe practice environments, and clear institutional guidelines. Strengthening these supports can improve teacher confidence, protect learners during practical work, and make TVL education more responsive to students' abilities, career pathways, and community needs.

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Conflict of Interest Statement

The author declares no conflict of interest.

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