

Exploring the teachers' challenges in the delivery of the TLE curriculum in Northern Samar, Philippines

Manlangit, Mary Joyce F. ✉

University of Eastern Philippines, Catarman, Northern Samar, Philippines
(manlangitmaryjoyce10@gmail.com)

Received: 14 June 2025
Available Online: 26 June 2025

Revised: 22 June 2025
DOI: 10.5861/ijrse.2025.25180

Accepted: 25 June 2025

ISSN: 2243-7703
Online ISSN: 2243-7711

OPEN ACCESS



Abstract

The study identifies the challenges faced by teachers in delivering the Technology and Livelihood Education (TLE) curriculum, focusing on four key areas: resources, teacher training, facilities, and students. A 4-point Likert scale was used to measure the extent of each challenge. In the resources category, the lack of tools is a moderate challenge, while insufficient learning materials are a minor concern. Teacher training challenges include limited access to professional development opportunities, rated as a moderate challenge, while a lack of available development options is less concerning. Facility-related challenges, especially the inadequacy of laboratory spaces, are also considered moderate, affecting the practical learning aspects of the TLE curriculum. Student-related challenges are a mix, with low student interest being a minor issue, but difficulty in understanding concepts or performing tasks rated as a moderate challenge. Addressing these challenges is crucial for ensuring the TLE curriculum meets its objectives of providing practical, skills-based education. The findings imply a holistic approach that includes resource provision, teacher development, improved facilities, and student engagement is necessary to enhance the quality and effectiveness of the TLE curriculum in schools.

Keywords: TLE curriculum, challenges, resources, facilities, TLE teachers, TLE students

Exploring the teachers' challenges in the delivery of the TLE curriculum in Northern Samar, Philippines

1. Introduction

Technology and Livelihood Education (TLE) is an integral part of the Philippine secondary education curriculum which aims to equip students with practical skills in areas such as Home Economics, Agri-Fishery Arts, Industrial Arts, and Information and Communications Technology. This subject is particularly vital in rural regions like Northern Samar, where it offers pathways for students to engage in entrepreneurial and technical careers. Despite its significance, TLE educators in Northern Samar face numerous challenges that hinder effective curriculum delivery. These include limited access to updated teaching materials, insufficient training opportunities, and inadequate facilities, which collectively impede the provision of hands-on learning experiences essential for TLE subjects. The TLE curriculum has been structured to respond to the demands of both local and global labor markets, where technical and vocational skills are becoming increasingly important. For regions such as Northern Samar, which is largely agricultural and coastal, skills in livelihood-related areas such as Agri-Fishery, entrepreneurship, and craftsmanship are critical to improving the socioeconomic status of its population. Many students in Northern Samar come from rural backgrounds where opportunities for formal employment are limited, and livelihood skills are highly valued.

In the Department of Education (DepEd)-Division of Northern Samar, where poverty incidence remains significantly higher than the national average and employment opportunities are limited, Technology and Livelihood Education (TLE) serves as a crucial bridge for students to attain economic independence. According to the Philippine Statistics Authority (PSA, 2024), the region's economy is primarily sustained by agriculture, fisheries, and other rural industries, which collectively accounted for 21.6% of the province's gross domestic product in 2023. In this context, the knowledge and skills that students acquire through TLE, such as crop production, aquaculture, and food processing, can directly impact their capacity to pursue sustainability. In this context, the knowledge and skills that students acquire through TLE such as crop production, aquaculture, and food processing can directly impact their capacity to pursue sustainable livelihoods, contribute to local economic activities, or continue education in technical-vocational institutions accredited by the Technical Education and Skills Development Authority (TESDA).

Challenges of TLE teachers - Tan (2021) conducted a study on Technology and Livelihood Education (TLE) instruction in secondary schools within the Northern Samar Division. The findings highlighted significant shortages in instructional materials, tools, and equipment. Many schools lacked essential facilities necessary for effective TLE instruction, which impeded the delivery of hands-on learning experiences crucial to the subject. The study also emphasized the need for professional development among TLE teachers, noting that the lack of training and seminars hindered their ability to effectively impart knowledge and adapt to evolving educational demands. Similarly, Gregorio (2016) examined TLE instruction in technical-vocational and general secondary schools in Catanduanes, Philippines. Her research identified several obstacles hindering effective instruction, including a shortage of qualified teachers, insufficient teaching strategies, lack of capital investment, unrepaired equipment, and inadequate facilities. These challenges collectively impeded the delivery of practical, hands-on learning experiences essential for TLE subjects.

In line with these findings, Barcelona et al. (2023) explored the challenges and opportunities faced by TLE teachers in Philippine public schools. Their study highlighted issues such as human resource constraints, pedagogical difficulties, and shortages in instructional materials. Teachers reported struggling to implement effective teaching approaches and to sustain student engagement due to these limitations. Similarly, Tingzon & Buyok (2022) identified the struggles faced by teachers tasked with teaching TLE subjects outside their specialized field, compounded by the scarcity of resources and equipment. The research findings shed light on

the various problems, challenges, and opportunities faced by teachers in the teaching of TLE. The identified problems revolve around human, pedagogical, and material aspects, including limited resources, practical activity constraints, and the financial backgrounds of students.

A similar study by Salvador et al. (2022), conducted in the highly urbanized Division of Manila in the Philippines, revealed that TLE instruction continued to face significant challenges despite the urban setting. The research, which focused on Junior High School teachers, identified persistent issues such as inadequate laboratory facilities, insufficient equipment and instructional materials, limited instructional time, a lack of professional development opportunities, and minimal institutional support for teacher training and advancement. Basal (2022) identified several challenges affecting instructional delivery. Notable issues included the lack of instructional materials and the improper implementation of the curriculum. These barriers were seen as significant factors that hindered effective teaching and learning in the TLE domain. As a result, the study called for the regular assessment of TLE teachers' training needs. This would enable educational institutions to design and implement appropriate and targeted training programs aimed at further developing instructional competencies. The study also underscored the need to improve facilities, tools, and materials to support hands-on learning. It also highlighted the importance of securing community resources, increasing funding, and enhancing teacher competencies, alongside ensuring access to adequate instructional materials.

Several studies conducted in the Philippines have consistently revealed systemic challenges in the implementation of Technology and Livelihood Education (TLE) in public secondary schools, many of which parallel the issues addressed in the current study. De Jesus (2018) noted that a significant number of public schools lack adequate and up-to-date tools and facilities necessary for hands-on instruction, such as kitchen laboratories, sewing rooms, and beauty care kits. This scarcity compels teachers to resort to improvised methods or simulations that often fall short in developing the technical competencies expected by the Technical Education and Skills Development Authority (TESDA). The unavailability of consumable materials, such as ingredients for cookery and fabrics for dressmaking, further restricts effective skills-based learning, thereby undermining the practical aspect of TLE instruction. Supporting this concern, Flores and Antonio (2020) observed that overcrowded classrooms significantly hinder the delivery of individualized instruction—an essential component in skill-based subjects like dressmaking and beauty care. Compounding this issue is the limited time allocation for TLE in the curriculum, which forces teachers to compress or skip important modules to meet instructional timelines. This rushed delivery compromises the quality of learning, ultimately affecting students' readiness for national certifications and their potential for industry integration.

Manalo (2021) further highlighted that financial constraints severely limit the implementation of effective TLE programs. In many instances, schools receive insufficient funding, prompting teachers to finance instructional needs out of pocket or seek support from parents and the community. The uneven distribution of resources and poor maintenance of existing facilities not only limit instructional reach but also reduce teacher motivation and innovation. Additionally, the absence of strong linkages between schools and industry partners restricts students' opportunities for meaningful work immersion and real-world application of acquired skills. Equally important is the issue of student motivation and perception towards TLE. David and Ubaldo (2019) emphasized that TLE subjects are often regarded as secondary or less important compared to academic subjects, a view influenced by societal and parental biases favoring academic tracks. This perception leads to low student engagement, which in turn hampers the effectiveness of teaching and learning. Anyakoha (2020) supported this observation by stressing that unmotivated students tend to display poor study habits, procrastination, and negative attitudes towards learning, all of which contribute to underachievement in both technical and academic pursuits.

Addressing these issues requires a concerted effort from educational stakeholders, including policymakers, school administrators, and the community. Investments in infrastructure, provision of adequate teaching resources, and continuous professional development programs for TLE teachers are crucial steps toward enhancing the quality of TLE instruction. By implementing these measures, TLE educators would be enabled to

deliver more effective and engaging instruction, and prepare students for future employment opportunities and to contribute to the socio-economic development of the region.

2. Methodology

Research Design - The study utilized a descriptive-correlational research design. The descriptive component aimed to gather detailed information about the profiles of TLE teachers (age, sex, educational attainment, teaching experience, and TESDA certifications) and schools (resources, facilities, and support for TLE instruction), as well as the challenges encountered in the delivery of the TLE curriculum.

Research Locale - This study was conducted in the selected Technical Vocational Schools (TVS) of Northern Samar, a province in the Eastern Visayas region of the Philippines known for its socio-economic challenges. The research focused on the TLE Teachers who teach Home Economics majors. The study considered the Home Economics specialization such as cookery, beauty care, and dressmaking, which are the most common TLE courses specializations offered in the Division of Northern Samar.

Research Participants - To ensure a representative sample, the study employed a stratified random sampling technique. All TLE teachers teaching Cookery, Beauty Care and Dressmaking from the identified Technical-Vocational Schools (TVS) were considered. Consents were obtained through a letter of permission submitted to the DepEd Regional Director, and the Schools' Division Superintendent asking permission and approval to conduct the study. To observe protocol and courtesy, a separate letter was given to the principals of the identified TVS in the Division of Northern Samar asking permission for the teachers to be allowed to participate in the study. Upon approval of the request to conduct the study, the researcher personally sought the consent of the respondents and distributed the instrument to them.

Research Instrument - To gather data effectively while adhering to TESDA standards, this study utilized the following research instruments. It contained closed-ended items, using a Likert scale to measure specific issues in curriculum delivery, and open-ended questions to gather detailed insights and suggestions.

Ethical Consideration - The study was conducted in compliance with established ethical standards. Participation was entirely voluntary, and all information provided by participants was treated with strict confidentiality. Individuals were clearly informed of their freedom to discontinue involvement at any point without facing any negative repercussions. Furthermore, the data gathered were solely utilized for scholarly purposes, and no participant experienced any form of harm during the research.

3. Results and Discussions

The table 1 shows the challenges encountered by teachers in the delivery of the Technology and Livelihood Education (TLE) curriculum, grouped into four thematic areas: Resources, Teacher Training, Facilities, and Students.

Table 1
Challenges Encountered by Teachers in the Delivery of TLE Curriculum

Challenges	Mean	Interpretation
Lack of Tools	2.18	Moderate Challenge
Insufficient LM's	2.53	Minor Challenge
Limited Access to Teachers' Training	2.29	Moderate Challenge
Lack of Professional Development	2.65	Minor Challenge
Inadequate Laboratory Facilities	2.35	Moderate Challenge
Students' Low interest	2.65	Minor Challenge
Students' Difficulty	2.41	Moderate Challenge
Grand Mean	2.43	Moderate Challenge

Note: 3.25–4.00 Major Challenge/Problem; 2.50–3.24 Minor Challenge/Problem; 1.75–2.49 Moderate Challenge/Problem; 1.00–1.74 Not a Challenge/Problem

Challenges Related to Resources - Among the resource-related concerns, the lack of tools was assessed as a moderate challenge (Mean = 2.18), indicating that the absence of essential equipment affects instructional delivery, particularly in the performance-based components of the TLE curriculum. Meanwhile, the issue of insufficient learning materials received a slightly higher mean score (Mean = 2.53), interpreted as a “minor challenge.” This suggests that while access to adequate learning resources remains a concern, teachers can mitigate its impact through improvisation or alternative methods. The finding of this study confirms Amor’s and Basal’s study that lack of instructional materials was identified as a challenge affecting instructional delivery. It also confirms the study conducted by Barcelona et al. which highlighted three major challenges: human, pedagogical, and material. Similarly, with the study of Abdul and Silor which uncovered significant challenges related to resource scarcity, particularly in the areas of practical skill development.

Challenges Related to Teacher Training - Regarding professional capacity-building, teachers identified limited access to training opportunities as a “moderate challenge” (Mean = 2.29), signifying a need for more accessible and regular in-service training programs. Conversely, the lack of professional development opportunities was rated as a “minor challenge” (Mean = 2.65), which may reflect the presence of some available mechanisms for self-directed or institution-supported development, albeit not uniformly accessed by all teachers. The result of this study confirms the study conducted by Barcelona et al., which pointed out the difficulty of teachers in engaging students and applying instructional methods that align with diverse needs and learning styles. Likewise, the findings of this study go with the study of Abdul and Silor which revealed that the adequate number of teachers who can effectively translate the curriculum into meaningful instructional practices is one of the challenges. The result further confirms Lleo’s study which pointed out that a substantial number of TLE educators lack TESDA National Certification (NC II) in the specific Home Economics subjects they handle, resulting in a mismatch between teacher expertise and subject requirements. Moreover, it also confirms the study of Padilla which indicated that training opportunities for in-service teachers remain limited and often inaccessible due to budget constraints or scheduling conflicts. This gap in qualifications affects not only teachers’ confidence but also their ability to effectively guide students through practical assessments.

Challenges Related to Facilities - The inadequacy of physical learning environments, specifically laboratory facilities, was recognized as a “moderate challenge” (Mean = 2.35). This suggests that the effectiveness of practical and experiential learning components is compromised by the absence of well-equipped spaces conducive to skill-based instruction, which is central to the TLE curriculum. Since the challenge related to facilities was moderate, this result negates the findings of De Jesus which pointed out that most public schools in the Philippines are not equipped with complete and up-to-date tools and facilities, such as kitchen laboratories, sewing rooms, and beauty care kits. This scarcity limits the extent to which students can engage in hands-on learning.

Challenges Related to Students - In terms of student-related challenges, low learner interest received a mean rating of 2.65, interpreted as a minor challenge. This suggests that although a lack of engagement is evident, it is not a significant barrier to curriculum delivery. This challenge is evident in the study of David and Ubaldo which states that TLE subjects are often perceived by students as less important compared to academic subjects, leading to decreased motivation and participation. This low interest further confirms the result of the study conducted by Anyakoha which suggests that uninterested students are generally unproductive and suffer a decline in academic achievement. On the other hand, student difficulty in understanding concepts or performing tasks emerged as a “moderate challenge” (Mean = 2.41), indicating that the cognitive or skill-based demands of the curriculum may not align well with the learners' current capabilities. This result confirms the study conducted by Garcia which found out that learning difficulties related to technical-vocational subjects contribute to students’ poor performance and disengagement. Many students struggle with the hands-on nature of TLE lessons due to their limited prior exposure to practical activities or weak foundational knowledge in related areas such as measurements, following procedures, and interpreting instructions.

4. Implications and Recommendations

Implications - Considering all the challenges, the findings reveal that the most pressing concerns in the implementation of the TLE curriculum are “moderate” in nature, specifically in the areas of tools availability, training access, laboratory adequacy, and student comprehension. While challenges related to learning materials, professional development, and student motivation are classified as “minor”, they still warrant attention to prevent escalation into more critical issues. These results mean the necessity for enhanced institutional support, including the provision of essential tools and facilities, increased access to relevant and timely teacher training, and strategic interventions aimed at improving student engagement and competency. Gregorio’s study is confirmed by the findings of this study. It revealed that the challenges encountered by TLE teachers are lack of teaching strategies, lack of capital investment, lack of teachers, unrepaired equipment, inadequate number of facilities in teaching TLE subjects etc. Addressing these challenges is crucial for ensuring the TLE curriculum meets its objectives of providing practical, skills-based education. The findings imply a holistic approach that includes resource provision, teacher development, improved facilities, and student engagement is necessary to enhance the quality and effectiveness of the TLE curriculum in schools.

Recommendations - It is recommended that educational institutions, especially the Department of Education, invest in continuous professional development programs for Dressmaking teachers. Workshops, skills enhancement seminars, and updated training on new Dressmaking techniques and teaching strategies should be regularly conducted to ensure that teachers are well-equipped to foster higher student achievement, regardless of their academic degree level. School leaders and division administrators should invest in targeted improvements in TLE laboratories, provision of consumable materials, and capacity building for TLE teachers, ensuring equity of access and quality of instruction across all TLE specializations.

5. Conclusion

The study highlights that while TLE teachers in the Northern Samar Division face a range of challenges, these obstacles are perceived as moderate to minor in severity. Addressing these challenges requires a multifaceted approach, including investing in teaching tools and materials, enhancing professional development programs, improving laboratory facilities, and implementing strategies to increase student engagement. By acknowledging and addressing these challenges, stakeholders can work towards creating an environment conducive to effective TLE curriculum delivery, thereby enhancing the quality of education and better preparing students for future careers.

5. References

- Abdul, A. M., & Silor, A. C. (2024). Assessing the teaching strategies and techniques used by TVL teachers: Basis for pedagogical training design. *International Journal for Multidisciplinary Research (IJFMR)*, 6(3), May–June 2024.
- Amor, R. (2021). Technology and Livelihood Education (TLE) instruction in the secondary schools of Northern Samar Division. *AJARR Journal*.
- Anyakoha, M. J. (2020). Progress on a cognitive-motivational relational theory of emotions. *American Psychologist*, 46(8).
- Barcelona, K. E. P., Daling, B. A. J., Doria, P., Balangiao, S. J., Mailes, M. J., Chiang, P. M., & Ubatay, D. (2023). Challenges and opportunities of TLE teachers in Philippine public schools: An inquiry. *British Journal of Multidisciplinary and Advanced Studies*, 4(4), 44–60.
- Basal, D. V. (2022). Instructional competencies of Technology and Livelihood Education (TLE) teachers: Basis for a competency-based module. *International Journal of Research Publications*.
- David, R., & Ubaldo, C. (2019). Students’ perception and engagement in TLE under the K–12 curriculum. *Philippine Journal of Education*, 97(4), 30–39.
- De Jesus, A. (2018). Teaching home economics in resource-constrained public schools: A case study. *Philippine*

- Journal of Technology Education*, 7(2), 40–52.
- Flores, R., & Antonio, S. (2020). Classroom realities of TLE teachers in the implementation of K to 12 curriculum. *Journal of Educational Leadership and Practice*, 5(1), 23–31.
- Garcia, M. (2021). Instructional strategies in teaching cookery in secondary schools. *Journal of Home Economics Education*.
- Gregorio, M. S. R. (2016). Technology and livelihood (TLE) instruction of technical vocational and selected general secondary schools in Catanduanes. *International Journal of Learning, Teaching and Educational Research*, 15(4), 69–74. <https://ijlter.org/index.php/ijlter/article/viewFile/671/290>
- Llego, M. A. (2018). Public school facilities in the Philippines. TeacherPH. <https://www.teacherph.com/public-school-facilities-in-the-philippines/>
- Manalo, J. (2021). School support and resource allocation for TLE programs in rural public schools. *Asia Pacific Journal of Education and Development*, 3(2), 14–27.
- Padilla, F. (2017). Teacher competency in delivering technical-vocational education in public senior high schools. *Philippine Teacher Education Journal*, 9(2), 56–68.
- Salazar, E. (2020). Resource gaps in the implementation of home economics in public secondary schools. *Vocational Education Review*, 6(1), 12–22.
- Salvador, R. R. E., Ramos, C. L., & Magsino, E. S. (2022). Instructional competencies of TLE teachers in selected schools in the Division of Manila: Basis for a proposed intervention. *EARIST Research Journal*, 22(32).
- Tan, M. C. (2021). Technology and Livelihood Education (TLE) instruction in the secondary schools in Northern Samar Division, Eastern Philippines. *Asian Journal of Advanced Research and Reports*. <https://doi.org/10.9734/AJARR/2021/v15i230369>
- Tingzon, L. L., & Buyok, H. J. A. (2022). Lived experiences of non-TLE teachers teaching TLE subjects: A phenomenological inquiry. *European Journal of Education Studies*, 9(11).

