

Instructional Proficiency of Technical Vocational Livelihood Teachers and Learners' Performance in the Division of San Pedro City: Basis for Enhanced Professional Development Program

James D. Cayetano

Eulogio "Amang" Rodriguez Institute of Science and Technology – Cavite Campus

cayetanojames98@gmail.com

Date Submitted:

March 27, 2026

Date Accepted:

May 18, 2026

Date Published:

July 25, 2026

DOI:

10.5281/zenodo.21543912

ABSTRACT

This study assessed the instructional proficiency of Technical Vocational Livelihood (TVL) teachers and examined its relationship with learners' performance in the Division of San Pedro City as a basis for an enhanced professional development program. A descriptive research design supported by documentary analysis was employed. The detailed sampling table reported 113 respondents, comprising 99 TVL teachers and 14 school administrators from seven public secondary schools. Data were gathered through a validated researcher-made questionnaire and school records of learners' performance for three academic years. Percentage, weighted mean, independent-samples t-test, and Pearson product-moment correlation were used. The teachers' instructional proficiency was highly evident across instructional planning, delivery, assessment and feedback, classroom

management, professional reflection and growth, and instructional innovation, with an overall composite mean of 4.55. Significant differences between administrator and teacher assessments were found in planning, delivery, assessment and feedback, and classroom management, but not in professional reflection and instructional innovation. Learners obtained an overall three-year average of 67.30, interpreted as Moving Toward Mastery. Instructional performance had a very weak negative and nonsignificant relationship with learner performance ($r = -0.124$, $p = .352$). Teaching challenges were generally least encountered ($M = 2.56$), while the proposed INTERACT Enhanced Professional Development Program was rated acceptable ($M = 4.05$). The findings indicate that high teacher proficiency alone may not fully account for learner outcomes and that professional development should be complemented by attention to learner, resource, and institutional conditions.

Keywords: *instructional proficiency, Technical Vocational Livelihood, learner performance, professional development, teacher assessment, San Pedro City*

INTRODUCTION

Instructional proficiency in Technical Vocational Livelihood education involves the coordinated use of content knowledge, pedagogical competence, assessment literacy, classroom management, reflective practice, and instructional innovation. In competency-based programs, these capacities are especially important because learners are expected to demonstrate both conceptual understanding and practical skills. Effective planning and alignment of objectives, activities, and assessment support coherent instruction, while learner-centered and technology-supported strategies can strengthen engagement and the application of technical knowledge (Santos, 2022; Dela Peña, 2024).

TVL teachers work within conditions that differ from those of conventional academic subjects. Practical classes often require laboratories, tools, consumable materials, industry-relevant equipment, and differentiated support for learners with varying levels of readiness. Although TVL educators commonly demonstrate adaptability and resourcefulness, limitations in training opportunities, instructional materials, and structured support can affect the consistent implementation of competency-based instruction (Lopez & Mendoza, 2023; Villacorta & Arnado, 2023). These realities make localized evidence essential for professional development planning.

Previous studies have examined instructional planning, classroom management, assessment, innovation, and teacher competence separately. However, fewer local investigations have assessed these domains together, compared the perspectives of teachers and school administrators, and linked instructional proficiency with actual learner performance over multiple school years. This gap is particularly relevant in rapidly developing school divisions, where high ratings of teacher practice may coexist with uneven learner achievement. Determining whether teacher proficiency corresponds with learner outcomes can help school leaders avoid one-dimensional interventions and identify broader conditions affecting performance.

Accordingly, this study assessed the instructional proficiency of TVL teachers in the Division of San Pedro City in terms of instructional planning and preparation, instructional delivery and strategies, assessment and feedback, classroom management, professional reflection and growth, and instructional innovation. It also compared the assessments of administrators and teachers, examined learners' performance over three academic years, tested the relationship between instructional performance and learner performance, identified teaching challenges, and evaluated the acceptability of the proposed INTERACT Enhanced Professional Development Program.

Literature Review

Instructional Planning, Delivery, and Classroom Management

Instructional planning provides the structure through which curriculum standards are translated into achievable learning experiences. Santos (2022) reported that clear objectives, organized learning materials, and alignment between instruction and assessment support teaching effectiveness. Reyes (2023) further emphasized that planning becomes more responsive when teachers integrate technology, varied strategies, collaboration, and continuous revision based on learner needs and classroom evidence.

Effective delivery requires teachers to communicate clearly, use varied and learner-centered methods, and adjust instruction according to learner responses. Cruz (2022) linked interactive discussions, guided questioning, and collaborative activities with stronger engagement, while Dela Peña (2024) highlighted differentiated instruction, technology integration, and authentic learning experiences. In TVL settings, these practices are critical because learners must connect theory with practical tasks and workplace-oriented performance.

Classroom management supports the safe and orderly implementation of both classroom and workshop activities. Bautista (2024) found that clear routines, consistent expectations, and positive reinforcement encourage responsible behavior and participation. Navarro (2025) similarly noted that flexible, reflective, and student-centered management approaches help teachers respond to diverse learners while sustaining an inclusive learning environment.

Assessment, Feedback, and Learner Performance

Assessment in TVL education must capture both knowledge and observable competence. Bautista and Ramos (2023) observed that teachers understand competency-based assessment but may encounter difficulty in standardizing tools, tracking competencies, and providing individualized feedback. These concerns can be addressed through well-designed rubrics, digital assessment systems, and professional learning focused on authentic performance evaluation.

Reflective and aligned assessment practices help teachers identify learning gaps and make timely instructional adjustments. Mendoza (2022) found that varied assessment methods and constructive feedback improve monitoring of student progress, while Cruz (2023) emphasized the importance of aligning assessment

tasks with curriculum objectives and involving learners in self- and peer-assessment. Together, these practices support learner accountability and provide evidence for improving instruction.

Nevertheless, learner performance is shaped by more than teacher practice alone. Technical resources, learner motivation, prior knowledge, attendance, family support, and school-level conditions may influence whether strong instruction translates into higher achievement. This broader perspective is important when interpreting correlations between teacher proficiency and school performance data.

Professional Reflection, Growth, and Instructional Innovation

Professional reflection enables teachers to examine the effectiveness of their strategies, respond to evidence, and set goals for continued improvement. Kim and Johnson (2024) associated professional learning communities and reflective practice with teacher adaptability and improved instructional decisions. Mendoza and Alvarado (2023) likewise emphasized mentoring, collaboration, and structured opportunities for reflection as important supports for the sustained growth of TVL teachers.

Instructional innovation includes the purposeful use of emerging technologies, multimedia materials, data-informed design, and collaborative or problem-based activities. Lim (2024) showed that technology-enhanced and student-centered practices can promote creativity and critical thinking, while Nguyen et al. (2025) highlighted the value of flexible, contextualized, and collaborative approaches in secondary education. Innovation is therefore not limited to acquiring new devices; it also involves redesigning learning experiences to address contemporary competencies.

Professional development initiatives are more likely to be accepted and sustained when they address identified needs, align with institutional goals, and provide realistic implementation support. Rivera and Santos (2022) and Cruz and Hernandez (2023) found that perceived relevance, feasibility, leadership support, and resource availability influence the adoption of school-based interventions. Fullan and Langworthy (2023) further stressed that collaborative meaning-making and shared responsibility are central to educational change.

Conceptual Framework

The study used an Input–Process–Output framework. Inputs included literature and policy sources, administrator and teacher assessments of the six instructional proficiency domains, learners' three-year performance records, teaching challenges, and respondent data. The process involved validated survey administration, documentary analysis, statistical treatment, and interpretation. The output was the INTERACT Enhanced Professional Development Program, with feedback serving as a mechanism for continuous improvement.

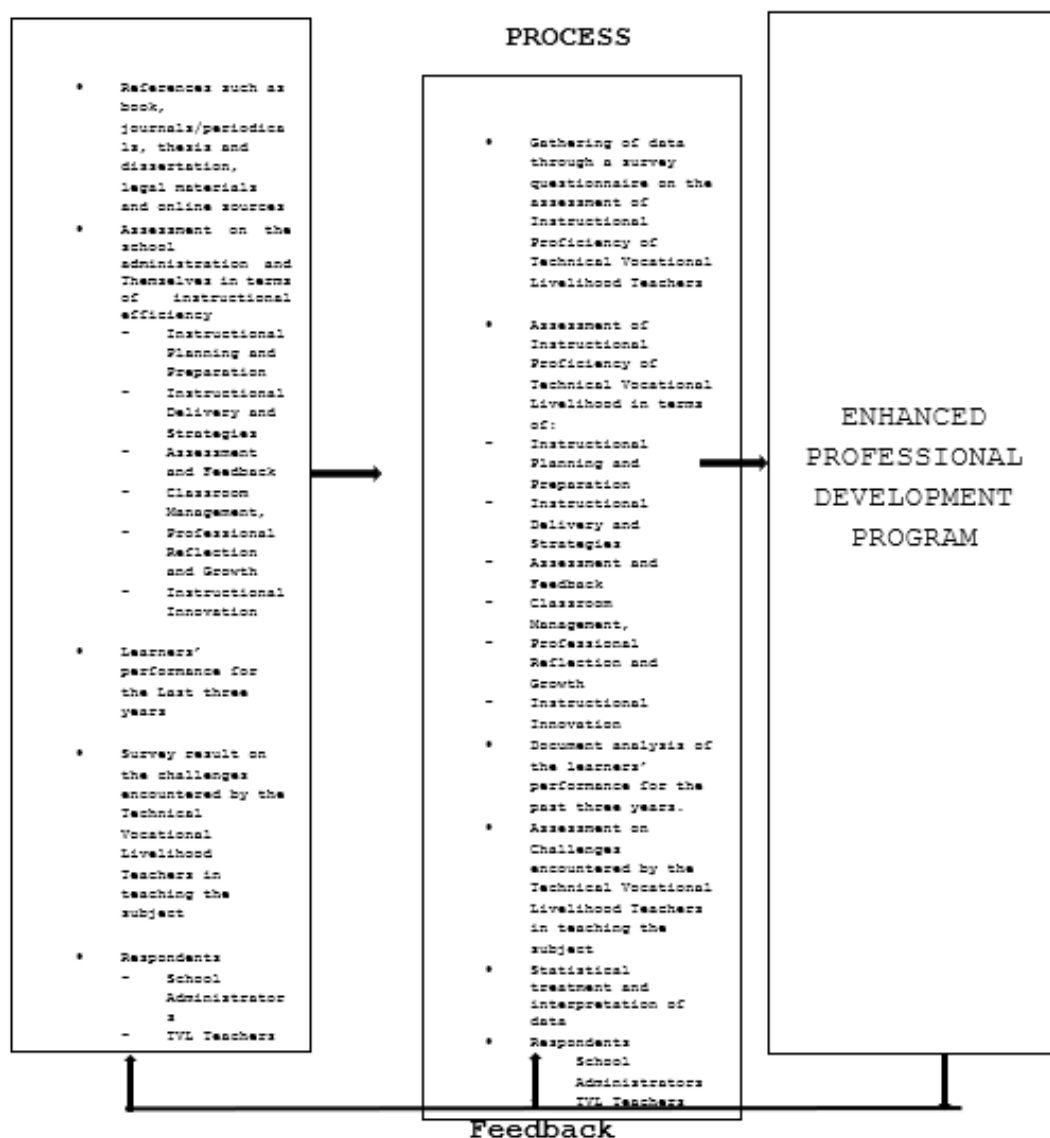


Figure 1. *Research Paradigm of the Study*

METHODS

Research Design

The study employed a descriptive quantitative research design to describe the instructional proficiency of TVL teachers, the challenges they encountered, and the acceptability of the proposed professional development program. Documentary analysis was used to supplement the survey data through the review of learners' performance records for three academic years. The design examined existing conditions without manipulating variables or claiming causal relationships.

Research Locale

The study was conducted in seven public secondary schools under the Schools Division Office of San Pedro City: Adelina 1 National High School, Cuyab Integrated National High School, Pacita Complex National High School, Pacita Complex Senior High School, Sampaguita Village National High School, San Pedro

Relocation Center National High School, and Southville 3A National High School. Data collection covered the School Year 2025–2026.

Participants and Sampling Technique

Purposive sampling was used because the respondents possessed direct knowledge and experience relevant to TVL instruction and supervision. Based on the detailed population and sample table in the source manuscript, the final sample consisted of 113 respondents: 99 TVL teachers and 14 school administrators. The teachers represented 83% of the identified teacher population, while all 14 administrators were included.

Research Instrument

A researcher-made questionnaire was used. It contained sections on respondent profile; instructional proficiency in planning and preparation, delivery and strategies, assessment and feedback, classroom management, professional reflection and growth, and instructional innovation; challenges encountered in the same domains; and acceptability of the proposed intervention. The instrument was reviewed by three Graduate School faculty members and two school heads for relevance and clarity. Documentary records provided the learners' performance data for the previous three school years.

Data Gathering Procedure

Formal permission was obtained from the Schools Division Superintendent and the principals of the participating schools. The researcher coordinated with administrators and TVL coordinators, explained the purpose of the study, distributed the validated questionnaires, and allowed one week for completion. Retrieved questionnaires were checked for completeness, encoded, and organized. Learner performance records were obtained through approved documentary requests and compiled for analysis.

Data Analysis

Frequency and percentage were used to summarize respondent characteristics. Weighted means described instructional proficiency, teaching challenges, and program acceptability. Independent-samples t-tests at the .05 significance level compared administrator and teacher assessments. Pearson product-moment correlation tested the relationship between instructional performance and learners' performance. The study used the interpretation scales reported in the source manuscript.

Ethical Consideration

Participation was voluntary and informed consent was obtained before the questionnaires were administered. The researcher explained the study, assured respondents that their answers would remain confidential, and coordinated the schedule to avoid disruption of school activities. Institutional permission was secured, and gathered records were used only for the stated research purposes.

RESULTS AND DISCUSSION

Instructional Proficiency of TVL Teachers

All six instructional domains were rated Highly Evident. The overall composite mean was 4.55. Instructional delivery and strategies obtained the highest composite mean (4.61), followed by classroom management (4.60), assessment and feedback (4.58), and professional reflection and growth (4.57). Instructional planning and preparation and instructional innovation both obtained 4.48. These results show that teachers consistently demonstrated the expected practices across planning, implementation, assessment, learning environment, continuous development, and innovation.

The strongest ratings in delivery and classroom management are consistent with studies emphasizing varied strategies, clear communication, differentiation, and structured classroom routines (Cruz, 2022; Bautista, 2024). The comparatively lower, although still highly evident, ratings for planning and innovation indicate areas where professional learning may further strengthen data-informed preparation, contextualization, and the sustained use of emerging technologies (Reyes, 2023; Lim, 2024).

Table 1. *Summary of the Instructional Proficiency of TVL Teachers*

Domain	Administrator Mean	Teacher Mean	Composite Mean	Interpretation	Rank
Instructional Planning and Preparation	4.44	4.49	4.48	Highly Evident	5.5
Instructional Delivery and Strategies	4.74	4.60	4.61	Highly Evident	1
Assessment and Feedback	4.62	4.58	4.58	Highly Evident	3
Classroom Management	4.39	4.63	4.60	Highly Evident	2
Professional Reflection and Growth	4.58	4.57	4.57	Highly Evident	4
Instructional Innovation	4.44	4.49	4.48	Highly Evident	5.5
Overall	4.53	4.56	4.55	Highly Evident	

Differences Between Administrator and Teacher Assessments

Significant differences were found in instructional planning and preparation, instructional delivery and strategies, assessment and feedback, and classroom management (all $p < .001$). Administrators assigned higher means for planning, delivery, and assessment, whereas teachers gave the higher rating for classroom management. No significant differences were found for professional reflection and growth ($p = .72$) or instructional innovation ($p = .15$).

The pattern suggests that administrator and teacher perceptions converged most strongly in domains associated with professional learning and innovation, but differed in several day-to-day instructional practices. Such differences do not necessarily indicate weak performance; rather, they may reflect differences in observation opportunities, role expectations, and self-assessment. Shared professional standards, collaborative supervision, peer observation, and feedback systems may help establish a common interpretation of proficient practice (Kim & Johnson, 2024).

Table 2. *Comparison of Administrator and Teacher Assessments*

Domain	Admin M	Teacher M	SD A	SD T	t	p	Decision
Planning and Preparation	4.86	4.63	0.076	0.064	24.70	<.001	Significant
Delivery and Strategies	4.74	4.60	0.156	0.057	9.00	<.001	Significant
Assessment and Feedback	4.62	4.58	0.058	0.064	4.95	<.001	Significant
Classroom Management	4.39	4.63	0.094	0.047	7.24	<.001	Significant
Professional Reflection and Growth	4.57	4.57	0.080	0.052	-0.373	.72	Not significant
Instructional Innovation	4.44	4.49	0.110	0.060	1.58	.15	Not significant

Note. $\alpha = .05$. Significant results led to rejection of the corresponding null hypothesis.

Learners' Performance and Its Relationship With Instructional Proficiency

Across the five schools with complete performance records, the overall three-year average was 67.30, interpreted as Moving Toward Mastery. School E obtained the highest average (73.68), followed by School B (71.04) and School D (66.93), all within Moving Toward Mastery. Schools A (65.90) and C (58.95) were classified under Average Mastery. The results reveal uneven achievement across schools despite consistently high teacher proficiency ratings.

Table 3. *Learners' Performance Across Three Academic Years*

School	2022–2023	2023–2024	2024–2025	Average	Rank	Interpretation
A	63.42	64.17	70.10	65.90	4	Average Mastery
B	72.05	71.83	69.25	71.04	2	Moving Toward Mastery
C	59.50	58.59	58.75	58.95	5	Average Mastery
D	66.83	67.74	66.21	66.93	3	Moving Toward Mastery
E	72.64	72.87	75.53	73.68	1	Moving Toward Mastery
Overall	66.89	67.04	67.97	67.30		Moving Toward Mastery

The correlation analysis produced $r = -0.124$ with $p = .352$, indicating a very weak negative and nonsignificant relationship between instructional performance and learners' performance. The null hypothesis was therefore not rejected. High teacher proficiency, as measured through perceptions, did not correspond to higher school performance within the available data.

Table 4. *Relationship Between Instructional Performance and Learners' Performance*

Variables	Pearson r	Interpretation	p	Decision
Instructional Performance and Learners' Performance	-0.124	Very weak negative correlation	.352	Fail to reject H_0

This finding underscores the multidimensional nature of learner achievement. Resource availability, learner readiness, motivation, attendance, curriculum implementation, family and community support, and opportunities for hands-on practice may affect performance alongside teaching competence. Studies of TVL implementation similarly indicate that teacher adaptability can maintain instructional quality even when resource and learner conditions remain challenging (Sumbilon & Valmorida, 2023; Villacorta & Arnado, 2023). The result should therefore not be interpreted as evidence that teacher proficiency is unimportant, but as an indication that professional development must operate together with learner and institutional support.

Teaching Challenges and Acceptability of the INTERACT Program

Teaching challenges were generally least encountered, with an overall composite mean of 2.56. Planning and preparation (2.71) and instructional delivery and strategies (2.69) were moderately encountered, while assessment and feedback (2.51), professional reflection and growth (2.50), instructional innovation (2.49), and classroom management (2.47) were least encountered. The results suggest that teachers were able to maintain instructional quality, but they still needed support in adjusting pacing, accommodating diverse learner abilities, accessing resources, and connecting instruction to industry-relevant practice.

Table 5. *Summary of Challenges Encountered by TVL Teachers*

Domain	Administrato r Mean	Teacher Mean	Composite Mean	Interpretation	Rank
Planning and Preparation	2.61	2.73	2.71	Moderately Encountered	1
Delivery and Strategies	2.43	2.73	2.69	Moderately Encountered	2
Assessment and Feedback	2.31	2.54	2.51	Least Encountered	3
Professional Reflection and Growth	2.10	2.56	2.50	Least Encountered	4
Instructional Innovation	2.14	2.54	2.49	Least Encountered	5
Classroom Management	2.16	2.51	2.47	Least Encountered	6
Overall	2.29	2.60	2.56	Least Encountered	

The proposed INTERACT Enhanced Professional Development Program was designed to strengthen teacher competencies through workshops, collaborative learning, mentoring, reflective practice, evidence-based instruction, and modern teaching technologies. Its overall acceptability mean was 4.05. Feasibility for implementation and the availability of supporting resources received the highest composite means (4.15), while

all other indicators were also rated Acceptable. These findings show that administrators and teachers regarded the program as relevant, practical, and potentially sustainable.

Table 6. Acceptability of the INTERACT Enhanced Professional Development Program

Indicator	Composite Mean	Interpretation
Addresses identified instructional proficiency issues	3.98	Acceptable
Relevant to current teaching needs	4.09	Acceptable
Feasible for implementation in San Pedro schools	4.15	Acceptable
Available resources support implementation	4.15	Acceptable
Acceptable and desirable to the school community	4.05	Acceptable
Aligns with teachers' and administrators' goals	4.04	Acceptable
Can be sustained over time	4.07	Acceptable
Can be maintained beyond initial implementation	3.99	Acceptable
Expected to improve the teaching process	3.96	Acceptable
Expected to enhance organizational agility	4.03	Acceptable
Overall	4.05	Acceptable

The program's acceptability reflects the importance of aligning professional development with identified needs and school capacity. Rivera and Santos (2022) found that relevance and feasibility influence educators' willingness to adopt professional learning programs, while Cruz and Hernandez (2023) emphasized leadership support, shared goals, and mechanisms for sustainability. Thus, implementation should include protected learning time, monitoring, peer support, and adequate resources rather than relying on one-time training.

CONCLUSION

TVL teachers in the Division of San Pedro City demonstrated highly evident instructional proficiency across all six domains, although administrator and teacher assessments differed significantly in planning, delivery, assessment and feedback, and classroom management. Learners' overall performance remained at the Moving Toward Mastery level and varied across schools. The nonsignificant relationship between instructional performance and learner performance indicates that strong teacher proficiency alone did not explain achievement differences in the available data. Teaching challenges were generally manageable, and the INTERACT Enhanced Professional Development Program was considered acceptable and feasible. The study contributes localized evidence that professional development should strengthen teacher practice while simultaneously addressing learner needs, resources, practical training conditions, and school-level support.

Recommendation

The Schools Division Office and participating school administrators should implement the INTERACT program through needs-based workshops, mentoring, professional learning communities, peer observation, and follow-up coaching in planning, differentiated delivery, competency-based assessment, reflective practice, and instructional innovation. Schools should also strengthen learner support, provide targeted remediation and enrichment for lower-performing groups, improve access to tools and workshop resources, and examine factors such as motivation, attendance, prior knowledge, and home support. Future studies may use larger samples, direct classroom observations, validated learner-level outcome measures, and multivariate or longitudinal designs to determine how teacher proficiency interacts with resources and learner characteristics over time.

References

- Bautista, J. P., & Ramos, L. A. (2023). Evaluation and feedback strategies among Technical-Vocational-Livelihood educators: A descriptive study. *Philippine Journal of Technical Education*, 13(1), 55–72.
- Bautista, L. M. (2024). Classroom management practices and student behavior in public basic education. *Philippine Journal of Educational Management*, 12(1), 23–41.

- Cruz, A. L. (2023). Alignment of assessments and reflective practices in enhancing teaching quality in secondary education (Master's thesis, University of the Philippines). University of the Philippines Digital Repository.
- Cruz, J. P., & Hernandez, M. L. (2023). Sustaining school intervention programs: Teachers' and administrators' perspectives. *Philippine Journal of Educational Management*, 14(1), 44–61.
- Cruz, R. M. (2022). Instructional delivery practices and student engagement in public secondary schools. *Journal of Philippine Educational Research*, 18(2), 55–72.
- Dela Peña, A. G. (2024). Learner-centered and technology-integrated teaching strategies in basic education. *Philippine Journal of Teaching and Learning*, 10(1), 34–49.
- Fullan, M., & Langworthy, M. (2023). *A rich seam: How new pedagogies find deep learning*. Routledge.
- Garcia, M. T. (2022). Instructional planning practices and professional growth of secondary school teachers (Unpublished master's thesis). University of the Philippines Diliman, Philippines.
- Kim, S., & Johnson, R. (2024). Professional learning communities and reflective practice: Enhancing teacher adaptability and student outcomes. *Journal of Educational Innovation*, 11(1), 23–40.
- Lim, S. Y. (2024). Technology-enhanced student-centered learning and instructional innovation in Singapore secondary schools. *ASEAN Journal of Education*, 12(1), 45–62.
- Lopez, P. J., & Mendoza, A. L. (2023). Assessment of teaching strategies and resource constraints among technical-vocational livelihood educators. *Philippine Journal of Technical Education*, 12(2), 78–95.
- Mendoza, J. P., & Alvarado, L. R. (2023). Professional reflection and growth practices among Technical-Vocational-Livelihood educators: A descriptive study. *Philippine Journal of Technical Education*, 13(2), 88–104.
- Mendoza, J. R. (2022). Assessment strategies and feedback practices of secondary school teachers: Implications for instructional effectiveness (Master's thesis, Philippine Normal University). Philippine Normal University Repository.
- Navarro, P. R. (2025). Student-centered and reflective classroom management strategies in contemporary education. *Journal of Philippine Teaching and Learning*, 9(2), 67–85.
- Nguyen, T. H., Le, P. Q., & Pham, M. T. (2025). Innovative pedagogical strategies and technology integration in Vietnamese secondary education. *Southeast Asian Journal of Educational Research*, 8(2), 78–95.
- Reyes, J. P. (2023). Technology integration and differentiated instructional strategies in basic education classrooms. *Asia Pacific Journal of Educational Research*, 7(1), 88–102.
- Rivera, L. M., & Santos, R. P. (2022). Perceived acceptability and effectiveness of school-based professional development programs. *Philippine Journal of Education*, 11(3), 65–82.
- Santos, M. L. (2022). Instructional planning competencies and teaching effectiveness among public school teachers. *Philippine Journal of Education Studies*, 15(2), 45–60.
- Sumbilon, M. L., & Valmorida, R. A. (2023). Teaching strategies, parental involvement, and TVL learners' self-efficacy and performance in modular distance learning. *Asian Journal of Education and Social Studies*, 41(3), 12–25.
- Villacorta, R. G., & Arnado, J. M. (2023). Competencies, instructional skills, and challenges of teachers in implementing the Technical-Vocational-Livelihood (TVL) senior high school track. *International Journal of Educational Management and Development Studies*, 4(2), 45–62.